PRÓ-REITOR HUGO MOREIRA SOARES		
CALL AND INSTITUTION INF	ORMATION	
Program - Capes/Print		Call 41/2017 – Capes/Print
Institution – Universidade Fede Catarina (UFSC)	eral de Santa	Institution acronym - UFSC
PERSONAL INFORMATION		
Name: HUGO MOREIRA SO	ARES	
Date of birth		Nationality
01/10/1957		Brazilian
IDENTIFICATION DOCUMEN	TS	
CPF - 615.582.497-53		
ID Number - 52750361		Issuing Agency - SSP-RJ
ORCID number - 0000-0001-9666-7632		
PHONES		
Contact number -	+ (55) (48) 3721-	-8311
Cell phone number -	+ (55) (48) 8421-	-3346

# EMAIL

E-mail address: hugohu57@gmail.com

### ADDRESS FOR CORRESPONDENCE

Institution address – Universidade Federal de Santa Catarina, Departamento de Engenharia Química e Engenharia de Alimentos, Trindade, s/n, Florianópolis, CEP 88040-900

# INSTITUTIONAL COMMITTEE

# **BRAZILIAN MEMBERS**

Name	E-mail	Phone
MARCELO FARINA	marcelo.farina@ufsc.br	+55(48)96356052
Postgraduate Program	Field of research	Admission date
Biochemistry	Biochemistry	09/01/2004 12:00:00
Name	E-mail	Phone
EUNICE SUELI NODARI	eunice.nodari@gmail.com	+55(48)37219359
Postgraduate Program	Field of research	Admission date
Interdisciplinary in Human Sciences	Social and Humanities	09/01/1999 12:00:00
Name	E-mail	Phone
DACHAMIR HOTZA	d.hotza@ufsc.br	554884660880
Postgraduate Program	Field of research	Admission date
Science and Engineering of Materials	Materials	02/01/1996 12:00:00
Name	E-mail	Phone
RONICE MULLER DE QUADROS	ronicequadros@gmail.com	+55(48)84544041
Postgraduate Program	Field of research	Admission date
Linguistics	Linguistics	02/01/2002 12:00:00
Name	E-mail	Phone
ROBERTO CARLOS PACHECO	pacheco@egc.ufsc.br	+55(48)88067080
Postgraduate Program	Field of research	Admission date
Engineering and knowledge manageme	ent Engineering/TechnologyManagement	02/01/2007 12:00:00
Name	E-mail	Phone
TANIA CRECZYNSKI PASA	tania.pasa@ufsc.br	+55(48)37212200
Postgraduate Program	Field of research	Admission date
i ostgraddate i rograffi		

# FOREING MEMBERS

Name	E-mail	Phone
PEDRO ALVAREZ	alvarez@rice.edu	17137757733
Field of research	Institution	ORCID
Environmental Sciences	RICEUNIVERSITY	000000267257199
Name	E-mail	Phone
DIANE LILLO-MARTIN	diane.lillo-martin@uconn.edu	18604555174
Field of research	Institution	ORCID
Psicolinguistics	UNIVERSITY OF CONNECTICUT	00000028503727X
Name	E-mail	Phone
BARBARA NAWROT	bnawfot@cbmm.lodz.pl	48426803248
Field of research	Institution	ORCID
Organic Chemistry	POLSKA AKADEMIA NAUK	000000240844334

#### DIAGNOSTICS

#### **STRENGHTS**

#### Title: Regional Insertion

#### Justification

As an educational and social institution, the university is always questioned by many sectors to answer for numerous demands of society and to assist in the progressive development and dissemination of new technologies, especially in Santa Catarina. UFSC, challenged to contribute to the decentralization of knowledge and professional training, played an important role in the development, modernization and expansion of mariculture on Santa Catarina coast, based on new opportunities in terms of occupation and income in several affected coastal localities by the decline of artisanal fisheries. Another successful involvement was the interaction with the regional and national industrial park, especially with the northeast of Santa Catarina. This interaction is one of the best models among Brazilian higher education institutions. It should be noted that the campus of Joinville was inaugurated in the heart of the industrial district of the region, which, in addition to the campuses in Araranguá, Blumenau and Curitibanos, contributes to the consolidation of the internalization process of the University. In addition, involvement has become remarkable through the study and support of various groups of researchers to social movements seeking differentiated forms of inclusion and respect for differences. In addition to the efforts in regular undergraduate, postgraduate and capacity-building courses, UFSC has been playing an active role in MEC (Brazilian Ministery of Education) policies directed at teacher training. Particularly noteworthy is UFSC's participation in the National Continuing Teacher Training Network.

#### Title: Exellence in Teaching

#### Justification

UFSC offers over 178,000 slots distributed in 117 degrees in the respective five campuses: Florianópolis, Araranguá, Blumenau, Curitibanos and Joinville. At the postgraduate level (stricto sensu), UFSC offered 66 courses in 2009, 74 in 2014, and 88 in 2017. The evolution of post-graduation in these years represents a great advance in the generation and diffusion of knowledge, in the consolidation of research centers and in the implementation of multiuser laboratories. In addition to the stricto sensu programs, UFSC also offers lato sensu postgraduate courses, meeting different community demands. Particularly with regard to teaching excellence, 26% of UFSC's stricto sensu postgraduate programs are classified as a course of international excellence (concept 6 or 7), while in Brazil, the percentage is around 11%. In relation to the undergraduate degrees, all the degrees evaluated by ENADE (National Examination of Student Performance) obtained averages above national averages.

#### **Title: Management Policies**

#### Justification

UFSC's management policy is centered on the consolidation of strategic management practices, complemented by the updating of organizational management and infrastructure in support of the main teaching, research, outreach, culture and art activities. This policy also includes programs and actions for the personal improvement of servers and attention to their health, as well as a better relationship with organizations affected by the functioning of the University. In this scenario, UFSC works with the objective of: (i) Institutionalize strategic management practices, including planning, monitoring and evaluation, (ii) Improve organizational management, (iii) Consolidate expansion actions in organizational management perspective as a multi-campus and international University, (iv) Implement actions seeking to increase fundraising for institutional policies, (v) Adapt infrastructure and management to current demands, (vi) Implement innovative actions for the individual improvement of servers aiming at improving institutional performance; (vii) Strengthen and professionalise communication in internal and external relationships; and (viii) Improve student reception and assistance. Particularly with regard to management policies aimed at the internationalization of UFSC, a strong point is the newly created Internationalization Committee,

which is formed by all Pro-Rectorates (Research, Undergraduation, Graduation, Outreach, Administration, Development and People Management) and four offices (Office for International Relations, Office for Planning and Budget, Office of Innovation, and Office for Distance Education). This Committee was created with the objective of thinking and making feasible management policies that promote the internationalization of UFSC in a transversal way.

# Title: Consolidated research and laboratories of excellence

# Justification

As a research institution, UFSC stands out among the ten best universities in the country in all evaluations, in a universe of approximately one hundred universities and one thousand Brazilian higher education institutions. This position is supported by the volume and quality of the scientific production, the strong relationship with the private initiative and productive arrangements of the region and the country, given the quality of undergraduate and postgraduate degress offered, good faculty qualification and qualification of the technical-administrative staff in education (STAE) to support research. This joint work is reflected in the number of publications in international journals indexed by ISI / Thomson, evidencing a highly qualified scientific production. All areas of knowledge are represented in the research activities carried out at the institution and are officially registered in the Directory of Research Groups of CNPq. This excellence is materialized in the quality of the research groups and postgraduate programs, through large projects obtained by these groups, such as INCT, PRONEX, FINEP and RHAE, and in the numerous national and international partnerships in which they are involved. Another important aspect that gualifies the research at UFSC is the participation of its researchers in decision-making bodies in the country, such as the advisory committees of the CNPq, CAPES, FINEP, FAPESC and other state research support agencies, as well as abroad, in respect to Science and Technology (for example, CYTED, SENACYT - Panama, among others). Among the laboratories of excellence and international recognition that stand out most, we can mention the Central and Multiuser Laboratories (Central Laboratory of Electronic Microscopy, Central Laboratory of Molecular and Structural Biology, Interdisciplinary Laboratory for the Development of Nanostructures) and a Laboratory accredited by EMBRAPII (Research Laboratory in Refrigeration and Thermophysics - Laboratory POLO - CTC, Department of Mechanical Engineering). Finally, it should be pointed out that UFSC, together with private and public companies and federal and state government bodies, pioneered the state by creating the Foundation of Reference Centers for Innovative Technologies - CERTI, in 1984, which two years later created the first Technological Business Incubator, currently denominated CELTA.

# Title: Consolidated Outreach Programs

## Justification

The university outreach programs, indissociable from teaching and research activities, according to the Constitution of our country, plays a fundamental role in the integration between university and society, as well as promote the development of communities to consolidate and train new professionals with social awareness. In this sense, UFSC promotes an average of 10,000 annual outreach activities, with the issuance of more than 70 thousand certificates per year. Due to these actions, the institution was projected in this field and today represents the South region in the College of Extension (COEX), next to Andifes. It is worth highlighting the participation of UFSC in the New Talents Program - CAPES, which aims to support proposals for extracurricular activities aimed at teachers and students of basic education, with the approval of several subprojects, as well as in the Rondon Project, under the coordination of the Ministry of Defense of the Federal Government, whose scope is the implementation of social projects through the voluntary work of students and university professors in regions with high poverty rates. It is emphasized that UFSC is the only university to participate in all the editions carried out by the project. In order to consolidate outreach projects, UFSC is implementing the curricularisation of extension in the university scope with a view to also assist internationalization activities of curricula of UFSC degrees. The Extension School, together with the Department of International Relations, launched the Winter & Summer Schools in 2017. These courses are taught in English and aim at helping internationalization at home, as well as providing foreign students with an opportunity to get to know UFSC through short courses of an interdisciplinary nature.

#### WEAKNESSES

### Title: The Initial Stage of the Postgraduate Programs in the Newly-created Campuses

#### Justification

UFSC began its internalization in 2008 through the Program to Support Restructuring and Expansion Plans of Brazilian Federal Universities (REUNI), with the installation of new campuses, initially in the cities of Araranguá, Curitibanos and Joinville, and later in the city of Blumenau (2013). All have stricto sensu postgraduate programs, but still in the initial stages, with master's degree and only one with a proposed doctorate degree. As a result, UFSC had a small impairment in the evaluation of the institution at the end of the four-year period and represents a limitation for internationalization activities. This weakeness is to be smoothed out with the years when degrees will attrack stundents and will create a body of excellence.

#### **Title: Physical Structure for the Reception of Foreigners**

#### Justification

UFSC, in its policies of attraction of foreign teachers and students to its campuses aims at high quality of the activities that it offers in the scope of teaching, research and university outreach. However, considering that the internationalization negotiations of the institution are recent, there is no physical structure in place to accommodate the foreign teachers and students it receives. This is a deficiency that must be addressed in future strategic planning, in order to facilitate the attraction of foreigners to the institution.

#### Title: Organizational Culture Geared Towards Internationalization

#### Justification

A weak point of the institution in internationalization is the heterogeneity in the receptivity and in the progress of activities of international academic exchange. In addition to long-standing undergraduate exchanges, UFSC has undergraduate degrees with double diploma (Food Engineering, Control Engineering and Automation, Electrical Engineering) or in the course of (Agronomy, Nursing), as well as experience with co-tenure (for ten years). However, this internationalization culture is not predominant, with a great heterogeneity among areas, degrees and postgraduate programs. Even in exchanges for one or two semesters, there are still formalistic barriers to the validation of activities carried out in institutions abroad. The process of formalization of agreements for double degree diplomas is delayed, due to the sometimes-bureaucratic approach of the competent deliberative body, the Undergraduate Teaching Chamber. Thus, it is necessary to create a "culture" of receptivity to activities carried out in other institutions, which is why there is a need to disseminate and train not only technical-administrative staff, but also professores and managers at different levels.

### DOES THE INSTITUTION HAVE A WELL-DEFINED VOCATION? YES

## Description

The vocation of the institution is the formation of skills for regional development, linked to research of local subjects and to innovation, with global scope by the scientific approach based on fundamental characteristics. This institutional project to establish itself as a research university is linked to the teacher training program established 40 years ago (the attraction of foreigners, about 5% of professors), and the partnerships with the productive sector, social organizations, state government, and community universities.

#### Describe other relevant information about the internationalization of your institution

About 4% of the graduate students and 5% of UFSC faculty come from abroad, and 50% of publications in 2017 are co-authored by foreigners. This result comes from the history and internal dynamics of the institution, being recent the inclusion of the subject in the policies of the institution. The UFSC's IDP (2015-2019) considers the deepening of the internationalization process, understood in a broad way, as it is explained in GOAL 13 - ENLARGING THE INTERNATIONALIZATION OF THE INSTITUTION ACTIVITIES: To increase actions and projects of international cooperation; Foster institutional, inter-institutional, national and international cooperation in research networks, especially those of high complexity; Foster the participation of faculty, students and technical-administrative servers in international scientific events to present papers; Expand publication in indexed journals on international reference bases; Encourage the international exchange of the student body and double degree programs and co-supervision. In order to guarantee and broaden the international profile, internationalization is treated as a cross-cutting strategy, encompassing all instances of the institution. In this sense, due to the commitment of all the deans and other management bodies, the internationalization committee was created in order to define the pertinent policies and plans. Solutions were created for practical and essential questions, such as: (i) the English version of the university's websites, (ii) the translation into English of document templates issued by the institution, discipline names and menus, (iii) English catalog with undergraduate and graduate diploma titles and its menus to send to partners, aiming to attract foreign students, and (iv) revision of proficiency testing standards and standardization of academic terminology. UFSC has a history of internationalization and ranks among the top 10 Brazilian universities at the Academic World of Universities (ARWU), among the top 15 universities in Latin America at Times Higher Education (THE) and among the top 60 BRICS universities at Top Universities (QS). This is reflected in the scope of the 320 international cooperation agreements with HEIs on all continents, with 70% being in countries listed in Annex I of RFP 41/2017.

#### INSTITUCIONAL PROJECT

#### Institution Name

UNIVERSIDADE FEDERAL DE SANTA CATARINA (UFSC)

#### Goals of the Institutional project

UFSC Institutional Internationalization Plan resulted from consultation and participation of the university community and of its various administrative and institutional bodies. Its goals are based on a conception framework and they also set the implementation strategies to be followed, as described below.

## CONCEPTUAL FRAMEWORK

According to Knight (2003), for more than 20 years, the definition of internationalization has been widely discussed in the area of Higher Education, but its popularity soared in the 1980s. One of the challenges in elaborating a working definition of internationalization is taking into account its application to the context, culture and education system in question. This requires a clear institutional vision in order to adopt a definition that includes the specificities of the internationalization process. Internationalization is considered by universities around the world as a necessary process to further research excellence and to offer a wide-ranging education and training for the academic community to move in an increasingly globalized world. For Altbach, Reisberg and Rumbley (2010), internationalization can be interpreted as a variety of policies and programs that universities implement to respond to the phenomenon of globalization. In this sense, universities play a crucial role as institutions that not only produce and disseminate knowledge, but also assimilate and adapt global knowledge to local needs. Hence, universities influence and are influenced by the forces of globalization and need internationalization to absorb them and transform them into knowledge, innovation and change.

Within this context, the various internationalization efforts and initiatives carried out so far by UFSC need now a systematic restructuring that allows the implementation, coordination and evaluation of these activities. Thus, the Internationalization Program launched by CAPES, through its call for proposals 41/2016, will be one of the strategic mechanisms for UFSC to put into practice the coordinated restructuring that such internationalization efforts are demanding in the institutional academic environment.

## GOALS

The general goal of this Institutional Project is to consolidate the University's internationalization process in the next four years, in order for UFSC to develop in a sustainable way as a world-class university, increasing the international and intercultural awareness of students, faculty, and technical-administrative staff; strengthening research and production of knowledge; and promoting international cooperation and solidarity. In this way, the process leads to the consolidation of an internationalized university of excellence and inclusion.

The plan has specific goals concerning:

- Student training: Prepare undergraduate and postgraduate students to perform their academic and professional activities in a practical and competent manner in international and multicultural societies;
- Faculty training (I): Encourage faculty members to develop as international researchers and to
  offer international-standard teaching and training;
- Faculty training (II): Increase the number of faculty members pursuing postdoctoral research abroad;
- Staff training: Transform our technical and administrative staff, as well as our students, into global citizens and learners;
- Institutional positioning: Respond to the increasing public need for global competition in the production of knowledge, innovation and talent development;
- Courses: Offer undergraduate and postgraduate courses in English;
- · Curricula: Promote the internationalization of curricula of courses offered at UFSC;
- Projects: Increase the number of teaching, research and outreach projects with international collaboration;
- Scientific Production: Expand scientific production in international journals and with international

collaboration;

- Outreach: Expand the impact of outreach and extension actions through international development.
- Networking: Facilitate collaborative links between international communities, especially those located in regional areas;
- Mobility: Expand international mobility programs;
- · Attractiveness: Make UFSC more attractive to international students, faculty and researchers;
- Double degree: Encourage the signing of double degree agreements;
- Communication and culture (I): Create and expand multilingual environments on all campuses;
- Communication and culture (II): Provide foreign language education for Brazilians (mainly English) and Portuguese language education for foreigners;
- Funding: Search for new revenue streams;
- Visibility: Expand the international exposure of UFSC;
- Image and Reputation: Raise UFSC's international reputation and ranking;

In summary, in order to achieve its status as a global university, UFSC's Institutional Plan includes actions aimed at the training and qualification of students, faculty and staff; internationalization of its curricular and pedagogical structure; networking; research and extension projects; as well as communication; mobility; funding; and institutional image and reputation.

# **IMPLEMENTATION STRATEGIES**

Having set the plan's goals, it is necessary to establish an implementation strategy and an operational sequence so that the expected dimensions are contemplated throughout the whole internationalization process. One of the challenges faced by many universities relates to the translation of a strong commitment to internationalization into a practical and comprehensive strategy that integrates and institutionalizes the international dimension into the university systems and values (Knight, 1994, p. 11).

Knight (1994) proposes a sequencing of policies, guidelines and strategic actions for the process:

- Awareness create awareness among students, faculty and staff. Internationalization covers all aspects of the university and all constituencies need to be aware of the issues involved so they can participate in the process. Therefore, internationalization cannot be owned by a small group, otherwise it may become marginalized and viewed as an exclusive, rather than inclusive, issue.
- 2. Commitment build commitment to the process of integrating an international dimension into teaching/training, research, extension and other services. The commitment of the University's central administration is of vital importance and should be expressed both in concrete ways (i.e. by allocating funds for internationalization) and symbolic ways (i.e. by recognizing and rewarding the efforts of those actively contributing to internationalization).
- 3. Planning develop a comprehensive plan or strategies. Planning needs to happen at several different levels. Therefore, this institutional plan will demonstrate the priorities and provide the directions for the internationalization process. Special attention will be given to the decentralization issue, encouraging participation and initiatives from academic departments, teaching units, research laboratories and groups.
- 4. Operationalization implement the different aspects of a strategy and create a supportive culture. In this stage of the cycle, (i) academic activities and services, (ii) organizational factors and (iii) guiding principles will be the three main components. It is fair to say that the development of these components are somewhat obvious and essential parts of the process. Therefore, the priority and pacing of their implementation will depend on the resources, needs and objectives of UFSC (see below).
- 5. Review assess and continually enhance the quality and impact of the different aspects of the process. It is important to note that by review we mean to monitor and assess the value and success of individual activities and how they complement each other synergistically.
- Reinforcement reward and recognize faculty and staff participation in the internationalization process. The objective is to develop a culture within the institution which supports its internationalization through concrete or symbolic actions that value and reward those working directly with internationalization.

# **RELATION TO THE CAPES-Print**

The institutionalization of UFSC's internationalization plan finds in the CAPES-PrInt Call for Proposals a unique opportunity to embrace practically all of its objectives in the scope of postgraduate studies. The process of defining the themes, inviting the proposals, prioritizing and selecting international projects and, especially, discussing with the various postgraduate bodies through the creation of a

multidisciplinary committee has already brought tangible results to the University in terms of the ongoing actions in the various postgraduate programs. During the preparation of the University's proposal, all of the programs were mobilized to participate, generating 39 research proposals and involving 580 faculty members from 56 postgraduate programs, with the record of 313 cooperation agreements currently in progress or planned with foreign institutions. The present proposal engages virtually all university campuses and academic schools in multidisciplinary actions focused on contemporary society's challenges. The continuity of these institutional investments, in the scope of the Prorectorate for Research (PROPESQ), the Prorectorate for Graduate Studies (PROPG), and the Office of International Relations (SINTER), with the support of a Multidisciplinary Management Committee, aligns the postgraduate actions with the University's internalization plan and, as such, should assume a strategic position for UFSC in the coming years.

#### THEMES AND SPECIFIC GOALS

THEME 1	Countries
Nanoscience and Nanotechnology	Italy, The Netherlands, Switzerland, New Zealand, Argentina, France, Spain, Belgium, Austria, United Kingdom, Portugal, China, Germany, South Africa, Australia
Instituation	

#### Justification

The choice of the theme was based on the growing demand presented in the literature for solving problems with nanotechnology application and in the expertise of some research groups of UFSC. Thus, the subject intends to contribute in materials, nanostructured components, sensors and devices, in particular for: i) development of nanocatalysts for applications in energy, environment and therapeutic products; ii) nanostructures development and incorporation in functional products; iii) new application nanostructured release systems for the treatment of infectious, parasitic and cancer diseases; iv) application of nanomaterials in sensors and optoelectronic devices. The interaction of the postgraduate programs related with this subject and the respective foreign partners should promote important advances in relationships to the development of processes and products that present synergistic aspects. Accordingly, as an example, a nanocatalyst can release a drug directly in a cellular microenvironment; or a nanostructure can be developed for load/energy transfer processes in organic systems. The theme based on nanoscience and nanotechnology has played an important role in the process of internationalization of the institution, considering that there have been produced in our university either scientific articles or theses and dissertations in different collaborative ways with international partners. Thus, this theme is participating directly in the improvement of the internationalization process of the university. The Programs involved will develop activities including qualified training of human resources at an international level and research activities with knowledge generation, involving development and use of new materials and structures in the nanometric scale for applications in different areas.

#### GOALS

#### Goal 1

Development of nanocatalysts for energy and environment applications

#### Description

This objective refers to the project coordinated by the Postgraduate Program in Chemistry, which deals with fundamental research related to new structured materials in the nanoscale. It considers the development of nanocatalysts, with complete structural and dynamic characterization, which present high performance in relation to the activity, sensitivity, selectivity and stability, to contribute to the solution of industrial problems in the areas of energy, environment and therapeutic products. Examples of application include synthesis of organic molecules; sensors and biosensors; fuel cells; atomic spectrometry; bio-orthogonal and biomimetic catalysts. In addition to actions regarding technical aspects and increase in scientific quality productivity, actions will be undertaken in the training of technical personnel to achieve high quality and efficiency, as well as to participate in the process of internationalization of the institution, bringing foreign researchers and sending faculty members abroad for training, performing and participating in international events, creating courses taught in English for the insertion of students in a favourable environment, among other actions.

#### Goal 2

Development of nanostructures and incorporation into functional products

#### Description

This objective is related to the project, coordinated by the Postgraduate Program in Materials Science and Engineering, which deals with researches that generate intermediary products structured in the nanoscale for final applications. It refers to the development of functional nanomaterials with unique properties, not found in the respective equivalents formed from larger particles. As examples, one can

mention ceramics with nanometric structures that are tougher than those made from micrometric particles; nanostructured metals are significantly harder than the metals with coarser grains; modified surfaces at the nanoscale may exhibit exceptional corrosion and wear resistance; nanosystems applied to constructions may not only improve mechanical performance but also activate the properties related to the environment; nanoparticle-reinforced polymers have special features due to local bonds and interactions; bioactive nanoparticles, larger than typical molecules, but smaller than viruses, can act within the cells for delivering drugs. In addition to the actions regarding the technical aspects and increase in qualified scientific and technical (patents) productivity, the objectives are also relate to actions in training researchers at an international level, training the technical staff to achieve high quality and efficiency as well as to participate of the internationalization process of the institution, bringing foreign researchers and sending faculty members abroad, conducting and participating in events, creating courses taught in English for students insertion in a favourable environment, among other actions.

## Goal 3

Application of nanomaterials to sensors and optoelectronic devices

#### Description

This objective is related to the proposal coordinated by the Post-Graduate Program in Physics, with emphasis on applied research in sensors and optoelectronic devices using structured materials at the nanoscale. This objective aims also to design, implement and to test sensor circuits in CMOS technology capable of harvesting energy from the environment. Specifically, it aims to model, design, fabricate, and characterize MOSFETs radiation sensors, interface circuits for sensors and circuits for communication and control. Current optoelectronic devices involve the conjunction of organic and hybrids materials besides the necessary electrical contacts with electrodes. At the interfaces between the different materials, the kinetics of ionic and electronic processes is determinant for the global performance. Therefore, it is also envisaged the development of experimental methods that could allow the quantification of interfacial phenomena of accumulation and charge transport.

In addition to the actions related to technical aspects and increase in scientific productivity, it is also clearly intended to carry out actions to promote training of researchers at an international level, training of technical staff to achieve high quality and efficiency as well as participate in the internationalization process of the institution, bringing in foreign researchers. For this purpose, it is intended to send professors to international events, create courses taught in English for the insertion of the students in a favourable environment, among other actions.

## Goal 4

Application of new drugs with nanostructured release systems for the treatment of infectious, parasitic and cancer diseases

#### Description

This objective is related to the project proposed by the Post-Graduate Program in Pharmacy, with emphasis on drug research using structured materials in the nanoscale. It refers to the search for new drugs, the improvement of drugs already known and the production of new prototypes using nanotechnological strategies aiming the treatment of cancer, infectious and parasitic diseases. Even considering numerous studies in the area, there are still challenges for the treatment and/or eradication of these diseases. The use of nanotechnology for drug release is a solution that can be applied to the diseases in focus, since it can be used as a strategy to circumvent biological barriers, as well as making drugs with reduced adverse effects, improving the treatment compliance and consequently reducing costs. However, few nanomaterials have been used in clinical trials, it is a challenge for the researchers to create interest in governments and industries for the mentioned points. In addition, it has to be considered that nanostructures can be translated from the area exposed to other parts of the body, being able to cross cell membranes and blood-brain barrier, and even accumulate in particular parts of the body producing adverse effects. It should therefore be considered that substances, which are safe for some animal species at a given dose, may not be safe for humans or vice versa, as well as the particles used in the formulations that are inert when ingested, but toxic when inhaled. It is therefore envisaged that, although nanotechnology opens up many improvement for drugs, the research must advance to provide coverage in the implementation and regulation.

In addition to the actions regarding the technical and increase in scientific and technical (patents)

productivity, the aims evidently are also related to actions to promote researchers training at an international level, training of technical staff to achieve high quality and efficiency as well as to participate in the internationalization process of the institution, bringing foreign researchers and sending researchers abroad for training, conducting and participating in events, creating courses taught in English for the insertion of the students in a favourable environment, among other actions.

THEME 2	Countries
Digital Transformation: Industry 4.0 and Services	Spain, Portugal, Sweden, China, Greece, Argentina, Canada, Switzerland, Finland, Peru, Belgium, New Zealand, United Kingdom, Germany, Colombia, Chile, United States of America, France, Italy, Australia, Austria, Norway, Japan
lucatification	

#### Justification

Digital disruption is a transformation caused by the emerging digital technologies and new business models with impact on the value of existing products and services offered by different business segments. This disruption is projected in the technological, economic, environmental, social and cultural dimensions. Particularly for the industrial sector, in Germany this disruption was named as "Industry 4.0". In 2011, the German research union for economy and science created the expression "industry 4.0" to nominate the financing program requested to Chancellor Merkel to keep the German industry in the state of the art. The term is a reference to the 4<sup>th</sup> era (or revolution) of the industrial sector. The first was the Industrial Revolution (1760-1820), with steam power and mechanization through spinning mills. The second industrial revolution was mass production (1870-1950), based on electricity. The third industrial revolution came with the introduction of computers and automation in manufacturing (1950-2000). The current era is characterized by cybernetic systems and the support of artificial intelligence in the repositioning of the industry as the enabling of services, dematerialization and disintermediation. Neither causes nor digital transformation impacts are limited to technologically based industrial production. Digital disruption is caused and effects all sectors. This is particularly true for Education, Science and Technology, which have a central role in human capital development, knowledge production, goods and services. In this theme are training, research and development related to innovation in technology (eq internet of things - IoT, big data, cloud computing), industry (robotics, distributed manufacturing), economics (e.g., bitcoin/blockchain and fintechs), management (e.g., crowsourcing, open innovation, virtual organizations, knowledge management and governance), public management (e-Gov and digital democracy), and transformations in science itself (e.g., digital science, citizen science, transdisciplinarity) and education (e.g., MOOCs, Crowd Certification). Hence, in the internationalization project of UFSC, digital transformation aims to establish a scenario for the mobilization of multi, inter and transdisciplinary endeavors, involving multi-campus and multicampus actions of the University, in cooperation with international centers of excellence in different dimensions of digital disruption.

#### GOALS

#### Goal 1

Mathematical models for describing physical phenomena for application in engineering

## Description

This objective refers to the project coordinated by the Post-Graduate Program in Pure and Applied Mathematics. Mathematical models appear in the description of phenomena in several areas such as Engineering, Physics, Chemistry, Biology, Medicine and many others. Some of the problems that will be considered by the team are: - In the area of convex optimization, it is intended to develop and analyze modern algorithms of decomposition with application in several strategic areas of industry and applied sciences in general. Another objective is to develop efficient semi-defined programming algorithms for problems in geometry of distances and quantum information. - The research in Partial Differential Equations involves several aspects such as results of existence, uniqueness, regularity and asymptotic behavior of solutions to initial value and / or contour problems. One of the objectives of the project is to develop techniques to study the asymptotic behavior of differential equations as well as to consider their applications in problems of Physics and Engineering. Operator algebras have emerged as models for quantum physical phenomena. - The study of operators, their representations and the algebras generated by them have direct application in quantum physics. We propose here to study advances in the theory of algebras of operators and their iterations with the most varied areas, such as dynamical systems, algebras, physics, engineering, etc.

# Goal 2

Big data analysis

#### Description

This objective refers to the project coordinated by the Graduate Program in Computer Science. Big data analysis has enabled more accurate prediction of patient needs and discovery of knowledge for the pharmaceutical industry. Transformation is also underway in educational and scientific research processes that require approximation and convergence between the resolution of complex problems of human reality with the advances of science and training. One example is the use of mobile technologies and global connectivity for the production of scientific data (in so-called citizen science) and in learning (e.g. inverted classroom). In this objective, the research and training projects focused on the applied research of disruptive digital technologies in the different sectors of human activity, as well as critical analysis of technological, economic, social and environmental impacts.

#### Goal 3

Automation, control and computational systems for industry 4.0 and services

#### Desciption

This objective refers to the project coordinated by the Post-Graduate Program in Automation and Systems Engineering. The concept of Industry 4.0, associated with a new phase of industrial and socioeconomic development, aims to integrate the physical and virtual worlds in the form of networked systems with the ultimate goal of allowing the direct interaction of the customer with the industry that will be in charge of the manufacturing the desired product. In general, this concept can be extended to other service sectors, public or private, and these complex systems will be based on innovative ideas and technologies associated with the areas of Automation, Control and Computational Systems. In this context, this project has as main objective to carry out a set of actions to give greater international visibility to the participating PG Programs, and to UFSC as a whole, making them references in the subject of Automation, Control and Computational Systems for Industry and Services 4.0.

#### Goal 4

Development of reconfigurable robots and parallel mechanisms

#### Description

This objective refers to the project coordinated by the Post-Graduate Program in Mechanical Engineering. The purpose of this proposal is to develop comprehensive methodologies of design and development of reconfigurable parallel robots and mechanisms for applications in the industry 4.0. The study of reconfigurability is relevant in order to achieve one of the main objectives of industry 4.0 which is modularity. But not only in this focus, the reconfigurability of mechanisms and parallel robots can be used in cooperative spaces man / machine, seeking efficient and safe operations for both. Suitable drives for joint movement enable the creation of agile and precise robots. Methodologies should also design robots that have real-time capabilities, that is, that can predict and adapt to the different realities and modes of operation required for the job. These processes will be performed using available sensors for data collection and analysis and for subsequent decision making, leading to a decentralization of process control, another industry pillar 4.0. A methodology that allows the development of a robot with all the characteristics mentioned should include enumeration of robots and mechanisms, development of mathematical tools to assist in enumeration and design, software development for autonomy and control of automated systems, collection and data processing in real time, among other activities. The wide range of requirements shows the need for the proposed interaction in this document, combining the knowledge of the various research groups specialized in each area for the development of a generalized methodology for industry 4.0.

#### Goal 5

Analysis of distributed and automated manufacturing lines for manufacturing customized medical treatment items

#### Description

This objective refers to the project coordinated by the Post-Graduate Program in Production engineering. The project aims to analyze the operational, economic and social viability of the implementation of an IoT platform for distributed and highly automated manufacturing lines destined to the manufacture of customized items for personalized medical treatment. To achieve this, the following specific objectives will be sought: - Analyze requirements for conceptual modeling of platforms for integration and synchronization of information in distributed production systems. -Characterize the industrial practice and define test scenarios for evaluation of the platform based on concepts and technologies of the Industry 4.0. - Through twin digital model, evaluate the operational, economic (costs and benefits) and social performance of the IoT platform for distributed and highly automated manufacturing lines for manufacturing personalized medical treatment items... - To propose a modeling of the IoT platform that supports a cooperative approach between the design, manufacturing and use steps, in order to enable the active involvement of the participants throughout the product life cycle. The activities of the project will result in the development of scientific knowledge, focused on conceptual propositions and oriented to new methods and models for decision making; and practical, aimed at the development of applied approaches and empirical studies, within the framework of IoT platforms for distributed and highly automated manufacturing lines.

THEME 3	Countries
Human Health	Australia, Belgium, Canada, France, Italy, The Netherlands, New Zealand, Norway, Portugal, United Kingdom, United States of America, Sweden, Switzerland
Justification	

#### Justification

The search of the human being for health and life guality is an intense and growing phenomenon in today's society. The maintenance of a general state of health during the different life stages requires both preventive and therapeutic actions, which are based on scientific knowledge arising from several areas. Together, these areas deal with matters with the most varying degrees of complexity, ranging from the knowledge about molecular mechanisms related to the action of a pathogen or a tumor cell in the human organism, as well as to understanding the influences of diet, physical exercise and urban infrastructure on people's health and quality of life.

In this scenario, Human Health was selected as one of the priority themes belonging to the internationalization process of our University (UFSC). Such a choice was due, in addition to the relevance of the theme to present humanity, to the Institutional Plan for Internationalization of UFSC (2018), which aims to recognize, encourage and strengthen areas that already contribute significantly to the internationalization of the Institution. In this context, it was diagnosed that the Health Area has a major collaborative role to the current Internationalization status of our University. This collaboration occurs in part through the participation of professors and students of postgraduate programs in different subareas, such as: Cellular Biology and Development; Biochemistry; Biotechnology and Biosciences; Food Science; Physiological Sciences; Medical Sciences; Physical Education; Nursing; Food Engineering; Pharmacology; Neurosciences; Nutrition; Dentistry; Collective Health; among others.

In the internationalization process of UFSC, particularly in the area of postgraduate studies, the theme of HUMAN HEALTH will be developed by cross-cutting and multidisciplinary international research projects (detailed later). The above-mentioned postgraduate programs (among others) will develop activities that aim institutional internationalization, gualified training of human resources in an international context, as well as development of research activities to generate scientific knowledge that will enable, directly or indirectly, actions necessary for the maintenance and/or improvement of human health at different stages of life.

#### GOALS

### Goal 1

Mechanisms involved in the different levels of communication and intra- and interspecific cellular interaction in normal and pathological conditions

#### Description

This goal is related to the project coordinated by the Postgraduate Program in Biotechnology and Biosciences. Cell homeostasis is a fundamental phenomenon for the maintenance of life and, consequently, for the health of living beings, including humans. In addition to this individual homeostasis of each cell, communication between cells of the same individual (e.g., metastatic tumors) or between cells of different organisms (e.g., infections) is crucial for maintaining health; changes in this communication process can lead to the development of pathological conditions. In this regard, one of the objectives of the HUMAN HEALTH theme in this project is to understand mechanisms modulating the different levels of cellular communication and interaction (both intra- and interspecific) under normal and pathological conditions. The achievement of this goal is mainly related to the development of an international research project that has as Brazilian team researchers linked to the Postgraduate Programs in (i) Biotechnology and Biosciences (leader), (ii) Pharmacology, (iii) Biochemistry, (iv) Cellular Biology and Development, (v) Neurosciences and (vi) Physiological Sciences (Multicentric).

The specific goal (mentioned above) will be consolidated in an scenario of internationalization of the linked Postgraduate Programs, with emphasis on activities that will seek to: (i) implement external commissions with the participation of international researchers to evaluate the Postgraduate Programs participants of the proposal, (ii) train professors, students and technical and administrative staff from UFSC abroad, (iii) receive foreign researchers (junior and senior) in order to qualify and internationalize different institutional sectors (especially Postgraduate Programs), (iv) hold

international events at UFSC (workshops, congresses, summer / winter schools), (v) generate biotechnological products derived from research in international cooperation.

### Goal 2

Mechanisms involved in the development of chronic human diseases

#### Description

This goal is related to the project coordinated by the Postgraduate Program in Biochemistry. Nowadays, human population is facing a silent pandemic of chronic diseases. According to data from the World Health Organization, chronic diseases such as coronary artery disease, myocardial infarction, diabetes mellitus, chronic obstructive pulmonary disease, degenerative and psychiatric diseases accounted for 70% of deaths in 2015; such numberr have increased over the last years, in parallel with human demographic changes and the increases in life expectancy. In this regard, one of the objectives of the HUMAN HEALTH theme in this project is to understand mechanisms involved in the development of chronic human diseases, such as coronary artery disease, myocardial infarction, diabetes mellitus, infertility, degenerative diseases and psychiatric disorders, as well as to seek therapeutic possibilities for such conditions. The achievement of this goal is mainly related to the development of an international research project that has as Brazilian team researchers linked to the Postgraduate Programs in (i) Biochemistry (leader), (ii) Pharmacology, (iii) Medical Sciences, iv), Neurosciences and (vi) Multicentric in Physiological Sciences.

The specific goal (mentioned above) will be consolidated in an scenario of internationalization of the linked Postgraduate Programs, with emphasis on activities that will seek to: (i) train professors, students and technical and administrative staff from UFSC abroad, (ii) receive foreign researchers (junior and senior) in order to qualify and internationalize different institutional sectors (especially Postgraduate Programs), (iii) hold international events at UFSC (workshops, congresses, summer / winter schools).

#### Goal 3

#### Interprofessional health education

#### Description

This goal is related to the project coordinated by the Postgraduate Program in Nursing. The improvement of health indicators of societies depends, at least in part, on the gualification of education of health professionals. In this context, recent studies show that several activities concerning the education of health professionals in many countries are obsolete and should be modified in view of the opportunities for mutual learning and joint solutions made possible by global interdependence. In this context, INTERPROFESSIONAL EDUCATION emerges as an interesting possibility, which allows for students from two or more competencies to learn about and with each other, enabling effective collaboration and improvement of health outcomes. Although the subject of interprofessional health education is relatively new in terms of postgraduate education, there is evidence that it may represent an important strategy promoting the education of health professionals. In this context, one of the objectives of the HUMAN HEALTH theme in this project is the creation of a network of interprofessional education in health, formed by a team of Brazilian researchers (linked to the Postgraduate Programs in Nursing, Collective Health, Pharmacy, Medical Sciences, Nutrition and Dentistry) and foreigners (from Canada, USA and Spain), which will enable the production of knowledge and generation of methodologies and tools for interprofessional health education. The achievement of this goal is mainly related to the development of an international research project entitled "Interprofessional Health Education". The creation of this interprofessional (and international) health education network will be carried out in an internationalization scenario, seeking to (i) train professors, students and technical and administrative staff from UFSC abroad, (ii) receive foreign researchers (junior and senior) in order to qualify and internationalize different institutional sectors (especially Postgraduate Programs), (iii) hold international events at UFSC (workshops, congresses, summer/winter schools) and (iv) develop and maintain an online platform for internationalization of interprofessional health education.

#### Goal 4

Promotion of human health through food and nutrition, with a focus on better food conservation and transformation

#### Description

This goal is related to the project coordinated by the Postgraduate Program in Food Engineering. Although factors intrinsic to individuals (mainly genetic) have a significant influence on their general health, environmental factors also exert a great influence on the promotion and maintenance of health. Of particular importance, some exogenous factors, such as molecular constituents of ingested foods, can modulate cellular function and promote health or, conversely, contribute to disease development. In this context, one of the objectives of the HUMAN HEALTH theme in this project is to generate knowledge related to the maintenance and promotion of human health through food and nutrition, focusing on the best conservation and transformation of food, aiming nutritional security.

The achievement of this goal is mainly related to the development of an international research project that has as Brazilian team researchers linked to the Postgraduate Programs in (i) Food Engineering (leader), (ii) Food Science and (iii) Nutrition.

The specific goal (mentioned above) will be consolidated in an scenario of internationalization of the linked Postgraduate Programs, with emphasis on activities that will seek to: (i) train professors, students and technical and administrative staff from UFSC abroad, (ii) receive foreign researchers (junior and senior) in order to qualify and internationalize different institutional sectors (especially Postgraduate Programs), (iii) hold international events at UFSC (workshops, congresses, summer / winter schools).

#### Goal 5

Urban infrastructure as a promoter of human health

#### Description

This goal is related to the project coordinated by the Postgraduate Program in Colective Health. There is evidence that the urban infrastructure that favors the displacement and well-being of the population can act to promote health maintenance, especially during aging; it acts in mitigating the physical incapacity resulting from the natural and unavoidable process of aging. Such urban infrastructure tends to be less frequent in low- and middle-income countries, which triggers early morbidity and mortality. In this context, one of the objectives of the HUMAN HEALTH theme in this institutional project is to better understand the relationship between healthy aging and urban mobility, addressed in an interdisciplinary way and at different levels. The activities related to this objective will focus mainly on studies with human beings and communities and the achievement of this goal is mainly related to the Postgraduate Programs in (i) Collective Health (leader), (ii) Architecture and Urbanism, (iii) Nutrition, (iv) Dentistry, (v) Medicine and (vi) Physical Education.

The specific goal (mentioned above) will be consolidated in an scenario of internationalization of the linked Postgraduate Programs, with emphasis on activities that will seek to: (i) expand co-projects by the participating Programs, (ii) train professors, students and technical and administrative staff from UFSC abroad, (iii) receive foreign researchers (junior and senior) in order to qualify and internationalize different institutional sectors (especially Postgraduate Programs), (iv) hold international events at UFSC (workshops, congresses, summer / winter schools).

#### Goal 6

Increased safety, value, and confidence in health decision-making from evidence-based research

#### Description

This goal is related to the project coordinated by the Postgraduate Program in Dentistry. The duplication of researchs (including those in the area of Health), due to non-observance of previous studies and previous systematic reviews, was pointed out as the main critical point that leads to wasted financial and human resources. In health sciences, systematic reviews are at the top of the evidence pyramid, above important study designs that require significant financial support, such as controlled clinical trials, cohort studies, and case-control studies. From a social point of view, evidence-based research brings science closer to the needs of the population, fostering public health

policies. Given the central importance of evidence-based research and systematic reviews for scientific research in health (especially human health), one of the goals of the HUMAN HEALTH theme is to increase safety, value and confidence in health decision-making from evidence-based research, inserting UFSC in a context of international prominence in the production of evidence-based research and the development of strategies to reduce waste in health research. The achievement of this goal is mainly related to the development of an international research project that has as Brazilian team researchers linked to the Postgraduate Programs in (i) Dentistry (leader), (ii) Knowledge Engineering and (iii) Nursing.

The specific goal (mentioned above) will be consolidated in an scenario of internationalization of the linked Postgraduate Programs, with emphasis on activities that will seek to: (i) train professors, students and technical and administrative staff from UFSC abroad, (ii) receive foreign researchers (junior and senior) in order to qualify and internationalize different institutional sectors (especially Postgraduate Programs), (iii) hold international events at UFSC (workshops, congresses, summer / winter schools), and (iv) develop new automated methods to reduce the main difficulties related to conducting systematic reviews in health sciences.

# Goal 7

Healthy lifestyle as a possible promoter of human health: diagnosis and intervention

## Description

This goal is related to the project coordinated by the Postgraduate Program in Physical Education. Epidemiological evidence has proven the existence of components of lifestyle that act as health promoters, such as physical activity, healthy eating habits, quality of sleep, among others. Interestingly, such health-promoting components tend to be less frequent in low- and middle-income countries, triggering early morbidity and mortality. In this context, one of the objectives of the HUMAN HEALTH theme in this institutional project is to study diagnostic actions and interventions in people's lifestyles, extending such analyzes to contextual aspects of health determinants. The achievement of this goal is mainly related to the development of an international research project that has as Brazilian team researchers linked to the Postgraduate Programs in (i) Physical Education (leader), (ii) Collective Health and (iii) Nutrition.

The specific goal (mentioned above) will be consolidated in an scenario of internationalization of the linked Postgraduate Programs, with emphasis on activities that will seek to: (i) train professors, students and technical and administrative staff from UFSC abroad, (ii) receive foreign researchers (junior and senior) in order to qualify and internationalize different institutional sectors (especially Postgraduate Programs), (iii) hold international events at UFSC (workshops, congresses, summer / winter schools), (iv) propose innovation strategies focused on health interventions and (ii) develop technological apparatus/softwares that will serve as a basis for health-companies.

THEME 4	Countries
Languages, Interculturality and Identities	China; Spain; United States of America; France; The Netherlands; United Kingdom; Italy; Mozambique; New Zealand; Norway; Austria; Germany; Angola; India; Portugal; Argentina; Ireland; Australia; Russia; Sweden; East Timor; Uruguay; Belgium; Canada; Indonesia; Mexico; Peru
Justification	

The case for support for this theme is based on the way that the university and education can contribute decisively to preservation of the historical and cultural heritage of all humanity, and to production of social technology which can provide a dialogic way to integrate the past, present and future, locally, regionally and internationally, and thus is multilingual and intercultural.

The transnationalisation of education, such as the transfer of knowledge and ideas based on respect for human rights and acceptance of differences, contributes to a more just society that can create mechanisms for dialogue and social participation that can overcome the problems of intolerance and various forms of violence and social inequality. Training in global citizenship, with a focus on cultural, linguistic and human rights practices in different nations, contributes to the study of these complex issues, which require inter- and transdisciplinary perspectives for their understanding and development.

Thus, this proposal is linked to the internationalization of the university, but also seeks to bring the university closer to social issues that affect the population and to inspire commitment to find their solutions. After all, the mission of universities is to contribute directly or indirectly, in the short, medium and long term, to the improvement of social indicators of quality of life. The social and scientific relevance of this topic is justified by the need for academic publications in which dialogue between different cultures contributes to the fight for human rights and to combat violence from a perspective that considers intersectionalities of language, gender, social class, ethnicity-race, age and disability.

#### GOALS

#### Goal 1

Repository of intercultural practices

#### Description

This objective refers to the project coordinated by the Post-Graduate Program in Scientific and Technological Education, and includes the following specific objectives: a) To establish, articulate and deepen international collaborative partnerships that will be developed by researchers from the participating countries for study, research and action among teachers at various levels and in different types of education (pre-primary, primary, secondary, undergraduate and postgraduate), in different countries, communities and schools with a view firstly to the international recognition of local knowledge, technology and culture, and secondly to the actions of coloniality; b) To contribute to the internationalization of UFSC Post-Graduate Programs through international teaching, research and outreach activities and multilingual publication of the resulting output; c) To form an international network of researchers linked to the UNESCO Chair of "Language and Policies for Multilingualism" and researchers from other countries connected to the project, such as Australia and the United States of America; d) To map local and regional themes, and the shared problems of the different participating countries, with a view to supporting scientific and technological output and dialogic teaching at various levels; e) To contribute perspectives on the multilingual internationalization of memory, knowledge and mapped local and ancestral traditions to the online repository of multilingual and intercultural practices, local knowledge and technology at http://repi-dicite.nute.ufsc.br/; f) To produce multilingual teaching materials (initially in Tetum, Portuguese, Spanish and English) whose content expresses the dialogue between local knowledge (ancestral and traditional) and modern science and technology; g) To contribute to the preservation of historical cultural heritage through education, taking a dialectic view - past, present and future - and to the important role played by schools in preserving local cultural heritage, and in development and human rights.

# Goal 2

Translation, tradition and innovation

# Description

This objective refers to the project coordinated by the Postgraduate Program in Translation Studies and includes the following specific objectives: a) To identify barriers that hinder cross-cultural exchanges between different areas of knowledge in a world without borders and to create ways to overcome these barriers, drawing on the sciences of translation / Translation Studies. b) To encourage international research, in collaborative networks, in the fields of knowledge that are part of the project; c) To train high-level researchers in the interdisciplinary perspective; d) To promote and characterize multicultural dialogues with the aid of Translation Studies; e) To enable participation in calls for funding and financing programs (particularly international ones) aimed at developing science and culture.

# Goal 3

Challenges of the contemporary university in a globalized world

## Description

This objective refers to the project coordinated by the Postgraduate Program in Philosophy, and includes the following specific objectives: a) To investigate, from a comparative perspective (between Brazil and Germany), the place of the University in contemporary society, with focus on tensions between tradition and contemporaneity in research and teaching; b) To research the impact of new digital technology, especially portable devices, on new forms of subjectivation of university students; c) To investigate the circulation and cultural appropriation of different social groups recently represented in the University, in the context of their struggles for recognition; d) To research the forms of political construction of different groups of students, considering the recent and rapid economic, discursive and cultural changes in the public sphere; e) To describe the challenges made by internationalization to research and teaching in the humanities, considering the prevalence of cultures and languages at a time when social experience is simultaneously both multiculturally and individually oriented; f) To investigate changes in the work of teachers (in terms of teaching, research and outreach) in face of the new demands placed upon the contemporary university; g) To compare the way in which Brazilian and German universities are structured with regard to scientific academic output, teaching and outreach; h) To understand the social place the university occupies in Brazilian and German contexts; i) To analyze university training in relation to its continuity or discontinuity with basic education in Brazil and Germany.

# Goal 4

Digital support for the governance of the internationalization program

## Description

This objective refers to the project coordinated by the Post-Graduate Program in Engineering and Knowledge Management, and includes the following specific objectives: a) To develop a framework to support the governance of internationalization projects at UFSC, to support its institutionalization through registering and disseminating knowledge and experiences acquired; b) To strengthen partnerships with foreign universities and consolidate those in development or in their early stages; c) To increase the participation of foreign researchers by coordinating of research work, publications and post-graduate examination; d) To increase the possibility of exchange for foreign students and students of UFSC programs; e) To offer courses taught by foreign professors, as well as to offer courses taught by our professors in other universities abroad; f) To increase the impact of the conferences and colloquia offered by our programs.

#### Goal 5

Languages portal, literature and cultural practices

#### Description

This objective refers to the project coordinated by the Postgraduate Program in Linguistics, and includes the following specific objectives: a) To develop an open access portal that provides databases bringing together oral/visual and written texts in Brazilian sign language (Libras) and variants of the Portuguese Language for researchers, teachers, translators and interpreters and other interested parties; b) To develop and promote linguistic policies on Brazilian Sign Language and Portuguese as it is spoken and written in Brazil and in other countries where Portuguese is the official language; c) To create a space to promote dissemination and availability of texts that enable contextualized teaching of language and literature; d) To reflect on the relationship between language and literature practices; e) To provide literary texts for researchers and teachers; f) To make an UFSC-based database that includes linguistic and literary variants of Portuguese available to the national and international community, thus giving worldwide visibility to Portuguese and its variants; g) To foster the exchange between different postgraduate programs at UFSC, establishing partnerships to consolidate research; h) To foster a policy of internationalization of post-graduate study at UFSC, enabling partnerships and exchanges with world-class research centers abroad.

#### Goal 6

Cultural practices, education and human rights

#### Description

This objective refers to the project coordinated by the Interdisciplinary Postgraduate Program in Human Sciences, and includes the following specific objectives: a) To promote the internationalization of UFSC Graduate Programs through coordination, implementation and consolidation of a network of six programs (Interdisciplinary Sciences, Psychology, Anthropology, Literature, Education, and Social Work) with foreign institutions and researchers, aiming to develop the production of cutting-edge knowledge on diversity, gender, violence, education and arts for promotion of human rights. b) To consolidate and extend international dialogue with centers of excellence in studies on gender, sexuality, violence, and education and the arts. c) To promote researchers' publications in world-class foreign academic journals and articles in foreign languages in national journals, aiming at the international academic dissemination of the project's research. d) To train elementary school teachers in the themes of gender, sexuality and violence through innovative pedagogical technologies; e) To train high-quality professionals scientifically and technologically in studies of violence, gender, sexualities and disabilities, focusing on strategic themes to promote citizenship through research that considers intersectionalities of race / color / ethnicity, class, age, disabilities and others. f) To train high-level researchers to contribute to the formulation of public policies in the areas of education and health, on gender, sexuality and violence, themes that are integral to social relations in contemporary Brazil. g) To promote broad popularization of the scientific output of this field through publicity magazines, social networks and other channels of access to the general population. h) To produce innovative teaching material on the themes of gender, sexuality, disability and violence, aimed at strategic areas in the fight against violence and discrimination, especially in the educational field. i) To contribute in an innovative way to the creation of new public policy agendas in the themes of the project. j) To consolidate, in a more equal way, existing networks with countries in the global north (United States of America and Europe). k) To expand UFSC's academic discourse to universities in the global South in Asia (India), Africa (Mozambique) and Latin America (Argentina and Mexico).

UNIVERSIDADE FEDERAL	DE SANTA CATARINA
----------------------	-------------------

THEME 4	Countries
Environmental Sustainability	Australia, Belgium, Canada, China, Denmark, France, Germany, Italy, Japan, Mexico, The Netherlands, New Zealand, Norway, Portugal, Singapore, South Africa, Spain, Sweden, Switzerland, United Kingdom, United States of America
Justification	

This theme seeks to articulate UFSC capabilities in environmental sustainability, from three approaches. The first is a transversal approach departing from the framework of laws and regulation since the Law Postgraduate Program has a well establishes research line on Environmental Law. A second approach involves the use and conservation of natural resources, coastal and marine ecosystems, as well as environmental friendly food production. The third focus is on cities, energy, and industrial production, through integrated approaches, intended to reduce and reuse waste from industrial production, increased efficiency and minimal impact of energy generation, distribution, and use, and the development of smart cities, which encompasses management of water, energy, and residues. The challenge and relevance of this proposal seek to connect local and international stakeholders around the concept of sustainability. From a scientific point of view, it innovates by developing concepts, methods, and knowledge about the principles and phenomena linked to the flow of matter and energy in the biosphere, with biodiversity safety and avoiding that the technical inputs, designed to be recycled, reach the biosphere. From a technological point of view, the proposal innovates by seeking to develop tools, equipment, and systems aiming to protect, preserve and manage natural resources and ecosystems. Examples include industrial and food processing activities, renewable energy generation and management, systems for the collection, use, and treatment of water and wastewater, as well as the development of Smart Grids. From a socioeconomic viewpoint, innovation will have tangible results if new solutions get to the marketplace and are effectively adopted in urban, industrial, and agricultural management. Reduction of waste and non-renewable input use may generate opportunities to save resources, generate energy, protect and restore urban and rural spaces, increasing quality of life. This theme innovates by adopting transversal and multidisciplinary actions, which will potentially benefit diverse areas of knowledge, such as Engineering, Ecology, Aquaculture and Agriculture, Genetics, Food Science, Management, Decision Making, Sociology, and Law.

#### GOALS

## Goal 1

#### Sustainable energy for the future

#### Description

This project is coordinated by the Postgraduate Programs on Electrical Engineering. The overall objective of this project, involving the sustainability of electric power generation, addresses hydroelectric, thermoelectric, nuclear, solar (electric and thermal) generation plants, cogeneration,  $CO_2$  capture, smart grids, and electric vehicles. Specifically, the project will involve transversal and multidisciplinary challenges, which include: 1) development of intelligent solutions for monitoring, supervision, and control of energy networks aiming to increase service reliability and to integrate renewable sources; 2) research and Development on electronic structures that operate electrical network as intelligent components and high-performance interfaces; 3) design and optimization of systems for energy capture and reuse; techniques and models for removal of  $CO_2$  from polluting processes; 4) solutions to mitigate the impact of electric vehicles in electrical networks; 5) multi-scale modeling of regulation in water, food and energy sectors, among others.

#### Goal 2

Sustainable industry

#### Description

This project coordinated by the Postgraduate Programs on Chemical Engineering and Food Science encompass research on interactions between industrial processes and environment in the water and energy sectors, as well as the valorization/use of solid wastes. The objectives are: 1) recovery, transformation and valorization of waste currently discarded by industries; 2) use and conservation of energy, water, and materials, which affect diverse industrial sectors.

#### Goal 3

Sustainability in the international community (water, energy and food)

#### Description

The internationalization project coordinated by the Postgraduate Program in Law will seek to contribute to research lines in different postgraduate programs, which include: 1) to develop a policy-analysis and engagement framework to effectively inform and support policy cycles in Brazil, aiming to achieve sustainability goals in the context of global economic and environmental change; 2) to participate in public policy-making processes, influencing the appropriate use of instruments in this area, as well as their implementation, to generate resilience for the "water-energy-food" nexus in Brazil; 3) to develop new methods to evaluate the intersectoral complexity and the uncertainties involved in all levels of the "water-energy-food" nexus for Brazil, in a context of global changes; 4) to develop robust, quantitative evidence and new research tools and methods, based on a highly detailed new-generation computational model; 5) to obtain satisfactory demonstrations of sustainability projects in Santa Catarina state, with key institutions and networks whose activities affect and influence the Nexus challenges.

## Goal 4

Production of knowledge and training of human resources in the area of marine/coastal biodiversity

## Description

The project coordinated by the Postgraduate Program on Ecology will seek to contribute to research lines, which include: 1) evaluation of ecosystem functioning involving environmental indicators; hydrodynamic and nutrient modeling; food health; and evaluation of mesocosms, by characterizing global primary production, oxygen production, calcification, and carbon and nutrient sequestration; 2) definition of ecosystem goods and services, considering changes and losses caused by environmental impacts; 3) environment Conservation and Management, including management mechanisms; bioremediation and environmental restoration techniques; and communication and education.

#### Goal 5

Sustainable food production in Agricultural Sciences

#### Description

The project coordinated by the Postgraduate Program in Aquaculture aims seek to contribute to research lines, including: 1) to develop new methodologies for the efficient use of nutrients in sustainable agriculture and evaluation of new food products from sustainable agriculture and aquaculture; 2) to develop multi-trophic aquacultural production systems with effluent use and zero residues; 3) to improve fish quality by replacing feed ingredients; 4) to offer integrated courses to the four postgraduate programs in Agricultural Sciences; 5) to offer workshops on food safety assessment.

#### Goal 6

Characterization, conservation and sustainable use of biodiversity

#### Description

The project coordinated by the Postgraduate Program in Plant Genetic Resources contribute to different research lines, which include: 1) to design and test systems, practices, and protocols for the production of high-quality food products, as well as other products of economic interest (e.g., fibers, oils, others), while in accordance to the ethical values of contemporary society; 2) to generate knowledge and processes associated with the potential use of underutilized or unused plant species in Southern Brazil; 3) to adapt methodological and analytical tools to evaluate ecosystem services associated with the Atlantic Forest Biome; 4) to subsidize programs for the development of varieties or clones of native or exotic species; 5) o evaluate the relationships between knowledge, attitudes, and behavior of diverse societal stakeholders regarding the use and conservation of biodiversity, based on ecological principles.

#### Goal 7

Research and innovation for intelligent and environmentally sustainable cities - water, waste and renewable energy

#### Description

The project coordinated by the Postgraduate Program in Environmental Engineering aims to improve scientific and technological development to incorporate the concept of environmental sustainability into sanitation and natural resource management, through the implementation of an international network with UFSC for studies and research on Sustainable Cities. The objectives include: 1) to develop concepts, technologies, and application of Zero-Waste methodology as a contribution to the Sustainable City; 2) to improve and develop Eco-technologies and nanotechnologies for urban water and effluent treatment; 3) to study technological alternatives, in the scope of green infrastructures, which encompass the concept of sustainability; 4) to incorporate social, legal, historical, and anthropological dimension into technological processes to achieve the transdisciplinary approach necessary and inherent to the concept of Sustainable City; 5) to create face-to-face and virtual spaces to exchange knowledge between Brazilian and international research groups and for staff training.

POSTGRADUATE PROGRAMS	
THEME 1	
NANOSCIENCE AND NANOTHECHNOLOGY	
NANUSCIENCE AND NANUTHECHNOLOGY	
De stans duste Dre men	Opened and heating (0017 and heating and de)
Postgraduate Program	Capes evaluation (2017 evaluation grade)
MATERIALS SCIENCE AND ENGINEERING	7
Justification	

This Postgraduate Program is linked to the Area of Materials (CAPES). It is the proponent of the project "Development of nanostructures and incorporation into functional products". The Program is structured in three Concentration Areas (Metals, Ceramics, and Polymers), based on fundamentals of Materials Science and Engineering according to the respective research lines. The work subjects in nanoscience and nanoengineering are multidisciplinary and include majorly interactions among several materials. In this way, for instance, from interconnected research lines, biocomposite materials might be developed with a polymeric matrix and functionalized nanoparticles as fillers, or even, through surface treatments, textures might be created with nanostructured tribological characteristics.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
CHEMICAL ENGINEERING	7
Justification	
This Destanduate Destances is lighted to the Area of	

This Postgraduate Program is linked to the Area of Engineering II (CAPES). It is participant of the projects "Development of nanostructures and incorporation into functional products" and "Development and application of nanocatalysts". The Program is structured in a single Concentration Area, "Development of chemical and biotechnological processes". The respective research areas are: engineering of chemical reactions and materials development; genomic engineering and biomedical engineering; transport phenomena and porous media; process modelling, optimization and control; biotechnological processes; thermodynamics and separation processes. Typically, there is a strong interaction with themes connected to nanotechnology, for instance, in works related to fabrication of nanometric polymeric compounds, electrospinning of functionalized nanofibers, production and characterization of nanostructured porous media, biosynthesis of nanoparticles, among others.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
PHARMACY	5
luctification	

Justification

This program is linked to the Pharmacy Area of CAPES. It is the proponent of the project "Multilateral and translational study of new drugs and nanostructured systems for the treatment of infectious, parasitic and cancer diseases" and participates of the project "Development and application of nanocatalysts". The Program is structured in two areas of concentration: clinical analysis; and pharmaceutical sciences. Nanotechnology permeates the different lines of research developed in the program through projects that range from the synthesis or isolation of compounds from natural sources to improvement of biopharmaceutical properties, systems for the encapsulation of drugs and new drugs to be tested in vitro and in vivo through preclinical evaluations of formulations, in addition to nanotoxicological aspects important for health and for regulatory processes.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
CHEMISTRY	7
Justification	
This program is linked to the Chemistry Area of CAR	PES. Proponent of the project "Development and

application of nanocatalysts" and participates of the project "Multilateral and translational study of new drugs and nanostructured release systems" and "Nanomaterials for sensors and optoelectronic devices". The Program is structured in four concentration areas, including analytical chemistry, inorganic chemistry, organic chemistry and physicochemistry. Among the most recent research focuses are several in the field of nanoscience and nanotechnology, involving surface modification with functional nanoparticles, synthesis and characterization of nanocatalysts, nanostructured colloidal systems, among others.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
FOOD ENGINEERING	6
Justification	

This program is linked to the Food Science Area of CAPES and participates of the project "Development of nanostructures and incorporation into functional products". The Program is structured in a single concentration area, "Development of food industry processes". The research lines are: transfer of heat and mass in food processing; separation processes: supercritical application of anti-bacterial nanoparticles in food preservation films, among others.

extraction and separation with membranes; biotechnological processes and applied microbial kinetics; development of processes and products. These lines include works related to nanotechnology, such as use of microorganisms in fermentative processes that exert their metabolism at the nanoscale, membrane separation for the production of nanoemulsions, and

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
PHYSICS	4
Justification	

This program is linked to the Physics Area of CAPES, and it is the proponent of the project "Nanomaterials for sensors and optoelectronic devices" and participates of the projects "Development of nanostructures and incorporation into functional products" and "Development and application of nanocatalysts". The Program is structured in five concentration areas: astrophysics; atomic and molecular physics; physics of condensed matter and statistical mechanics; mathematical physics and field theory, nuclear physics and hadrons. The importance of this Program participation in the project consists in the fundamental expertise related to the development of nanostructured materials: synthesis and characterization of new materials, including low-cost materials, that can be structured at the nanoscale to different applications in devices and sensors; theoretical studies on the prediction of materials properties.

#### POSTGRADUATE PROGRAM

#### Capes evaluation (2017 evaluation grade)

DENTISTRY

#### 4

#### Justification

This program is linked to the Dentistry Area of CAPES and participates of the project ""Multilateral and translational study of new drugs and nanostructured systems for the treatment of infectious, parasitic and cancer diseases". The Program is structured in five concentration areas: dentistry clinics; oral diagnosis, endodontics, implantodontics, and dentistry in public health. This Program has research lines that complement those of pharmacy including different approaches in oral healthcare, including the development of nanotechnological products for different objectives. Some developments include formulations for dental whitening, for inflammatory and infectious processes such as cancer, as well as an approach involving relationships and search of solutions related to public health.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
BIOTECHNOLOGY AND BIOSCIENCES	5
Justification	

This program is linked to the Biotechnology Area of CAPES and participates of the project ""Multilateral and translational study of new drugs and nanostructured systems for the treatment of infectious, parasitic and cancer diseases". The Program is structured in 3 concentration areas: cellular and molecular biology. Microbiology and parasitology; biotechnology. The importance of the participation of this Program in the project consists in the complementarity of the research lines. The faculty members have the expertise in relevant subjects in public health such as parasitology and microbiology, which are important to the development and test of nanostructured formulations with a therapeutic goal.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
ELECTRICAL ENGINEERING	6

#### Justification

This program is linked to the Area of Engineering IV of CAPES. It participates of the project "Nanomaterials for sensors and optoelectronic devices". The Program is structured in two concentration areas: energy processing and information processing. These concentration areas are divided into the following sub-areas: circuits and integrated systems; communications and signal processing; electromagnetism and electromagnetic devices; power electronics and electric drive; biomedical engineering; electrical power systems. The participation of this program aims to provide the applicability of materials and nanostructured materials developed in the elaboration and modeling of new electronic devices.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
PUBLIC HEALTH	5
Justification	

This program is linked to the Public Health Area of CAPES. It participates of the project "Multilateral and translational study on new drugs and release systems nanostructured for the treatment of infectious, parasitic and cancer diseases". The program has three concentration areas: epidemiology, health policies, and human sciences. The participation of this program in the project seeks to give a view of the use of nanotechnology in an interdisciplinary way, including aspects of epidemiological studies.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
PHARMACEUTICAL NANOTECHNOLOGY	4
Justification	

This program was created in 2010 and is linked to the Pharmacy Area of CAPES. The program is structured in one concentration area: "Nanotechnology applied to pharmaceuticals sciences" and one research line: "Research and development of nanostructured systems for bioactive molecules". Evaluating the trajectory of Nanobiotechnology in Brazil, it is possible to affirm that important steps have already been taken and bottlenecks have been superseded. With growing specialization in issues related to health, nanobiotechnology and nanotechnology stand out in the generation of new knowledge. Moreover, several research groups distributed throughout the country take part of this program, including UFSC, working in an efficient and competitive way. Additionally, since the expertise is focused in this theme and all infrastructure is shared among the participating institutions, as well as the existing national and international networks of researchers is relevant for our university, the participation of this program in this theme is justified.

## THEME 2

**DIGITAL TRANSFORMATION: INDUSTRY 4.0 AND SERVICES** 

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
COMPUTER SCIENCE	5
Justification	

Proponent of "Big Data Analytics: Shedding Light from Genes to the Cosmos" project and participant in the project "Distributed and automated healthcare manufacturing". It has research lines in computational intelligence, embedded systems, networks and parallel and distributed computing, security in computer systems, references to scientific research on digital disruptive technologies, and a broad history of applied research in different domains (e.g., health, evaluation, remote computing, intelligent manufacturing, digital certification, etc.).

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
BIOTECHNOLOGY AND BIOSCIENCES	5
Justification	

Participant in the project "Big Data Analytics: Shedding light from genes to the cosmos" has research lines in bioinformatics and systems biology, development of vaccines and biological therapies and development of bioprocesses. In the subject of digital transformation brings its experience in the National Genome Project, large-scale genomic data analysis and data analysis of environmental metagenomes.

#### POSTGRADUATE PROGRAM

#### Capes evaluation (2017 evaluation grade)

PHYSICS

#### Justification

Participant in the project "Big Data Analytics: Shedding light from genes to the cosmos" has research in astrophysics, optics and quantum information, statistical physics, particle physics and nuclear physics. In digital transformation, it brings the experience of its researchers and international leadership in the development and application of computational methods in large databases, exploration of scientific data, "collaboratories" of astrophysical data, spectral analysis of stellar populations, galaxy population studies and analysis of compact objects (neutron stars and magnetars).

4

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
ACCOUNTING	5
Justification	

Participant in the project "Distributed and automated healthcare manufacturing" has research in governance and sustainability, accounting, environmental and accounting auditing. In the digital transformation, it participates in the applications of cost models in health and organizational management.

POSTGRADUATE PROGRAM

Capes evaluation (2017 evaluation grade)

AUTOMATION AND SYSTEMS ENGINEERING

#### Justification

Proponent of the project "Automation, control and computational systems for industry and services 4.0" and participant in the project "Integration of robotics competencies in R & D for configurable parallel mechanisms". The program has research in control, automation and mechatronic systems (including robotics and applications), computer systems (including IA and Industrial Informatics), oil and gas automation. In digital transformation, it offers its notorious international experience in R&D on digital technologies and its applications.

6

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
ADMINISTRATION	4
Justification	

It has a research line in contemporary relations between society and organizations, including subjects such as work reorganization, new organizational forms and inter and transdisciplinary studies, thematic and approaches related to digital transformation.

#### POSTGRADUATE PROGRAM

KNOWLEDGE ENGINEERING AND MANAGEMENT 6

#### Justification

Its main areas are knowledge engineering, knowledge management and knowledge media. Digital transformation and industry 4.0 are among its research topics, with international cooperation already in force. Among the topics of action are digital science, disintermediation and the impact of disruptive digital technologies in knowledge society. Researchers at EGC / UFSC can work on both the proposed projects and emerging actions in digital transformation.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
ELECTRICAL ENGINEERING	6
Justification	

Participant in the project "Automation, control and computational systems for industry and services 4.0" the program has research in electronics, communications and signal processing, electromagnetism, biomedical engineering and electrical energy systems. In this area, it offers its experience and international research in R&D of digital technologies and its applications.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
PURE AND APPLIED MATHEMATHICS	5
Justification	

This PPG is linked to the Area of Mathematics of CAPES. The Program is structured in four lines of research that consist of Algebra, Analysis, Geometry and Topology, Applied Mathematics. The program is inserted in this theme because it aims at the internationalization and integration of mathematics with other areas such as physics and engineering, with ramifications in all technological programs of UFSC. Also due to the scientific experience of the members of the project and constant cooperation with foreign research groups in the last years, being a fundamental part of the proposal to foster new partnerships and consolidate existing ones through the exchange of postgraduate students and researchers from UFSC and abroad. It is also justified by the researchers' expertise in convex optimization, in the development of partial differential equations particularly for the development of techniques to study the asymptotic development of differential equations and applications in problems of Physics and Engineering, algebras of operators to model quantum physical problems, as well as quantum simulation topics.

Capes evaluation (2017 evaluation grade)
5

It has a line of research in globalization and development, which includes the themes productive chains, innovation systems and their socioeconomic consequences, all topics closely related to industry 4.0 and digital transformation. Its researchers can work on both the proposed projects and emerging actions in digital transformation.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
MECHANICAL ENGINEERING	6
Justification	
Proponent of the project "Integration of Robotics Mechanisms" structures its research in mechanica manufacturing, metrology, mechanical systems, vil program offers its international experience in recon	al engineering, engineering and thermal sciences, pration and acoustics. In digital transformation the

 of reconfigurable robots, Networked Interconnected Systems.

 POSTGRADUATE PROGRAM
 Capes evaluation (2017 evaluation grade)

 PRODUCTION ENGINEERING
 5

# Justification

Proponent of the project "Distributed and automated healthcare manufacturing" conducts research in product design and management, ergonomics, organizational intelligence, environmental quality management, production management, logistics chains. In digital transformation the Program brings its international experience in integration of productive systems, operation and logistics and analysis of costs in intelligent systems.

THEME 3	
HUMAN HEALTH	
Postgraduate Program	Capes evaluation (2017 evaluation grade)
BIOCHEMISTRY	5
Justification	

The Postgraduate Program in Biochemistry is linked to the Area of Biological Sciences II (CAPES). However, it has a large number of productive researchers who work directly in research related to the subject of human health. The main themes studied are: neurodegenerative diseases, metabolic diseases, neuropsychiatric diseases, cancer and toxicity. Among the research lines of the Postgraduate Program in Biochemistry, those related to the subject of HUMAN HEALTH are: (i) Molecular Toxicology and (ii) Signal Transduction. Consequently, the insertion of the Postgraduate Program in Biochemistry in the HUMAN HEALTH theme of this project is fully justified. Its work will be particularly important in the projects (i) "Cellular communication and systems biology" and (ii) "Molecular and therapeutic targets in metabolic and degenerative diseases".

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
FOOD SCIENCE	6
Justification	

The Postgraduate Program in Food Science is linked to the Food Science Area at CAPES. However, several of its researchers work on research related to the subject of human health, since they are looking for new methodologies for the production of foods with high nutritional value, focusing on human health. The insertion of researchers from the Postgraduate Programs in Food Science on the subject of HUMAN HEALTH is also justified by the presence of an international research project entitled "Food of plant origin, processing and health impact", which aims to maintain and promote human health through food and nutrition, with a focus on food and nutritional security. Among the research lines of the Postgraduate Program in Food Sciences, that related to the subject of HUMAN HEALTH is "Food quality assessment".

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
MEDICAL SCIENCE	4
Justification	

The Postgraduate Program in Medical Sciences is linked to the Area of Medicine I in CAPES. Practically all of its professors work directly in research related to the subject of human health. Among the research lines of the Postgraduate Program in Medical Sciences, those related to the subject of HUMAN HEALTH are: (i) Adult diseases: research on clinical and epidemiological aspects, (ii) Maternal and child health: research on health promotion and prevention of health problems, (iii) Health education and information, (iv) Cellular and molecular mechanisms involved in the pathogenesis and therapeutic response of chronic diseases; and (v) Cellular and molecular mechanisms involved in the pathogenesis and therapeutic response of airway inflammation. Thus, the insertion of the Postgraduate Program in Medical Sciences in the HUMAN HEALTH theme of this institutional proposal is fully justified. Its activities will be particularly important in the projects (i) "Healthy Aging and Urban Mobility: From Cell to Society", (ii) "Molecular and Therapeutic Targets in Metabolic and Degenerative Diseases" and (iii) "Interprofessional Health Education".

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
PHYSICAL EDUCATION	6

#### Justification

The Postgraduate Program in Physical Education is linked to the Physical Education Area at CAPES. Practically all of its teachers work directly in research related to the subject of human health. Among the research lines of the Postgraduate Program in Physical Education, those related to the subject of HUMAN HEALTH are: (i) Programs and Processes of Physical Activity Promotion and (ii) Physical Education, Living and Health Conditions. The performance of the Postgraduate Program in Physical Education will be particularly important in the projects (i) "Diagnosis and intervention for healthy lifestyles" and (ii) "Healthy aging and urban mobility", which justifies its insertion in the HUMAN HEALTH theme of this institutional proposal.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
NEUROSCIENCES	5
Justification	

The Postgraduate Program in Neuroscience, linked to the Area of Biological Sciences II at CAPES, has a large number of researchers engaged in research related to the topic of human health. Among the research lines of the Postgraduate Program in Neurosciences, those related to the subject of HUMAN HEALTH are: (i) Evaluation of the analgesia induced by physical exercise, (ii) Neurobiology of immune-mediated neurological diseases, (iii) Neurobiology of Depression, (iv) Neurobiology pain and inflammation, (v) Neurobiology of neurodegenerative diseases. The performance of the Postgraduate Program in Neuroscience will be particularly important in the projects (i) "Cellular communication and systems biology" and (ii) "Molecular and therapeutic targets in metabolic and degenerative diseases", which justifies its insertion in the HUMAN HEALTH theme of this institutional proposal.

## POSTGRADUATE PROGRAM

Capes evaluation (2017 evaluation grade)

CELL BIOLOGY AND DEVELOPMENT

#### Justification

Although the Postgraduate Program in Cell Biology and Development is linked to the Area of Biological Sciences I at CAPES, there are a significant number of productive researchers of this Postgraduate Program who act directly in research related to the subject of human health. In this context, the main themes studied are: toxicity, use of bioactive substances and polymeric substrates for application in human health, tissue regeneration, stem cells, among others. Among the research lines of the Postgraduate Program in Cell Biology and Development, those related to the subject of HUMAN HEALTH are: (i) Cellular and molecular mechanisms associated with pathophysiological processes, (ii) cell differentiation and tissue regeneration, (iii) embryotoxicity, cytotoxicity, Genotoxicity. Thus, the insertion of the Postgraduate Program in Cell Biology and Development in the HUMAN HEALTH theme is fully justified. Its performance will be particularly important to the project "Cellular communication and systems biology".

4

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade

**BIOTECNOLOGY AND BIOSCIENCES** 

#### Justification

Although the Postgraduate Program in Biotechnology and Biosciences is linked to the Biotechnology Area at CAPES, it has several researchers that act directly in research related to the subject of human health. The main topics studied are: (i) cell signaling in the interaction between microorganisms and their hosts and (ii) metabolic dysfunctions. Among the research lines of the Postgraduate Program in Biotechnology and Biosciences, those related to the subject of HUMAN HEALTH are: (i) Microorganism-host interaction, (ii) Prospecting of bioactive molecules and development of vaccines and biological therapies. Thus, the insertion of the Postgraduate Program in Biotechnology and Biosciences in the HUMAN HEALTH theme of this institutional proposal is fully justified. Its performance will be particularly important in the project "Cellular communication and systems biology".

5

## POSTGRADUATE PROGRAM

Capes evaluation (2017 evaluation grade)

MULTICENTER IN PHYSIOLOGICAL SCIENCES

## Justification

The Multicentric Postgraduate Program in Physiological Sciences (Multicentric) is linked to the Area of Biological Sciences II at CAPES. In our institution, this multicentric Postgraduate Program has several researchers that act directly in research related to the subject of human health. In this context, the main subjects studied are: pain, endocrinology, cardiovascular physiology, neurophysiology and behavior.

4

Among the research lines of the Postgraduate Program in Physiological Sciences at UFSC, those related to the subject of HUMAN HEALTH are: (i) Physiology and Pharmacology of Pain, (ii) Endocrine Physiology, (iii) Neurophysiology and Behavior, (iv) Neuroimmunoendocrinology, and (v) Cardiovascular Physiology. Thus, the insertion of the Multicentric Postgraduate Program in Physiological Sciences in the HUMAN HEALTH theme of this institutional proposal is fully justified. Its work will be particularly important to the projects (i) "Cellular communication and systems biology" and (ii) "Molecular and therapeutic targets in metabolic and degenerative diseases".

4

## POSTGRADUATE PROGRAM

Capes evaluation (2017 evaluation grade)

## DENTISTRY

## Justification

The Postgraduate Program in Dentistry is linked to the Dentistry Area at CAPES. It has a large number of researchers who work directly in research related to the subject of human health. Among the research lines of the Postgraduate Program in Dentistry, those related to the subject of HUMAN HEALTH are: (i) Attention to the health of children and adolescents, (ii) Studies in oral rehabilitation: adult and elderly health care, (iii) Clinical, imaging, and histopathological studies and use of information technology and telecommunication in approaching diseases of the stomatognathic system, (iv) Clinical and laboratory studies in endodontics, (v) Collective oral health: policies, services, education, ethics and epidemiology. The performance of this Postgraduate Program will be particularly important to the projects (i) "Evidence-based strategy and decision-making in health" and (ii) "Interprofessional health education", which justifies its insertion in the HUMAN HEALTH theme of this institutional proposal.
POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
COLLECTIVE HEALTH	5
Justification	

The Postgraduate Program in Collective Health is linked to the Public Health Area at CAPES. All of its researchers work directly on research related to the topic of human health. Among the research lines of the Postgraduate Program in Collective Health, those related to the subject of HUMAN HEALTH are: (i) Epidemiology, (ii) Collective Health, and (iii) Human Sciences and Health Policies. The performance of this Postgraduate Program will be particularly important to the projects (i) "Healthy Aging and Urban Mobility" and (ii) "Interprofessional Health Education", which justifies its insertion in the HUMAN HEALTH theme of this institutional proposal.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
ARCHITECTURE AND URBANISM	5

Justification

Although the Postgraduate Program in Architecture and Urbanism is not linked to the Health Area, its insertion in the HUMAN HEALTH theme in this proposal is fully justified. This is because Postgraduate Program in Architecture and Urbanism will assist in the development of the project entitled "Healthy Aging and Urban Mobility", which aims to investigate the relationship between urban mobility and healthy aging/human health. Working together with researchers from other Postgraduate Programs and with foreign collaborators, researchers (teachers and students) linked to Postgraduate Program in Architecture and Urbanism will contribute with their experiences in issues related to the urban environment, focusing on their impact on human health. In this context, it should be noted that the Postgraduate Program in Architecture and Buildings", which has a close relationship with the project to be developed.

POSTGRADUATE PROGRAM

Capes evaluation (2017 evaluation grade)

NUTRITION

Justification

The Postgraduate Program in Nutrition is linked to the Nutrition Area at CAPES. It has a large number of researchers who work directly in research related to the subject of human health. In fact, the Postgraduate Program in Nutrition is linked to the Health Sciences Center and the research projects developed focus basically on human health (not animal health). Among the research lines of the Postgraduate Program in Nutrition, those related to the subject of HUMAN HEALTH are: (i) Diagnosis and Nutritional Intervention in Collectivities, (ii) Dietary and Biochemical Study related to nutritional status, (iii) Nutrition in meal production and eating behavior. Thus, the insertion of the Postgraduate Program in Nutrition into the HUMAN HEALTH theme of this institutional proposal is fully justified. Its activities will be particularly important in the projects (i) "Diagnosis and intervention for healthy lifestyles", (ii) "Food of plant origin, processing and health impact", (iii) "Interprofessional health education".

4

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
FOOD ENGINEERING	6
Justification	

The Postgraduate Program in Food Engineering is linked to the Food Science Area at CAPES. However, this Postgraduate Program presents a line of research entitled "Development of Processes and Products", in which processes and products are developed with the objective of maintaining nutritional properties in food. In this context, the performance of researchers from the Postgraduate Program in Food Engineering into the theme of HUMAN HEALTH is justified by the presence of a research project in international cooperation "Food of plant origin, processing and health impact", which aims to maintain and promote health through food and nutrition, with a focus on food and nutritional security.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
NURSING	6
Justification	

The Postgraduate Program in Nursing is linked to the Nursing Area at CAPES. Practically all of its professors work directly in research related to the subject of human health. Among the research lines of the Postgraduate Program in Nursing, those related to the subject of HUMAN HEALTH are: (i) Models and Technologies for Health Care and Nursing, (ii) Policies, Management and Evaluation of Health Care and Nursing, (iii) Health Promotion in the Process of Human Living and Nursing, (iv) Health Care and Nursing in Acute and Chronic Health Situations, and (v) Nursing Care for Women and Newborn Health. The performance of this Postgraduate Program will be particularly important to the projects (i) "Interprofessional health education" and (ii) "Evidence-based strategy and decision-making in health", which justifies its inclusion into the HUMAN HEALTH theme of this institutional proposal.

### POSTGRADUATE PROGRAM

Capes evaluation (2017 evaluation grade)

### KNOWLEDGE ENGINEERING AND MANAGEMENT 6

#### Justification

The Postgraduate Program in Knowledge Engineering Management is linked to the Interdisciplinary Area in CAPES. Its insertion into the HUMAN HEALTH theme of this institutional proposal lies in the fact that one of the projects, related to Evidence-Based Research, aims to develop new (automated) methods for conducting a systematic review in the health area. This will be possible with the collaboration researchers from health sciences with those linked to the Postgraduate Program in Knowledge Engineering Management, who have significant experience in the development and application of methods to manage knowledge.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
PHARMACOLOGY	6
Justification	

Although the Postgraduate Program in Pharmacology is linked to the Area of Biological Sciences II at CAPES, it presents a large number of researchers that act directly in research related to the subject of human health. In this context, the main topics studied are: Pharmacology of the Central Nervous System, Endocrine Pharmacology, Inflammation and Immunology, Pain and Analgesia, Cardiovascular Pharmacology. Among the research lines of the Postgraduate Program in Pharmacology, those related to the subject of HUMAN HEALTH are: (i) Translational

psychopharmacology; (ii) Mechanism of action and kinetics of synthetic drugs and natural products; (iii) Pharmacological strategies for pain therapy and (iv) Toxicology. Thus, the insertion of the Postgraduate Program in Pharmacology into the HUMAN HEALTH theme of this institutional proposal is fully justified. Its work will be particularly important to the projects (i) "Cellular communication and systems biology" and (ii) "Molecular and therapeutic targets in metabolic and degenerative diseases".

#### THEME 4

## LANGUAGES, INTERCULTURALITY AND IDENTITIES

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
JOURNALISM	4
Justification	

The teachers of this program have international publications on the proposed theme as well as maintain international partnerships and act as visiting professors in foreign institutions. It is inserted in the subject, under the project coordinated by the Post-Graduate Program in Engineering and Knowledge Management. The contribution will be effectively to the institution international insertion related to the discussions involving intercultural issues.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
HISTORY	4
Justification	

This Program plays an important role in the actions involving the identities and the interculturality and identities linked to the Interdisciplinary Postgraduate Program in Human Sciences. The researchers involved in the program have experience in coordinating international programs such as: international bi-lateral cooperation projects, including CAPES/COFECUB/UFSC/EHESS, as well as programs in co-supervision degree (joint supervision programs).

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
EDUCATION	4
Justification	

The teachers of this Program have international publications on the proposed topic as well as maintain international partnerships and have worked as visiting professors in foreign institutions. They compose the intercultural proposal directly linked to educational issues considering the interfaces that impact on the institution internationalization, headed by the proposal coordinated by the Interdisciplinary Postgraduate Program in Human Sciences and the Postgraduate Program in Linguistics.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
LINGUISTICS	6
Justification	

This Program makes part of the thematic within the project entitled "Portal Languages, Literatures and Cultural Practices" articulating subprojects headed by researchers recognized internationally. Several researchers of the team are stockholders of high scientific productivity (50%). The Brazilian team has technical capacity and scientific leadership, which is evidenced by 28 projects supported by resources of national and international agencies; 31 as coordinator of research projects. Leadership capacity can be evidenced by (i) training of masters and doctors, as well as postdoctoral supervision; (ii) organization of large national and international events; (iii) performance of a relevant

role in Brazilian and international associations in the area; (iv) international publications in partnership with foreign members. Researchers share research projects in partnerships of 46 international institutions. The academic insertion includes partnerships that have yielded 48 publications in journals and international books. They participate in international scientific events, such as search results, as well as invited speakers for events that are important in the area of linguistics and literature. The international experience of the team is also related to joint supervision programs (co-supervision), in the participation in theses/dissertations conclusion as referees in institutions abroad, and other activities developed under international agreements already established. In the last two three-year, 39 researchers participated in international events; 8 projects were approved by international agencies; 43 concrete partnerships with research activities in linguistics and literature, with publications in partnership with foreign researchers. These relationships include the partnership with the University of Connecticut, as well as funding research projects with national resources (CNPQ and CAPES) and international (National Institute of Health and Science, NIH). This experience assures, gualifies and enhances the network and its production. It also has recently approved a UNESCO Chair "Language Policies for multilingualism", based in UFSC, involving 22 universities and research institutes from 13 countries of four continents.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
SOCIAL ANTHROPOLOGY	5
Justification	

This Program plays an important role in the actions involving identities and interculturality, linked to the Interdisciplinary Postgraduate Program in Human Sciences. The researchers involved in the program have experience in coordinating international programs such as: international bi-lateral cooperation projects, among which: CAPES/COFECUB/UFSC/EHESS; CAPES-NUFFIC/Amsterdam University, CAPES-DGPU/University of Cadiz and Universidad Autónoma de Madrid. Miriam Grossi detained the Ruth Cardoso Chair at Columbia University from January to May 2017, supported by Fulbright/CAPES.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
DESIGN	5
Justification	

This program permeates all the projects of the related thematic, since it involves languages translation of all proposals through a language that impacts on the presentation form and usability of the proposed interfaces in different projects.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
ENGLISH: LINGUISTIC AND LITERARY STUDIES	5
Justification	

This program makes part of the UFSC internationalization because English is its object of study. The Brazilian team includes 16 members, all with relevant experience in conducting institutional projects. The researchers have extensive experience in coordinating academic projects and scientific production with high quality. Several researchers present international experiences with postdoctoral internships in foreign institutions, which resulted in international research partnerships. The program is part of several proposals for research promotion, such as the ACERTA Project/Education Observatory Program/CAPES and the CAPES-NUFFIC Project (Newton Fund/British Academy). Some members integrate international teams involving the United Kingdom, China and Spain, as well as the coordination of research laboratories, such as the Laboratory of Language and Cognitive

Processes at UFSC. Also, the program participates in the coordination of the Cooperation Agreement between UFSC and Ghent University. Several of the program's researchers have carried out or coordinated projects involving institutional cooperation and development, as well as executed leadership functions, either in the coordination of courses and programs or in administrative positions in various areas of UFSC. Together, the experience of the Brazilian team ensures the competent management of this project. The experience related to English becomes fundamental especially in this theme of the institutional plan for UFSC internationalization.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
SOCIAL SERVICE	5
Justification	

This Program is involved in actions related to identities and interculturality and identities, considering human emancipation, linked to the Interdisciplinary Post-graduate Program in Human Sciences. Participating researcher have experience in coordinating international programs.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
POLITICAL SOCIOLOGY	5
Justification	

Researchers of this Program have international publications on the proposed topic as well as maintain international partnerships and have worked as visiting professors in foreign institutions. It is included in the theme, under the project coordinated by the Interdisciplinary Post-graduation Program in Human Sciences. It will effectively contribute to the international insertion related to the discussions involving intercultural issues within the framework of political sociology.

### POSTGRADUATE PROGRAM

Capes evaluation (2017 evaluation grade)

ENGINEERING AND KNOWLEDGE MANAGEMENT 6
Justification

This Program presents excellence in knowledge management. It is formed by researchers with experience in coordinating national and international projects such as FP7 - Project Marie-Courier (Brazilian coordinator) involving five countries. Coordination of the project BRAFITEC, involving University of Antofagasta supporting a research project for nationalization of products for mining; Coordination of the agreement with UTPL in personnel development; Presidency of the Inter-American University Organization (OUI) and National research and extension projects. The Coordination of the International Congress on Innovation and Knowledge (CIKI), in its 8th edition, held interchangeably between Brazil and other countries - Spain, Ecuador, Colombia, and Mexico. Promotion of the Third International Colloquium on Structural Changes in Journalism (BEST 2015). The event, with open call for papers (http://mejor2015.sites.ufsc.br), co-promoted: in Brazil, by UNB, and abroad, by the Réseau d'Études sur le Journalisme (REJ), Centre de Recherche sur l'Accion Politique en Europe (CRAPE) and Centre de Recherche en Information et Communication (ReSIC), linked to the L'University de Rennes 1 and the Université Libre de Bruxelles. Orientation of doctoral students and masters from USA, Ecuador, Peru, Colombia and participation in the orientation of master students from Germany, France and Portugal. The researchers also coordinate Brazilian stages of international research projects such as the Journalistic Role Performance Around the Globe, which involves researchers from 19 countries and is headed by teachers from Chile and the United States of America; as well as FlexMediaLives – Gauging and analysis of biographical risks in flexible labor markets through big data: the case of journalist careers in France and in Brazil, coordinated by French researchers. It maintains permanent partnerships in scientific production with

researchers from France, Portugal, the United States of America and Spain in the scope of more specific research as well as experimental productions in languages, technology and innovation and their processes in society. The Brazilian team also coordinates the Institute of Management and University Leadership - IGLU - Brazil Region, whose purpose is to support institutions members of the Interamerican University Organization (OUI). The IGLU seeks to contribute to the institutional development of universities using various exchanges and learning interventions.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
LITERATURE	5
Justification	

This Program in collaboration with the Post–graduation Program in Languages in the Language Portal proposal, as well as with the Interdisciplinary Postgraduate Program in Human Sciences. It is a program that has an articulation history in an international level with established partnerships and exchanges with foreign universities that includes joint supervision programs (co-supervision) activities and visits of foreign researchers in a systematic way. Literature with its framework immersed in the identity and intercultural issues expressed through language justifies its insertion in this theme.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
TRANSLATION STUDIES	6
Justification	

Researchers who have international experience compose this Program. It is a multilingual, multicultural team, involved with research projects, events organization and international publications related to the proposed theme. Of particular note are the following researchers: Gilvan Muller de Oliveira, coordinator of the UNESCO Chair in Linguistic Policies for Multilingualism, involving eight Brazilian institutions and 14 universities in 12 countries; Mónica Salomón who, between 2011-2014, coordinated workshops at the Institute of Brazil-Europe Studies, a consortium of Brazilian and European universities; Carlos Alberto Margues, who coordinated a CAPES-FCT/Portugal, an international cooperation project and is a member of an international Green Chemistry network. PGET became part of the European Society for Translation Studies (http://www.esttranslationstudies.org/index.html) in 2009, a link that has given greater international visibility to the program. Prof. Andréia Guerini has been a visiting professor at the Università per Stranieri di Siena/Italy since 2011 and is coordinating various international agreements in preparation with American, Italian, Belgian, Portuguese, German, Canadian and Polish universities. She is a member of the External Advisory Committee for Scientific Advice of the Center for Humanistic Studies of the University of Minho/Portugal. She makes part of international research groups: Belgium, Canada, Italy and Portugal. Additionally, she coordinates a project supported by CAPES "Advanced Studies" in collaboration with a researcher from Canada and has already been contemplated in several others CAPES and CNPg calls to bring Foreign Visiting Researchers (Germany, Belgium, Italy, the United States of America), with emphasis on José Lambert, one of the founders of the course Translation Studies at world level.

#### POSTGRADUATE PROGRAM

Capes evaluation (2017 evaluation grade)

SCIENTIFIC AND TECHNOLOGICAL EDUCATION

#### Justification

Researchers of this Program have international trajectories and are dedicated to studying issues focused on human rights, in different areas: science, technology, coloniality, multilingualism, identity, culture and education. Within the scope of the program, there is an insertion in the PQLP/CAPES by UFSC (http://pglp.pro.br/), which includes: the coordination of the Pro-AULP/CAPES International Mobility; coordination of the proposal related to East Timorese teachers stage with scholarships from the oil funds, among others. Through the direction of the International Institute of Portuguese Language (IILP), based in Cabo Verde, Prof. Gilvan represented the connection of eight countries to the Community of Portuguese Speaking Countries in a Community manner. This trajectory made possible the approval of the UNESCO Language Policies for Multilingualism Chair, approved in 2017 in Brazil. Many professors had the opportunity to attend part of doctorates, full doctorates and postdoctoral stage in foreign universities, having a very diversified and interdisciplinary training. The group has a great diversity of experiences, from teachers who worked with Paulo Freire in Guinea Bissau in 1974, to teachers who already act as visiting professors and / or in international missions in countries considered priority in this issue. Most of our researchers have participated in international events and publications, organizing national and international events and publications on their respective themes in Brazil. There are also examples of international project coordination in various countries. Some teachers have already offered courses in foreign languages (English, French and Spanish) 2018/1, and already supervised foreign students. The Program is part of the theme, also in partnership with the Interdisciplinary Postgraduate Program in Human Sciences, the Post-graduate Program in Knowledge Management, and the Post-graduate Program in Information Sciences. It will contribute effectively to the international insertion related to the discussions involving intercultural issues in the scope of scientific and technological education in different areas of knowledge.

6

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
INTERNATIONAL RELATIONS	4
Justification	

The Post-graduation Program in International Relations (PGRI) aims to encourage and support scientific research in the issue of international relations, mainly from the economy and international politics, creating an academic space for the ideas exchange and conceptual deepening. The PGRI is a program that permeates all the projects of the thematic, since it involves the international relations of all the proposals through its science that impacts the relations established among the foreign universities and all the post-graduation programs inserted in the proposal of the institution internationalization, allowing the exercise the interdisciplinarity in the approach of the international phenomena.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
PHILOSOPHY	6
Justification	

The construction of a Society Critical Theory with analytical capacity of the present, have proven potential to be investigatived in theoretical and empirical plans simultaneously, linked to their areas of origin, but often with an interdisciplinary approach. This reflects in publications in national and international journals, students' supervisions in various plans, wide networks in Brazil and abroad, participation and leadership in successive research projects (including with foreign researchers) and

in circulation in high level academic centers. The Brazilian team is composed by experienced researchers with a long history and well consolidated in their respective areas of knowledge, as well as young researchers with solid trajectories and significant academic output, underlining the scholarships received, both from Brazilian institutions (CNPq, CAPES, FAPESP, FAPESC) and foreign institutions (DAAD, Alexander von Humboldt Foundation). In particular, Brazilian team members have established continuing relationships with members of the foreign team through the provision of training stays, short-term or post-doctoral research internships, participation in the organization of events in Germany, as well as receiving German researchers in academic activities in Brazil. The Brazilian team has the knowledge about science and technology systems of Brazil, Hispanic America and Europe. Finally, the Brazilian team has acted jointly at UFSC through the conduction of study groups, joint orientation in a postgraduate program, organization and participation in events and collaborative bibliographic production.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
PSYCHOLOGY	5
Justification	

This Program has an important role in the actions involving the identities and interculturality, linked to the Interdisciplinary Postgraduate Program in Human Sciences. The team presents a concrete international insertion through institutional partnerships that are concretized with actions of joint advisement, academic visits of foreign researchers, partial doctorates (sandwich PhD) and post doctorates abroad.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
INTERDISCIPLINARITY IN HUMAN SCIENCES	5
Justification	

The postgraduate programs involved in the project entitled "Cultural Practices: Violence, Gender, Diversity ", coordinated by this Program, integrate a theme that already participate in a network of researchers linked to several Brazilian institutions, based in the different regions of the country. The team works in the training of human resources, research, internationalization, transfer of knowledge to society and to public sectors. They act interdisciplinary, therefore integrate several postgraduate programs that make part of this theme: Psychology, Education, Social Anthropology, Literature, Social Service, Scientific and Technological Education. With regard to the present proposal in the context of the theme, the goal is to expand and integrate this network, by focusing on the articulation with foreign universities. This integration will contribute to the improvement of the academic production indicators, fruit of the partnerships that will be intensified with researchers of different nationalities. The knowledge produced, in turn, will subsidize the production of technologies with social impact, such as didactic materials, informative booklets, seminars, meetings and art exhibitions. With regard to the transmission of knowledge, the articulation of this network aims to make possible a greater impact in the production of public policies linked to the institutions responsible for its implementation, such as the Ministries of Culture, Health, Education, Public Security, in actions aiming the promotion of human rights and fight against all discrimination ways. At the state and municipal levels, direct communication channels will be established with the responsible bureaus related to the areas of education, culture, health and public safety, to make feasible research and extension activities as well as the dissemination of the knowledge produced. It aims to contribute to the improvement of social indicators of the municipality and the state through the movements headed by this project. The team involved in this interdisciplinary program presents excellence in the theme proposal, which involves languages, identities and interculturality, with an international projection established through several projects in partnerships with several researchers and foreign universities.

#### POSTGRADUATE PROGRAM

INFORMATION SCIENCE

#### 5

Justification

This program, jointed with the Programs of Scientific and Technological Education (PPGECT), Education (PPGE), Graphic Design (PPGDesign) are associated around the theme through the proposal entitled: "Digital Support for the governance of the internationalization program". The team has experience in five fronts of work, proving the leadership in international scope studies, training of masters and doctors and with highly productive researchers. Faced with the techniques developed by the group, the main ones are underlined: (a) Metric Information Studies, which monitors, retrieves, aids and treats the scientific and technological information of the scientific environment; (b) Democratization of information, works with public information and treats them facilitating the population consume and understanding; (c) Applied Mathematics and Statistics, attends supporting the differences and similarities of the data; (d) Visualization and Representation of Information, which facilitates the understanding of information and data; (e) Computing, which serves as the basis for programming the entire informational process, from computer systems, data statistics support, data mining, e-Science, BigData and Semantic Web. The group's leadership is working in programs already developed by its members, such as: (a) The LattesDataXplorer system, which recovers more than 5 million Curriculum from Brazilian researchers; (b) The Prospecta system, which implements the prospection of public data of CNPq research groups; (c) The data-processing model with licenses of scientific publications, from Creative Common and Digital Object Identifier; (d) The model for democratization of public information, initially used by teachers in the area of Education and then expanding the philosophy for scientific and technological data; (e) The Mathematical Model of Information Classification in Science and Technology (S & T) for its representation by median and systemic patterns of data retrieval. The technical capacity and leadership of the team ensure that at the end of the project there will be a public system to consult the scientific and technological indexes of all Brazilian education and research institutions, in a standardized and democratic way, boosting all Brazilian academic activities internationally.

#### THEME 5

### ENVINRONMENTAL SUSTENTABILITY

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
FOOD SCIENCES	6
Justification	

This program participates in the projects "Industrial Sustainability", "Sustainable food production in Agricultural Sciences", and "Characterization, conservation, and sustainable use of biodiversity". Its research lines focus on food production and quality, as well as on valorization/recovery of food industry waste. Its participation involves production, extraction, and purification of bioactive compounds, use of emerging technologies to reduce and reuse agro-industrial waste. This program has extensive experience in international cooperation with several countries.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
AQUACULTURE	6
Justification	

This program coordinates the project "Sustainable Food Production in Agricultural Sciences", which integrates all four programs with links with Agricultural Sciences. The program has research lines ranging from basic aspects, such as reproduction, physiology, and health, to the analysis and development of aquaculture production systems. This team started developing techniques for freshwater and marine aquaculture, which lead to research requiring work on basic sciences. This program is one a pioneer in its area in Brazil and has a long history of international collaboration.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
ECOLOGY	5
Justification	

This program coordinates the project "Production of knowledge and training of human resources on marine / coastal biodiversity Description" and participates in the project "Characterization, conservation, and sustainable use of biodiversity". It has broad lines of research on terrestrial and marine ecosystems, to cover the theme complexity in Santa Catarina, which range from population and community modeling to ethnoecology studies. It has sought to increase its international collaborations.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
PLANT GENETIC RESOURCES	6

#### Justification

This program coordinates the project "Characterization, conservation, and sustainable use of biodiversity" and participates in the projects "Water, Energy and Food 'NEXUS' - Sustainability in the international community" and "Sustainable food production in Agricultural Sciences". The program has research lines ranging from surveying non-domesticated and neglected plant species to topics such as plant physiology, genetics, and management, ethnobotany, as well as regulatory processes and public policies linked to plant genetic resources. The program is only 20 years old, but it has been evaluated as an excellent program in the last ten years. Its team has intense South-North and South-South academic collaboration, and more than 10% of is students are foreigners.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
PURE AND APPLIED MATHEMATICS	5
Justification	

This program participates in the project "Sustainable Energy for the Future", and it will contribute all mathematical modeling required for the various energy systems in the proposal.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
ARCHITECTURE AND URBANISM	5
Justification	

This program will contribute to research on the environmental behavior of urban spaces and buildings, and on urban management and planning, especially for the projects on energy and Smart-Cities.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
AUTOMATION AND SYSTEMS ENGINEERING	6
Justification	

It participates in the project "Sustainable Energy for the Future". The most relevant research lines for that subject are automation and mechatronic systems (urban traffic control), computer systems (artificial intelligence and industrial computing), and automation, control, optimization, and instrumentation for oil and gas industry.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
CHEMICAL ENGINEERING	7
Justification	

The proponent of the project "Industrial Sustainability" is a participant in the project Research and Innovation for Intelligent and Environmentally Sustainable Cities - Water, Waste and Renewable Energy ". It has research lines on Chemical Reaction Engineering, Materials Development, Transport Phenomena and Porous Media, and Biotechnological Processes. Its projects are closely linked to the theme, and the program has a long history of applied research in different areas of sustainability in the industry (e.g., water treatment and reuse, energy conservation, materials development, etc.). The program has a long record of international collaborations, with an extensive list of foreign institutions and researchers involved in common research and training.

### POSTGRADUATE PROGRAM

Capes evaluation (2017 evaluation grade)

BIOLOGY OF FUNGI, ALGAE, AND PLANTS

### Justification

This program participates in the projects "Characterization, conservation, and sustainable use of biodiversity" and "Production of knowledge and training of human resources on marine / coastal biodiversity". It has emerged from the area of Botany, widening its scope to biodiversity in different ecosystems where algal, fungal, and plants communities are important in determining the environments physiognomy and functioning. With research lines on Systematics and Structural Biology, and Physiology and Ecology, the program has started doctoral training and seeks to expand international collaborations.

4

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
CIVIL ENGINEERING	5
Justification	
Cities exist because of and reflect the complex relationships involving their inhabitants. The world population is increasing, and cities are becoming densely populated, leading to disorderly urban	

population is increasing, and cities are becoming densely populated, leading to disorderly urban sprawl, infrastructure deficiencies, mobility problems, and environmental imbalances. In this context, the postgraduate program on Civil Engineering, through its research line Construction, Structures, and Geotechnics will contribute to the theme of sustainability. Contemporary models of city functioning should be fostered interaction and research partnerships with leading institution and countries in the theme, aiming to share knowledge and practices.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
ENVIRONMENTAL ENGINEERING	6
Justification	

This program coordinates the project "Research and Innovation for Intelligent and Environmentally Sustainable Cities - Water, Waste and Renewable Energy". The Program has research lines closely linked to environmental management and environmental impacts; water resources; atmospheric pollution; solid wastes; water and effluent treatment, and pollution remediation. This program is one of Capes' excellence programs, and it has a tradition of international collaboration.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
MECHANICAL ENGINEERING	6
Justification	

It participates in the project "Sustainable Energy for the Future". Its research lines include thermal sciences and engineering, exergetic analysis, building thermal efficiency, solar energy, and energy generation and cogeneration.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
FOOD ENGINEERING	6
Justification	

This program participates in the project "Industrial Sustainability". It has research lines Separation Processes, Biotechnological Processes and Applied Microbial Kinetics, and Product Development and Processes. Its team has extensive experience in waste reuse, development of new products, applied extraction, and separation processes to obtain value-added products, and water purification. This program has a substantial list of international partners in the area of the sustainability theme.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
BIOTECHNOLOGY AND BIOCIENCES	5
Justification	

The PGP in Biotechnology and Biosciences participates in the project "In Production of knowledge and training of human resources on marine / coastal biodiversity ". It has a research line on Bioinformatics and Systems Biology, which is essential to understand complex biological systems. The domain of analytical tools linked to the "omics" is now fundamental to ecological studies, and the theme needs integration of programs with varying scopes, such as those involved in this sustainability theme.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
ELECTRICAL ENGINEERING	6
Justification	

The coordinator of the project "Sustainable Energy for the Future" has research lines on Energy Processing and Information Processing, which are closely linked to renewable energies. This is a program of excellence and has a longstanding history of international collaborations.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
LAW	6
Justification	

This program is the proponent of the project "Water, Energy and Food 'NEXUS' - Sustainability in the international community". It has a research line on Environmental Law and Human Rights, in which it has an international projection, which results in its evaluation as an international quality program. This research area, due to its transversal nature, has promoted partnerships within and outside UFSC. The program also participates in the project "Research and Innovation for Intelligent and Environmentally Sustainable Cities - Water, Waste and Renewable Energy".

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
DESIGN	5
Justification	

This program is one the partners in the project "Research and Innovation for Intelligent and Environmentally Sustainable Cities - Water, Waste and Renewable Energy". It approaches Design through innovation, ergonomics, methodology, and technique to obtain artifacts, services, and processes for political, social, and economic development. The research line on design management is applied to technologically and socially based organizations, taking into account operational, tactical, and strategic aspects as well as their relationship with process efficiency and performance in organizations.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
ACCOUNTING	5
Justification	
The program is a participant in the project "Water, Er international community", contributing to its research a Evaluation. That line researches management and methods for performance evaluation and managemen	area on Management Control and Performance control processes in organizations, studying

Capes evaluation (2017 evaluation grade)
5

seeks to increase its international collaborations and its integration with other areas of knowledge.

This program is a participant in the NEXUS Water, Energy and Food Projects - Sustainability in the international community, and "Research and Innovation for Intelligent and Environmentally Sustainable Cities - Water, Waste, and Renewable Energy". It will contribute to work on Society and Environment, specifically the research lines on Development, Conflict, and Public Policy and Consumerism, Lifestyles, and Ethics. This program was conceived and created to address transversal issues, and it interacts with several USC postgraduate programs and international partners.

on (2017 evaluation grade)

This program participates in the project "Industrial Sustainability", with research lines on all areas of Chemistry, such as Analytical, Organic, Inorganic, and Physical-Chemical. Its researchers have significant experience in the areas of synthesis, purifications, and characterization of products generated in the various stages of transformation of compounds used and produced in different processes. It develops appropriate methodologies for such applications, besides developing catalytic processes needed to obtain desirable products in residue reuse. The Postgraduate Program in Chemistry has long been a program of excellence, with great visibility and international insertion. PPG Quadrennial Note.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
GEOGRAPHY	5
Justification	

This postgraduate program has an area of work on use and conservation in natural resources, with a research line on environmental analysis, coastal oceanography, and marine geology, and another line on the geomorphological process in natural disasters. This program will, therefore, contribute to cross-sectional studies in sustainability studies.

POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)
ADMINISTRATION	4
Justification	
between organizations and issues such as e	ganizations and society, which studies the relationship environment and sustainable territorial development. This of the different problems addressed in this theme.
POSTGRADUATE PROGRAM	Capes evaluation (2017 evaluation grade)

4

#### Justification

AGROECOSYSTEMS

This program is a participant in the projects "Characterization, conservation and sustainable use of biodiversity" and "Sustainable food production in Agricultural Sciences". It has an interdisciplinary approach between Agricultural Sciences and Environmental Sciences, with concentration areas on Agroecology and Sustainable Rural Development. It has improved its evaluation, and it has well established international collaborations.

## **ACTIVITIES LINKED TO THE THEMES**

# THEME 1

## NANOSCIENCE AND NANOTECHNOLOGY

## Goal 1

Development of nanocatalysts for energy and environment applications

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

International bibliographical production of the researches developed in house by all UFSC participant groups, carried out within the scope of the PRINT Program, both on their own and in conjunction with foreign groups. In this action, outcome indicators will be associated with the publication of UFSC faculty with international co-authorship, including articles, books and book chapters, as well as increasing the impact of the publication of articles by faculty members.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	2	4
Quantitative	Publication with international co- authoring (per faculty per year)	0	2	4
Quantitative	Faculty co-authoring publication with international partners	0	40	80
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	40	80
Quantitative	Number of patents as the result of student related activities	0	2	4

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

### Description

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	16	32

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date
Attractiveness	of	researchers	with	08/2018	07/2022
experience abro	ad for	postdoctoral tra	ining		

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date	
Missions to Brazil (visiting	08/2018	07/2022	
professors)			

## Description

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	8	16

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

### Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	3	6
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

## Description

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date	
Training of doctors abroad including	08/2018	07/2022	
co-supervisions			

## Description

Engagement of postgraduate doctorates from UFSC, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups, and nuclei that will join the Program during its execution. In this activity, both the medium (6 months) and the long duration periods (12 months) are considered, the latter contemplating the possibility of co-supervision.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	12	24

#### Goal 2

Development of nanostructures and incorporation into functional products

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

### Description

International bibliographical production of the researches developed in house by all UFSC participant groups, carried out within the scope of the PRINT Program, both on their own and in conjunction with foreign groups. In this action, outcome indicators will be associated with the publication of UFSC faculty with international co-authorship, including articles, books and book chapters, as well as increasing the impact of the publication of articles by faculty members.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	3	6
Quantitative	Publication with international co- authoring (per faculty per year)	0	3	6
Quantitative	Faculty co-authoring publication with international partners	0	60	120

Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	60	120
Quantitative	Number of patents as the result of student related activities	0	2	4

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

## Description

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	20	40

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

## Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date
Attractiveness	of	researchers	with	08/2018	07/2022
experience abro	ad for	postdoctoral trai	ning		

## Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date	
Missions to Brazil (visiting professors)	08/2018	07/2022	

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	10	20

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

## Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	4	8
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

## Description

Engagement of postgraduate doctorates from UFSC, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups, and nuclei that will join the Program during its execution. In this activity, both the medium (6 months) and the long duration periods (12 months) are considered, the latter contemplating the possibility of co-supervision.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	16	32

### Goal 3

Application of nanomaterials to sensors and optoelectronic devices

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

### Description

International bibliographical production of the researches developed in house by all UFSC participant groups, carried out within the scope of the PRINT Program, both on their own and in conjunction with foreign groups. In this action, outcome indicators will be associated with the publication of UFSC faculty with international co-authorship, including articles, books and book chapters, as well as increasing the impact of the publication of articles by faculty members.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	1	2
Quantitative	Publication with international co- authoring (per faculty per year)	0	1	2
Quantitative	Faculty co-authoring publication with international partners	0	20	40
Quantitative	Articles published by faculty in Qualis	0	20	40

	A1 and A2 journals			
Quantitative	Number of patents as the result of student related activities	0	1	3

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

### Description

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	12	24

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date
Attractiveness	of	researchers	with	08/2018	07/2022
experience abro	ad for	postdoctoral trai	ining		

## Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	5	11

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

## Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	2	4
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	1	3
Quantitative	Number of professors with completed junior internship (6 months)	0	1	3

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

## Description

Engagement of postgraduate doctorates from UFSC, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups, and nuclei that will join the Program during its execution. In this activity, both the medium (6 months) and the long duration periods (12 months) are considered, the latter contemplating the possibility of co-supervision.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	8	16

#### Goal 4

Application of new drugs with nanostructured release systems for the treatment of infectious, parasitic and cancer diseases

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

International bibliographical production of the researches developed in house by all UFSC participant groups, carried out within the scope of the PRINT Program, both on their own and in conjunction with foreign groups. In this action, outcome indicators will be associated with the publication of UFSC faculty with international co-authorship, including articles, books and book chapters, as well as increasing the impact of the publication of articles by faculty members.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	3	6
Quantitative	Publication with international co- authoring (per faculty per year)	0	3	6
Quantitative	Faculty co-authoring publication with international partners	0	60	120

Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	60	120
Quantitative	Number of patents as the result of student related activities	0	2	4

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	20	40

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date
Attractiveness	of	researchers	with	08/2018	07/2022
experience abro	ad for	postdoctoral trai	ining		

### Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	10	20

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

## Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	4	8
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

## Description

Engagement of postgraduate doctorates from UFSC, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups, and nuclei that will join the Program during its execution. In this activity, both the medium (6 months) and the long duration periods (12 months) are considered, the latter contemplating the possibility of co-supervision.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	16	32

# THEME 2

#### **DIGITAL TRANSFORMATION: INDUSTRY 4.0 AND SERVICES**

#### Goal 1

Mathematical models for describing physical phenomena for application in engineering

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

International bibliographical production of the researches developed in house by all UFSC participant groups, carried out within the scope of the PRINT Program, both on their own and in conjunction with foreign groups. In this action, outcome indicators will be associated with the publication of UFSC faculty with international co-authorship, including articles, books and book chapters, as well as increasing the impact of the publication of articles by faculty members.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	2	4
Quantitative	Publication with international co- authoring (per faculty per year)	0	2	4
Quantitative	Faculty co-authoring publication with international partners	0	40	80
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	40	80

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	16	32

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

## Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date
Attractiveness	of	researchers	with	08/2018	07/2022
experience abro	ad for	postdoctoral tra	ining		

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting	08/2018	07/2022
professors)		

## Description

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	8	16

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

### Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	3	6
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date	
Development of methodologies and	08/2018	07/2022	
technologies			

## Description

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

### Description

Engagement of postgraduate doctorates from UFSC, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups, and nuclei that will join the Program during its execution. In this activity, both the medium (6 months) and the long duration periods (12 months) are considered, the latter contemplating the possibility of co-supervision.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	12	24
Big data analysis

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

## Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

## Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	1	2
Quantitative	Publication with international co- authoring (per faculty per year)	0	1	2
Quantitative	Faculty co-authoring publication with international partners	0	40	80
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	40	80

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	12	24

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

# Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date
Attractiveness	of	researchers	with	08/2018	07/2022
experience abro	ad for	postdoctoral tra	ining		

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	5	11

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

# Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	5	10
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	1	3
Quantitative	Number of professors with completed junior internship (6 months)	0	1	3

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date	
Training of doctors abroad including	08/2018	07/2022	
co-supervisions			

# Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	2
Quantitative	Number of doctorates that completed the activity (6 months)	0	8	16

Automation, control and computational systems for industry 4.0 and services

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

# Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

# Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	3	6
Quantitative	Publication with international co- authoring (per faculty per year)	0	3	6
Quantitative	Faculty co-authoring publication with international partners	0	60	120

#### UNIVERSIDADE FEDERAL DE SANTA CATARINA

Quantitative	Articles published by faculty in Qualis	0	60	120
	A1 and A2 journals			

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

## Description

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	20	40

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

## Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date	
Missions to Brazil (visiting professors)	08/2018	07/2022	

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	10	20

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

# Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	5	10
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of summer/winter schoools	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date	
Development of methodologies and	08/2018	07/2022	
technologies			

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

# Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	16	32

Development of reconfigurable robots and parallel mechanisms

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

## Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

## Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	1	2
Quantitative	Publication with international co- authoring (per faculty per year)	0	1	2
Quantitative	Faculty co-authoring publication with international partners	0	20	40

#### UNIVERSIDADE FEDERAL DE SANTA CATARINA

Quantitative	Articles published by faculty in	0	20	40
	Qualis A1 and A2 journals			

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

# Description

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	12	24

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

## Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6			Start date	End date
Attractiveness of experience abroad f	recourditorio	with ning	08/2018	07/2022

# Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	5	11

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

# Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	2	4
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	2
Quantitative	Number of doctorates that completed the activity (6 months)	0	8	16

Analysis of distributed and automated manufacturing lines for manufacturing customized medical treatment items

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	1	2
Quantitative	Publication with international co- authoring (per faculty per year)	0	1	2
Quantitative	Faculty co-authoring publication with international partners	0	20	40

Quantitative	Number of patents as the result of student related activities	0	2	4
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	20	40

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	12	24

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

# Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	5	11

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

# Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	2	4
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

# Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	2
Quantitative	Number of doctorates that completed the activity (6 months)	0	8	16

# THEME 3

### HUMAN HEALTH

### Goal 1

Mechanisms involved in the different levels of communication and intra- and interspecific cellular interaction in normal and pathological conditions

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

## Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	3	6
Quantitative	Publication with international co- authoring (per faculty per year)	0	3	6
Quantitative	Faculty co-authoring publication with international partners	0	60	120
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	60	120

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	20	40

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

# Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness experience abroa	of ad for	researchers postdoctoral tra	with ining	08/2018	07/2022	

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting	08/2018	07/2022
professors)		

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	10	20

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

## Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	4	8
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of at distance learning courses	0	1	2
Quantitative	Number of summer/winter schools	0	4	8

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and	08/2018	07/2022
technologies		

# Description

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date	
Training of doctors abroad including	08/2018	07/2022	
co-supervisions			

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	16	32

Mechanisms involved in the development of chronic human diseases

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

# Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

## Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	3	6
Quantitative	Publication with international co- authoring (per faculty per year)	0	3	6
Quantitative	Faculty co-authoring publication with international partners	0	60	120
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	60	120

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	20	40

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

# Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date
Attractiveness	of	researchers	with	08/2018	07/2022
experience abro	ad for	postdoctoral tra	ining		

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	10	20

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

# Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	4	6
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of at distance learning courses	0	1	2
Quantitative	Number of summer/winter schools	0	3	6

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

# Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	16	32

Interprofessional health education

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

# Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

## Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	3	6
Quantitative	Publication with international co- authoring (per faculty per year)	0	3	6
Quantitative	Faculty co-authoring publication with international partners	0	60	120
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	60	120

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	20	40

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

# Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date
Attractiveness	of	researchers	with	08/2018	07/2022
experience abro	ad for	postdoctoral tra	ining		

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	10	20

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

# Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	4	8
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of at distance learning courses	0	0	1
Quantitative	Number of summer/winter schools	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	16	32

Promotion of human health through food and nutrition, with a focus on better food conservation and transformation

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	1	2
Quantitative	Publication with international co- authoring (per faculty per year)	0	1	2

Quantitative	Faculty co-authoring publication with international partners	0	20	40
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	20	40

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	12	24

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

# Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	5	11

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

# Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	2	4
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of summer/winter schools	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	1	3
Quantitative	Number of professors with completed junior internship (6 months)	0	1	3

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	2
Quantitative	Number of doctorates that completed the activity (6 months)	0	8	16

Urban infrastructure as a promoter of human health

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

## Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

## Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	2	4
Quantitative	Publication with international co- authoring (per faculty per year)	0	2	4
Quantitative	Faculty co-authoring publication with international partners	0	40	80
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	40	80

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	16	32

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

# Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date
Attractiveness	of	researchers	with	08/2018	07/2022
experience abro	ad for	postdoctoral tra	ining		

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	8	16

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

# Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	3	6
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of summer/winter schools	0	1	2
Quantitative	Number of at distance learning courses	0	1	1

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	12	24
#### Goal 6

Increased safety, value, and confidence in health decision-making from evidence-based research

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	1	2
Quantitative	Publication with international co-authoring (per faculty per year)	0	1	2

Quantitative	Faculty co-authoring publication with international partners	0	20	40
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	20	40

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	12	24

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

#### Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	5	11

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

## Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	1	2
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of summer/winter schools	0	1	2
Quantitative	Number of at distance learning courses	0	0	1

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	1	3
Quantitative	Number of professors with completed junior internship (6 months)	0	1	3

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	2
Quantitative	Number of doctorates that completed the activity (6 months)	0	8	16

### Goal 7

Healthy lifestyle as a possible promoter of human health: diagnosis and intervention

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	2	4
Quantitative	Publication with international co-authoring (per faculty per year)	0	2	4

Quantitative	Faculty co-authoring publication with international partners	0	40	80
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	40	80

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	16	32

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

#### Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	8	16

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

## Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	3	6
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of summer/winter schools	0	1	2
Quantitative	Number of at distance learning courses	0	1	1

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	12	24

# THEME 4

## LANGUAGES, INTERCULTURALITY AND IDENTITIES

#### Goal 1

Repository of intercultural practices

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	3	6
Quantitative	Publication with international co-authoring (per faculty per year)	0	2	4
Quantitative	Faculty co-authoring publication with international partners	0	20	40
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	50	100

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	20	40

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

#### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	2	4

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting	08/2018	07/2022
professors)		

## Description

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	10	20

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

#### Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	8	16
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and	08/2018	07/2022
technologies		

## Description

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	16	32

#### Goal 2

Translation, tradition and innovation

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	3	6
Quantitative	Publication with international co-authoring (per faculty per year)	0	2	4

Quantitative	Faculty co-authoring publication with international partners	0	20	40
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	40	80

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	20	40

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	2	4

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

# Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	10	20

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

## Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	8	16
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	16	32

#### Goal 3

Challenges of the contemporary university in a globalized world

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	1	2
Quantitative	Publication with international co-authoring (per faculty per year)	0	1	2

Quantitative	Faculty co-authoring publication with international partners	0	10	20
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	10	20

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	12	24

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

#### Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	5	11

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

## Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	4	8
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of summer/winter schools	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	1	3
Quantitative	Number of professors with completed junior internship (6 months)	0	1	3

Activity 10	Start date	End date	
Development of methodologies and technologies	08/2018	07/2022	

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	2
Quantitative	Number of doctorates that completed the activity (6 months)	0	8	16

### Goal 4

Digital support for the governance of the internationalization program

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	3	6
Quantitative	Publication with international co-authoring (per faculty per year)	0	2	4

Quantitative	Faculty co-authoring publication with international partners	0	20	40
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	50	100

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	20	40

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

## Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	2	4

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

# Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	10	20

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

## Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	4	8
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	16	32

#### Goal 5

Languages portal, literature and cultural practices

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	3	6
Quantitative	Publication with international co-authoring (per faculty per year)	0	2	4

Quantitative	Faculty co-authoring publication with international partners	0	50	100
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	50	100

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	20	40

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

## Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	2	4

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

# Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	10	20

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

## Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	4	8
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	16	32

#### Goal 6

Cultural practices, education and human rights

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	3	6
Quantitative	Publication with international co-authoring (per faculty per year)	0	3	6

Quantitative	Faculty co-authoring publication with international partners	0	50	100
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	50	100

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	20	40

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

## Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	2	4

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

# Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	10	20

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

## Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	5	10
Quantitative	Number of seminars/workshops	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	16	32

# THEME 5

# ENVIRONMENTAL SUSTENTABILITY

#### Goal 1

Sustainable energy for the future

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	3	6
Quantitative	Publication with international co-authoring (per faculty per year)	0	3	6
Quantitative	Faculty co-authoring publication with international partners	0	60	120
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	60	120

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	20	40

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

#### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting	08/2018	07/2022
professors)		

## Description

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	10	20

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

#### Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	4	8
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of summer/winter schools	0	0	1
Quantitative	Number of at distance learning courses	0	0	1

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and	08/2018	07/2022
technologies		

## Description

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

## Description

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	16	32
#### Goal 2

Industrial sustainability

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	2	4

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	2

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

International bibliographical production of the researches developed in house by all UFSC participant groups, carried out within the scope of the PRINT Program, both on their own and in conjunction with foreign groups. In this action, outcome indicators will be associated with the publication of UFSC faculty with international co-authorship, including articles, books and book chapters, as well as increasing the impact of the publication of articles by faculty members.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	5	10
Quantitative	Publication with international co-authoring (per faculty per year)	0	5	10

Quantitative	Faculty co-authoring publication with international partners	0	100	200
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	100	200

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	36	72

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

#### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	2	4

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

#### Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	2	4
Quantitative	Number of young talented researchers attracted (12 months)	0	2	2

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	18	36

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

#### Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	7	14
Quantitative	Number of seminars/workshops	0	2	4
Quantitative	Number of summer/winter schools	0	0	2
Quantitative	Number of at distance learning courses	0	0	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	4	8
Quantitative	Number of professors with completed junior internship (6 months)	0	4	8

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	2

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

#### Description

Engagement of postgraduate doctorates from UFSC, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups, and nuclei that will join the Program during its execution. In this activity, both the medium (6 months) and the long duration periods (12 months) are considered, the latter contemplating the possibility of co-supervision.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	2	6
Quantitative	Number of doctorates that completed the activity (6 months)	0	28	56

#### Goal 3

Sustainability in the international community (water, energy and food)

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

International bibliographical production of the researches developed in house by all UFSC participant groups, carried out within the scope of the PRINT Program, both on their own and in conjunction with foreign groups. In this action, outcome indicators will be associated with the publication of UFSC faculty with international co-authorship, including articles, books and book chapters, as well as increasing the impact of the publication of articles by faculty members.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	2	4
Quantitative	Publication with international co-authoring (per faculty per year)	0	2	4

Quantitative	Faculty co-authoring publication with international partners	0	40	80
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	40	80

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	16	32

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

#### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

#### Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	8	16

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

#### Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	3	6
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of summer/winter schools	0	0	1
Quantitative	Number of at distance learning courses	0	0	1

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

#### Description

Engagement of postgraduate doctorates from UFSC, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups, and nuclei that will join the Program during its execution. In this activity, both the medium (6 months) and the long duration periods (12 months) are considered, the latter contemplating the possibility of co-supervision.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	12	24

#### Goal 4

Production of knowledge and training of human resources in the area of marine/coastal biodiversity

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

International bibliographical production of the researches developed in house by all UFSC participant groups, carried out within the scope of the PRINT Program, both on their own and in conjunction with foreign groups. In this action, outcome indicators will be associated with the publication of UFSC faculty with international co-authorship, including articles, books and book chapters, as well as increasing the impact of the publication of articles by faculty members.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	2	4
Quantitative	Publication with international co-authoring (per faculty per year)	0	2	4

Quantitative	Faculty co-authoring publication with international partners	0	40	80
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	40	80

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	16	32

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

#### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

#### Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	8	16

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

#### Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	3	6
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of summer/winter schools	0	0	1
Quantitative	Number of at distance learning courses	0	0	1

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

#### Description

Engagement of postgraduate doctorates from UFSC, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups, and nuclei that will join the Program during its execution. In this activity, both the medium (6 months) and the long duration periods (12 months) are considered, the latter contemplating the possibility of co-supervision.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	12	24

#### Goal 5

Sustainable food production in the field of Agrarian Sciences

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

International bibliographical production of the researches developed in house by all UFSC participant groups, carried out within the scope of the PRINT Program, both on their own and in conjunction with foreign groups. In this action, outcome indicators will be associated with the publication of UFSC faculty with international co-authorship, including articles, books and book chapters, as well as increasing the impact of the publication of articles by faculty members.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	2	4
Quantitative	Publication with international co-authoring (per faculty per year)	0	2	4

Quantitative	Faculty co-authoring publication with international partners	0	40	80
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	40	80

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	16	32

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

#### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

#### Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	8	16

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

#### Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	3	6
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of summer/winter schools	0	0	1
Quantitative	Number of at distance learning courses	0	0	1

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

#### Description

Engagement of postgraduate doctorates from UFSC, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups, and nuclei that will join the Program during its execution. In this activity, both the medium (6 months) and the long duration periods (12 months) are considered, the latter contemplating the possibility of co-supervision.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	12	24

#### Goal 6

Characterization, conservation and sustainable use of the biodiversity resources

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

International bibliographical production of the researches developed in house by all UFSC participant groups, carried out within the scope of the PRINT Program, both on their own and in conjunction with foreign groups. In this action, outcome indicators will be associated with the publication of UFSC faculty with international co-authorship, including articles, books and book chapters, as well as increasing the impact of the publication of articles by faculty members.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	1	2
Quantitative	Publication with international co-authoring (per faculty per year)	0	1	2

Quantitative	Faculty co-authoring publication with international partners	0	20	40
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	20	40

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	12	24

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

#### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

#### Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	5	11

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

#### Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	2	4
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of summer/winter schools	0	1	2
Quantitative	Number of at distance learning courses	0	1	2

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	1	3
Quantitative	Number of professors with completed junior internship (6 months)	0	1	3

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

#### Description

Engagement of postgraduate doctorates from UFSC, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups, and nuclei that will join the Program during its execution. In this activity, both the medium (6 months) and the long duration periods (12 months) are considered, the latter contemplating the possibility of co-supervision.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	8	16

#### Goal 7

Research and innovation for intelligent and environmentally sustainable cities - water, waste and renewable energy

Activity 1	Start date	End date
Short-term training abroad	08/2018	07/2022

#### Description

Short courses or summer / winter schools abroad aimed at postgraduate students linked to research projects, in countries and institutions with centers of excellence, including both the nuclei participating in the project proposals as well as international groups and nuclei that are added to the project. Program throughout its execution. In this action, the indicators will be associated with the number of activities completed by students at UFSC abroad.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of short-term activities completed abroad	0	1	2

Activity 2	Start date	End date
Outreach projects	08/2018	07/2022

#### Description

Carrying out extension activities in the theme, to share the results and the knowledge of the network to the interested community, including the middle and basic schools. This action will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 3	Start date	End date
Publications with international impact	08/2018	07/2022

#### Description

International bibliographical production of the researches developed in house by all UFSC participant groups, carried out within the scope of the PRINT Program, both on their own and in conjunction with foreign groups. In this action, outcome indicators will be associated with the publication of UFSC faculty with international co-authorship, including articles, books and book chapters, as well as increasing the impact of the publication of articles by faculty members.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Articles/faculty in Qualis A1 and A2 journals	0	2	4
Quantitative	Publication with international co-authoring (per faculty per year)	0	2	4

Quantitative	Faculty co-authoring publication with international partners	0	40	80
Quantitative	Articles published by faculty in Qualis A1 and A2 journals	0	40	80

Activity 4	Start date	End date
Missions abroad (Brazilian faculty)	08/2018	07/2022

Technical visit of UFSC faculty to the international centers of excellence for planning and follow-up of research, joint intellectual production, partnership training and prospective visit to business, social and governmental organizations working in the area. In this activity, missions of short duration (15 days) are planned, financed by Assignments for Work Missions for Faculty at UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of faculty work assignments abroad (15 days)	0	16	32

Activity 5	Start date	End date
Organization of events	08/2018	07/2022

#### Description

Organization of international technical-scientific congresses in related topics. In this activity, the indicators will be associated to the number of congresses or similar events organized by UFSC.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of international congresses organized	0	1	2

Activity 6				Start date	End date	
Attractiveness	of	researchers	with	08/2018	07/2022	
experience abro	ad for	postdoctoral tra	ining			

#### Description

Reception of foreign and Brazilian researchers, with experience abroad, for post-doctoral studies at UFSC. The respective work plans should include research, intellectual production and joint training with UFSC faculty and students. In this activity, Youth Talent Scholarships with Experience Abroad (12 months), for foreign residents, and Post-doctoral Scholarships with foreign experience (12 months) are foreseen.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of postdoctoral researchers attracted (12 months)	0	1	2
Quantitative	Number of young talented researchers attracted (12 months)	0	1	1

Activity 7	Start date	End date
Missions to Brazil (visiting professors)	08/2018	07/2022

Reception of researchers from international centers of excellence for planning and follow-up on research, joint intellectual production, training in partnership with UFSC researchers, and prospective visit to business, social and governmental organizations working on the theme. In this activity, missions of short duration (15 days) are foreseen, financed by Scholarships for Visiting Professors in Brazil, that are reference in the scope of the subject.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of visits of international professors (15 days)	0	8	16

Activity 8	Start date	End date
Learning and training	08/2018	07/2022

#### Description

Lecture courses, as well as seminars/workshops, summer/winter schools, distance learning courses, in partnership with the researchers of the international groups involved in the projects on the subject. In this activity, the indicators will be associated to the number of activities offered to students from other universities in Brazil and the world.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of courses offered in English	0	3	6
Quantitative	Number of seminars/workshops	0	1	2
Quantitative	Number of summer/winter schools	0	1	2
Quantitative	Number of at distance learning courses	0	0	1

Activity 9	Start date	End date
Visiting professors abroad	08/2018	07/2022

#### Description

Improvement of junior and senior UFSC faculty, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups and nuclei that will join the Program during its execution. In this activity, both Junior and Senior Visiting Scholarships abroad are planned, considering an average period of 6 months.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of professors with completed senior internship (6 months)	0	2	4
Quantitative	Number of professors with completed junior internship (6 months)	0	2	4

Activity 10	Start date	End date
Development of methodologies and technologies	08/2018	07/2022

Research and development activities aiming to create methods, techniques and tools in the theme. This activity will be evaluated qualitatively.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Qualitative	Concluded activities	0	0	1

Activity 11	Start date	End date
Training of doctors abroad including	08/2018	07/2022
co-supervisions		

#### Description

Engagement of postgraduate doctorates from UFSC, whose research is related to the scope of the subject, in countries and institutions with nuclei of excellence in related areas. It includes both the nuclei that participate in the proposals of the projects and international groups, and nuclei that will join the Program during its execution. In this activity, both the medium (6 months) and the long duration periods (12 months) are considered, the latter contemplating the possibility of co-supervision.

Туре	Indicator	Current situation	Goal for the 2nd year	Final Goal
Quantitative	Number of doctorates that completed the activity (12 months)	0	1	3
Quantitative	Number of doctorates that completed the activity (6 months)	0	12	24

#### STRATEGIES

# Strategy for the consolidation of existing international partnerships, as well as the construction of new partnerships and cooperation projects to increase the relationship between the Brazilian institution and research groups abroad

Having a large number of partnerships around the world does not necessarily guarantee that UFSC will improve its international profile and reputation, but the choice of geographically strategic partnerships can play a key role in achieving those goals. International partnerships offer opportunities to attract a more diverse student body and to promote greater mobility of faculty, staff and student. These partnerships also have the potential to impact curriculum development, collaborative learning programs, and research networks. Within this context, the following strategies stand out: • Encourage the signing of double degree agreements at the undergraduate and postgraduate levels, including doctoral co-supervision agreements; • Issue calls for proposals to provide seed money specifically for faculty to prepare international projects; • Increase the number of submissions to mobility calls for proposals issued by national and international funding agencies; • Encourage the submission of proposals for international collaboration and mobility programs; • Fund research missions that enable the approximation and greater consolidation of existing partnerships; • Value the quality of cooperation prior to the number of partner universities; • Focus on the leading research areas at the foreign HEIs; • Focus on cooperation agreements that provide for double degree programs: • Assimilate its academic leadership position in the South-South axis by, for instance, participating more actively in associations such as AUGM and GCUB; • Approach world-class universities from the Northern Hemisphere; • Approach HEIs from BRICS countries.

#### Strategy to attract foreign students to Brazil.

Within the Student Mobility Policy, ways for encouraging and facilitating the recruitment of foreign students to Brazil will also be focused as a strategy to initiate dialogues with world-class universities. In this context, the following strategies should be highlighted: • Offer courses in English (and other languages) to meet the needs of foreign students; • Create mobility programs for foreign university students (with grants); • Improve institutional welcoming policies; • Reduce the effects of cultural shock through specific courses on Brazilian language and culture; • Facilitate the obtaining of visas in partnership with the Federal Police; • Offer non-compulsory internships in partner laboratories and companies.

#### Strategy to attract faculty and researchers with international experience.

Within the Faculty Mobility Policy, providing support for visiting faculty is one of the priorities. Among the strategies to attract them are: • Encourage and increase the number of collaborative research projects and individual fellowships through programs offered by the European Research Council (ERC), the Alexander von Humboldt Foundation, Erasmus, Newton Fund, etc. • Improve the call for applications for Visiting Faculty positions issued annually by the Prorectorate for Graduate studies; • Engage SINTER in the visiting faculty hiring process together with the Prorectorate for Personnel Management and Development (PRODEGESP), in order to expedite this process; • Promote faculty mobility in short-term events; • Support the creation and expansion of cooperation and research projects with an international scope; • Improve institutional welcoming policies; • Facilitate the obtaining of visas in partnership with the Federal Police and the Ministry of Labor.

## Strategy to prepare the scholarship holders for the period abroad as well as for their return, especially in order to increase the knowledge appropriation by the institution.

Within the UFSC Institutional Language Policy, the strategies to prepare faculty and students in their mobilities are as follows: • Value linguistic and cultural diversity by offering courses, workshops, trainings and services in different languages; • Democratize access to language learning, through the promotion of equal access to language learning for all students, faculty and staff; • Provide faculty training aimed at teaching courses in a foreign language, writing articles in a foreign language, and submitting papers to international events; • Administer language proficiency tests (TOEFL, IELTS, Cambridge, etc) at UFSC; • Promote and support the reformulation of the language proficiency tests offered by the Department of Foreign Language and Literature (DLLE).

## Describe innovative strategies that will be used by the institution that were not mentioned above.

An innovative strategy to be used by UFSC is the integration between undergraduate and postgraduate programs with a view to making them more international. In particular, the possibility that the last year of undergraduate studies is associated with a corresponding master's program will be encouraged. The idea is, following the philosophy of the Bologna process, to adapt the content of the undergraduate degree (first cycle) to the master's degree (second cycle). This would also allow, for example, a student with 5 years of study to pursue a doctoral degree (third cycle) abroad and/or to enter the international labor market, particularly in Europe. Another innovative strategy proposed by UFSC is to establish virtual activities that promote training partnerships, create educational hubs, and expand its own local and national activities into cross-border activities with a view to meeting its own needs and those of potential foreign partners. Among the possible guidelines are: - developing joint programs and courses with international partners; - offering e-learning programs; - offering courses for foreign institutions, including for single course validation; and - training faculty and staff ("capacity building"). Finally, UFSC intends to value internationalization activities by awarding faculty members and students with outstanding scientific production in collaboration with foreign institutions, by subject and year, throughout the implementation of the CAPES-PrInt project at UFSC.

#### POLICIES

# Policy for selection of foreign partners, considering that 70% (at least) of the resources should be earmarked for partnerships with institutions based on countries that Capes maintains effective cooperation (listed in Annex I of the call).

The selection of foreign partners is based on the CAPES guidelines and on the existing or intended collaborations by UFSC's researchers. Currently, partnerships between researchers involve institutional relations which has already generated an impact on joint scientific productivity with foreign partners (annual average of 2000 articles with foreign authorship from 2013 to 2016), on cosupervision agreements (55 from 2013 to 2016), on student academic activities abroad (current average of 210 sandwich doctoral students per year), on faculty training abroad (470 postdoctoral researchers per year in 2013 and 2016), on visiting faculty and researchers recruitment (18 visiting foreign faculty members in 2017), and on international projects with foreign partnerships (97 projects between 2013 and 2018). At present, UFSC is expanding its institutional cooperation agreements to cover all partnerships planned under CAPES-PrInt. To this end, in addition to the existing agreements department, actions involving the internationalization of postgraduate programs were included in the scope of the Office of International Relations (SINTER), and an exclusive division will be created for the PrInt related activities in the Prorectorate for Graduate Studies. From the 312 existing partnerships, about 280 foreign universities, with which CAPES maintains effective cooperation, were prioritized for participation in the program. UFSC also considers, as selection criteria, the university as a whole, or its performance in a particular area of knowledge, the higher capacity utilization (that is, qualified personnel and infrastructure) in comparison to UFSC's, as well as the reciprocity policies, such as those that provide for exemption from or reduction of tuition, administrative or bench fees. Among the institutional selection criteria, well-ranked universities, according to internationally recognized rankings, preferably among the top 100, are prioritized for partnerships. For the implementation of this policy, it is expected that the Management Committee and UFSC institutional units (PROPG, PROPESQ, PROEX and SINTER) will define the way in which the previous criteria are to be operationalized, including the monitoring of the expected indicators and actions for each theme emphasizing internationalization in the program.

# Grant policy and internal selection process for specific actions, within the funding lines of the Capes-PrInt program. In the case of cooperation projects with foreign institutions, the proposer should specify the application of funds, the plan of activities, reciprocal funding, academic mobility, technical - scientific production, counterparts in the partner institutions, among others.

The internal selection policy for specific actions and beneficiaries will be carried out through open calls for proposals including the topics prioritized in the present proposal, namely: a) Nanoscience and nanotechnology; b) Digital transformation: industry and services; 4.0 c) Human Health; d) Languages, interculturality and identities; e) Environmental sustainability. As required by CAPES, UFSC reiterates its transparency policy by including in the calls for proposals the following items: resource allocation plan, activities plan, proof of reciprocal funding by the foreign team/institution, expectation of academic mobility and joint technical-scientific production, returns offered by the partner institutions, and expected joint publications after the accomplishment of the established academic activities. When appropriate, binational intellectual property agreements will also be required. The Management Committee will be responsible for ensuring the fulfillment of this policy, the operationalization of the internal calls, and the monitoring of the investments, including the partner institutions, respecting the strategic priorities of the institutional internationalization plan and the CAPES-PrInt guidelines.

#### Policy for hiring faculty with recognized scientific performance at an international level.

The actions for recruiting foreign or Brazilian faculty abroad will be established through open calls for applications that prioritize merit in the particular area of expertise. Researchers will be selected within any of the themes established in this proposal. The policy for attracting these researchers will be based on the remuneration offer and on the attractive work and living conditions in Florianópolis. To this end, as provided in the internationalization plan, actions must be taken to communicate, promote and disseminate UFSC's image at a global level. It will be UFSC's responsibility to mobilize its areas of communication and institutional promotion in order to disseminate the opportunities for foreign and

#### UNIVERSIDADE FEDERAL DE SANTA CATARINA

Brazilian researchers residing abroad. The hired faculty will be expected to commit themselves to the research activities related to their respective programs and themes, including teaching and student supervision, as well as to get involved in the university's innovation ecosystem (including innovation parks, incubators, research centers and partnerships with companies). Similarly, UFSC will provide access to its fields of research and application in other sectors (health, hospital) and social and cultural areas, which include schools, indigenous and quilombola communities, etc.

## Policy to increase proficiency in foreign languages for students, postgraduate faculty and technical staff that have a direct relationship with the proposed Internationalization Project.

In addition to all the activities developed within the scope of the Idiomas sem Fronteiras [Language without Borders] Program, UFSC offers, since the 1980s, foreign language courses at reduced prices to the academic community, as well as full grants to faculty and staff. The number of courses lectured in English is increasing, specifically to prepare students and staff for international insertion. The Office of International Relations (SINTER) is also implementing English teaching programs for faculty and researchers focused on language proficiency, writing articles and submitting papers to international events. SINTER also aims to create a multilingual and multicultural environment among the international university community. Within this perspective, postgraduate programs will be encouraged to create opportunities for academic interaction in English on a regular basis, with presentations of ongoing work by postgraduate students, as well as by faculty researchers for presenting papers at the international level. SINTER has a catalogue of 46 postgraduate courses offered at UFSC in English. For international students and visiting faculty, UFSC also offers a Portuguese as a Foreign Language course as a way to encourage Portuguese language learning and to value this heritage and the culture of Portuguese-speaking countries. The course also aims to attract students, faculty and researchers from internationally renowned institutions, institutes and research centers, as well as to foster intercultural experiences within UFSC's internationalization activities in the areas of teaching, research, outreach and management.

## Policy for recognition of academic and scientific activities performed by faculty and students abroad.

This policy includes the creation of UFSC's Internationalization Resolution, as well as the improvement of Resolution No. 17/CUn/97 of 30 September 1997, which sets the procedures for course validation and credit recognition for studies taken at partner institutions. The objective is to create mechanisms that stimulate the institutional return of the knowledge and experiences acquired by faculty, staff and students when participating in international academic mobility activities. Among the proposed guidelines are:

- Validating courses taken at partner institutions by curricular sections or areas;
- Training the administrative staff and the coordinators of postgraduate and undergraduate programs for the validation of credits and activities carried out abroad.
- Promoting informative lectures and seminars;
- Encouraging the publication of articles and books with international partners;
- · Offering short-courses and workshops to disseminate the knowledge acquired;
- Using international experience reports for the creation of institutional promotional materials.

#### Policy for hosting and support of foreign faculty, researchers and students.

This policy aims to collaborate to the integration of foreign students and faculty at UFSC, by organizing cultural activities and providing support in matters related to housing, transportation and the functioning of the University. Among the guidelines for welcoming faculty, research and students are:

- Hosting welcoming sessions at the beginning of each semester for undergraduate and postgraduate students;
- · Promoting extracurricular events with international students and their study buddies;
- Obtaining an exhibition booth at SEPEX (University's Teaching, Research and Outreach Week) to disseminate international students' cultures;
- Reducing the effects of cultural shock through specific Portuguese language and Brazilian culture courses;
- Offering social gatherings to assist in the adaptation of visiting students and faculty at UFSC;
- Promoting UFSC Internationalization Fair;
- · Scheduling tours with the purpose of showing UFSC's main off-campus areas of activity

#### UNIVERSIDADE FEDERAL DE SANTA CATARINA

(Fortresses, Yakult Farm, Ressacada Experimental Farm, Perini Industrial Park, Aquaculture Laboratory, Sapiens Park, etc.) to the international visitors.

## Policy for the appropriation of knowledge and experience acquired abroad by the beneficiaries of the actions of the Institutional Internationalization Project.

Based on the aforementioned guidelines, it is possible to list concrete actions to be carried out aiming the effective and systematized consolidation of UFSC's internationalization process. In this regard, policies that are geared towards the institutional development through actions that value the advancement of knowledge and innovation are fundamental. Such policies are focused on achieving scientific and technological excellence, seeking the consolidation of the innovative industry and the informed ability to face the challenges imposed on society. The guidelines for implementing knowledge appropriation actions, linked to the internationalization policy, include:

- Establishing international research laboratories to promote cutting-edge research;
- Promoting studies, developing strategies and proposing international guidelines on themes related to innovation-friendly environments, technology transfer activities, and other topics inherent to stimulating innovation at UFSC, including for attracting, setting up and installing research, development and innovation centers and technology hubs and parks;
- Discussing strategies regarding the registration, maintenance and licensing of UFSC's Intellectual Property in the international sphere;
- Broadening the discussion on the international cooperation and interaction between UFSC and the public and private sectors, as well as on the creation of favorable environments for innovation and technology transfer activities; and
- Proposing simplified and verified procedure models for the management of international science, technology and innovation projects within UFSC.

#### Policy for management and operationalization of the Institutional Internationalization Project.

UFSC Internationalization Plan's strategic actions are the shared responsibility of the Prorectorates and Offices that compose the University administration - including the Office of International Relations (SINTER). Hence, the set of actions was planned within each of the following executive bodies, whose main responsibilities in the internationalization process are described as follows:

- I The Office of International Relations (SINTER) is responsible for:
  - a) promoting interinstitutional cooperation and academic mobility;
  - b) prospecting national and international partners to establish cooperation agreements aimed at language teaching;
  - c) assisting in national and international cooperation agreement processes;
  - d) supporting and monitoring language teaching programs or projects linked to cooperation agreements with institutions or funding agencies.

II – The Prorectorate for Outreach and Extension (PROEX) is responsible for:

- a) elaborating, releasing and monitoring calls for extension project proposals linked to the Institutional Language Center (Nuclii);
- b) supporting and monitoring the operational and academic management activities of the Language Centers.
- III The Prorectorate for Undergraduate Studies (PROGRAD) is responsible for:
  - a) encouraging the insertion of foreign language activities as components of the undergraduate curricula;
  - b) providing foreign language experience opportunities for undergraduate students on campus and abroad;
  - c) assisting in the development of SINTER's internationalization regulation;
  - d) facilitating the translation and implementation process of bilingual documents to be issued by the Student Administration Department.

IV – The Prorectorate for Graduate Studies (PROPG) is responsible for:

- a) supporting activities that promote multilingualism among UFSC's faculty, students, and technical-administrative staff, in Brazil and abroad;
- b) supporting initiatives that encourage a multicultural environment within the Graduate Programs;
- c) managing doctoral co-supervision agreements jointly with SINTER.

- V The Prorectorate for Graduate Studies (PROPESQ) is responsible for:
  - a) announcing opportunities, encouraging and giving support to UFSC's research groups for them to propose and participate in mutual or network international research projects;
  - b) creating opportunities for emerging research groups to interact internationally with groups that have a greater international experience;
  - c) encouraging the use of English in international research-related lectures and meetings hosted at UFSC;
  - d) disseminating and stimulating the participation of UFSC researchers in training courses to improve scientific English writing skills;
  - e) disseminating and stimulating the participation of UFSC researchers in remote meetings, such as webinars, scientific meetings and others that may take place online.

VI – The Prorectorate for Administration (PROAD) is responsible for:

- a) contributing with infrastructure matters, mainly regarding the setting of a welcoming international environment for both international students and UFSC students;
- b) assisting with bidding processes for the purchase of materials and equipment for SINTER.

VII – The Prorectorate for Personnel Management and Development (PRODEGESP) is responsible for:

- a) increasing the offer of foreign languages courses for faculty and technical-administrative staff;
- b) funding the participation of faculty and technical-administrative staff in mobility programs, trainings and international events;
- c) improving the temporary recruitment procedures for foreign and visiting professors in partnership with SINTER;
- d) strengthening and enhancing UFSC's internationalization actions through activities of personnel management and development.

VIII- The Prorectorate for Student Affairs (PRAE) is responsible for:

- a) assisting international students regularly enrolled at UFSC.
- IX The Office of Planning and Budget (SEPLAN) is responsible for:
  - a) enabling financial resources for the internationalization process;
  - b) indicating external fund sources;
  - c) assisting in the development of fund raising projects.
- X The Office of Innovation (SINOVA) is responsible for:
  - a) promoting studies, developing strategies and proposing international guidelines on topics concerning innovation-friendly environments, technology transfer activities, and matters related to the encouragement of innovation activities at UFSC, including for the attraction, creation and installation of research, development and innovation centers and of technology parks and complexes.
  - b) discussing strategies for the registration, maintenance, and licencing of UFSC's Intellectual Property in the international sphere;
  - c) broadening the discussion on the international cooperation and interaction between UFSC and public and private sectors, as well as on the creation of favorable environments for innovation and technology transfer activities;
  - d) proposing simplified and verified procedure models for the management of international science, technology and innovation projects within UFSC.

XII- The Office of Distance Learning (SEAD) is responsible for:

- a) increasing distance learning opportunities in order to meet the university's internationalization needs;
- b) establishing cross-border partnerships.

XII – The Office of Culture and Arts (SECARTE) is responsible for:

- a) creating opportunities for artistic and cultural activities related to foreign language communication in all of UFSC's campuses;
- b) promoting actions to welcome international students at UFSC, as well as to value the experiences obtained by UFSC students abroad;
- c) assisting in the promotion of cultural events proposed by international students at UFSC for the dissemination of their cultural diversities.

#### UNIVERSIDADE FEDERAL DE SANTA CATARINA

- XIII The Office of Affirmative Action and Diversities (SAAD) is responsible for:
  - a) including the international students in the affirmative action and diversity appreciation activities promoted at UFSC;
  - b) assisting UFSC's international community throughout their whole adaptation process.

### Policy for monitoring and internal evaluation of the goals of the Institutional Internationalization Project.

For the internal monitoring and evaluation of the Internationalization Program, University experts in the areas of governance and organizational assessment, with emphasis on public management, will be mobilized. In addition to the conceptual framework provided in the Institutional Plan, a management model will be used for the elaboration, calculation and monitoring of gualitative and guantitative indicators, in a value cycle that includes direct results (outputs), medium-term results (outcomes) and impact on the institutionalization of the university internationalization. For this mission, it is worth noting UFSC's institutional capacities in the areas of institutional evaluation (it has the only postgraduate professional training program in the country), and organizational knowledge management (area in which UFSC has a Doctoral and a Master's Program with Grade 6, responsible for about 3% of the Brazilian research on the subject). Subsequent to the establishment of the evaluation policy, the Internationalization Committee will be responsible for defining criteria, as well as the operationalization of the processes for achieving and monitoring the goals, according to the actions and projects described in the Program. The institutional bodies indicated in the previous item ("Policy for Management and Operationalization") will give support to this activity. Actions include the university's information management, which will require a comprehensive, integrative vision based on international data standards. Along with the administrative units, UFSC can count on the support of its degree programs in information science, information systems, computer science, and knowledge engineering and management, whose research and outreach projects have national and international impact.

## Policy for the conciliation of national development programs supported by Capes to the internationalization effort.

UFSC actively participates in CAPES international programs. An example is the participation in its oldest program, CAPES-COFECUB, since its launch year, totalling 44 projects to date, as well as in the BRAFAGRI and BRAFITEC programs. It is important to mention the partnership with Germany, via PROBRAL, UNIBRAL and BRAGECRIM programs. With the United States of America, we highlight UFSC's participation in the CAPES-FIPSE and the Fulbright programs. In Europe, there is cooperation with the The Netherlands, Belgium, Sweden, Spain and Portugal. UFSC has also worked in South-South partnerships with Argentina and Uruguay, as well as in the Pro-Haiti Program, in which UFSC was the second institution with the highest number of students. UFSC assumed the technical coordination of the Portuguese Teacher Training Program in Timor-Leste. UFSC faculty has collaborated with Capes in the evaluation and prioritization of internationalization proposals, with the constant participation of one or more faculty members in the International Relations Special Advisory Group. These international cooperation efforts, supported by CAPES, created an institutional culture of articulation among the different components of UFSC's administrative structures to enable the exchanges. The university has rules for undergraduate programs to validate activities carried out in foreign institutions and rules and support structures for international exchange students at UFSC, in addition to a regulation on double degree programs. A 2010 Resolution regulates the co-supervision of doctoral students from UFSC and foreign institutions, resulting from articulation between PROGRAD and SINTER. This university office, which had only 2 staff members and 2 student interns in 2008, currently has 11 staff members and 8 interns (mainly International Relations students) giving support to existing exchanges. The existence of institutional policies (rules and regulations), support structures to international exchanges, and articulation between administrative and academic structures, are evident to enable and enhance the internationalization process. CAPES-PrInt strategic and operational actions should be added to these actions, harmonizing the missions, investments, study periods abroad, grants, and other planned instruments along with what is already being done in cooperation with foreign institutions and countries through other programs.

## Describe here other innovative policies that will be adopted by the institution that were not addressed in the above items.

The term "World-Class University" was coined by the World Bank and became especially known in the book by Jamil Salmi (2009) on the challenges of establishing world-class universities. There is no consensus on a single definition of world-class university, but some characteristics are common to all of them. In all lists and rankings, elaborated in different contexts, we find universities such as Harvard, Stanford, MIT, Oxford and Cambridge. These are universities that present higher results than others, such as high student demand, research leadership and technology transfer. In general, these characteristics can be attributed to three complementary groups of factors that are common to the best universities in the world: i. High concentration of talent among students and faculty; ii. Abundant resources to provide a rich learning environment and to conduct advanced research; iii. Favorable governance, which encourages strategic vision, innovation and flexibility, and enables institutions to manage resources without major bureaucracy. In the case of UFSC, due to its public nature and the current economic crisis that has reduced the resources destined to education in the country, we recognize the lack of "abundant resources" of item (ii). However, a great deal can be done in relation to items (i) and (iii), especially in relation to the creation of a favourable university environment for attracting external resources together with public and private initiatives, which in turn may offer conditions to keep our talents and also attract the attention of foreign students and faculty to our institution. In relation to the creation of world-class universities, we highlight three main approaches: i. Improving universities with high potential for excellence: an approach that chooses the best universities ("picking winners") and promotes the necessary changes to enhance the three previous characteristics. This example has been used by countries like Germany since 2006, and recently by Russia; ii. Creating new universities: this approach assumes that it is difficult to promote change in existing universities, and that the best way to promote excellence is to create completely new universities with these characteristics ("clean-state approach"). A more recent World Bank document calls this approach the most efficient (Altbach, 2011); iii. Promoting the merger of smaller universities: this approach generates incentives for the merger of universities that will then lead to a greater concentration of talent and a greater volume of resources (hybrid approach). Among the three approaches listed above, the first would be the most plausible approach to be adopted by UFSC, taking into account its current international insertion and structure in terms of management, teaching, research and outreach, which also offers great potential for internationalization. However, it is important to point out that a university does not become world-class by its own will. This status has external origin and comes from international recognition. It is possible to notice that, among several criteria, these universities have great international presence, which is something that must be promoted internally. Therefore, the main question would be how to conceive this internationalization internally. Within this vision, referred to by some authors as Comprehensive Internationalization, we find an operational definition of internationalization. This definition contributes to the direction of UFSC's internationalization process, including its policies, guidelines and strategic actions. One of the ways to stimulate these actions is to promote studies that lead to the development of strategies and international guideline proposals on themes related to innovation-friendly environments, technology transfer activities, and other topics inherent to stimulating innovation, including for attracting, setting up and installing research, development and innovation centers and technology hubs and parks. In this sphere, we highlight the following actions: Discussing strategies regarding the registration, maintenance and licensing of UFSC's Intellectual Property in the international sphere: Broadening the discussion on the international cooperation and interaction between UFSC and the public and private sectors, as well as on the creation of favorable environments for innovation and technology transfer activities; and Proposing simplified and verified procedure models for the management of international science, technology and innovation projects within UFSC.

#### FURTHER INFORMATION

INDICATOR	NUMBER
Number of postgraduate courses taught in English between 2013 and 2016	48
Number of joint supervision postgraduate programs between 2013 and 2016	55
Number of double degree postgraduate programs between 2013 and 2016	55
Number of bilateral postgraduate programs between 2013 and 2016	0
Number of products derived from research projects and contributions to international databases between 2013 and 2016	8
Number of Capes' development programs from which the institution benefited between 2013 and 2016	44
Number of Capes' international cooperation projects from which the institution benefited between 2013 and 2016	125

## Insertion of materials, themes and subjects in foreign language in the postgraduate program curricular structure

The offer of courses, seminars, mini-courses and workshops in a foreign language will be an excellent opportunity to increase the internationalization of UFSC's postgraduate programs. In this way, a flexible curricular structure is foreseen and with the following guidelines: - Type of subjects: The disciplines taught may be optional or compulsory, according to the decision of the Graduate Program. - Credit Unit: The subjects can be arranged in theoretical, with 15 class hours, theoretical-practical and practical with 30 class hours. Academic activities will have 45 class hours. - Validation of credits: In order to allow international students to validate the activities carried out at UFSC, the equivalence of ECTS will be as follows, 1 ECTS = 25 hours of work. The Postgraduate programs are committed to teaching subjects in foreign languages on average one per semester, as well as promoting seminars with visiting professors from abroad in thematic areas, such as Summer/Winter Schools, Workshops and other activities that qualify the students and researchers on the proposed themes and involve and promote the internationalization of their postgraduate programs. It is important to emphasize here the creation of the catalog of subjects in English, which will be available from the semester 2018.2. These disciplines have an interdisciplinary character, which will positively contribute to establishing dialogues among the different areas of UFSC knowledge.

#### **EXPECTED BENEFITS**

#### **THEME 1: Nanoscience and Nanothechnology**

#### Work missions not related to the project

Year of work missions	Quantity of work missions per year	Amount of work missions
2018	3	R\$ 37.500,00
2019	8	R\$ 100.000,00
2020	8	R\$ 100.000,00
2021	8	R\$ 100.000,00
2022	3	R\$ 37.500,00

#### Scholarships not related to the cooperation project

Year	Modality Quantity		Amount	
2018	Sandwich Doctorate Scholarship (6 months)	5	R\$ 202.392,00	
2019	Sandwich Doctorate Scholarship (6 months)	10	R\$ 404.784,00	
2020	Sandwich Doctorate Scholarship (6 months)	12	R\$ 485.740,80	
2021	Sandwich Doctorate Scholarship (6 months)	10	R\$ 404.784,00	
2022	Sandwich Doctorate Scholarship (6 months)	5	R\$ 202.392,00	

#### Other actions not related to the project

Year	Action	Description	Amount
2019	Support for the organization of international events linked to the internationalization project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2020	Support for the organization of international events linked to the internationalization project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2021	Support for the organization of international events linked to the internationalization project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2022	Support for the organization of international events linked to the internationalization project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000

#### INTERNATIONAL COOPERATION PROJECTS

#### Description

This project aims to strengthen the internationalization indicators with the objective to achieve scientific leadership in terms of publications in the area of Health Sciences. The international insertion of the participants of this proposal is solid and in rapid expansion, given the characteristics of the projects developed as well as the indicators currently shown. Pharmaceutical technological innovation in parasitic and infectious diseases has been limited when compared to other diseases. In cancer, although the investments are high, new therapies are necessary, given the manifestation of resistance and/or adverse effects beyond the appearance of new gene mutations. Thus, it remains a challenge to develop innovative drugs that are economically feasible for these issues. A good strategy is the creation of cooperative networks between experts that can amplify the possibilities of innovation in the area. The use of nanotechnology has emerged as one of the most important strategies to improve drug performance. When compared to conventional carriers, the nanocarriers can be designed to deliver drugs by different administration routes and thus to improve the therapeutic activity. The nanocarriers promote biological half-life increase, improve solubility and bioavailability of hydrophobic compounds and drug release when encapsulated. In particular, drugs can be directed to specific action targets by passive mechanisms or by particles spontaneous accumulation in organs rich in macrophages infected by parasites. Nevertheless, the conventional release of drugs lacks of specificity, which results in adverse effects and toxicity. In addition, functionalized nanocarriers can be recognized increasing the interaction with receptors expressed on the surface of tumor cells and reducing the systemic drug exposure and adverse effects. In gene therapy, the nanocarriers allow to bypass the nucleic acids administration barriers, such as enzymatic degradation, capture by endothelial reticulum system cells, renal filtration and limited capacity to entry into cells. Therefore, this proposal is focused on the search for new drugs, therapeutic targets and release strategies using nanotechnology.

#### Work missions related to the cooperation project

Year		Quantity	Amount	
2022	6			150.000,00
2018	6			150.000,00
2020	10			250.000,00
2021	10			250.000,00
2019	8			200.000,00

#### Resources to maintenance the projects

Year	Amount	
2020	10.000,00	
2021	10.000,00	
2022	6.000,00	
2018	4.000,00	
2019	10.000,00	

#### Scholarships related to the cooperation project

Year	Modality	Quantity	Amount Total
2019	9 Senior Visiting Faculty Abroad (6 months)		65.678,40
2020	020 Visiting Faculty in Brazil (0 months)		80.776,45
2020	2020 Sandwich Doctorate Scholarship (12 months)		76.276,80
2021	2021 Junior Visiting Faculty Abroad (6 months)		60.638,40
2021	2021 Visiting Faculty in Brazil (0 months)		80.776,45
2021	2021 Sandwich Doctorate Scholarship (6 months)		323.827,20
2019	2019 Young Talents (12 months)		116.110,58
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Short-term training abroad (3 months)	1	25.466,40
2021	Short-term training abroad (3 months)	1	25.466,40
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Visiting Faculty in Brazil (0 months)	5	80.776,45
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2018	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2020	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
Name of the project	Start date	End date	
--	------------	----------	
Development of nanostructures and incorporation in functional products	08//2018	07/2022	

# Description

This research proposal was designed to aggregate researchers from UFSC Postgraduate Programs who are working and have recognized experience in nanoscience and nanotechnology of powder materials. Following a truly interdisciplinary approach, the objective of the project is: i) to ensure worldclass excellence in research and development in powder materials in the nano and micro scales; ii) to develop partnerships with industry and promote knowledge transfer to enable innovative products and processes; iii) to train students and researchers as a skilled workforce for the nanotechnology industry. The project intends to provide a cutting-edge research environment addressing key challenges in emerging science and engineering in the nanoscale. The main research activities are based on existing UFSC excellence groups, as well as partnerships both in industry and in research institutions around the world, particularly in North and South America, Australia, and Europe.

### Work missions related to the cooperation project

Year	Quantity	Amount
2020	10	250.000,00
2018	6	150.000,00
2019	8	200.000,00
2022	6	150.000,00
2021	10	250.000,00

# Resources to maintenance the projects

Year		Amount
2019	10.000,00	
2022	6.000,00	
2021	10.000,00	
2018	4.000,00	
2020	10.000,00	

Year	Modality	Quantity	Amount Total
2019	Short-term training abroad (3 months)	1	25.466,40
2020	Visiting Faculty in Brazil (0 months)	5	80.776,45
2021	Visiting Faculty in Brazil (0 months)	5	80.776,45
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2019	Postdoctoral Research (12 months)	1	69.310,58
2021	Postdoctoral Research (12 months)	1	69.310,58
2021	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40

VI V LASIDAI	DE l'EDERAE DE SANTA CATARINA		
2018	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2021	Short-term training abroad (3 months)	1	25.466,40
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2020	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Young Talents (12 months)	1	116.110,58
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Visiting Faculty in Brazil (0 months)	5	80.776,45
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40

Name of the project	Start date	End date
Development and application	08/2018	07/2022
of nanocatalysts		

#### Description

This research project aims to promote and consolidate international research partnerships in the area of nanocatalysts, one of the most traditional and important nanotechnology application areas, from the generation of high quality academic productivity through students and researchers mobility linked to the postgraduate programs participating in Brazil and abroad and promoting the internationalization of this area, such as the creation of subjects in foreign languages and the recognition of academic and scientific activities carried out abroad. In addition, the objective is developing new catalytic nanomaterials, with complete structural and dynamic characterization, which present superior gualities in relation to the activity, sensitivity, selectivity and stability that can contribute to the solution of current social and industrial problems in the areas of energy, environment and therapeutic products. The catalysis is one of the most traditional and important areas of nanotechnology, a rapidly growing field involving the use of nanomaterials for a variety of applications, both in homogeneous and heterogeneous catalysis. The industrial impact of nanocatalysts is clearly reflected by the increasing number of patents, technologies and products related to nanocatalysts in the market. The broad applicability of catalysis by nanomaterials is highlighted, being part of technological devices or acting directly, the nanocatalysts can be applied from the purification of water and air to rocket propellants and medicine. Therefore, nanocatalysts already not only contribute to a large share of the economy related to producing chemicals and devices, but also the demand for new nanocatalysts is extremely high. Thus, several countries, including Brazil, have nanotechnology as one of the priority areas, and catalysis is an important part in this context.

#### Work missions related to the cooperation project

Year	Quantity	Amount
2018	4	100.000,00
2019	8	200.000,00
2022	4	100.000,00
2020	8	200.000,00
2021	8	200.000,00

## Resources to maintenance the projects

Year	Amount
2019	10.000,00
2022	6.000,00
2018	4.000,00
2020	10.000,00
2021	10.000,00

Year	Modality	Quantity	Amount Total
2022	Sandwich Doctorate Scholarship (6 months)	3	121.435,20
2021	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40

NIVERSIDAI	DE FEDERAL DE SANTA CATARINA		
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Short-term training abroad (3 months)	1	25.466,40
2020	Visiting Faculty in Brazil (0 months)	4	64.621,16
2022	Visiting Faculty in Brazil (0 months)	2	32.310,58
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2019	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2021	Short-term training abroad (3 months)	1	25.466,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Young Talents (12 months)	1	116.110,58
2019	Visiting Faculty in Brazil (0 months)	4	64.621,16
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Visiting Faculty in Brazil (0 months)	4	64.621,16
2018	Sandwich Doctorate Scholarship (6 months)	3	121.435,20
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80

Name of the project	Start date	End date
Nanomaterials for sensors	08/2018	07/2022
and optoelectronics devices		

#### Description

This proposal includes two essential aspects of internationalization: i) scientific subjects at the frontier of knowledge and the potential for technological applications; ii) national and international interdisciplinary team, acting in the synthesis of new materials, characterization allied to theoretical modeling and application to devices. Nanoscience has been the focus of several scientific areas for innovation and development new technologies. However, a complete approach depends on a large number of parameter, from planning and obtaining new materials, going through appropriate characterization and application. Thus, the scientific team, both national and international, includes chemists, physicists and engineers. The national team is comprised by researchers with experience in international cooperation, involved in postgraduate programs, and advising of students. Respected researchers compose the foreign team and most of them are already collaborating with members of the Brazilian team. The research to be developed in this project involves optoelectronics, organic and inorganic materials, at the frontier of knowledge in this new age of materials for fundamental studies and technological applications. In the experimental bias, it is a team able to approach the problem of new devices creation in all aspects, from the new material production to the final application, with the possibility of developing new technologies. From the point of view of academic theory and technology, the theory of excited states in molecules will be developed, which is practically inexistent until recently due to the computational development. Such a theoretical development should lead to new forecasts and potentially even more interesting than those currently known. Optoelectronics has progressed rapidly in recent years with devices such as light emitting diodes, field effect transistors, photovoltaic cells and sensors. In addition to traditional inorganic materials used as active layers, molecular and hybrid organic systems have recently been applied. Current applications are driven by the premise of ease of processing through methods such as printing or solution / evaporation deposition, versatility of the synthesis processes and compatibility with a wide range of substrates such as transparent glass and flexible polymeric materials.

Year	Quantity	Amount
2020	6	150.000,00
2022	3	75.000,00
2019	6	150.000,00
2018	3	75.000,00
2021	6	150.000,00

#### Work missions related to the cooperation project

Year	Amount
2019	10.000,00
2020	10.000,00
2021	10.000,00
2022	6.000,00
2018	4.000,00

Year	Modality	Quantity	Amount Total
2019	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2019	Short-term training abroad (3 months)	1	25.466,40
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Postdoctoral Research (12 months)	1	69.310,58
2021	Postdoctoral Research (12 months)	1	69.310,58
2019	Visiting Faculty in Brazil (0 months)	3	48.465,87
2021	Visiting Faculty in Brazil (0 months)	3	48.465,87
2018	Visiting Faculty in Brazil (0 months)	1	16.155,29
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2018	Sandwich Doctorate Scholarship (6 months)	2	80.956,80
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Short-term training abroad (3 months)	1	25.466,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2022	Sandwich Doctorate Scholarship (6 months)	2	80.956,80
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2021	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2019	Young Talents (12 months)	1	116.110,58
2020	Visiting Faculty in Brazil (0 months)	3	48.465,87
2022	Visiting Faculty in Brazil (0 months)	1	16.155,29

# **EXPECTED BENEFITS**

# THEME 2: Digital Transformation: Industry 4.0 and Services

# Work missions not related to the project

Year of work missions	Quantity of work missions per year	Amount of work missions
2018	3	R\$ 37.500,00
2019	8	R\$ 100.000,00
2020	8	R\$ 100.000,00
2021	8	R\$ 100.000,00
2022	3	R\$ 37.500,00

# Scholarships not related to the cooperation project

Year	Modality	Quantity	Amount
2018	Sandwich Doctorate Scholarship (6 months)	5	R\$ 202.392,00
2019	Sandwich Doctorate Scholarship (6 months)	10	R\$ 404.784,00
2020	Sandwich Doctorate Scholarship (6 months)	12	R\$ 485.740,80
2021	Sandwich Doctorate Scholarship (6 months)	10	R\$ 404.784,00
2022	Sandwich Doctorate Scholarship (6 months)	5	R\$ 202.392,00

# Others action not related to the project

Year	Action	Description	Amount
2019	Support for the organization of international events linked to the internationalization project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2020	Support for the organization of international events linked to the internationalization project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2021	Support for the organization of international events linked to the internationalization project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2022	Support for the organization of international events linked to the internationalization project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000

Name of the project	Start date	End date
Robotics: competence and research in parallelism and reconfiguration	08/2018	07/2022

# Description

In the last two decades, reconfigurable robotics evolved from rudimentary machines to elaborate and prototypes, demanded by new manufacturing models and by Industry 4.0. The increasing demand for small quantities, rapid batch (e.g. packaging) exchanges and technological and social changes has made production in series costly, due to fixed installation and lack of flexibility. The flexible manufacturing cell generally does not fully meet the criteria of cost, programming time required. Industry 4.0 and digital transformation particularly challenge the fundamentals of robot design and development. The so-called smart factories sought in Industry 4.0 require machines and equipment that accompany the desired levels of integration and flexibility and adaptability of production. In the mechanics and robotics sciences, one should seek solutions that integrate the concept of adaptability and reconfigurability in the development of mechanisms and robots. These properties are challenges that roboticists face in this century to meet Industry 4.0. Recently, new concepts have emerged as reconfigurable robots, modular robots, metamorphic robots, variable topology mechanisms, and so on. These new concepts have the property of generating different topological configurations for reconfiguration and for various task requirements. To develop innovative reconfigurable parallel robots and mechanisms, it is necessary to follow a well-structured mechanism design methodology and share experiences with other researchers. This project will deal with Mechanisms and Reconfigurable Parallels to fill the gap in the literature: propose a design framework (as general as possible) to generate new and innovative reconfigurable robots and parallel mechanisms. The project also includes research in the field of hydraulic drives, including recent research in the field of digital hydraulics and electrohydrostatic systems. Participating in the project are researchers from UFSC and other research centers around the world that have, among their lines of research, reconfigurable mechanisms and robots. It is understood that the aggregation of knowledge through the exchanges of researchers from these various research centers will allow us to advance the research of reconfigurable robots and contribute to the purposes of the industry.

Work missions related to the cooperation project			
Year	Quantity	Amount	
2018	3	75.000,00	
2021	6	150.000,00	
2022	3	75.000,00	
2019	6	150.000,00	
2020	6	150.000,00	

#### Resources to maintenance the projects

Year	Amount
2020	10.000,00
2018	4.000,00
2021	10.000,00
2022	6.000,00
2019	10.000,00

Year	Modality	Quantity	Amount Total
2019	Postdoctoral Research (12 months)	1	69.310,58
2020	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2021	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2022	Sandwich Doctorate Scholarship (6 months)	2	80.956,80
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Visiting Faculty in Brazil (0 months)	3	48.465,87
2021	Visiting Faculty in Brazil (0 months)	3	48.465,87
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Visiting Faculty in Brazil (0 months)	3	48.465,87
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2019	Young Talents (12 months)	1	116.110,58
2021	Short-term training abroad (3 months)	1	25.466,40
2019	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2018	Visiting Faculty in Brazil (0 months)	1	16.155,29
2022	Visiting Faculty in Brazil (0 months)	1	16.155,29
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Short-term training abroad (3 months)	1	25.466,40
2018	Sandwich Doctorate Scholarship (6 months)	2	80.956,80

Name of the project	Start date	End date
Distributed and automated manufacturing and automated sectorial manufacturing (health)	08/2018	07/2022

# Description

This project analyzes the operational, economic and social viability of the implementation of an IoT platform for distributed and highly automated manufacturing lines destined to the manufacture of customized items for personalized medical treatment. To this end, the IoT INCANTO platform will connect sensors and devices in the supply chains of production and logistics systems, as well as end users of medical products, actively mobilizing a process of co-designing customized solutions. Custom items will be used for the treatment of chronic diseases that reach the most deprived and elderly part of the population. The analysis of the distributed and automated manufacturing lines will support the planning and implementation of the INCANTO platform, especially in the decisions that impact on: (i) the structuring of the manufacturing in distributed, networked and highly automated production units with based on advanced manufacturing technologies, supported by integrated and intelligent transportation and logistics systems, as well as through the adoption of lean manufacturing and lean manufacturing practices and techniques; (ii) customization of medical devices considering various dimensions of customization (composition, structure, geometry, assembly) with improvement of costbenefit ratio and reduction of time to delivery to the patient; and (iii) monitoring the effectiveness of items for medical treatment by combining data from design, manufacturing, and transportation with those collected during medical consultations, treatment, and the daily life of the patient. Internationalization will take place through the transfer of knowledge and technology among the PPGs partners in the UFSC and the international entities. In particular, the exchange aims to reinforce the insertion of UFSC in the international scenario. The technologies developed in this project have marked scientific and technological potential. In the medium and long term, they make possible the exchange of data and prototypes with other groups interested in the subject of the project.

#### Work missions related to the cooperation project

Year	Quantity	Amount
2021	6	150.000,00
2020	6	150.000,00
2019	6	150.000,00
2022	3	75.000,00
2018	3	75.000,00

#### Resources to maintenance the projects

Year	Amount
2018	4.000,00
2020	10.000,00
2022	6.000,00
2021	10.000,00
2019	10.000,00

Year	Modality	Quantity	Amount Total
2019	Visiting Faculty in Brazil (0 months)	3	48.465,87
2019	Young Talents (12 months)	1	116.110,58
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2018	Visiting Faculty in Brazil (0 months)	1	16.155,29
2021	Short-term training abroad (3 months)	1	25.466,40

NIVERSIDAL	JE FEDERAL DE SANTA CATARINA		
2019	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2021	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2022	Sandwich Doctorate Scholarship (6 months)	2	80.956,80
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Visiting Faculty in Brazil (0 months)	3	48.465,87
2020	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2019	Short-term training abroad (3 months)	1	25.466,40
2020	Visiting Faculty in Brazil (0 months)	3	48.465,87
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2022	Visiting Faculty in Brazil (0 months)	1	16.155,29
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2018	Sandwich Doctorate Scholarship (6 months)	2	80.956,80

Name of the project	Start date	End date
Mathematical modeling for applications in physics and engineering	08/2018	07/2022

# Description

Mathematics permeates virtually all of the important scientific advances of mankind. This project focuses on the application of Mathematics in related areas and practical problems, as well as the development of Pure Mathematics. The team of this project has researchers in the areas of Differential Equations, Analysis and Control of Dynamic Systems, Operator Algebra and Optimization, branches of mathematics that, in addition to their theoretical importance, find applications in physics and engineering. Such applications led us to collaborate with the Quantum Information group of the PPG in Physics and with groups of PPGs in Electrical Engineering and Systems and Automation Engineering. Together with foreign researchers, leaders in their respective areas, we will work on challenging themes, with a direct impact on science and technology. As for student training, the project will allow visits by internationally renowned researchers, co-supervised doctoral studies and technolal visits and internships (sandwich doctorate) in institutions abroad: a fundamental experience in the training of excellence of post-graduate students.

#### Work missions related to the cooperation project

Year	Quantity	Amount
2019	8	200.000,00
2022	4	100.000,00
2020	8	200.000,00
2021	8	200.000,00
2018	4	100.000,00

#### Resources to maintenance the projects

Year	Amount
2018	5.000,00
2021	10.000,00
2022	5.000,00
2020	10.000,00
2019	10.000,00

Year	Modality	Quantity	Amount Total
2019	Short-term training abroad (3 months)	1	25.466,40
2021	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Visiting Faculty in Brazil (0 months)	4	64.621,16
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2018	Sandwich Doctorate Scholarship (6 months)	3	121.435,20
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40

III ENSIDAL			
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2022	Visiting Faculty in Brazil (0 months)	2	32.310,58
2021	Postdoctoral Research (12 months)	1	69.310,58
2019	Young Talents (12 months)	1	116.110,58
2020	Visiting Faculty in Brazil (0 months)	4	64.621,16
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2019	Visiting Faculty in Brazil (0 months)	4	64.621,16
2019	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2022	Sandwich Doctorate Scholarship (6 months)	3	121.435,20
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Short-term training abroad (3 months)	1	25.466,40

Name of the project	Start date	End date
Big Data Analytics: Shedding Light from Genes to the Cosmos	08/2018	07/2022

# Description

Several areas of science have undergone a great revolution in this millennium. Studies that were done with a dozen data now have millions of data. Managing this huge amount of heterogeneous data - or Big Data - and understanding the science behind these data - data science - have been incorporated into the daily lives of many scientists, especially physicists and biologists. In astrophysics, since 2000 large image surveys and spectra of galaxies and stars began to make their data public (e.g. 2dF, SDSS, VVV). In particle physics, the experimental side is dominated by large collaborations, such as the ATLAS, CMS, LHCb and ALICE experiments of the Large Hadron Collider (LHC). Theoretical physicists have a multitude of experimental data to analyze, using the most advanced computational techniques. Another important aspect in understanding the universe involves both observational data obtained by large telescopes around the world and in space, as well as experimental ones, coming from the great colliders of particles. This complementary information is used jointly or separately in relativistic models and to corroborate theories already proposed. In the area of biotechnology, the great volume of data comes from DNA sequencing of different organisms, especially with the advent of the new generation sequencers (NGS), as well as protein analysis by mass spectrometry, where they are thousands of mass spectra per second. Physicists and biologists have added to their vocabulary terms expensive to computer science, such as data management to organize data; techniques such as PCA, machine learning, data mining, pattern recognition and clustering to analyze data; distributed, high-performance computing to handle data volume; and even "citizen science" which provides for recruiting the public to help sort from galaxies to whale song (www.zooniverse.org). This superposition of techniques requires the collaboration of researchers from different areas of the UFSC, who work with Big Data and all the computational terms associated with it. In this project, we aim to broaden the international insertion of the Graduate Programs in Computation, Physics and Biotechnology and Biosciences of UFSC, consolidate existing research partnerships and seek new cooperation, through the exchange of researchers and students, and an interdisciplinary symposium in Big Data.

# Work missions related to the cooperation project

Year	Quantity	Amount
2021	6	150.000,00
2018	3	75.000,00
2022	3	75.000,00
2019	6	150.000,00
2020	6	150.000,00

# Resources to maintenance the projects

Year	Amount
2018	4.000,00
2019	10.000,00
2020	10.000,00
2021	10.000,00
2022	6.000,00

Year	Modality	Quantity	Amount Total
2020	Visiting Faculty in Brazil (0 months)	3	48.465,87
2021	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2021	Short-term training abroad (3 months)	1	25.466,40
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Young Talents (12 months)	1	116.110,58
2018	Visiting Faculty in Brazil (0 months)	1	16.155,29
2022	Sandwich Doctorate Scholarship (6 months)	2	80.956,80
2021	Visiting Faculty in Brazil (0 months)	3	48.465,87
2019	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2021	Postdoctoral Research (12 months)	1	69.310,58
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2022	Visiting Faculty in Brazil (0 months)	1	16.155,29
2019	Short-term training abroad (3 months)	1	25.466,40
2019	Visiting Faculty in Brazil (0 months)	3	48.465,87
2020	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2018	Sandwich Doctorate Scholarship (6 months)	2	80.956,80

Name of the project	Start date	End date
Automation, control and computing systems for industry and services 4.0	08/2018	07/2022

# Description

The concepts of Industry 4.0 and Digital Transformation, associated to a new phase of industrial and socioeconomic development, refer to the integration of the physical and virtual worlds in the form of networked systems, with the ultimate goal of allowing the direct interaction of the client with the industry that will manufacture the desired product. This concept has been extended to the services, where complex systems are based on innovative ideas and technologies associated with areas such as Automation, Control and Computational Systems. In this context, this project has as main objective to carry out a set of actions to give greater international visibility to the participating PG Programs, and to UFSC as a whole, making them references in the theme of AUTOMATION, CONTROL AND COMPUTATIONAL SYSTEMS FOR INDUSTRY AND SERVICES 4.0. The actions for internationalization comprise two complementary axes: i) Postgraduate Education and Training, and ii) Scientific and Technological Research. Directed by these axes, the specific objectives of the project, the intended innovations and the expected impacts to UFSC and society are constituted. More specifically, the problem to be addressed is the development of new techniques and tools (software and hardware) adapted to Industry and Services 4.0. In order to do so, we will seek innovative scientific and technological contributions and critical mass training in topics such as: Communication Networks and Wireless Sensors, Network Control Systems (NCS), Network multiagent systems including Internet-of- Things (IoT) and Cyber-Physical Systems. Embedded Systems and Computing Systems Industrial-oriented and Services 4.0. At UFSC, members of the project are PPGEAS, the leading program, and PPGEEL and PPGCC, as collaborating programs. The foreign team is made up of collaborators from institutions from different countries. This team of foreign collaborators is comprised of both senior and junior faculty members and researchers, all with the potential to contribute significantly to the achievement of the project's goals and objectives.

······································			
Year	Quantity	Amount	
2019	8	200.000,00	
2020	10	250.000,00	
2022	6	150.000,00	
2018	6	150.000,00	
2021	10	250.000,00	

#### Resources to maintenance the projects

Year	Amount
2021	10.000,00
2022	6.000,00
2020	10.000,00
2018	4.000,00
2019	10.000,00

Work missions related to the cooperation project

Year	Modality	Quantity	Amount Total
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2019	Short-term training abroad (3 months)	1	25.466,40
2021	Short-term training abroad (3 months)	1	25.466,40
2018	Sandwich Doctorate Scholarship (6 months)	4	161.913,60

UNIVERSIDA	DE FEDERAL DE SANTA CATARINA		
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Visiting Faculty in Brazil (0 months)	5	80.776,45
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Postdoctoral Research (12 months)	1	69.310,58
2020	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2019	Young Talents (12 months)	1	116.110,58
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2020	Visiting Faculty in Brazil (0 months)	5	80.776,45
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2021	Visiting Faculty in Brazil (0 months)	5	80.776,45
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40

# **EXPECTED BENEFITS**

# **THEME 3: Human Health**

# Work missions not related to the project

Year of work missions	Quantity of work missions per year	Amount of work missions
2018	3	R\$ 37.500,00
2019	8	R\$ 100.000,00
2020	8	R\$ 100.000,00
2021	8	R\$ 100.000,00
2022	3	R\$ 37.500,00

# Scholarships not related to the cooperation project

Year	Modality	Quantity	Amount
2018	Sandwich Doctorate Scholarship (6 months)	5	R\$ 202.392,00
2019	Sandwich Doctorate Scholarship (6 months)	10	R\$ 404.784,00
2020	Sandwich Doctorate Scholarship (6 months)	12	R\$ 485.740,80
2021	Sandwich Doctorate Scholarship (6 months)	10	R\$ 404.784,00
2022	Sandwich Doctorate Scholarship (6 months)	5	R\$ 202.392,00

# Others action not related to the project

Year	Action	Description	Amount
2019	Support for the organization of international events linked to the internationalization project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2020	Support for the organization of international events linked to the internationalization project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2021	Support for the organization of international events linked to the internationalization project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2022	Support for the organization of international events linked to the internationalization project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000

Name of the project	Start date	End date
Evidence-based strategy and	08/2018	07/2022
decision-making in health		

### Description

The duplication of researches (including those in the area of Health), due to non-observance of previous studies and previous systematic reviews, was pointed out as the main critical point that leads to wasted financial and human resources. In health sciences, systematic reviews are at the top of the evidence pyramid, above important study designs that require significant financial support, such as controlled clinical trials, cohort studies, and case-control studies. In this context, the present project aims to increase safety, value and confidence in health decision-making from evidence-based research, inserting UFSC in a context of international prominence in the production of evidence-based research and the development of strategies to reduce waste in health research. The Brazilian team of this project is multidisciplinary and made up of researchers from the Postgraduate Programs in Dentistry (leader), Knowledge Engineering Management and Nursing. Many of these researchers have already had experience in international cooperation projects, including a cooperation with Canadian collaborators (University of Alberta-Canada), whose objective was to train 20 teachers to work with evidence-based research (main focus of this project). The foreign team is made up of internationally recognized researchers in the project area, such as David Moher (University of Ottawa), Marco Peres (University of Adelaide) and Carlos Flores-Mir (University of Alberta). The proposed activities of each annual module will begin with induction (meetings to prepare students and professors for mobility) and will end with reception (to share experiences of mobility). Among the specific activities (study missions, integrated disciplines with foreign researchers, workshops, technical visits, etc.), one of the most important will be the interdisciplinary course in systematic reviews (based on the summer school model and similar to the Canadian and Australian teaching plans). The course will be in real time and students will be able to interact with the teachers. To do so, the resources of the Distance Learning Laboratory (UFSC) will be used.

# Work missions related to the cooperation project

Year	Quantity	Amount
2022	3	75.000,00
2018	3	75.000,00
2019	6	150.000,00
2020	6	150.000,00
2021	6	150.000,00

# **Resources to maintenance the projects**

Year	Amount
2019	10.000,00
2021	10.000,00
2018	5.000,00
2020	10.000,00
2022	5.000,00

Yea	r Modality	Quantity	Amount Total	
202	1 Sandwich Doctorate Scholarship (6 months)	4	161.913,60	
2019	9 Short-term training abroad (3 months)	1	25.466,40	
202	0 Sandwich Doctorate Scholarship (6 months)	4	161.913,60	
202	2 Sandwich Doctorate Scholarship (6 months)	2	80.956,80	

VIVERSIDAI	DE FEDERAL DE SANTA CATARINA		
2019	Visiting Faculty in Brazil (0 months)	3	48.465,87
2021	Visiting Faculty in Brazil (0 months)	3	48.465,87
2022	Visiting Faculty in Brazil (0 months)	1	16.155,29
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2020	Visiting Faculty in Brazil (0 months)	3	48.465,87
2018	Sandwich Doctorate Scholarship (6 months)	2	80.956,80
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Young Talents (12 months)	1	116.110,58
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Short-term training abroad (3 months)	1	25.466,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2018	Visiting Faculty in Brazil (0 months)	1	16.155,29
2019	Sandwich Doctorate Scholarship (6 months)	4	161.913,60

Name of the project		Start date	End date
Interprofessional Education	Health	08/2018	07/2022

#### Description

Improving the education/training of health professionals is a factor that leads to the improvement of health indicators of societies. Considering that the current education model of many health courses is out of date, some lines of evidence propose that it should be modified in view of the opportunities for mutual learning and joint solutions. In this scenario, INTERPROFESSIONAL EDUCATION emerges as an interesting possibility, which allows for students from two or more competencies to learn about and with each other, enabling effective collaboration and improvement of health outcomes. This research project brings the innovative idea of creating a network of interprofessional education in health, which will enable the production of knowledge and generation of methodologies and tools for interprofessional education in health. The researchers involved (Brazilian and foreign), who have experience in the subject of the project, intend, with the implementation of this network, to strengthen the internationalization of the participating Postgraduate Programs, seeking to contribute to innovate the process of teaching in health and transform professional practices in order to intervene in the health care model through the integration between service and education/training. With regard to internationalization, the main objectives of the project are based on double exchanges of human resources at different levels, focusing on study missions, integrated disciplines with foreign researchers, workshops and technical missions. In addition, English-language interdisciplinary disciplines will be offered and an online platform for interprofessional networking for health education will be developed.

#### Work missions related to the cooperation project

Year	Quantity	Amount
2019	8	200.000,00
2021	10	250.000,00
2020	10	250.000,00
2022	6	150.000,00
2018	6	150.000,00

#### **Resources to maintenance the projects**

Year	Amount
2019	10.000,00
2020	10.000,00
2021	10.000,00
2018	5.000,00
2022	5.000,00

Year	Modality	Quantity	Amount Total
2019	Young Talents (12 months)	1	116.110,58
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2021	Short-term training abroad (3 months)	1	25.466,40
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80

NIVERSIDAL	DE FEDERAL DE SANTA CATARINA		
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2018	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2019	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2020	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Visiting Faculty in Brazil (0 months)	5	80.776,45
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Short-term training abroad (3 months)	1	25.466,40
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Postdoctoral Research (12 months)	1	69.310,58
2019	Visiting Faculty in Brazil (0 months)	5	80.776,45
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2021	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2020	Visiting Faculty in Brazil (0 months)	5	80.776,45
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40

Name of the project	Start date	End date
Cellular communication	08/2018	07/2022
and systems biology		

# Description

The proper communication between cells is crucial to the maintenance of human life and health. Such communication occurs at several levels: atomic interaction, molecular interaction, communication between different cellular compartments (e.g.: nucleus and cytoplasm), different cells of a tissue (e.g., metastatic tumors), and cells of different organisms (e.g., infections). Given the pivotal role of cellular communication events for life and, consequently, for the health of individuals (including humans), cellular communication will be addressed in this project with a particular emphasis on (i) human infections by microorganisms, (ii) tumor cell interactions with normal cells and (iii) cellular interactions in pathological processes. The general objective of this project is the generation of basic and applied knowledge with the possibility of transference to society in the form of biotechnological inputs and therapies, essential for the positioning of the country in a level of protagonism and self-sufficiency, always aiming at the maintenance and promotion human health. The Brazilian team of this project is composed of a multidisciplinary team with significant scientific experience in cooperation projects. especially in the following programs: Science Without Borders, CAPES-MINCyT, CAPES-STINT and Sea-Sciences-CAPES. It should be noted that many members of the foreign teams linked to this specific project already have prior cooperation with the Brazilian researchers of the project. The main collaborating countries to date are: Argentina, Bolivia, Canada, Colombia, Spain, United States of Mexico, Portugal, United Kingdom, and Sweden. With regards to America, France, internationalization, the main goals of the project are based on the exchange (outgoing and incoming) of human resources. In summary, the main activities of the project will be based on: (i) general courses provided by foreign visitors; (ii) summer / winter schools on more specific topics of common interests; (iii) Workshops with foreign researchers; (iv) implementation of external committees (with foreign researchers) to evaluate the Postgraduate Programs linked to this project; (v) implementation of the "Meet The Teacher" activity, in which small groups (5-6) students will have 2 to 3 hours to talk informally with each international visitor about their career and scientific interests (in the absence of their advisers or any national researcher).

Year	Quantity	Amount
2019	8	200.000,00
2018	6	150.000,00
2021	10	250.000,00
2022	6	150.000,00
2020	10	250.000,00

Work missions related to the cooperation project

#### **Resources to maintenance the projects**

Year	Amount
2018	4.000,00
2019	10.000,00
2020	10.000,00
2022	6.000,00
2021	10.000,00

Year	Modality	Quantity	Amount Total
2020	Visiting Faculty in Brazil (0 months)	5	80.776,45
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2019	Postdoctoral Research (12 months)	1	69.310,58
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Young Talents (12 months)	1	116.110,58
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2018	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Short-term training abroad (3 months)	1	25.466,40
2021	Short-term training abroad (3 months)	1	25.466,40
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2019	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2019	Visiting Faculty in Brazil (0 months)	5	80.776,45
2021	Visiting Faculty in Brazil (0 months)	5	80.776,45

Name of the project	Start date	End date
Healthy Aging and Urban Mobility	08/2018	07/2022

#### Description

The ability of the human being to move around the urban environment (mobility) with safety, comfort and efficiency is fundamental to a healthy aging. In particular, financial investments in the environment positively influence the human displacement in an active manner, stimulating the physical activity and, consequently, promoting the physical and mental health. However, when urban infrastructure does not meet some basic needs, there is a decrease in displacements and worsening of human physical capacity. In this context, a multidisciplinary team composed of researchers from the Postgraduate Programs in Collective Health, Physical Education, Architecture and Urbanism, Nutrition, Medical Sciences and Dentistry will develop an international cooperation project whose object of study is the aging and urban mobility, addressed in an interdisciplinary and multilevel manner, with a focus on populational studies and on the development of technologies. The Brazilian team is comprised of researchers with a leadership position and experience with international cooperation projects with England, France, Germany, Portugal, Spain, Australia and the United States of America. With respect to the foreign team, eleven researchers from eight universities from 4 countries (The Netherlands, United States of America, Australia and United Kingdom) will take part of the project. The foreign researchers are leaders in their countries in themes related to the area of collective health, psychology, genetics, physical activity and urban mobility. With respect to internationalization, the main goals of the project are based on bi-directional exchange of human resources at different levels. With the development of specific activities (study missions, integrated disciplines with foreign researchers, workshops, among others), it is hoped to contribute significantly to the internationalization of UFSC. It is noteworthy that the project addresses the issues of healthy aging and urban mobility in a comprehensive, integrated and interdisciplinary manner, at both individual and collective level, involving research for the diagnosis, intervention and development of technologies, integrating researchers from the area of Health Sciences and Applied Social Sciences. In this way, it is expected that the development of this project can contribute significantly to the maintenance and promotion of health.

Year	Quantity	Amount
2022	4	100.000,00
2020	8	200.000,00
2018	4	100.000,00
2019	8	200.000,00
2021	8	200.000,00

# Work missions related to the cooperation project

#### **Resources to maintenance the projects**

Year	Amount
2020	10.000,00
2018	5.000,00
2019	10.000,00
2021	10.000,00
2022	5.000,00

Year	Modality	Quantity	Amount Total
2021	2021 Junior Visiting Faculty Abroad (6 months)		60.638,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Visiting Faculty in Brazil (0 months)	4	64.621,16
2021	Postdoctoral Research (12 months)	1	69.310,58
2019	Young Talents (12 months)	1	116.110,58
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Short-term training abroad (3 months)	1	25.466,40
2020	Visiting Faculty in Brazil (0 months)	4	64.621,16
2020	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2022	Sandwich Doctorate Scholarship (6 months)	3	121.435,20
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Postdoctoral Research (12 months)	1	69.310,58
2022	Visiting Faculty in Brazil (0 months)	2	32.310,58
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Short-term training abroad (3 months)	1	25.466,40
2018	Sandwich Doctorate Scholarship (6 months)	3	121.435,20
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2021	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2019	Visiting Faculty in Brazil (0 months)	4	64.621,16
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58

Name of the project	Start date	End date
Molecular and therapeutic targets in metabolic and degenerative diseases	08/2018	07/2022

### Description

Health problems have always had major impacts on the lives of societies. Of particular importance, the present society faces a silent pandemic of chronic diseases such as coronary artery disease, myocardial infarction, diabetes mellitus, obstructive pulmonary chronic disease, degenerative and psychiatric diseases, among others. Although the identification of new therapeutic targets to improve the pharmacological treatment of chronic diseases represents a complex and arduous process, it is extremely necessary for the maintenance and promotion of human health. In this scenario, the present project will address "molecular and therapeutic targets involved in metabolic and degenerative diseases", with emphasis on (i) molecular mechanisms of disease; (ii) identification and validation of therapeutic targets; (iii) predictive preclinical models; (iv) biomarkers for patient stratification and clinical endpoints; and (v) reliability and reproducibility of the data obtained. The results of this research will have applicability in patient care, leading to the quality of life of the population. All the researchers of the Brazilian team present some kind of previous collaboration with foreign groups. The significant experience of the Brazilian team is highlighted not only in the development of international projects, but also in the training of human resources at the level of international cooperation, where co-supervision represents one of the important results. The foreign team is composed of researchers from different countries with a great history of work in research on chronic diseases, being a reference in the study of neurodegenerative diseases, obesity, diabetes, infertility and cardiovascular diseases. With regards to internationalization, the main goals of the project are to: (i) establish flow of researchers in both directions (outgoing and incoming); (ii) create an attractive and receptive environment for foreign researchers at UFSC; (iii) offer courses in English with or without participation of foreign guests to consolidate the English language as a communication tool within the Postgraduate Programs; (iv) increase the international experience of younger researchers of the Brazilian team as a strategy of increasing and maintaining international collaborations for the future.

Year	Quantity	Amount
2022	6	150.000,00
2020	10	250.000,00
2018	6	150.000,00
2019	8	200.000,00
2021	10	250.000,00

#### Work missions related to the cooperation project

#### Resources to maintenance the projects

Year	Amount
2020	10.000,00
2022	6.000,00
2018	4.000,00
2019	10.000,00
2021	10.000,00

Year	Modality	Quantity	Amount Total
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80

NIVERSIDAI	DE FEDERAL DE SANTA CATARINA		
2019	Visiting Faculty in Brazil (0 months)	5	80.776,45
2021	Visiting Faculty in Brazil (0 months)	5	80.776,45
2018	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2020	Visiting Faculty in Brazil (0 months)	5	80.776,45
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2019	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Young Talents (12 months)	1	116.110,58
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2021	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Short-term training abroad (3 months)	1	25.466,40
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Short-term training abroad (3 months)	1	25.466,40

Name of the project	Start date	End date
Food of plant origin,	08/2018	07/2022
processing and health impact		

# Description

Population growth and the process of urbanization of societies present major challenges for food production and conservation. Agriculture has responded to this growth, but it is important that processed foods are offered in small and large urban centers, while respecting food and nutritional security parameters. In fact, food processing engineering must be tailored to meet human demands. In this sense, the present research project will address precisely this theme, focusing on the generation of scientific knowledge, technological and nutritional aspects related to the production of vegetable protein drinks for the different life cycles of humans. On the other, it is also intended to study alternatives of technological processes that allow the production of foods with different bioavailabilities and contribute to a healthy diet in different life cycles, always aiming at health promotion. This project will be developed by a national multidisciplinary group (Postgraduate Programs in Food Sciences, Nutrition and Food Engineering) with proven scientific capacity and experience of international cooperation with researchers from universities and institutes in Europe, North America and Asia. The choice of institutions that are part of this proposal is a result of these previous collaborative actions and research, including Cornell University, Harvard University, University of Massachusetts, University of Parma (Italy), the Institut national polytechnique de Toulouse (France), CIRAD Montpellier (France), University of Warwick (Coventry, United Kingdom), Institute of Food Research (Norwich, United Kingdom). With regards to internationalization, the main goals of the project are to: (i) establish flow of researchers in both directions (outgoing and incoming); (ii) create an attractive and receptive environment for foreign researchers at UFSC; (iii) offer courses in English with or without participation of foreign guests to consolidate the English language as a communication tool within the Postgraduate Programs. The project also aims to create a lasting relationship with the foreign institutions. This is because Brazil exports food to a large number of countries, including those of the foreign partner institutions. Academic cooperation with these universities is of scientific and economic importance to UFSC and to the country.

Year	Quantity	Amount
2020	6	150.000,00
2018	3	75.000,00
2022	3	75.000,00
2019	6	150.000,00
2021	6	150.000,00

#### Work missions related to the cooperation project

#### Resources to maintenance the projects

Year	Amount
2019	10.000,00
2020	10.000,00
2021	10.000,00
2018	5.000,00
2022	5.000,00

Year	Modality	Quantity	Amount Total
2021	Short-term training abroad (3 months)	1	25.466,40
2018	Sandwich Doctorate Scholarship (6 months)	2	80.956,80
2021	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2022	Sandwich Doctorate Scholarship (6 months)	2	80.956,80
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Young Talents (12 months)	1	116.110,58
2020	Visiting Faculty in Brazil (0 months)	3	48.465,87
2022	Visiting Faculty in Brazil (0 months)	1	16.155,29
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2021	Visiting Faculty in Brazil (0 months)	3	48.465,87
2019	Visiting Faculty in Brazil (0 months)	3	48.465,87
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2018	Visiting Faculty in Brazil (0 months)	1	16.155,29
2021	Postdoctoral Research (12 months)	1	69.310,58
2020	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Short-term training abroad (3 months)	1	25.466,40
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40

Name of the project	Start date	End date
Diagnosis and intervention for healthy lifestyles	08/2018	07/2022

#### Description

Epidemiological evidence has proven the existence of components of lifestyle that act as health promoters, such as physical activity, healthy eating habits, quality of sleep, among others. Affected by inequality in health, these components tend to be less frequent in low- and middle-income countries, triggering early morbidity and mortality. In this scenario, a globally important topic highlighted by the World Bank and the World Health Organization, is the innovation in health for adoption of a healthy lifestyle. On the other hand, little is known about how to evaluate interventions in health, what actions have been effective in different populations and what is the real outcome when new educational, behavioral and environmental strategies are adopted. In view of the above, this project has as main objective to propose actions of diagnosis and interventions in the people's life style, extending such analyzes to contextual aspects related to the determinants of health. This project will be developed by a group of national researchers with high technical capacity and leadership skills recognized in Brazil and abroad. The members of this Brazilian team have experience in collaborative projects with groups from the following countries: Australia, Belgium, Canada, United States of America, Italy, Portugal and the United Kingdom United. With regard to the foreign team, it is made up of renowned researchers working in reference centers focused on determinants of health, at the different perspectives that this object of study provides. The main goals of the project are based on the double-track exchange of human resources at different levels. In addition to the activities abroad (technical missions, cosupervision and junior postdoctoral research), it is intended to carry out numerous internationalization activities at UFSC, such as (i) integrated courses (in English language and with the presence of foreign researchers), (ii) seminars (iii) Workshops, evaluative symposium (biannual) and (iv) reception of young talent with experience abroad and visiting professors.

#### Work missions related to the cooperation project

Year	Quantity	Amount
2022	4	100.000,00
2018	4	100.000,00
2020	8	200.000,00
2021	8	200.000,00
2019	8	200.000,00

#### Resources to maintenance the projects

Year	Amount
2022	5.000,00
2021	10.000,00
2018	5.000,00
2020	10.000,00
2019	10.000,00

Year	Modality	Quantity	Amount Total
2019	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2020	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2022	Sandwich Doctorate Scholarship (6 months)	3	121.435,20
2020	Visiting Faculty in Brazil (0 months)	4	64.621,16
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40

DE FEDERAL DE SANTA CATARINA		
Sandwich Doctorate Scholarship (12 months)	1	76.276,80
Junior Visiting Faculty Abroad (6 months)	1	60.638,40
Postdoctoral Research (12 months)	1	69.310,58
Senior Visiting Faculty Abroad (6 months)	1	65.678,40
Visiting Faculty in Brazil (0 months)	4	64.621,16
Visiting Faculty in Brazil (0 months)	2	32.310,58
Short-term training abroad (3 months)	1	25.466,40
Short-term training abroad (3 months)	1	25.466,40
Visiting Faculty in Brazil (0 months)	2	32.310,58
Junior Visiting Faculty Abroad (6 months)	1	60.638,40
Junior Visiting Faculty Abroad (6 months)	1	60.638,40
Senior Visiting Faculty Abroad (6 months)	1	65.678,40
Senior Visiting Faculty Abroad (6 months)	1	65.678,40
Sandwich Doctorate Scholarship (6 months)	6	242.870,40
Sandwich Doctorate Scholarship (12 months)	1	76.276,80
Young Talents (12 months)	1	116.110,58
Postdoctoral Research (12 months)	1	69.310,58
Junior Visiting Faculty Abroad (6 months)	1	60.638,40
Sandwich Doctorate Scholarship (6 months)	3	121.435,20
Sandwich Doctorate Scholarship (12 months)	1	76.276,80
Visiting Faculty in Brazil (0 months)	4	64.621,16
	Junior Visiting Faculty Abroad (6 months) Postdoctoral Research (12 months) Senior Visiting Faculty Abroad (6 months) Visiting Faculty in Brazil (0 months) Visiting Faculty in Brazil (0 months) Short-term training abroad (3 months) Short-term training abroad (3 months) Visiting Faculty in Brazil (0 months) Junior Visiting Faculty Abroad (6 months) Junior Visiting Faculty Abroad (6 months) Senior Visiting Faculty Abroad (6 months) Senior Visiting Faculty Abroad (6 months) Senior Visiting Faculty Abroad (6 months) Sandwich Doctorate Scholarship (6 months) Young Talents (12 months) Junior Visiting Faculty Abroad (6 months) Sandwich Doctorate Scholarship (12 months) Junior Visiting Faculty Abroad (6 months) Sandwich Doctorate Scholarship (6 months) Sandwich Doctorate Scholarship (6 months) Sandwich Doctorate Scholarship (12 months) Sandwich Doctorate Scholarship (12 months)	Sandwich Doctorate Scholarship (12 months)1Junior Visiting Faculty Abroad (6 months)1Postdoctoral Research (12 months)1Senior Visiting Faculty Abroad (6 months)1Visiting Faculty in Brazil (0 months)4Visiting Faculty in Brazil (0 months)2Short-term training abroad (3 months)1Short-term training abroad (3 months)1Visiting Faculty in Brazil (0 months)2Short-term training abroad (3 months)1Visiting Faculty in Brazil (0 months)2Junior Visiting Faculty Abroad (6 months)1Junior Visiting Faculty Abroad (6 months)1Senior Visiting Faculty Abroad (6 months)1Senior Visiting Faculty Abroad (6 months)1Senior Visiting Faculty Abroad (6 months)1Sandwich Doctorate Scholarship (12 months)1Young Talents (12 months)1Junior Visiting Faculty Abroad (6 months)1Junior Visiting Faculty Abroad (6 months)1Sandwich Doctorate Scholarship (12 months)1Junior Visiting Faculty Abroad (6 months)1Sandwich Doctorate Scholarship (6 months)1Sandwich Doctorate Scholarship (6 months)3Sandwich Doctorate Scholarship (6 months)3Sandwich Doctorate Scholarship (12 months)1

# **EXPECTED BENEFITS**

# THEME 4: Languages, Interculturality and Identities

# Work missions not related to the project

Year of work missions	Quantity of work missions per year	Amo miss	unt of work ions
2018	3	R\$	37.500,00
2019	8	R\$	100.000,00
2020	8	R\$	100.000,00
2021	8	R\$	100.000,00
2022	3	R\$	37.500,00

# Scholarships not related to the cooperation project

Year	Modality	Quantity	Amount
2018	Sandwich Doctorate Scholarship (6 months)	5	R\$ 202.392,00
2019	Sandwich Doctorate Scholarship (6 months)	10	R\$ 404.784,00
2020	Sandwich Doctorate Scholarship (6 months)	12	R\$ 485.740,80
2021	Sandwich Doctorate Scholarship (6 months)	10	R\$ 404.784,00
2022	Sandwich Doctorate Scholarship (6 months)	5	R\$ 202.392,00

# Others action not related to the project

Year	Action	Description	Amount
2019	Support for the organization of international events linked to the internationaliz ation project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2020	Support for the organization of international events linked to the internationaliz ation project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2021	Support for the organization of international events linked to the internationaliz ation project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2022	Support for the organization of international events linked to the internationaliz ation project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000

Name of the project	Start date	End date
Digital support for the governance of the internationalization program	08/2018	07/2022

# Description

The project proposes to design and develop a framework that will provide digital support to the governance of UFSC internationalization projects, with specific objectives that define the following action steps: 1) registration and dissemination of networks; 2) the dissemination of information, knowledge and experiences of these networks; 3) the principles of governance in the flow of knowledge and information. The Framework and the digital support program for governance are based on the Transversal Internationalization model defined by the Center for Internationalization and Global Engagement (CIGE), which is a strategic and articulated process whose purpose is to align and integrate policies, programs and initiatives to position the university as a more world-oriented and internationally connected institution. The term framework is related to several multidisciplinary knowledge fields from the knowledge mapping and can be understood as a real or conceptual structure that aims to be a support or guide for the analysis and development of some object, context, or that allows the understanding of a phenomenon. For this work, the proposed framework will be of a hybrid nature, since, in addition to constructing a theoretical conceptual element, it also aims to be applied in a given context. The participants of this project have a multi- and interdisciplinary character, which presents itself as a fundamental and potential base for team action, increasing the development of the program for digital support of internationalization projects, expanding the scientific diffusion of research and offering a management knowledge related to these processes.

#### Work missions related to the cooperation project

Year	Quantity	Amount
2020	10	250.000,00
2018	6	150.000,00
2021	10	250.000,00
2019	8	200.000,00
2022	6	150.000,00

#### **Resources to maintenance the projects**

Year	Amount
2019	10.000,00
2018	5.000,00
2021	10.000,00
2020	10.000,00
2022	5.000,00

Year	Modality	Quantity	Amount Total
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2019	Short-term training abroad (3 months)	1	25.466,40
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Short-term training abroad (3 months)	1	25.466,40
2021	Sandwich Doctorate Scholarship (6 months)	8	323.827,20

UNIVERSIDA	DE FEDERAL DE SANTA CATARINA		
2021	Visiting Faculty in Brazil (0 months)	5	80.776,45
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2018	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2019	Visiting Faculty in Brazil (0 months)	5	80.776,45
2019	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Visiting Faculty in Brazil (0 months)	5	80.776,45
2021	Postdoctoral Research (12 months)	1	69.310,58
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Young Talents (12 months)	1	116.110,58
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40

Name of the project	Start date	End date
Languages portal, literature	08/2018	07/2022
and cultural practices		

# Description

The proposal is to establish a linguistic policy of corpus in order to organize and provide accessible and didactic corpora of languages, literature and cultural practices. The languages included in the project are: 1) stories and narratives in spoken and written Portuguese in Brazil, as well as texts of different synonyms of Brazilian writing (18th, 19th and 20th centuries); 2) stories and narratives in Brazilian sign language; 3) stories and narratives in spoken and written Portuguese in Africa; 4) stories and narratives of African languages; and 5) other foreign languages that relate to variants of Portuguese through literature and translation. The linguistic options to be made available in the Portal will also be approached in cultural practices, with: 1) production of texts in different media with and on authors of parlances of the Portuguese language and translated authors; 2) preparation and dissemination of edicts and unpublished files; 3) production of educational media; 4) survey and analysis of objects in which language and cultural practices are in motion. Part of the documentation will be related to spoken, signed and written language and another will focus on literature, assay, criticism and text translation materials. All documentation will be made available through virtual interfaces, to be used as research resources for studies and resources for faculty, translators, researchers, as well as for other interested parties for educational purposes. Part of the documentation will be inserted into the Language Archive (https://tla.mpi.nl/), allowing its insertion in the international context, through multilingual and multimodal documentation. The Languages, Literatures and Cultural Practices Portal is an institutional proposal that integrates researchers of the Graduate Programs in Linguistics, Literature, Design and Education, and important research centers abroad.

#### Work missions related to the cooperation project

Year	Quantity	Amount
2020	10	250.000,00
2021	10	250.000,00
2019	8	200.000,00
2018	6	150.000,00
2022	6	150.000,00

Resources to maintenance the projects				
Year	Amount			
2020	10.000,00			
2022	5.000,00			
2021	10.000,00			
2018	5.000,00			
2019	10.000,00			

Year	Modality	Quantity	Amount Total
2020	Visiting Faculty in Brazil (0 months)	5	80.776,45
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Visiting Faculty in Brazil (0 months)	5	80.776,45
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
NIVERSIDAL	DE FEDERAL DE SANTA CATARINA		
------------	--	---	------------
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Short-term training abroad (3 months)	1	25.466,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2021	Postdoctoral Research (12 months)	1	69.310,58
2021	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Young Talents (12 months)	1	116.110,58
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2019	Visiting Faculty in Brazil (0 months)	5	80.776,45
2018	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2019	Short-term training abroad (3 months)	1	25.466,40
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40

Name of the project	Start date	End date
Repository of intercultural practices	08/2018	07/2022

### Description

The guiding axis of the project is the construction of intercultural knowledge and practices that deal with the effects of coloniality and emancipatory solutions to this problem, with a view to the construction of a multilingual online repository. These notions are related to domination by noncoercive means, but that subalternate and dehumanize people, causing loss of cultural identity, dependence and lack of belonging. In order to find ways to counter these effects, we believe that partnerships between researchers and international institutions, concerned with these themes, favor a dialogue of knowledge, recognition of existing experiences and production of social technologies. The proposal aims to develop networks for research, study, diagnosis of relevant local and regional issues, contributions to international cooperation, dissemination of research and an online repository with different materials produced in the project. Results from the research and work experiences show the pertinence of the project with a view to the international preservation of the local and ancestral cultural heritage, to the dialogue and recognition of new knowledge and social technologies. Also, it is important to highlight that this project is articulated by the newly created Chair of Unesco Language and Polices for Mutilingualism based at UFSC, in which thirteen countries participate. It aims to understand how languages and multilingualism are resources for the sustainable development of communities linguistic, societal and state, in accordance with the ideas of the United Nations 2030 Goals for Sustainable Development in a broad and transdisciplinary perspective. In this sense, internationalization and multilingualism are articulated in relation to education, economics, access to communication and technologies, all of which are also linked to the actions and pretensions of this project involving six UFSC Graduate Programs.

#### Work missions related to the cooperation project

Year	Quantity	Amount
2021	10	250.000,00
2019	8	200.000,00
2018	6	150.000,00
2020	10	250.000,00
2022	6	150.000,00

Resources to maintenance the projects			
Year	Amount		
2019	10.000,00		
2021	10.000,00		
2018	5.000,00		
2020	10.000,00		
2022	5.000,00		

Year	Modality	Quantity	Amount Total	
2019	Short-term training abroad (3 months)	1	25.466,40	
2019	Young Talents (12 months)	1	116.110,58	
2018	Sandwich Doctorate Scholarship (6 months)	4	161.913,60	
2019	Visiting Faculty in Brazil (0 months)	5	80.776,45	
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40	
2021	Visiting Faculty in Brazil (0 months)	5	80.776,45	

NIVERSIDAI	DE FEDERAL DE SANTA CATARINA		
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2020	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Visiting Faculty in Brazil (0 months)	5	80.776,45
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2021	Short-term training abroad (3 months)	1	25.466,40
2019	Sandwich Doctorate Scholarship (6 months)	8	323.827,20

Name of the project	Start date	End date
Cultural practices, education and human rights	08/2018	07/2022

### Description

This proposal invests in the formation of networks of researchers who are dedicated to the study of complex themes/challenges for different cultures and whose confrontation is fundamental for social development based on respect for human rights and acceptance of differences, considering class, ethnic social, gender, disability and others. The possibility of integrating partnerships with researchers from centers of excellence and worldwide recognition is fundamental to the university's internationalization efforts and the qualification of faculty and student training. Through actions foreseen in this project, efforts will be made to share experiences, to increase and to socialize results of researches and theoretical-methodological problematizations, to construct indicators that inform/construct public policies that promote human rights in the fields of violence, culture, education and health and whose priority target audience are groups discriminated against due to social markers of differences of gender, sexuality, race/ethnicity, social class, and impairment. The objective is to develop, in partnership with the foreign institutions involved, investigations, seminars, networks of studies, diagnostics and scientific dissemination of proposals to combat gender, racial, capacitator and generational violence that reach important segments of the populations in the contemporary world. It will also seek to strengthen links with social movements committed to the human rights of vulnerable groups of the population, as well as to public management bodies responsible for policies aimed at promoting the equality of these groups. Regarding the impact in the scientific field, it is hoped to increase the indicators of academic production of the Brazilian team and of international dissemination of the results obtained; contribute to and make visible the theoretical and methodological production on the topics in focus. Finally, the proposal aims to contribute to the elaboration of policies in the field of gender, race/ethnicity, sexuality and disability issues.

#### Work missions related to the cooperation project

Year	Quantity	Amount
2021	10	250.000,00
2018	6	150.000,00
2022	6	150.000,00
2019	8	200.000,00
2020	10	250.000,00

# Resources to maintenance the projects

Year	Amount
2018	5.000,00
2020	10.000,00
2022	5.000,00
2019	10.000,00
2021	10.000,00

Year	Modality	Quantity	Amount Total
2021	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Postdoctoral Research (12 months)	1	69.310,58

JE FEDERAL DE SANTA CATARINA		
Sandwich Doctorate Scholarship (6 months)	4	161.913,60
Junior Visiting Faculty Abroad (6 months)	1	60.638,40
Senior Visiting Faculty Abroad (6 months)	1	65.678,40
Sandwich Doctorate Scholarship (12 months)	1	76.276,80
Young Talents (12 months)	1	116.110,58
Postdoctoral Research (12 months)	1	69.310,58
Visiting Faculty in Brazil (0 months)	2	32.310,58
Sandwich Doctorate Scholarship (6 months)	8	323.827,20
Visiting Faculty in Brazil (0 months)	5	80.776,45
Short-term training abroad (3 months)	1	25.466,40
Junior Visiting Faculty Abroad (6 months)	1	60.638,40
Sandwich Doctorate Scholarship (12 months)	1	76.276,80
Senior Visiting Faculty Abroad (6 months)	1	65.678,40
Senior Visiting Faculty Abroad (6 months)	1	65.678,40
Sandwich Doctorate Scholarship (6 months)	8	323.827,20
Short-term training abroad (3 months)	1	25.466,40
Visiting Faculty in Brazil (0 months)	5	80.776,45
Sandwich Doctorate Scholarship (12 months)	1	76.276,80
Visiting Faculty in Brazil (0 months)	5	80.776,45
Junior Visiting Faculty Abroad (6 months)	1	60.638,40
Senior Visiting Faculty Abroad (6 months)	1	65.678,40
	Sandwich Doctorate Scholarship (6 months) Junior Visiting Faculty Abroad (6 months) Senior Visiting Faculty Abroad (6 months) Sandwich Doctorate Scholarship (12 months) Young Talents (12 months) Postdoctoral Research (12 months) Visiting Faculty in Brazil (0 months) Sandwich Doctorate Scholarship (6 months) Visiting Faculty in Brazil (0 months) Short-term training abroad (3 months) Junior Visiting Faculty Abroad (6 months) Senior Visiting Faculty Abroad (6 months) Sandwich Doctorate Scholarship (6 months) Short-term training abroad (3 months) Visiting Faculty in Brazil (0 months) Short-term training abroad (3 months) Visiting Faculty in Brazil (0 months) Sandwich Doctorate Scholarship (12 months) Visiting Faculty in Brazil (0 months) Junior Visiting Faculty Abroad (6 months)	Sandwich Doctorate Scholarship (6 months)4Junior Visiting Faculty Abroad (6 months)1Senior Visiting Faculty Abroad (6 months)1Sandwich Doctorate Scholarship (12 months)1Young Talents (12 months)1Postdoctoral Research (12 months)1Visiting Faculty in Brazil (0 months)2Sandwich Doctorate Scholarship (6 months)2Sandwich Doctorate Scholarship (6 months)8Visiting Faculty in Brazil (0 months)5Short-term training abroad (3 months)1Junior Visiting Faculty Abroad (6 months)1Senior Visiting Faculty Abroad (6 months)1Senior Visiting Faculty Abroad (6 months)1Senior Visiting Faculty Abroad (6 months)1Sandwich Doctorate Scholarship (6 months)1Senior Visiting Faculty Abroad (6 months)1Senior Visiting Faculty Abroad (6 months)1Sandwich Doctorate Scholarship (6 months)1Visiting Faculty in Brazil (0 months)5Sandwich Doctorate Scholarship (12 months)1Visiting Faculty in Brazil (0 months)5Sandwich Doctorate Scholarship (12 months)1Visiting Faculty in Brazil (0 months)5Junior Visiting Faculty Abroad (6 months)1Visiting Faculty in Brazil (0 months)5Junior Visiting Faculty Abroad (6 months)1Visiting Faculty Abroad (6 months)1Visiting Faculty in Brazil (0 months)5Junior Visiting Faculty Abroad (6 months)1Visiting Faculty Abr

Name of the project	Start date	End date
Translation, tradition and innovation	08/2018	07/2022

### Description

This project aims, through a system of international cooperation, to scientifically and academically deal with the interrelationships and crossings between cultures of different areas of knowledge whose language-translation integrating axis aims to guarantee, empower and qualify multicultural dialogues, eliminating borders and universalizing knowledge. To achieve this goal, the project brings together researchers (national and foreign), experts in Translation Studies, Linguistic Studies, Literary Studies, Interpretation Studies, Anthropological Studies, Adaptation Studies, Performance Studies, International Relations, Education and Scientific and Technological Education, Engineering and Knowledge Management. It is a network of internal and international collaboration, whose bridges between the sciences and the humanities involving the Translation Studies, will promote diverse modalities of academic exchanges, networks and scientific production, contributing to the international reference center in order to promote an integrated system (network) of research activities in the field of different languages that intertwine in this project, with a view to the internationalization of higher education, based on the collaboration between researchers and professors from UFSC and other institutions in America, Europe and Asia.

#### Work missions related to the cooperation project

Year	Quantity	Amount
2020	10	250.000,00
2019	8	200.000,00
2018	6	150.000,00
2022	6	150.000,00
2021	10	250.000,00

#### Resources to maintenance the projects

Year	Amount
2020	10.000,00
2019	10.000,00
2021	10.000,00
2022	5.000,00
2018	5.000,00

Year	Modality	Quantity	Amount Total
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2021	Visiting Faculty in Brazil (0 months)	5	80.776,45
2019	Postdoctoral Research (12 months)	1	69.310,58
2019	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2019	Short-term training abroad (3 months)	1	25.466,40
2021	Short-term training abroad (3 months)	1	25.466,40

UNIVERSIDA	DE FEDERAL DE SANTA CATARINA		
2019	Visiting Faculty in Brazil (0 months)	5	80.776,45
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2019	Young Talents (12 months)	1	116.110,58
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Visiting Faculty in Brazil (0 months)	5	80.776,45
2021	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2018	Sandwich Doctorate Scholarship (6 months)	4	161.913,60

Name of the project		Start date	End date	
Challenges contemporary		the ty in a	08/2018	07/2022
globalized wor	d			

# Description

This project, with interdisciplinary interest, focuses on challenges faced by the "University" in the globalized world. In particular, it aims to analyze and compare the Brazilian and German academic models, both objects of structural changes in the last decades, and their respective ways of conceiving the relation between Bildung (cultural formation) and Ausbildung (professional formation). The University model elaborated in Germany in the mid-nineteenth century by Wilhelm Von Humboldt envisions the possibility of an education beyond the individual as a foundation of a nation project for which arts and sciences competed. This model, however, is at risk in a globalized society: from a relatively protected and autonomous place for research and teaching, academic institutions have increasingly become market territory. On the other hand, to the varied demand invoked by an increasingly complex society are allied to the great transformations in the production and the dissemination of information in the last two and a half decades, as well as the emergence of social groups in search of social recognition. Inclusion policies in Brazil and migration policies in Germany are recent examples of this movement. Thus, new social actors come to the University, confronting different cultural registries with the increasing urgency of internationalization. Because of this background of profound changes, the University needs to rethink its organization. To achieve this goal, the project brings together researchers (national and foreign) experts in Philosophy, Education, Interdisciplinary in Human Sciences, Sociology and Political Science.

# Work missions related to the cooperation project

Year	Quantity	Amount
2019	6	150.000,00
2021	6	150.000,00
2020	6	150.000,00
2022	3	75.000,00
2018	3	75.000,00

# **Resources to maintenance the projects**

Year	Amount
2022	5.000,00
2018	5.000,00
2019	10.000,00
2021	10.000,00
2020	10.000,00

Year	Modality	Quantity	Amount Total
2021	Short-term training abroad (3 months)	1	25.466,40
2020	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2019	Visiting Faculty in Brazil (0 months)	3	48.465,87
2020	Visiting Faculty in Brazil (0 months)	3	48.465,87
2019	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80

VIVERSIDAL	DE FEDERAL DE SANTA CATARINA		
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Young Talents (12 months)	1	116.110,58
2018	Visiting Faculty in Brazil (0 months)	1	16.155,29
2021	Postdoctoral Research (12 months)	1	69.310,58
2019	Postdoctoral Research (12 months)	1	69.310,58
2021	Visiting Faculty in Brazil (0 months)	3	48.465,87
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2022	Sandwich Doctorate Scholarship (6 months)	2	80.956,80
2021	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2022	Visiting Faculty in Brazil (0 months)	1	16.155,29
2019	Short-term training abroad (3 months)	1	25.466,40
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2018	Sandwich Doctorate Scholarship (6 months)	2	80.956,80
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40

# **THEME 5: Environmental Sustainability**

# Work missions not related to the project

Year of work missions	Quantity of work missions per year	Amo miss	unt of work ions
2018	3	R\$	37.500,00
2019	8	R\$	100.000,00
2020	8	R\$	100.000,00
2021	8	R\$	100.000,00
2022	3	R\$	37.500,00

# Scholarships not related to the cooperation project

Year	Modality	Quantity	Amount
2018	Sandwich Doctorate Scholarship (6 months)	5	R\$ 202.392,00
2019	Sandwich Doctorate Scholarship (6 months)	10	R\$ 404.784,00
2020	Sandwich Doctorate Scholarship (6 months)	12	R\$ 485.740,80
2021	Sandwich Doctorate Scholarship (6 months)	10	R\$ 404.784,00
2022	Sandwich Doctorate Scholarship (6 months)	5	R\$ 202.392,00

# Others action not related to the project

Year	Action	Description	Amount
2019	Support for the organization of international events linked to the internationaliz ation project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2020	Support for the organization of international events linked to the internationaliz ation project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2021	Support for the organization of international events linked to the internationaliz ation project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000
2022	Support for the organization of international events linked to the internationaliz ation project	The internationalization of the institution will further expand the horizons of cooperation with institutions and research centers abroad. The results of this interaction will estimulate our faculty and researchers to participate in the organization of events offered in an even greater number of those practiced today. This organization of events of an international character will serve as a showcase for the dissemination of PRINT's actions, further leveraging the internationalization interactions of the institution	R\$ 125.000,000

Name of the project	Start date	End date
Sustainability in the international communit		07/2022
(water, energy and food)	,	

# Description

The global environment has drastically changed due to unsustainable use of natural resources and greenhouse gas emission. Climate change intensifies water scarcity and intensive energy use, directly affecting food production. Without appropriate policies and a valid and enforceable legal framework, natural resources will deteriorate irrecoverably. Brazilian economy, which is intensive in use of natural resources, is vulnerable and affects the entire global trade chain. World demand for Brazilian food commodities is high and therefore environmental degradation, climate change, as well as inadequate land use; affect the Brazilian economy and global food security. This project will work on the complex relationship between water, energy, and food, following the integrated approach adopted by the United Nations and FAO. For FAO, the inseparable links between these critical areas require a properly integrated approach to ensure global water security, sustainable agriculture, and energy production. Thus, an integrated approach to the water, energy, and food nexus requires dialogue, collaboration, and coordination, intending to future benefits and compensation considerations. The closest negative externality related to this method of analysis is the pressure on natural resources in vulnerable communities since effective public policies aimed at climate change mitigation cannot avoid this essential challenge. Finally, it is a challenge for all Law, Economics and Accounting scholars to ensure an effective response to environmental resilience. This challenge requires an understanding of the central legal, normative, and scientific research currently carried out on this topic, the mapping of international organizations that guide public policies for environmental protection, and solutions in such context - considering both the impacts of biodiversity and climate change and decision-making processes in the implementation of public policies.

# Work missions related to the cooperation project

Year	Quantity	Amount
2018	4	100.000,00
2022	4	100.000,00
2021	8	200.000,00
2019	8	200.000,00
2020	8	200.000,00

# Resources to maintenance the projects

Year	Amount
2019	10.000,00
2020	10.000,00
2021	10.000,00
2022	5.000,00
2018	5.000,00

# Scholarships related to the cooperation project

- -

Modality	Quantity	Amount Total	
Senior Visiting Faculty Abroad (6 months)	1	65.678,40	
Visiting Faculty in Brazil (0 months)	2	32.310,58	
Visiting Faculty in Brazil (0 months)	4	64.621,16	
Visiting Faculty in Brazil (0 months)	2	32.310,58	
Sandwich Doctorate Scholarship (6 months)	3	121.435,20	
	Senior Visiting Faculty Abroad (6 months) Visiting Faculty in Brazil (0 months) Visiting Faculty in Brazil (0 months) Visiting Faculty in Brazil (0 months)	Senior Visiting Faculty Abroad (6 months)1Visiting Faculty in Brazil (0 months)2Visiting Faculty in Brazil (0 months)4Visiting Faculty in Brazil (0 months)2	Senior Visiting Faculty Abroad (6 months)165.678,40Visiting Faculty in Brazil (0 months)232.310,58Visiting Faculty in Brazil (0 months)464.621,16Visiting Faculty in Brazil (0 months)232.310,58

UNIVERSIDAI	DE FEDERAL DE SANTA CATARINA		
2019	Young Talents (12 months)	1	116.110,58
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Visiting Faculty in Brazil (0 months)	4	64.621,16
2021	Visiting Faculty in Brazil (0 months)	4	64.621,16
2018	Sandwich Doctorate Scholarship (6 months)	3	121.435,20
2019	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2020	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2021	Short-term training abroad (3 months)	1	25.466,40
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Short-term training abroad (3 months)	1	25.466,40
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Postdoctoral Research (12 months)	1	69.310,58

Name of the project	Start date	End date
Sustainable industry	08/2018	07/2022

### Description

The main challenges for the industry of the future will undoubtedly include Energy use and conservation; Water; Materials; and biochemical applications. They will affect all productive sectors (petrochemicals, paints, textiles, food, primary inputs, agribusiness, etc.). Energy use and conservation will require the development of new technologies to obtain and use of energy resources (ethanol, biomass, etc.). Population growth and the requirements for public water supply (potable water) make water reuse and recycling major challenge, which leads to the development of new and efficient technologies attending standards required by industry. Drinking water, in combination with energy and food, is the great engineering challenge for the 21st century. New materials (more resistant, less polluting, with improved qualities), produced at low costs, and recoverable after use represent another possibility. /processing and transformation of industrial raw materials generate wastes, which are an environmental liability if not properly managed. That should be included in the matrix of economic viability of all processes. Therefore, reuse, recovery, and transformation of wastes are needed, as well as adding value to them. In agro-industry, for example, raw materials rich in sugars, cellulose, lipids, proteins, fibers, and bioactive compounds such as carotenoids, tocopherols, phytosterols, bioactive peptides, phenolic compounds, anthocyanins, can be recovered by applying clean technologies, producing

# Work missions related to the cooperation project

Year	Quantity	Amount
2019	16	400.000,00
2018	10	250.000,00
2020	18	450.000,00
2021	18	450.000,00
2022	10	250.000,00

# Resources to maintenance the projects

Year	Amount
2022	5.000,00
2019	10.000,00
2021	10.000,00
2018	5.000,00
2020	10.000,00

Year	Modality	Quantity	Amount Total
2021	Sandwich Doctorate Scholarship (12 months)	2	152.553,60
2021	Senior Visiting Faculty Abroad (6 months)	2	131.356,80
2019	Postdoctoral Research (12 months)	2	138.621,16
2019	Sandwich Doctorate Scholarship (6 months)	14	566.697,60
2020	Sandwich Doctorate Scholarship (6 months)	14	566.697,60
2022	Sandwich Doctorate Scholarship (6 months)	7	283.348,80
2021	Visiting Faculty in Brazil (0 months)	9	145.397,61
2019	Visiting Faculty in Brazil (0 months)	9	145.397,61
2020	Junior Visiting Faculty Abroad (6 months)	2	121.276,80

NIVERSIDAL	DE FEDERAL DE SANTA CATARINA		
2019	Junior Visiting Faculty Abroad (6 months)	2	121.276,80
2018	Visiting Faculty in Brazil (0 months)	4	64.621,16
2021	Junior Visiting Faculty Abroad (6 months)	2	121.276,80
2020	Senior Visiting Faculty Abroad (6 months)	2	131.356,80
2018	Junior Visiting Faculty Abroad (6 months)	2	121.276,80
2018	Senior Visiting Faculty Abroad (6 months)	2	131.356,80
2020	Sandwich Doctorate Scholarship (12 months)	2	152.553,60
2021	Sandwich Doctorate Scholarship (6 months)	14	566.697,60
2021	Short-term training abroad (3 months)	2	50.932,80
2018	Sandwich Doctorate Scholarship (6 months)	7	283.348,80
2021	Postdoctoral Research (12 months)	2	138.621,16
2019	Sandwich Doctorate Scholarship (12 months)	2	152.553,60
2019	Short-term training abroad (3 months)	2	50.932,80
2019	Young Talents (12 months)	2	232.221,16
2020	Visiting Faculty in Brazil (0 months)	9	145.397,61
2019	Senior Visiting Faculty Abroad (6 months)	2	131.356,80
2022	Visiting Faculty in Brazil (0 months)	5	80.776,45

Name of the project	Start date	End date
Characterization, conservation and sustainable use of biodiversity	08/2018	07/2022

#### Description

Brazil has the highest biodiversity on the planet and is an exporter of agricultural products. However, most of the genetic resources - livestock, animals and microbial - used are of exotic origin. Well-contextualized research is necessary for the characterization, conservation, and sustainable use of biodiversity components. Thatis relevant due to factors such as loss of biodiversity, dwindling of agricultural frontiers; global climate change, optimization of ecologically based agricultural systems, and need to expand the use of native and exotic species. Greater use of indigenous biodiversity of farming systems will contribute to an increase and diversification of high-quality food supply, with a reduction of negative externalities. Greater understanding of ecosystems functioning in the Atlantic Forest Biome will increase the number of ecosystem services. The characterization, conservation and sustainable use of biodiversity components will agglutinate research and development activities and tools. Knowledge and understanding of the expectations, possibilities, and limitations of stakeholders in the use and conservation of biodiversity are essential to guide scientific programs and public policies. The postgraduate programs participating in this project have adherence to the theme of sustainability, with complementary activities as well as interinstitutional and multidisciplinary approaches.

#### Work missions related to the cooperation project

Year	Quantity	Amount
2019	6	150.000,00
2022	3	75.000,00
2021	6	150.000,00
2018	3	75.000,00
2020	6	150.000,00

#### Resources to maintenance the projects

Year	Amount
2020	10.000,00
2019	10.000,00
2018	5.000,00
2021	10.000,00
2022	5.000,00

Year	Modality	Quantity	Amount Total
2021	Short-term training abroad (3 months)	1	25.466,40
2018	Visiting Faculty in Brazil (0 months)	1	16.155,29
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2022	Sandwich Doctorate Scholarship (6 months)	2	80.956,80
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Short-term training abroad (3 months)	1	25.466,40
2020	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2019	Young Talents (12 months)	1	116.110,58

#### UNIVERSIDADE FEDERAL DE SANTA CATARINA Visiting Faculty in Brazil (0 months) 3 48.465,87 2020 2019 Sandwich Doctorate Scholarship (6 months) 4 161.913,60 2019 Junior Visiting Faculty Abroad (6 months) 1 60.638,40 2019 Postdoctoral Research (12 months) 1 69.310,58 2021 Junior Visiting Faculty Abroad (6 months) 1 60.638,40 2021 Visiting Faculty in Brazil (0 months) 3 48.465,87 1 2021 Postdoctoral Research (12 months) 69.310,58 2 2018 Sandwich Doctorate Scholarship (6 months) 80.956,80 2019 Sandwich Doctorate Scholarship (12 months) 1 76.276,80 1 2022 Visiting Faculty in Brazil (0 months) 16.155,29 2019 Senior Visiting Faculty Abroad (6 months) 1 65.678,40 2019 3 Visiting Faculty in Brazil (0 months) 48.465,87 2020 Senior Visiting Faculty Abroad (6 months) 1 65.678,40 2021 Sandwich Doctorate Scholarship (6 months) 4 161.913,60

Name of the project	Start date	End date
Research and innovation for intelligent and environmentally sustainable cities - water, waste and renewable energy	08/2018	07/2022

# Description

The establishment of an agenda for sustainable development in cities must include issues related to water resources, solid waste management, and power generation. Those issues must be supported by cooperative research activities, at the international level, to incorporate and apply the concept of sustainable cities in Brazil. The postgraduate programs in this project aim to improve scientific and technological to include the idea of environmental sustainability in sanitation and natural resource management in general, by implementing an international network for studies on Sustainable Cities. The project highlights three axes of actions for cooperation with foreign partner institutions: Urban Hydraulics, Water Management and Treatment; Management, Treatment and Reuse of Urban Effluents, and, finally, Management, Recycling and Energy Enhancement of Urban Solid Wastes. The activities will include training missions, specific training courses given by foreign researchers in Brazil, training through Distance Education, and the organization of an international event. These actions will have transversal activities integrated by the graduate programs participating with their technological, legal and social visions. Also, transversally and in an interdisciplinary way, these activities comprise decision-making support systems, environmental performance indicators, as well as the contribution of elements of Environmental Law, Design, History, and Environmental Sociology.

# Work missions related to the cooperation project

Year	Quantity	Amount
2022	6	150.000,00
2020	10	250.000,00
2021	10	250.000,00
2019	8	200.000,00
2018	6	150.000,00

# Resources to maintenance the projects

Year	Amount
2021	10.000,00
2019	10.000,00
2020	10.000,00
2022	5.000,00
2018	5.000,00

Year	Modality	Quantity	Amount Total
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Visiting Faculty in Brazil (0 months)	5	80.776,45
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Young Talents (12 months)	1	116.110,58
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40

NIVERSIDAL	DE FEDERAL DE SANTA CATARINA		
2021	Short-term training abroad (3 months)	1	25.466,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2019	Visiting Faculty in Brazil (0 months)	5	80.776,45
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Short-term training abroad (3 months)	1	25.466,40
2019	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2020	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2019	Postdoctoral Research (12 months)	1	69.310,58
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Visiting Faculty in Brazil (0 months)	5	80.776,45
2018	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2021	Sandwich Doctorate Scholarship (6 months)	8	323.827,20

Name of the project	Start date	End date
Sustainable food production in Agricultural Sciences	08/2018	07/2022

# Description

Sustainable food production is highlighted in international projects and publications. All four Postgraduate Programs in the domain of Agricultural Science at UFSC (Aquaculture, Genetic Plant Resources, Food Science, and Agroecosystems) work within the concept of sustainability of "Green Revolution" and "Blue Revolution", of agriculture and aquaculture, respectively. This project aims to discuss and develop, cooperating with renowned international institutions, the production of healthy food, considering environmental sustainability. The aim is to place or consolidate the programs' standing in international excellence. That will occur concomitantly with the consolidation and building of international networks. The project will create training opportunities for international students and faculty, by offering courses and receiving international students and faculty, as well as helping the programs to increase high-impact publications, as well as international agreements and co-supervision of Ph.D. dissertations.

# Work missions related to the cooperation project

Year	Quantity	Amount
2019	8	200.000,00
2018	4	100.000,00
2020	8	200.000,00
2022	4	100.000,00
2021	8	200.000,00

# Resources to maintenance the projects

Year	Amount
2019	10.000,00
2020	10.000,00
2018	5.000,00
2022	5.000,00
2021	10.000,00

Year	Modality	Quantity	Amount Total
2021	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2019	Young Talents (12 months)	1	116.110,58
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2019	Visiting Faculty in Brazil (0 months)	4	64.621,16
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2022	Sandwich Doctorate Scholarship (6 months)	3	121.435,20
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Visiting Faculty in Brazil (0 months)	4	64.621,16
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40

II V LINSIDAI	DE l'EDERAE DE SANTA CATARINA		
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Short-term training abroad (3 months)	1	25.466,40
2018	Sandwich Doctorate Scholarship (6 months)	3	121.435,20
2021	Short-term training abroad (3 months)	1	25.466,40
2020	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2019	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2022	Visiting Faculty in Brazil (0 months)	2	32.310,58
2020	Visiting Faculty in Brazil (0 months)	4	64.621,16
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40

Name of the project	Start date	End date
Production of knowledge and training of human resources in the area of marine/coastal biodiversity	08/2018	07/2022

# Description

The issues regarding the oceans and their areas of influence demand approach from diverse, largescale perspectives. Conservation and sustainable use of biodiversity and its ecosystems require multidisciplinary and transnational actions. Human resource training and knowledge production aimed at marine biodiversity conservation or management have momentum at the Federal University of São Catarina. Through individual work or in disciplinary groups, UFSC has structured an effective and resilient process of production of science and training in this area. However, the challenges presented by human social evolution and the socio-economic-environmental crisis demand integrated actions, in an international context. This project intends to consolidate integrated activities of human resource training and knowledge production in a global context, which will allow Santa Catarina and Brazil to face the challenges imposed by global changes.

#### Work missions related to the cooperation project

Year	Quantity	Amount
2020	8	200.000,00
2021	8	200.000,00
2022	4	100.000,00
2019	8	200.000,00
2018	4	100.000,00

# Resources to maintenance the projects

Year	Amount
2018	5.000,00
2019	10.000,00
2020	10.000,00
2022	5.000,00
2021	10.000,00

Year	Modality	Quantity	Amount Total
2019	Young Talents (12 months)	1	116.110,58
2018	Sandwich Doctorate Scholarship (6 months)	3	121.435,20
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2019	Postdoctoral Research (12 months)	1	69.310,58
2021	Short-term training abroad (3 months)	1	25.466,40
2021	Visiting Faculty in Brazil (0 months)	4	64.621,16
2022	Visiting Faculty in Brazil (0 months)	2	32.310,58
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Postdoctoral Research (12 months)	1	69.310,58
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40

NIVERSIDAL	JE FEDERAL DE SANTA CATARINA		
2019	Short-term training abroad (3 months)	1	25.466,40
2019	Visiting Faculty in Brazil (0 months)	4	64.621,16
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2022	Sandwich Doctorate Scholarship (6 months)	3	121.435,20
2020	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Visiting Faculty in Brazil (0 months)	4	64.621,16
2021	Sandwich Doctorate Scholarship (6 months)	6	242.870,40
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40

Name of the project	Start date	End date
Sustainable energy for the future	08/2018	07/2022

# Description

Energy is a major global challenge, and there are many reasons to promote the transition from the current energy matrix to a predominantly renewable resource. That includes climate change mitigation; energy import reduction; promotion of technological innovation in the green economy; reduction of risks associated with fossil and nuclear sources; energy security; and the increase of local economic systems related to greater social justice. There are other global challenges, such as electricity-lacking regions, global sector regulation, intermittent renewable energy resources (lack of sun or wind for extended periods), and costs related to the radical change of infrastructure happening in the sector. Some national systems, e. g. Germany has seen a substantial increase in renewables in their matrix, but maintain a two-system structure in parallel, with their associated costs. That happens because there are no viable solutions for storing energy in massive quantity, and generation by fossil resources cannot be turned off while feasible solutions are not widely available. The global scale of the challenge often hides the fact that multiple fronts of research are needed. The most striking feature of renewable sources is their granularity, and therefore effective solutions will rely on highly distributed energy systems. The answers range from thinking the transition process on a macro scale through seeking better solutions in specific system components. The energy resources considered here include large-scale generation sources, but also energy efficiency in resource use. Examples of components are the hydroelectric, thermoelectric, nuclear, solar (electric and thermal) generation plants, cogeneration, CO<sub>2</sub> capture, smart grids and electric vehicles. In short, research carried out with a broad vision, which helps to create a sustainable energy sector in an uncertain future.

### Work missions related to the cooperation project

Year	Quantity	Amount
2021	10	250.000,00
2022	6	150.000,00
2018	6	150.000,00
2020	10	250.000,00
2019	8	200.000,00

Resources	to	maintenance	the	project	S

Year	Amount
2018	5.000,00
2020	10.000,00
2022	5.000,00
2021	10.000,00
2019	10.000,00

Year	Modality	Quantity	Amount Total
2019	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2021	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2018	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2021	Senior Visiting Faculty Abroad (6 months)	1	65.678,40

UNIVERSIDA	DE FEDERAL DE SANTA CATARINA		
2021	Visiting Faculty in Brazil (0 months)	5	80.776,45
2020	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2020	Senior Visiting Faculty Abroad (6 months)	1	65.678,40
2019	Postdoctoral Research (12 months)	1	69.310,58
2020	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2019	Short-term training abroad (3 months)	1	25.466,40
2019	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2021	Postdoctoral Research (12 months)	1	69.310,58
2018	Visiting Faculty in Brazil (0 months)	2	32.310,58
2022	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2018	Junior Visiting Faculty Abroad (6 months)	1	60.638,40
2019	Sandwich Doctorate Scholarship (12 months)	1	76.276,80
2020	Visiting Faculty in Brazil (0 months)	5	80.776,45
2020	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2019	Visiting Faculty in Brazil (0 months)	5	80.776,45
2021	Sandwich Doctorate Scholarship (6 months)	8	323.827,20
2019	Young Talents (12 months)	1	116.110,58
2022	Visiting Faculty in Brazil (0 months)	3	48.465,87
2021	Short-term training abroad (3 months)	1	25.466,40
2018	Sandwich Doctorate Scholarship (6 months)	4	161.913,60
2021	Junior Visiting Faculty Abroad (6 months)	1	60.638,40

### CONTERPARTS

# Internationalization of the curriculum - Incorporation of international themes in postgraduate classes.

The incorporation of international themes and professionals (faculty, students and specialists) is a common practice within a significant part of UFSC's undergraduate programs and, especially, postgraduate programs. Both with the use of online audiovisual resources and the real presence in the academic environment, foreign researchers and faculty participate in classes, exchanging content and experiences from their area of study with UFSC academic community. In addition, through mechanisms such as the School of Advanced Studies and instruments such as the teaching practicum, the visiting faculty recruitment and postdoctoral research, seminars, workshops and learning opportunities have been offered jointly with international partners. Particularly in the scope of CAPES-PrInt, the projects provide for the development of learning objects, the offering of courses in English and the partnership with excellence groups, which shall have a substantial impact on the current presence of international themes and instances in both undergraduate and postgraduate classes. Apart from fostering practice, it is also expected that CAPES-PrInt will instigate the generation of topics of global interest, as presented in the main themes of this proposal (i.e., impacts of digital transformation, possibilities and challenges of nanoscience, multidimensionality of sustainability, intercultural barriers and opportunities, universalization of health, knowledge and wisdom society, social challenges, etc.), bringing to the classroom systemic and challenging visions for students' contemporary higher education.

#### Production of international publicity material in other languages, including course websites.

UFSC maintains its website in English (http://structure.ufsc.br/) and encourages Postgraduate Programs to develop and maintain their websites in English and Spanish (e.g. http://ppgeal.posgrad.ufsc.br/). The Office of International Relations (SINTER) also keeps its website in English (http://sinter.ufsc.br/sinter/?lang=en). SINTER's primary goals are to promote the interaction between UFSC and international higher education institutions and organizations, establish and give support to technical, scientific and cultural cooperation agreements, and provide exchange opportunities for UFSC students, faculty and staff.

#### Training and qualification of staff for institutional internationalization.

The training and development of UFSC's staff, as a permanent and deliberate learning process, is based on improvement and qualification actions which are geared towards the development of institutional competencies through the development of individual competencies. Training, at UFSC, is aimed at developing staff for the execution of their tasks, for their performance in the organizational environment, and for the exercise of their functions with the basic premise that human beings, in transforming themselves, also transform the environment in which they interact. The Annual Training Plan (PAC) is one of UFSC's Staff Training and Development Policy instruments and is intended to provide the means for operationalizing the guidelines which inform the professional development process of its staff. Its objective is to support the planning, organization and coordination of training events that provide staff members with the acquisition and improvement of individual and professional competencies, aiming to add a competitive value for the institution and a social value for the individual. At UFSC, the Training Plan is organized annually through a training needs survey conducted among staff, faculty and managers. As regards the University's internationalization, the training policy is currently focused on training and developing staff in the internationalization-related activities within their sectors. In addition, UFSC offers language grants for staff participation in the Extracurricular Language Courses administered by the Department of Foreign Languages and Literatures. Finally, it is worth mentioning that UFSC maintains cooperation agreements with international networks that offer training programs to the university staff, such as the AUGM Escala Gestores e Administradores, the Erasmus + Capacity Building, and USAC Language Courses.

### Counterparts offered by foreign partnership institutions, when applicable.

UFSC's foreign partner universities offer access to the institution's infrastructure, including its physical space, virtual and physical libraries, and the research laboratories where the participating researchers work. There are also contributions linked to actions funded by CAPES, which included

UFSC from 2013 to 2016, such as projects carried out in partnership under CAPES/COFECUB, CAPES/NUFFIC, CAPES/Nottigham and Birmingham, CAPES/PEC-PG, CAPES/Coimbra Chair, CAPES /Ruth Cardoso Chair, CAPES/Fulbright for Human Sciences, CAPES/School of Advanced Studies, CAPES/AULP, CAPES/CUB, BRAFITEC, AUGM, BRANETEC, CAPG-BA, BRICS, CAPES/ELETRONUCLEAR, CAPES/DAAD, CAPES/FCT, CAPES/International Iberian Laboratory of Nanotechnology, CAPES/Cuba, CAPES/MITACS, IODP/CAPES, CAPES/PLI, CAPES/PROBRAL, CAPES/STINT, German Teaching Assistants (GTA) Program for Institutional Projects, International Cooperation Program, Visiting Faculty Abroad Programs, CAPES/UDELAR for faculty mobility.

# Other counterparts, when applicable

In addition to the bilateral partnerships involving CAPES and CNPq financial support, UFSC usually receives unilateral research and postgraduate funding from international development agencies, such as Fullbright (USA), Newton Fund (United Kingdom), *Asociación de Universidades Grupo Montevideo* – AUGM (Latin America – this particular case is bilateral), among others.