



# UFMS

UNIVERSIDADE FEDERAL  
DE SANTA MARIA



**UFSM**

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UNIVERSIDADE FEDERAL  
DE SANTA MARIA

REPÚBLICA FEDERATIVA DO BRASIL  
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UNIVERSIDADE FEDERAL DE SANTA MARIA 2019  
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## WELCOME TO UFSM

The Universidade Federal de Santa Maria (UFSM) is a public institution of higher education, located in Santa Maria, in the central region of the state of Rio Grande do Sul. The first federal university in Brazil outside of a state capital, UFSM has expanded to establish three additional campuses in the cities of Cachoeira do Sul, Frederico Westphalen and Palmeira das Missões.

With a community of more than 30,000 students, faculty and administrative staff, UFSM offers tuition-free programs in a wide range of areas of knowledge, from secondary to postgraduate programs. It is recognized, nationally and internationally, for excellence in teaching and research, for its student assistance program and for its continuous dialogue and interaction with various social actors, actively contributing to local and regional development.

*Arch at the entrance of the Main Campus*





## PRESENTATION

The first federal university outside a state capital in Brazil, UFSM is comprised of four campuses and an academic community of about 30,000 people. Our magnitude, however, is not only revealed through numbers, but attested by our performance in different national and international rankings and evaluation mechanisms. UFSM ranked 9th best federal university in Brazil in the 2019 QS Rankings and, according to the General Course Index (IGC) of the Anísio Teixeira National Institute for Educational Studies and Research (INEP), UFSM has shown steady growth and currently maintains a score of 4, on a scale of 1 - 5.

This result is in line with the objectives established by the 2018-2021 Management Plan and by the Institutional Development Plan of UFSM. The main goal is to achieve a score of 5 by 2021, firmly establishing UFSM as a university of excellence, in addition to strengthening its activities in the areas of innovation, technological development and internationalization. In this direction, an intense project is underway to map, modernize and decrease bureaucracy in administrative processes, harnessing and optimizing employee expertise. These actions aim to boost productivity, reduce inefficiency and costs, standardize processes and, mainly, improve the quality of our services.

Although UFSM is a young university, it doubled in size during the recent period of expansion of higher education in Brazil and continues to achieve its institutional and developmental goals in all its sectors. This is the result of responsible management and the collective commitment of the entire community to guarantee its future as a high-quality, public, tuition-free and inclusive university.

Paulo Afonso Burmann and Luciano Schuch  
President and Vice President





## MISSION, VISION AND VALUES

### Mission

To create and disseminate knowledge, committed to educating people with the capacity to innovate and contribute to the sustainable development of society.

### Vision

To be recognized as an institution of excellence in the creation and dissemination of knowledge, committed to the innovative and sustainable development of society.

### Values

Commitment to education and knowledge, guided by the following values: Freedom, Democracy, Ethics, Justice, Respect for Identity and Diversity, Social Engagement, Innovation and Responsibility.



*"The Legend of Imembuí" by Eduardo Trevisan, panel at Imembuí Hall of the Main Administration building*



## THE UNIVERSITY AND ITS MAGNITUDE

UFSM is ranked among the top Brazilian and international universities in the main world university rankings. While the rankings differ in their methodology and scope, UFSM has achieved positive overall indicators across them.

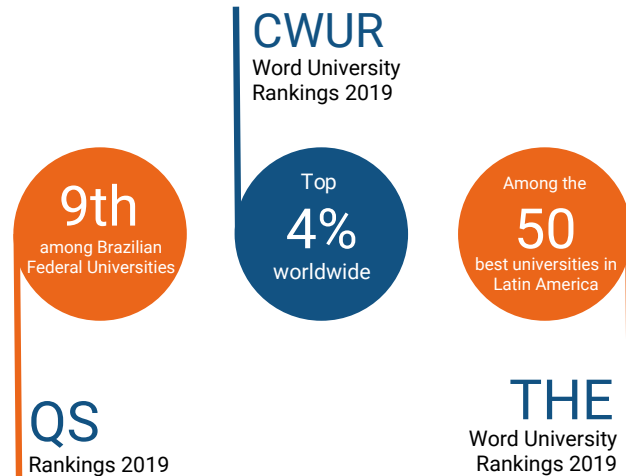
One of the world's top university rankings, published by the British magazine Times Higher Education (THE), has revealed constant improvements in UFSM's performance in almost all indices evaluated by the publication. In 2019, THE ranked UFSM among the top 1,100 universities in the world and in the magazine's 2019 regional rankings, UFSM placed 46th among the best universities in Latin America and among the top 350 universities in emerging countries.

In 2019, THE also highlighted UFSM as one of the most inclusive and diverse universities in the world. The first edition of the ranking analyzed 462 universities from 76 countries,

spotlighting institutions that promoted sustainability, equality of gender and policies to reduce inequality. UFSM is the only public university in the state of Rio Grande do Sul to be ranked among the 15 Brazilian institutions classified in this index.

Two other important international evaluation mechanisms have also demonstrated the quality and ongoing development of UFSM. According to the 2019 QS Latin America Rankings, UFSM placed 89th in Latin America and 9th among the Brazilian federal universities, in a ranking of the top 391 universities in Latin America. According to the Center for World University Rankings (CWUR), UFSM placed among the top four percent of institutions worldwide.

With regard to our scientific production, a ranking published in 2019 by the University of São Paulo (USP), using data from the Web of Science compiled by Clarivate Analytics, placed UFSM at 17th among the Brazilian institutions producing the largest amount of scientific papers, and 11th among federal universities. This result shows our strong standing in the production of science and technology in Brazil.



*Detail of the facade of the Human and Social Sciences Center Library*





## STRUCTURE

### Main Campus

The Professor José Mariano da Rocha Filho Campus, the main UFSM campus, possesses an area of more than 600 hectares and houses eight academic centers, the Arts and Languages Center, the Exact and Natural Sciences Center, the Rural Sciences Center, the Health Sciences Center, the Human and Social Sciences Center, the Education Center, the Physical Education and Sports Center and the Technology Center, in addition to two secondary and post-secondary technical schools, the Polytechnic School and the Technical Industrial School of Santa Maria, one Early Childhood Education School, the Santa Maria University Hospital, student housing buildings, two university restaurants, several libraries and the administrative offices, totaling a built area of more than 348,000 square meters. The main campus also includes several facilities located in the downtown area of Santa Maria, where the campus was originally located.

The campus is open to the community and is endowed with several large green spaces, including woods, gardens, hiking trails and a botanical garden. It also houses several artistic and cultural venues, including a convention center, events center, theater and planetarium. Thus, the campus is well-prepared not only for academic events and debates, but also promotes healthy living, by providing spaces for leisure, sports and entertainment, attracting students, faculty and administrative staff, as well as the entire local community.

*Aerial view of the main campus in Santa Maria*





## Cachoeira do Sul Campus (UFSM-CS)

UFSM's newest campus was founded by the University Council in 2013 and began its activities in 2014. The departments were initially installed in provisional buildings in the downtown area and relocation to the newly built campus began in 2019. With an area of 82 hectares, it was designed as a technological campus and comprises programs in engineering and related areas.

It currently offers five undergraduate programs: Agricultural Engineering, Transport and Logistic Engineering, Electrical

Engineering, Mechanical Engineering and Architecture and Urbanism. The newest UFSM campus, like the campuses of Frederico Westphalen and Palmeira das Missões established earlier in the Northern region of the state, aims to continue the process of expanding tuition-free higher education and, consequently, contribute to local development.

*Nathan Silva Arruda, mechanical engineering student at the new Cachoeira do Sul Campus*



## Frederico Westphalen Campus (UFSM-FW)

The Frederico Westphalen Campus was officially inaugurated in 2007, along with the Palmeira das Missões Campus as an initiative taken by UFSM to democratize access to tuition-free higher education. With an area of more than 190 hectares, the campus offers six undergraduate programs: Agronomy, Environmental and Sanitary Engineering, Forest Engineering, Journalism, Public Relations and Information Systems, in addition to two postgraduate programs: Agriculture and Environment and Environmental Science and Technology. In its 12-year history, more than one thousand students have graduated from UFSM – FW.

*Aerial view of Frederico Westphalen Campus*





### Palmeira das Missões Campus (UFSM – PM)

Opened in conjunction with the Frederico Westphalen campus in 2007, the Palmeira das Missões Campus was celebrated by the local and regional community as a reaffirmation of its commitment to the development of the region, which presents many social and economic demands.

The 70-hectare area houses classrooms, laboratories, student housing and a university restaurant. Currently, the campus offers undergraduate programs in Business Administration, Biological Sciences, Economic Sciences, Nursing, Nutrition and Animal Science and a postgraduate program in Agribusiness. Since its creation, more than one thousand professionals have graduated from UFSM – PM.

*Aerial view of the Palmeira das Missões Campus*



### Silveira Martins Multidisciplinary Space

Inaugurated in 2017 in the city of Silveira Martins, the Multidisciplinary Space for Research and Extension is a space for a variety of activities, such as workshops, courses, meetings, lectures, exhibitions and events. It also houses historical and bibliographical collections.

Uniting history and local tradition to innovation and modernity, the physical structure of the Space connects a modern 3,100 square meter construction to a neoclassical building erected in 1908, which formerly belonged to a local school. Currently, 10 projects from different areas are housed in the Silveira Martins Multidisciplinary Space, including projects in gastronomy, literature, arts, audiovisual production, biodiversity, agrobiodiversity, landscape studies and innovation and technology.

*Facade of the main building of the Silveira Martins Space*







## Santa Maria University Hospital

Created in 1970, the Santa Maria University Hospital (HUSM) is characterized as a public general tertiary and teaching hospital, serving exclusively within the National Public Healthcare System (SUS). It aims at professional training, through the development of teaching, research and extension programs which provide healthcare to the community. HUSM is one of the largest public hospitals in the state, serving a population of 1.2 million inhabitants.

For over 30 years, it has been a referral hospital in emergency and urgent care for 45 cities in the Central-Western Region of Rio Grande do Sul. It currently provides over 400 beds and, on average, 270,000 consultations, 17,000 admissions and 8,000 surgeries annually.

HUSM has excellent cure rates, especially for childhood leukemia, comparable to those of the best international centers, making it one of the foremost centers in Pediatric Oncology. As an accredited High Complexity Unit in Oncology, it also provides general cancer treatment, bone marrow transplantation, radiotherapy, hematology and pediatric oncology services.

*José Carlos Gama, radiology technician at HUSM, operating magnetic resonance imaging equipment*



## ACADEMICS

### Undergraduate Studies

UFSM offers 130 undergraduate programs, including bachelor, licentiate and associate degrees, in both traditional and distance education modalities.

About 20,000 students are enrolled in traditional undergraduate programs offered on the four university campuses and more than 1,700 students are enrolled in distance education programs. UFSM's undergraduate degree programs are divided into eight major areas of knowledge: Rural Sciences, Health Sciences, Natural and Exact Sciences, Human Sciences, Languages and Arts, Applied Social Sciences and Engineering.

Since 2016, the admission process has been based on scores obtained on the National High School Exam (ENEM), the Brazilian Standardized University Entrance Exam, managed by the Ministry of Education.

UFSM has two annual admission intakes, one at the beginning of each semester. However, intake into specific programs varies, with some programs admitting students twice per year and others only once per year.

By adhering to the national admissions system, which allocates 50% of student places to affirmative action beneficiaries, in categories such as income, race and public school attendance, UFSM reaffirms its commitment to the democratization of access to public and tuition-free higher education.

UFSM also has additional special admissions options, including an indigenous admissions process and a rolling admissions process for refugees and vulnerable migrants, among others.

*Cassiane Bolzan, Animal Science student carrying out a practical activity*



## Undergraduate Degree Programs

### NATURAL AND EXACT SCIENCES

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Biological Sciences  
Chemistry  
Computer Science  
Industrial Chemistry  
Information Systems  
Mathematics  
Meteorology

Physics  
Statistics  
Technology in Chemical Processes  
Technology in Computer Networks  
Technology in Geoprocessing  
Technology in Internet Systems

### LANGUAGES AND ARTS

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Dance  
English Language and Literature  
Interdisciplinary Indigenous Studies  
Music  
Music and Technology

Portuguese Language and Literature  
Spanish Language and Literature  
Theater  
Visual Arts

### HEALTH SCIENCES

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Dentistry  
Medicine  
Nursing  
Nutrition  
Occupational Therapy

Pharmacy  
Physical Education  
Physiotherapy  
Speech Therapy

### HUMAN SCIENCES

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Geography  
History  
International Relations  
Pedagogy

Philosophy  
Psychology  
Special Needs Education  
Teacher Training for Professional Education

### RURAL SCIENCES

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Agribusiness  
Agronomy  
Animal Science  
Environmental Management

Food Technology  
Forest Engineering  
Management of Cooperatives  
Veterinary Medicine

### APPLIED SOCIAL SCIENCES

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Accounting Sciences  
Architecture and Urbanism  
Archival Sciences  
Business Administration  
Economic Sciences  
Industrial Design  
Law

Social Communication - Editorial Production  
Social Communication - Journalism  
Social Communication - Public Relations  
Social Communication - Publicity and Advertising  
Social Sciences  
Social Services  
Tourism

### ENGINEERING

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Acoustic Engineering  
Aerospace Engineering  
Agricultural Engineering  
Automation and Control Engineering  
Chemical Engineering  
Civil Engineering  
Computer Engineering  
Electrical Engineering

Industrial Electronics  
Mechanical Engineering  
Mechanical Manufacturing  
Production Engineering  
Sanitary and Environmental Engineering  
Telecommunication Engineering  
Transport and Logistics Engineering





## Postgraduate Studies and Research

UFSM has always been committed to expanding research and postgraduate studies. Since its first master's degree in 1970, UFSM has continually striven to develop research, science and technology through teacher training, creation of postgraduate programs, formation of research groups and active participation in calls for proposals to obtain grants for the development of these areas.

Currently, UFSM has more than 5,000 students enrolled in 106 postgraduate programs, including 20 specialization programs, 55 master's degree and 30 PhD programs.

UFSM also has 548 research groups registered with the National Council for Scientific and Technological Development (CNPq). Yet, the magnitude of our postgraduate studies and research is not only evident through quantitative data, but can also be seen by the quality of its programs.

In the most recent four-year evaluation published by the Coordination for the Improvement of Higher Education Personnel (CAPES) in 2017, UFSM presented 14 postgraduate programs of excellence. The high quality performance of our

research groups and laboratories and the commitment of our employees and students is also attested by our qualified body of research, consolidating UFSM as one of the leading institutions in research and innovation in the country. The University's prominence in training researchers from the undergraduate level on was reflected in the CNPq Institutional Merit award received in 2019. The award recognized UFSM as the University with the largest number of undergraduate research grants in postgraduate programs recognized by CAPES.

UFSM remains dedicated to furthering its postgraduate studies and research by encouraging the continuing development and qualification of its faculty, the expansion and consolidation of postgraduate programs and research groups, the qualified production of knowledge and interaction with the industry in order to transfer technology and knowledge produced. Through these actions, UFSM contributes to local, regional and national development with qualified human resources capable of working critically and reflectively in the sectors of teaching, research and industry.

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*Morgana Doneda, doctoral student of the Postgraduate Program in Chemistry, doing research at the Center for Studies on Petroleum (CEPETRO)*





## BASIC EDUCATION

Early Childhood Education  
High School

## TECHNICAL EDUCATION

### Programs integrated to the High School curriculum

Electrical Technology  
Information Technology for the Internet  
Mechanics  
Electromechanics

### Post-Secondary

Accounting  
Administration  
Administrative Assistance  
Agriculture  
Elderly Care  
Electrical Technology  
Electromechanics  
Electronics  
Environment  
Farming  
Foods  
Geoprocessing  
Industrial automation  
Information Technology  
Landscaping  
Nursing  
Occupational health and safety  
Pharmacy  
Welding

## Basic and Technical Education

In addition to higher education, UFSM also has three units of basic, secondary and post-secondary technical and technological education, located on the main campus in Santa Maria: one Early Childhood Education Unit; and two secondary and postsecondary schools: the Technical Industrial School of Santa Maria (CTISM) and the Polytechnic School.

CTISM and the Polytechnic School are technical schools in the Federal Network of Professional, Scientific and Technological Education, which aims to offer professional and technological education at different levels and modalities. With more than 1,500 enrolled students, CTISM currently offers four technical courses integrated to the high school curriculum, seven postsecondary technical programs, three undergraduate programs and an academic master's degree. The Polytechnic School serves around 2,000 students, offering high school in addition to 14 post-secondary technical programs, four technological undergraduate programs, one specialization program and one professional master's degree.



## Distance Education

The extramural character that marked the establishment of UFSM has been renewed through the development of information and communication technologies at the end of the 1990s and beginning of the 2000s, allowing the expansion of higher education through undergraduate and postgraduate distance education programs.

UFSM has offered distance education opportunities since 2005, mainly through the Open University of Brazil Program linked to the Ministry of Education.

Our Center for Educational Technology (NTE) is responsible for distance education courses and coordinates with more than 40 centers in cities throughout the state of Rio Grande do Sul. Nowadays, about 1,700 student places are offered annually for undergraduate and postgraduate programs.

Students Fernanda Maldaner and Melissa Severo carrying out an experiment at the Pharmaceutical Practices Laboratory of the Polytechnic School



## ADMISSION AND RETENTION

UFSM seeks to promote equal opportunities for student admission and persistence and has invested in student assistance policies and projects since its foundation. Today, it has been recognized as having one of the best student assistance programs among public universities in South America.

### Student Assistance

The Socioeconomic Benefit Program (BSE) is UFSM's main student assistance program, providing several types of aid to undergraduate and postgraduate students with a family income per capita of less than one and a half minimum salaries. Benefits include meals, transportation vouchers, student housing, grants and services, such as social, dental and psychological assistance, computer education and sports and cultural activities. Students may also apply for aid to acquire books and educational supplies and to participate in events. About 5,400 students participate in the BSE.

UFSM offers 2,560 rent-free student housing options in six student residence halls on the different campuses. On the main campus, there is also a residence hall exclusively for indigenous students. In addition, UFSM has six university restaurants, on its four campuses, which serve breakfast, lunch and dinner free of charge for students in the BSE. Other students pay only a portion of the cost of producing their meals. Nearly 9,000 meals are served daily at the university restaurants.

*Dining hall at University Restaurant I on the main campus*







## Accessibility and social inclusion

UFSM is a reference in Brazil for its affirmative action initiatives. In 2007, the Affirmative Action Program was implemented to gradually establish a quota admissions system, aiming to democratize access to public education, protect human rights and eradicate social, educational, ethnic and racial inequalities. Besides ensuring access to programs of higher education, social inclusion actions also provide support throughout students' educational careers, as well as assistance for faculty and administrative staff.

Specific actions aim to support different populations, including low-income and indigenous populations, people of brown and black skin, maroons and public high-school graduates, addressing issues of inequality within social, educational and psychological contexts, as well as those related to gender expression and sexual orientation.

In this context, the Coordination of Educational Actions (CAEd) works to ensure inclusive policies at an institutional level, acting as an agent of pedagogical and social innovation in admissions, student persistence, teaching and learning at UFSM. CAEd provides services for the entire university community, offering specialized educational services with a multidisciplinary team including specialists in psychopedagogy, psychologists and special needs educators. The Sector is

made up of a number of specific commissions which overlook inclusion programs and identify and correct aspects that interfere with learning processes.

Students and staff with special educational needs or who deal with special needs situations count on the support of the Accessibility Unit, which provides a number of services for people with physical, mental, visual or auditory disabilities, as well as those with autism spectrum disorder and the highly gifted and talented. With this support, people with special needs can encounter the best way to carry out their activities and experience increased integration with the university community.

UFSM is also engaged in research and extension projects that focus on accessibility in the external community. One example is the Group Extremus – Dance on Wheels, which was created to teach dance to people in wheelchairs. The multidisciplinary group unites specialists in dance, physical education, special education, theater, pedagogy and occupational therapy. Members of the dance group include people with physical disabilities, intellectual disabilities, cerebral palsy and autism spectrum disorder. Dancers and instructors rehearse to present choreographies in different dance styles, using movements in and out of the wheelchair.

*Rehearsal of the Group Extremus - Dance on Wheels, extension project of the Dance Program, which promotes inclusion of people with disabilities*





### Immigrant and refugee admissions

The Program for Access to Technical and Higher Education for Refugees and Immigrants in vulnerable situations was created at UFSM in 2016 and offers a special rolling admissions process for technical, technological and undergraduate programs at the University.

This affirmative action policy for taking in refugees brought UFSM international recognition in 2018, with an invitation from De Montfort University to present the program at a special United Nations (UN) summit for the global campaign Together held at the UN headquarters in New York. UFSM was the only university from Latin America to participate in the event, which aimed to discuss ways to support refugees and migrants in the fight against xenophobia and discrimination.

*President Paulo Afonso Burmann signs pledge on behalf of UFSM as a participant of the UN global campaign Together*

### Indigenous admissions and housing

Since 2014, UFSM has offered a special admissions program for indigenous people, taking into account the needs of villages that seek development in areas including education, health, infrastructure and the environment. The admission exam is tailored to the indigenous cultures with the participation of an indigenous professional who facilitates intercultural dialogue with the examiners. Each year, 20 places are offered in different undergraduate programs in areas defined collaboratively between the indigenous communities and UFSM. Today we have students in technical and undergraduate programs from the Kaingang, Guarani Mbyá, Guarani-Kaiowá, Terena, Tupiniquim, Xakriabá and Parecis tribes.

UFSM also promotes actions to ensure the inclusion and persistence of our indigenous students. One such initiative is the student residence hall exclusively for indigenous students, which was inaugurated in 2018. With three floors and twelve furnished apartments, the hall has a capacity to house 96 residents.

*Willian Xakriabá, Indigenous student participating in the Opening Ceremony for the Indigenous Residence Hall*





## INTERNATIONALIZATION

Internationalization is one of the main objectives established by the Institutional Development Plan of UFSM and has gained strength in recent years through academic mobility programs and international cooperation agreements with different universities and organizations, aiming to develop plurality in teaching, research, extension and innovation. UFSM currently has international cooperation agreements with about 140 universities in more than 33 countries, 77 of which are with institutions in Europe, 50 in North and South America, eight in Africa, one in Asia and one in Oceania.

UFSM follows the principles established at the World Conference on Higher Education in the 21st Century, including equal access to information and science, international cooperation and knowledge sharing and the use of new technologies to increase educational opportunities, reduce internal and international differences and ensure sustainable higher education. To reach these goals, its Institutional Internationalization Plan details a wide range of specific actions to enhance internationalization, including the development of joint degree agreements, processes

to facilitate recognition of international diplomas and increase flexibility of program curricula, the creation of international graduate programs, increased opportunities for foreign visiting professors, housing arrangements for foreign students and researchers and internationalization of scientific production and research laboratories.

Between 2014 and 2017, UFSM sent over 400 students to study abroad, especially through the Science without Borders (CsF) program. During the same period, we hosted around 200 exchange students through bilateral agreements and programs such as the Asociación de Universidades Grupo Montevideo (AUGM) and the Exchange Program for Undergraduate Students (PEC-G), a program for foreign students from developing countries administered through a partnership between the Brazilian Ministries of External Relations and Education. UFSM is also a member of the Coimbra Group of Brazilian Universities (GCUB), the Brazilian Association for International Education (FAUBAI) and United Nations Academic Impact (UNAI).

*Academic mobility students at a reception event promoted by the International Affairs Office, in March 2019*







**CAPES PrInt**

UFSM took an important step towards internationalization in 2018, when it was selected to participate in the Institutional Internationalization Program created by the Coordination for the Improvement of Higher Education Personnel (CAPES PrInt). The aim of the program is to develop and foster internationalization in Brazilian Higher Education Institutions, stimulating competitiveness and visibility of the country’s scientific production. The funding awarded through this program enables participating universities to carry out work missions and provide research grants in Brazil and abroad, in addition to ensuring funding to maintain research.

CAPES PrInt aims to strengthen UFSM’s international leadership. In order to participate, the University established goals to improve the quality of its postgraduate programs, with strategic partnerships and well-defined counterparts to build up its research groups that are engaged in international collaboration.

The project presented by UFSM was developed around four overarching strategic themes (see Table to the right), uniting different postgraduate programs and research groups in an interdisciplinary and dialogical proposal.

UFSM’s participation in CAPES PrInt ushers in a new era of opportunities for internationalization and, consequently, stronger relationships with institutions around the world and increased opportunities for our employees and students.

*President Paulo Burmann articulates internationalization partnerships with the Deputy Director of the Shanghai Global Products Trade Center and members of the Brazilian delegation on a trip to China in May 2019*

INTERNATIONAL COOPERATION PROJECTS	COUNTRIES
<b>TOMORROW’S MATERIALS AND CLEAN TECHNOLOGIES</b> <ul style="list-style-type: none"> <li>Intelligent Materials</li> <li>Nanomaterials</li> <li>Clean Technologies</li> </ul>	Australia, Belgium, Canada, China, France, Germany, Ireland, Italy, Mexico, Netherlands, Portugal, Spain, Sweden, United Kingdom and United States
<b>ONE HEALTH</b> <ul style="list-style-type: none"> <li>Pharmacological and Nutritional Strategies for Health Promotion</li> <li>Animal Health and Welfare</li> </ul>	Argentina, Canada, China, Denmark, Germany, Italy, Mexico, Netherlands, Portugal, Spain, United Kingdom and United States
<b>INFORMATION SOCIETY: MEMORY AND TECHNOLOGIES</b> <ul style="list-style-type: none"> <li>Information and Technology</li> <li>Memory and Technologies</li> </ul>	Argentina, Austria, Chile, China, Colombia, Cuba, Denmark, France, Germany, Italy, Mexico, Netherlands, Portugal, Spain, Sweden, United Kingdom and United States
<b>SUSTAINABILITY AND INTELLIGENT ATTITUDES</b> <ul style="list-style-type: none"> <li>Agriculture - Innovative, Intensive and Sustainable</li> <li>Sustainable Ecosystems</li> <li>Energy Resources</li> <li>Soils - Production and Environmental Preservation</li> </ul>	Algeria, Argentina, Australia, Austria, Belgium, Canada, China, Denmark, France, Germany, India, Ireland, Italy, Mexico, New Zealand, Portugal, Spain, Switzerland, United Kingdom and United States



## UFSM AND SOCIETY

In order to contribute to social development, UFSM promotes several events, both of an academic nature as well as those aiming toward integration with the external community. UFSM also works in partnership with scientific societies from different areas of knowledge and national and international research foundations, such as the National Council for Scientific and Technological Development (CNPq) and the Asociación de Universidades Grupo Montevideo (AUGM).

The main scientific event promoted by UFSM is the Integrated Academic Seminar (JAI). Held once a year, the week-long event aims to showcase how the Institution invests in knowledge, innovation and the development of technologies. UFSM also sponsors Discover UFSM and the Open Window Program, which aim to provide high school students with access to the university, giving them the chance to learn about the opportunities offered at UFSM.

In addition, a variety of cultural and social events are held on the main campus, including concerts and cultural and recreational activities, aiming to promote knowledge, citizenship, environmental protection, physical activity and well-being. Because of these initiatives, Santa Maria now counts on UFSM as a leisure option and the campus receives thousands of visitors on weekends.



*Weekend Event "Viva o Campus" in March 2018, with artistic presentations.*





## Events Center and Convention Center

The Convention Center, inaugurated in 2017, is a 1,200-seat venue for graduation ceremonies, shows and other large events. In 2018, it was stage to the International Seminar, South America in the Nuclear Era: risks, challenges and perspectives, promoted by UFSM in partnership with the Pugwash Conferences on Science and International Affairs. The event, attended by ambassadors, national and international experts, representatives from Nobel-prize winning organizations, as well as members of the UFSM community, debated international efforts to mitigate the use of nuclear energy for warfare.

The Events Center was founded in 1965 and hosts a variety of events for the academic community, as well offering a venue for activities related to the primary sector and other demands from the external community. The center includes a number of large green spaces, a multipurpose pavilion and areas for animal expositions. Two large events held at the Events Center are the week-long Integrated Academic Seminar (JAI) and the Discover UFSM fair.

*President Paulo Afonso Burmann makes an address at the opening of the Seminar, South America in the Nuclear Era, in August 2018*



## The Center for Paleontological Research in the Quarta Colônia (CAPPa)

CAPPa became part of UFSM in 2010. It was created with the objective of supporting paleontological research in the Quarta Colônia Region, comprising nine cities near Santa Maria. The region is noted for its abundance of scientifically important fossils from the Triassic period.

With advanced equipment and a qualified technical and scientific team who perform state-of-the-art research in paleontology, CAPPa has earned esteem for UFSM. Today, it possesses the most important dinosaur fossil collection in the country, including two complete specimens.

CAPPa works in accordance with the threefold principle of teaching, research and extension, embracing a variety of activities in each of the three axes. In the realm of teaching, it provides grants for undergraduate and postgraduate students to develop research.

In research, it has made a number of significant findings, such as the recent discovery of the oldest long-necked dinosaur - *Macrocollum itaquii*.

As an extension program, it runs the permanent “Cargnin Brothers Paleontological Exhibition” at the museum attached to the Center. The exhibition features replicas of fossils, multimedia resources and original fossils.

*Detail of a Bagualosaurus agudoensis fossil, discovered by CAPPa researchers*







## REGIONAL DEVELOPMENT

Being actively engaged in society has always been a UFSM hallmark, enabling us to generate innovative solutions for local and regional development through extension programs for the community that make use of the knowledge produced through teaching and research.

The relationship between the University and the external community has been developed through a set of initiatives, including: services, such as health, dental and psychological care, legal assistance and veterinary medicine; classes for the external community in a wide variety of areas; the engagement of Junior Enterprises involved in a number of fields, including accounting, information technology, international relations, business administration, industrial design and engineering; and the promotion of art and culture, through organs and spaces such as the Events Center, the Convention Center, the Planetarium,

the Botanical Garden, the Gama d'Eça Museum, the Caixa Preta Theater and the Symphonic Orchestra of Santa Maria.

Extension projects bring the community closer to UFSM in different areas of knowledge. One example in the agricultural sciences is an initiative to support rural producers, a project that coordinates activities and dialog between the different campuses, agricultural businesses, agricultural cooperatives, startups, social groups and other institutions and segments interested in promoting regional development. Other important actions in this direction include a Permanent Extension Forum, Social Incubator, Geopark Project and Human Rights Observatory. UFSM has thus shown its commitment to help meet regional needs and contribute to local development, mainly focusing on social and environmental sustainability and the generation of employment and income for groups in situations of social vulnerability.

*Symphonic Orchestra of Santa Maria at the 2018 season opening*



## STRATEGIC PARTNERSHIPS AND PROJECTS

UFSM is engaged in partnerships with different public and private organizations in order to develop teaching, research and extension projects, promote the exchange of experiences and get researchers and students involved in globalized networks. Partners include industries, universities, the Armed Forces and government organizations.

The South Regional Center for Space Research (CRS / INPE-MCTIC), a unit of the Brazilian National Institute for Space Research (INPE), is located on the main UFSM campus. The center has developed a number of projects in collaboration with the University, including the first Brazilian nanosatellite, NanoSatC-BR1, which entered orbit in 2014.

Other projects in the aerospace sector have provided partnerships at the global level. In 2016, the Russian Space Agency, in partnership with UFSM, inaugurated a GLONASS measuring station at UFSM, which is a satellite system for navigation similar to a GPS.

Another important project involves the development of software and equipment for the Brazilian Army and other branches of the National Armed Forces. Through these strategic partnerships, UFSM contributes to strengthen the

local tradesmanship and economy and participates in national strategic projects such as Astros 2020, for the development of missiles and rockets.

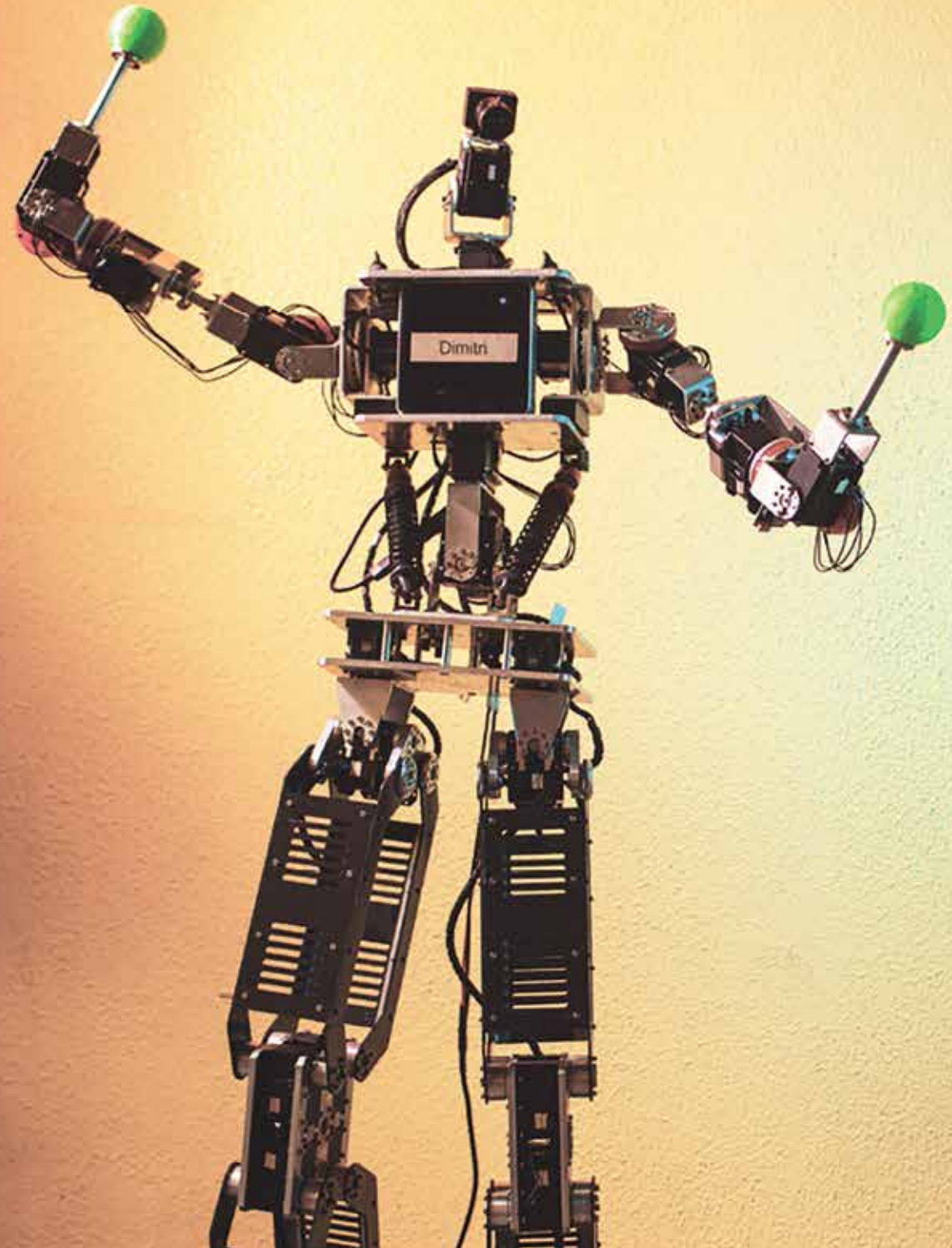
The University also has strategic partnerships with organizations from the agricultural sector, such as multinational companies, agricultural cooperatives and research institutions. One such example is an agreement signed in 2018 with the Embrapa Center for Temperate Climate Agricultural Research to develop software for rice production. In the oil and gas sector, a partnership between the Brazilian petroleum corporation, Petrobras, and the UFSM Center for Studies on Petroleum (CEPETRO) has enabled the development of research on clean technologies and process intensification, as well as on biofuels within the scope of Horizon 2020.

In the area of sports, UFSM is involved in projects focusing on training high performance athletes, in partnership with the Brazilian Ministry of Sport. Relevant actions in this direction include the research carried out at the Simulated Environment Performance Laboratory (Lapas) and construction of an athletics track built to meet Olympic standards, scheduled to begin in 2019.

*Students from the Center for Implementation of Sports Excellence and Health Maintenance at a training session*







## TECHNOLOGY AND INNOVATION

Supporting initiatives geared toward innovation, entrepreneurship and technology is a key action in our commitment to providing quality education, promoting regional development and increasing national and international competitiveness.

Within the scope of teaching and research, UFSM is engaged in several important technological innovation projects. Among these are a number of competition teams, linked to the production of prototypes. Taura Bots is a team that uses robotics to develop automation and artificial intelligence. Bombaja UFSM designs and produces off-road vehicles, while Formula UFSM designs and develops single-seater open-wheel vehicles. In the aerospace field, Carancho Aerodesign carries out research in aeronautics and the Rocket Lab investigates the construction of rockets.

In the business sector, the Agency for Innovation and Technology Transfer (AGITTEC) was created in 2015, aiming to integrate the management of intellectual property, entrepreneurship and technology transfer and contribute to society through the generation of jobs and income.

AGITTEC created the Pulsar Incubator in 2016, which offers office space, technical support and complementary training for

entrepreneurs and startup businesses. UFSM is also endowed with the Santa Maria Technological Incubator which works toward the development of an innovative business mentality in the region. Through research and innovation projects linked to these initiatives, UFSM contributes to technological innovation and the development of entrepreneurs with managerial skills, increasing the business survival rate and stimulating the generation of innovative solutions.

In the same direction, UFSM approved a resolution in 2016 recognizing junior enterprises as a teaching method and establishing institutional guidelines to support this approach to developing qualified human resources and talent. By offering quality services at a low cost, junior enterprises aid micro and small businesses and contribute to regional development and entrepreneurship.

In 2018, UFSM created the Doctoral Program for Innovation, with the support of AGITTEC and aiming to increase interaction with the production sector. The program finances research grants for students developing projects in the areas of electrical engineering, forest engineering and chemical engineering. Students in this program are connected to companies and focus on the development of new technologies and products.

*Dimitri, the Robot, developed by the Taura Bots project team.*



## ENVIRONMENTAL MANAGEMENT

Aware of its role in the collective effort to preserve the environment, UFSM has developed a set of actions in its Plan for Sustainable Logistics (PLS). The plan aims to introduce new sustainable practices for rationalization in the use of materials and services. Initiatives include practices to optimize the use of materials, electricity and water, sewage and waste management, workplace quality of life, purchasing, hiring and transportation. An additional project is the Sustainable UFSM campaign, which aims to increase visibility of sustainable actions carried out by the institution and promote the community's awareness about the sustainable use of university resources.

The Energy Efficiency project is another outstanding initiative developed by UFSM in partnership with the local electricity company and the National Agency of Electric Energy. The project has enabled the construction of a power plant with solar panels, which has a capacity of 100 kW and

generates energy for several UFSM buildings. The project also made possible the replacement of 1,300 fluorescent lamps and 56 sodium vapor lamps with LED bulbs and the installation of energy meters at several spots on the campus. This initiative has led to an economy of around R\$ 140,000 per year.

These projects are carried out in line with the Innovative System of Administration and Management of Electric Energy, a groundbreaking project in Brazil for rationalization of energy management employed at UFSM since 2018. The implantation of this system was the result of three years of research carried out at the UFSM Technology Center in partnership with startups at the UFSM business incubators and financed by the CPFL Energy company. The system has a wide market potential, with good prospects for application by different energy providers in Brazil and abroad.

*Solar panels of UFSM's Photovoltaic Power Plant*





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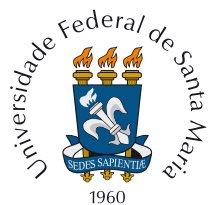
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