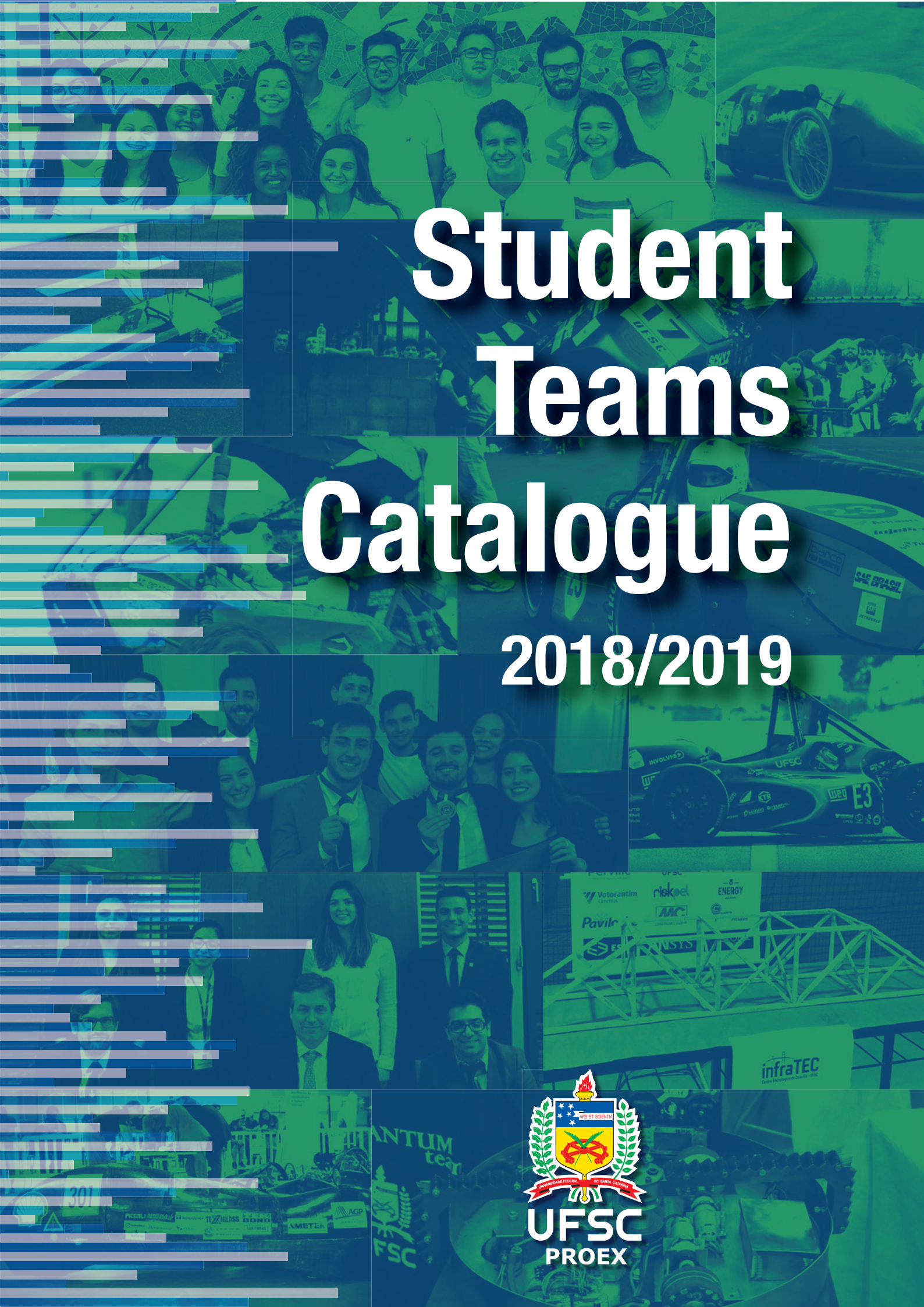


Student Teams Catalogue

2018/2019

UFSC
PROEX

Student Teams Catalogue

2018/2019

UFSC
PROEX

Catalogação na fonte pela Biblioteca Universitária da
Universidade Federal de Santa Catarina

U58s Universidade Federal de Santa Catarina. Pró Reitoria de Extensão.
Student Teams Catalogue 2018/2019 / Universidade Federal de Santa Catarina, Pró-Reitoria de Extensão ; organização Graziela De Luca Canto, Mariana Neis Machado Salvador. – Florianópolis : PROEX/UFSC, 2018.
52 p.; il.

1. Extensão universitária – Catálogos. I. Canto, Graziela De Luca. II. Salvador, Mariana Neis Machado. III. Título.

CDU: 378

Elabora por Dênira Remedi - CRB 14/1396

CENTRAL ADMINISTRATION

Rector
Prof. Ubaldo Cesar Balthazar

Vice-Rector
Prof. Alacoque Lorenzini Erdmann

Director-General
Prof. Alvaro Guillermo Rojas Lezana

Head of Rector's Office
Prof. Áureo Mafra de Moraes

Institutional Assistant
Prof. Gelson Luiz de Albuquerque

Prorectorate for Student Affairs - PRAE
Prof. Pedro Luiz Manique Barreto

Prorectorate for Undergraduate Studies - PROGRAD
Prof. Alexandre Marino Costa

Prorectorate for Graduate Studies -PROPG
Prof. Cristiane Derani

Prorectorate for Outreach and Extension - PROEX
Prof. Rogério Cid Bastos

Prorectorate for Research - PROPESQ
Prof. Sebastião Roberto Soares

Prorectorate for Administration - PROAD
Jair Napoleão Filho

Prorectorate for Personnel Management and Development - PRODEGESP
Prof. Carla Cristina Dutra Búrigo

Office of Culture and Arts - SECARTE
Prof. Maria de Lourdes Alves Borges

Office of Innovation - SINOVA
Prof. Alexandre Moraes Ramos

Office of International Relations - SINTER
Prof. Lincoln Paulo Fernandes

Office of Institutional Improvement - SEAI
Prof. Liz Beatriz Sass

Office of Planning and Budget - SEPLAN
Prof. Vladimir Arthur Fey

Office of Institutional Security - SSI
Leandro Luiz de Oliveira

Office of Works, Maintenance and Environment - SEOMA
Paulo Roberto Pinto da Luz

Office of Sports - SESP
Prof. Juliano Fernandes da Silva

Office of Affirmative Action and Diversities - SAAD
Prof. Francis Solange Vieira Tourinho

Office of Distance Learning - SEAD
Prof. Fernando Alvaro Ostuni Gauthier

PRORECTORATE FOR OUTREACH AND EXTENSION

Prorector
Prof. Rogério Cid Bastos
Director
Prof. Graziela De Luca Canto
Outreach and Extension Activities Coordinator
Prof. Juan Antonio Altamirano Flores
Extension School Coordinator
Gabriela Cordeiro de Oliveira Squariz
Extensio Journal Coordinator
Prof. André Luís Porporatti
UFSC Rondon Project Coordinator
Prof. Alcides Milton da Silva
UFSC Rondon Project Deputy Coordinator
Prof. Edmilson Rampazzo Klen

Education Affairs Technicians
Fabiano Seelig Paulokun
Gabriela Cordeiro de Oliveira Squariz
Karen Pereira Alvares
Márcia Luciane Gindri Reghelin
Mariana Neis Machado Salvador
Rainer Junio de Sousa
Suzana Kilpp da Silva

CENTER FOR THIRD AGE STUDIES - NETI

Jordelina Schier
Ana Paula Balthazar dos Santos
Fernando Flemming Bohn
Guilherme Henrique Koerich
Heloísa Maria de Medonça Louzada Sierdsma
Rossana Galliani

GREEN ROOM

Marlene Alano Coelho Aguilar
Viviane Gonçalves Lapa Raulino

CREDITS

Organization: PROEX
Prof. Graziela De Luca Canto
Mariana Neis Machado Salvador

Translation and Revision: SINTER
Paula Eduarda Michels

Design: AGECOM
Rafael Leme Camargo
Audrey Schmitz (supervision)

Texts and Images
Opening images: Agecom and Unsplash collection
Texts and images about the extension projects: provided by the respective coordinators.

Summary

Editorial

The real essence of the competition teams in Brazilian Universities is

"[t]o enhance the preparation of students for their future professional performance".

Far beyond practice, students gain preparation by means of social interaction, project development, respect and stimulus, as they get involved in the conception, planning, design and execution of projects in a multidisciplinary environment. Initially restricted to the fields of engineering, competition teams are now diversified and have reached other areas of knowledge. Contemporary students have a special profile and a growing need for new and diverse skills. They enter university knowing that learning will not stop there; they will have to create new opportunities on their own to become employable. In a globalized world, internationalization and multidisciplinarity are always present. Competition teams, in this sense, become challenge teams as they are supposed to face the challenges of this new world.

The Universidade Federal de Santa Catarina was a pioneer in approving a specific normative resolution for competition teams (Normative Resolution no. 87/2016/CUn of 27 September 2016). This year, we present another significant achievement – the consolidation of the teams and, at the same time, an improvement in the calls for proposals which made the award granting process more selective (Calls no. 1/2018/PROEX and no. 7/2018/PROEX). If, on the one hand, the granting process was more selective, on the other hand, the resources and the granting types were expanded.

We share once more, by means of this catalog, the excellent UFSC initiatives. In addition, following a directive from Rector Ubaldo Cesar Balthazar, we have innovated in presenting a catalog that takes advantage of the principles of Augmented Reality[1] , an important tool for the Education 4.0 project that will lead UFSC to the forefront of Brazilian universities.

Get to know a little about UFSC through the eyes of our competition teams.

Prof. Rogério Cid Bastos
Prorector for Outreach and Extension - UFSC

[1] To see the catalog using AR codes, download the free Zappar app on your mobile device (iOS and Android).


UFSC Compete

UFSC Compete (since 2007)

Website: http://ufsccompete.sites.ufsc.br
Contact information: ufsccompete@gmail.com

Advisor:
Prof. Rodrigo de Souza Vieira
Department of Mechanical EngineeringDepartment, Technological CenterSchool of Technology, UFSC, Florianópolis, SC, Brazil
E-mail: rodrigo.vieira@ufsc.br

The UFSC Compete project started in 2007, based on the idea of synergy of professors Orestes Alarcon, Lauro Nicolazzi and Edison da Rosa. Its main goal is to provide support and a profitable environment for UFSC's competition teams to achieve their best outcomes, as well as to promote knowledge. Thereby, UFSC Compete seeks to optimize results and help UFSC to become a national reference among the best competition teams.

In 2016, the group initiated a strong effort towards the rights of competition teams at UFSC. In this sense, together with the Students' Union and supported by the Rector's Office, it allowed the approval of the Normative Resolution no. 87/2016/CUn by the University Council, guaranteeing the regulation of competition teams and ensuring their due rights inside the University.

In 2017, the team developed a Strategic Plan for the year, creating a new structure that is divided into areas such as: Presidency, Communication, People Management and Legal/Financial areas. Along the year, new goals were also traced, such as: to strengthen bonds between businesses and the University; to increase the amount of teams that can receive financial aid from UFSC and the number of Capacity Development initiatives; to transform the logistics between the University and the National/International competitions into a feasible and repeatable process; to increase the visibility and recognition of UFSC Compete within UFSC and the local community; and to become financially self-sufficient. Still in 2017, UFSC Compete admitted one more competition team to the group, totaling 7 teams.

In 2018, UFSC Compete switched from a Functional Structure to a Project Structure, opening its first selection process for new members and achieving several successful results.

Today, UFSC Compete has 14 members and 28 projects, covering topics that range from members training (for the main team and the associated competition teams), feedback system implementation, knowledge management, partnerships, physical space, regulations, logistics (to competitions) and the financial/legal control of the entity.

UFSC Compete gathers seven competition teams: Ampera Racing, Céu Azul Aeronaves, e3 - Equipe de Eficiência Energética, Fórmula UFSC, SdDUFSC - Sociedade de Debates da UFSC, UFSC Baja SAE and Vento Sul - Barco Solar UFSC. In addition, it organizes every year, with the associated competition teams, an event called *Semana Compete* to promote and disseminate their activities. This year, there are 254 students involved in the project, coming from 10 of the 12 academic schools at UFSC.

President: Jéssica Farias Pereira, Mechanical Engineering
Members:
Lucas Werner Kuipers, Mechanical Engineering
Alice Weza Fava Bilbao, Mechanical Engineering
Álvaro Dresch Zomkowski, Mechanical Production Engineering
Eduardo Just Barcelos, Mechanical Engineering
Gabriele Zaveruka, Civil Production Engineering
Jéssica Fernanda Oliveira, Mechanical Engineering
Leonardo Andrighetti, Mechanical Engineering
Letícia Pamplona Cabral, Mechanical Engineering
Letícia Silveira Minosso, Journalism
Luma Barbosa Hage, Mechanical Engineering
Matheus Vieira Domingues, Mechanical Engineering
Paulo Afonso Filho, Mechanical Production Engineering
Thaíza Peotta, Materials Engineering

President:
Jéssica Farias Pereira,
Mechanical Engineering

President's message

Being part of UFSC Compete was a huge pleasure since the very beginning - not only in terms of my academic and professional life, but also of my personal life. From the first meeting I attended, it felt as if the atmosphere in the team was something that I wanted badly for myself.

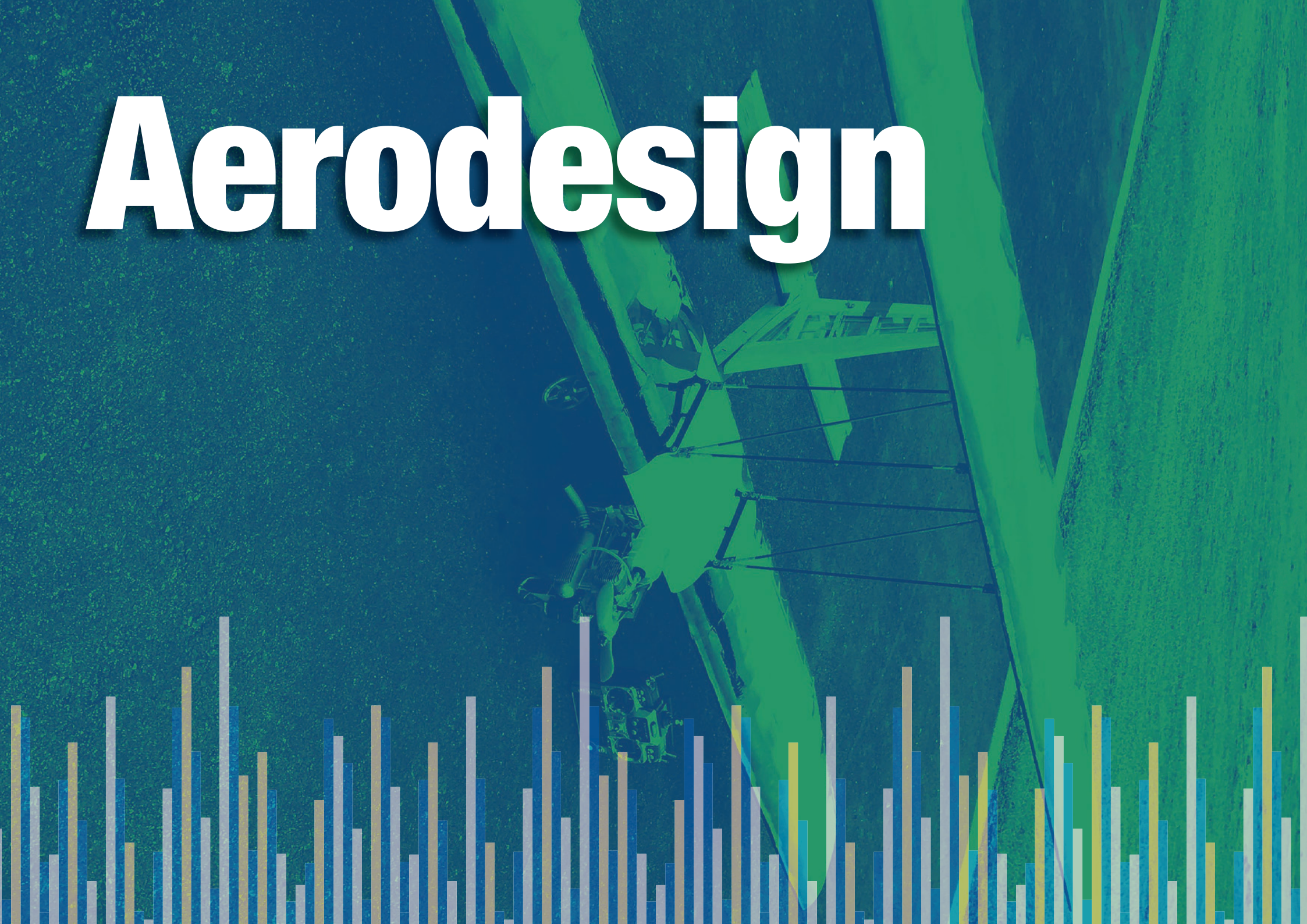
I'm in the group for nearly two years now, and during that time I have grown exponentially: I've learned how to work directly with people, who truly needed my work to be functioning correctly, so that theirs would too; I've met quite a lot of professors and had the opportunity to talk to them about topics not only on mechanical engineering, but also on management and work psychology; I've been directly introduced in the routine of people who work daily on engineering projects, applying knowledge of mechanics, electrics, electronics and automation (I've learned, for instance, technical terms related to the naval, automotive and aeronautics areas); but that's not all: I've learned about the fundamentals of Law, Administration, Accounting, Journalism, Design and Psychology.

The team has also reflected directly on the way I face my personal performance: I am aware that we will not always get the results, the grades or the competition victories that we wanted; nevertheless, I learned that the answers I must look for are in questions such as: Is the result I've got reflecting the effort I've putted in it, or my learning? Is my performance connected to some sort of emotional or psychological factor? What can I bring with me, out of this experience, that may positively contribute to my future?

I've met incredible people and I've seen wondrous things. I've had fantastic experiences. I've sweated and, mostly, I have given all of myself - and I wouldn't trade a single moment.


teams

Aerodesign



Céu Azul Aeronaves (since 2004)

Website: http://www.aerodesign.ufsc.br/
Contact information: ceuazulufsc@gmail.com

Advisor:
Prof. Amir Antonio Martins de Oliveira Jr.
Department of Mechanical Engineering, School of Technology, UFSC, Florianópolis, SC, Brazil
E-mail: amir.oliveira@ufsc.br

Main competitions

SAE BRASIL AeroDesign, São José dos Campos, SP, Brazil
SAE Aero Design East, Fort Worth, Texas, USA

Main results

National awards

- "Best Technology Innovation and Boldness Award", São José dos Campos, SP, Brazil (2010)
- 1st Place in the Micro Class, 6th Place in the Regular Class, "Best Structural Efficiency Award", São José dos Campos, SP, Brazil (2012)
- 3rd Place in the Micro Class, "Best Empty Weight Accuracy Award", São José dos Campos, SP, Brazil (2013)
- 3rd Place in the Advanced Class, "Best Oral Presentation Award", São José dos Campos, SP, Brazil (2015)
- International awards
- 3rd Place in the Micro Class, 1st Place in the "Highest Payload Fraction Award – Micro Class", 3rd Place in the "Written Design Report Award – Micro Class", Forth Worth, Texas, USA (2013)

The Céu Azul Aeronaves (that could be translated as "Blue Sky Airplanes") team focuses on the study and execution of a theoretical and practical aeronautical design to compete in the annual SAE Brazil AeroDesign competition. The team engages in planning, designing, manufacturing and selling activities, participating in the Regular and Micro Classes of the AeroDesign competition, and carrying out a number of other activities that impact UFSC's internal and external community. The mission of the team is to explore AeroDesign through the creation of competitive airplanes and to promote training and the professional and individual development of its members. Its vision is to become a national reference in AeroDesign, reaching the first places in competitions with innovative and bold designs. The values cultivated by the team are companionship, professionalism, proactivity, passion, zeal, discipline and respect. Its operation is divided into Design Areas (including Aerodynamics, Performance and Telemetry, Stability and Control, Payload and Aeroelasticity, Structures and Tests, Electrical Design, CAD, Manufacturing and Shape Design) and Management Areas (including Accounting, Partnership Relations, and Marketing). The members are primarily undergraduate and graduate engineering students, but participation of students from other fields of knowledge are encouraged and several valorous members have come from other areas, such as arts, design and journalism.

Céu Azul Aeronaves

Captains:
Regular Class: João Pedro De Toni de Almeida, Mechanical Engineering
Micro Class: André Silva Wagner, Mechanical Engineering
Members:
Amanda Saori Teixeira, Journalism
André Silva Wagner, Mechanical Engineering
André Pires, Mechanical Engineering
Bruno Souza de Lima, Mechanical Engineering
Caio Dias Fernandes, Mechanical Engineering
Camila Helena de Oliveira Silva, Mechanical Engineering
Camila Zandavalli Maluf de Araujo, Mechanical Engineering
David Steiner Sand, Automation and Control Engineering
Dominique Hotzel Ruther, Electrical Engineering
Fernando Battisti, Automation and Control Engineering
Gabriel Vicente Justino, Mechanical Engineering
Gustavo Henrique Angioleti Lopes, Electrical Engineering
Heloísa Ferreira Rocha, Materials Engineering
João Pedro De Toni de Almeida, Mechanical Engineering
Leonardo Estevo Martins, Electrical Engineering
Lucas Kuehl Andriolli, Mechanical Engineering
Luisa Piccolo Serafim, Mechanical Engineering
Maria Eduarda Quissini Dias, Mechanical Engineering
Marina Saffran Evangelista, Mechanical Engineering
Nicolas Rodio, Mechanical Engineering
Rafael Engels, Electrical Engineering
Valdecir Hoffmann, Automation and Control Engineering

Capitain of the Regular Class: João Pedro De Toni de Almeida, Mechanical Engineering

Captain of the Micro Class: André Silva Wagner, Mechanical Engineering

Captain's message (João Pedro)

When I got into the team, I was hoping to learn how to develop long-term projects and apply knowledge from my engineering classes. What I found in Céu Azul went far beyond that. Not only my expectations on project design were overpassed, but I met an amazing set of people that are incredible in solving problems and taking the best out of a bad situation. Essentially, that's what we do: we design optimized aircrafts, whose uncertainty is inherent. We need to feed the project over and over with test results, aiming at having a competitive project by the end of our cycle. That means we must take rough decisions. The most defying tasks often appear out of the blue with very little time to solve them. I learned that we need to understand each person's reality and then set reasonable goals. Only in this way we can improve our performance as a team and have the areas working alongside each other. You can't spend two years in the team without growing and learning constantly about engineering, team management and yourself. I'm sure that, when my time to leave comes, I'll be a totally different person. Céu Azul really took me out of my comfort zone and, for that, I'll be always grateful.

Captain's message (André)

The main reason I joined Céu Azul Aeronaves was to have my first experience in a teamwork environment while learning how an aircraft works and all the engineering involved in it. Fortunately, it went beyond that. Not only the teamwork was way more complex than I expected, but also the planning and decisions that must be taken during a project proved to be a big challenge for me and the whole group, since this is our first year in the team. The understanding of how people react and feel about the difficulties that we face during the year in Céu Azul is a big challenge. How to behave to fix the problems, in a way that everyone feels comfortable and satisfied with the results, is one of the main learnings that, I am sure, will have impacts along my entire professional life. To a student that is taking his first steps in the way of becoming a mechanical engineer, this opportunity is proving to be a great way to learn beyond what our classroom benches teach us. I feel I am expanding my notions of how a project cycle operates and being more prepared for the demands of the market.

Baja

UFSC Baja SAE (since 1997)

Website: http://www.baja.ufsc.br/
Contact information: equipe@bajaufsc.com

Advisor:
Prof. Lauro Cesar Nicolazzi
Department of Mechanical Engineering, School of Technology, UFSC, Florianópolis, SC, Brazil
E-mail: lauro.nicolazzi@ufsc.br

Main competitions

Baja SAE Brasil, São José dos Campos, SP, Brazil
Baja Regional SAE Brasil Etapa Sul, Pato Branco, PR, Brazil

Main results

The UFSC Baja Team has a large gallery of trophies obtained in regional and national competitions. In the regional stage, the team is 7-time champion, with two consecutive victories. In the national competition, the main achievements were the two qualifications for the international competition, in 2009 and 2013, that takes place in the United States. In the competitions, the team has already been awarded with several prizes, such as: acceleration, traction, suspension, business plan and design events. The most important achievements of the team were winning the 2009 endurance race in the national competition, being among the eight best projects in the international competition of 2009 and reaching the 22nd place in 2013.

The UFSC Baja Team has a great tradition of innovation in design and manufacturing and is recognized among the country's leading universities as a reference in innovation and technology development.

The UFSC Baja Team was created in 1997, within the Department of Mechanical Engineering at UFSC, and is composed of up to 20 students of different engineering programs, guided by Prof. Lauro Cesar Nicolazzi since 2000.

The organization of the team is based on the division of tasks into two sectors: the administrative sector, comprised by the Marketing, Legal/Financial/Procurement and Human Resources departments; and the technical sector, comprised by the Prototype Design and Manufacturing Groups. These two areas are led by directors, a captain and a team leader, who are responsible for organizing the distribution of tasks, giving support to the areas, ensuring the ongoing progress of the project and representing the team in presentations, fairs and before the sponsors.

UFSC Baja SAE

As an intrinsic characteristic of automobile development, the UFSC Baja Team encourages and adopts multidisciplinarity as a way of working, usually done through partnerships with other departments (Journalism, Design, Architecture, Psychology, Production Engineering, Electrical Engineering, Automation and Systems, among several others) that subsidize some of the team's tasks.

More than motorsport, the Baja SAE project encompasses engineering competitions. In order to maintain and improve the quality of its projects and prototypes, UFSC Baja SAE Team has researched and developed methods for the design, analysis and testing of the components it designs.

In the area of materials and manufacturing processes, the team masters methods of manufacturing and implementing advanced composite materials such as carbon fibers and Kevlar, as well as light metal alloys and engineering polymers.

After manufacture, tests of materials and parts are performed in order to verify the quality of the components developed. For this, sensors and data acquisition systems are developed to collect information from the vehicle during its operation.

In addition to data collection, structural analysis software, CAD modeling and data processing are often used to gauge numerical modeling, numerical compatibility, prediction of failures, and adjustments that can be made to improve the dynamic performance of the prototype.

As a way of rewarding and thanking the support of companies and partner laboratories, UFSC Baja Team seeks to promote the logo and image of its supporters at fairs, exhibitions and visits, as well as in its periodical newsletters, social networking pages, website and presentations.

In addition, it is common for Baja-related articles to circulate in regional and national communication vehicles during the competition seasons, providing more visibility to the team and its sponsors.

The team seeks to show students that taking part in a university undergraduate project is a way to bring the university closer to the industry and encourage its development - with focus on the automotive sector in this case -, making them better-prepared future engineers.

Captain: Émerson Shinji Suzuki, Mechanical Engineering
Team Leader: Arthur Fonseca Ruy, Mechanical Engineering

Members:
Ana Luiza da Costa Garcia, Mechanical Production Engineering
Arthur Fonseca Ruy, Mechanical Engineering
Asaph Canto Pereira, Electronic Engineering
Caio Henrique Andrade da Silva, Electronic Engineering
Emerson Shinji Suzuki, Mechanical Engineering
Guilerme Mattos, Mechanical Engineering
João Pedro Amaral Petrassi, Mechanical Engineering
Lorenzo Pitombo Vella, Automation and Control Engineering
Luam Gabriel Maul, Mechanical Engineering
Luana Barbosa Pina Pereira, Mechanical Engineering
Marcos Odivan Werner, Mechanical Engineering
Rafael Sartori Donini, Mechanical Production Engineering
Rafael Wehmuth Berndt, Mechanical Engineering
Vinicius de Bem Sousa, Electrical Engineering
Welinton Robson Mallmann, Mechanical Engineering

Captain:
Émerson Shinji Suzuki,
Mechanical Engineering

Team Leader:
Arthur Fonseca Ruy,
Mechanical Engineering

Captain's message

The UFSC Baja team is very important not only in my academic life, but also in my personal life. The team gave me the best opportunity to improve myself. It has taught me how to be a better professional and a better person in a lot of ways. The UFSC Baja team is the reason that makes me want to do my best every day. Also, it gave me a second home and friends that I know I can count on.

It has been three years of hard work, sleepless nights, struggles, sacrifices and learning, but it's all worth it when we do our best in the competitions. #GoBajaUFSC.


Competitive
debates

UFSC Debate Society (since 2014)

Website: www.facebook.com/sddufsc
Contact information: sddufsc@gmail.com

Advisor:
Prof. Arno Dal Ri Júnior
Department of Law, School of Law, UFSC, Florianópolis, SC, Brazil
Email: arno.dal.ri@ufsc.br

Main competition:
VI Campeonato Brasileiro de Debates (Parli Brasil), Vitória, ES, Brazil

Main results:
- Champion of the "Torneio Capixaba de Debates", Vitória, ES, Brazil (2018)
- Semifinalist and best debater of the 4th "Open Minas", Belo Horizonte, MG, Brazil (2018)
- Vice Champion of the 1st "Campeonato Regional de Integração Sul- CRIS", Florianópolis, SC, Brazil (2018)
- Semifinalist of the 1st "Campeonato Mundial de Debate em Língua Portuguesa", Lisboa, Portugal (2018)
- Champion of the 4th "Campeonato Brasileiro de Debates", Rio de Janeiro, RJ, Brazil (2017)

The UFSC Debate Society is both a competition team - which takes part in debate championships - and a group aimed at promoting extension activities related to the practice of argumentation and oratory, as well as debate practices, competitions and courses.

The so-called "SdDUFSC" was officially established as an extension project in 2014; it is also the first debate society in Southern Brazil and one of the first in Brazil. We look for inspiration in other debate societies worldwide and we are always linked to other Brazilian groups with the purpose of promoting the competitive debates' movement. Since the beginning, we face the debate as a means to favor the personal development of participants and stimulate their critical thinking allied to the mutual respect.

UFSC Debate Society

Regarding our internal structure, the project's directive group is composed by aspiring, effective and emeritus members. The first ones passed the initial phase of our selection process, but are still being trained and tested. After full acceptance, they become effective members, turning to emeritus as soon as they leave the team. The administrative structure is made up of a President, a Secretary and the following Directors: Marketing, Courses, Practicing Debates and Competitions.

We adopt the British Parliamentary debate model in competitions and in practicing debates; it is the same model adopted by national and worldwide championships.

The SdDUFSC organizes weekly debates at UFSC's School of Law known as practicing debates. The activity is an opportunity for the participants to practice oratory and argumentation in a respectful and learning-focused environment. The event is open to everyone and free of charge. Before every debate, the rules are explained to the newcomers and the role each debater will perform (whether defense or opposition) is sorted.

Each practice is coordinated by an adjudicator, who is a SdDUFSC member or someone with recognized experience in the field. A feedback is given by the adjudicator at the end of every debate containing suggestions to the debaters so as to improve their argumentation and oratory abilities - highlighting the positive aspects and where there is room for improvement.

As for the competitive side, beyond taking part in external competitions, we promote our own annual championship. Presently, three editions were successfully held at UFSC, always open to everyone without any university-specific registration criteria.

For the last, we perform lectures and teach courses, which are essentially practical courses on oratory and argumentation. They take place during our own events as well as in partnership with other university institutions, e.g. student representative bodies and Junior Enterprises.

President:
Diana Alina Cordeiro Corrêa, Law

President's message

Being the president of UFSC Debate Society turns out to be an experience which transcends both my academic and professional life, with important implications in my personal life. When I first joined the project in 2017, I felt that it would be a life-changing experience.

Since then, it has not been different from what I felt in the beginning. It is in the UFSC Debate Society that I find plurality of ideas and opinions, people diversity and, above all, it is where I meet friends. Friends for any situation, friends who diverge, argue, debate and that, at last, respect each other.

In this history of one year and a half, I have learned to work with a team and to believe in every person's potential, once it is only through union that a high objective can be reached.

Working with a competition team whose purpose is the development of intellectual knowledge is extremely fulfilling; its outcome is the daily development of abilities highly demanded in the academic field, such as oratory and argumentation.

The joy of taking part in a project committed to the promotion of plural, respectful, tolerant and quality debates is immeasurable. Being part of UFSC Debate Society means to encourage young university students towards the culture of listening, reflecting and debating ideas. There's no room for doubts: I would live all those moments again a thousand times.

President: Diana Alina Cordeiro Corrêa, Law
Members:
Allam Zimmer, International Relations
Amanda Karol Coelho, Law
Carolina Piazza, Law
Diego Rodrigues de Souza Reis, Law
Frederico Grubel Nunes, Law
Giancarlo Furlan, Law
Gustavo Ramos, Law
Julia Paiva, Law
Lucas de Azevedo Pazin, Law
Lucas Sena Medeiros, Law
Luidy Bellei, Economia
Murillo Preve, Law
Renan Parolin, International Relations
Ricardo Moreira Salles, Law
Victor Henrique Rorato, Economics
Taynara Rodrigues Bernardo, Law
Victoria Bartell, Law
Vinicius Benin, Law
Vitória Truculo, Law
Willian VInicius Bizotto, Law

International arbitration

UFSC Study Group on International Arbitration - GEArb UFSC (since 2014)

Website: http://gearb.paginas.ufsc.br
Contact information: arbitragem.ufsc@gmail.com

Advisor:
Prof. Aline Beltrame de Moura, School of Law, UFSC, Florianópolis, SC, Brazil
Email: arbitragem.ufsc@gmail.com

Main competitions

Willem C. Vis International Commercial Arbitration Moot, Vienna, Austria
Brazilian Arbitration Competition Petrônio Muniz, São Paulo, SP, Brazil

Main results

The team had its memorial recognized as one of the top 10 of the Brazilian Arbitration Competition Petrônio Muniz, which takes place annually in São Paulo (2017).

The UFSC Study Group on International Arbitration - GEArb is open for participation of students from the second to the fifth year of UFSC's Law Program and from the second to the fourth year of UFSC's International Relations Program.

The members of the group have as their goal the development of public speaking skills in English, as well as the research and study of Private International Law, International Relations, International Trade and International Commercial Arbitration. In order to reach this goal, the group promotes weekly study sessions and debates concerning issues related to the mentioned areas, in addition to competing in the Brazilian Arbitration Competition Petrônio Muniz, which takes place in São Paulo, and in the Willem C. Vis Arbitration Moot (Vis Moot), the world's largest competition in Law and Arbitration.

In 2018, the group debuted at the Vis Moot competition, which annually gathers over 350 (three hundred fifty) universities around the world since 1994.

UFSC International Arbitration Study Group - GEArb UFSC

The selection of students for the UFSC's team takes place at the beginning of the second semester of each academic year, through a specific call for applications. The selection process has the participation of the group's coaching teacher and the team's coaches, which are undergraduate or graduate students who have participated in previous editions of the competition or even arbitration lawyers. Law and International Relations graduate students can apply for a position as speaker or as researcher.

With regard to the administrative activities, the group has secretaries who take care of the organizational and logistical issues. In addition, all of the members are involved in organizing the GEArb UFSC Congress of Arbitration, an event promoted annually to raise funds for the team's participation in the competition.

As the whole competition revolves around a case involving companies located in two different fictitious countries, which are facing a conflict regarding an international sale of goods, the team is divided into two fronts: one responsible for the merit itself and for the arguments, doctrines and case law to be favorably applied to each party (Claimant and Respondent); and the other responsible for the jurisdiction, trying to find the law applicable to the case, the relation between the arbitral tribunal and its competence and, in case it is not competent to judge, the reasons why the arbitrators are suspect or unable to appreciate the case.

Currently, the group's main goal is to prepare and reach a good position in the next edition of the Vis Moot that will occur in 2019.

Captain's message

I had the opportunity to start my participation in GEArb at the end of 2017, when the team decided to participate for the first time in the Willem C. Vis Arbitration Moot (Vis Moot). Thus, in the short space of time that I served as researcher in the team, I learned and studied a lot about International Commercial Arbitration, as well as about the United Nations Convention on Contracts for the International Sale of Goods (CISG).

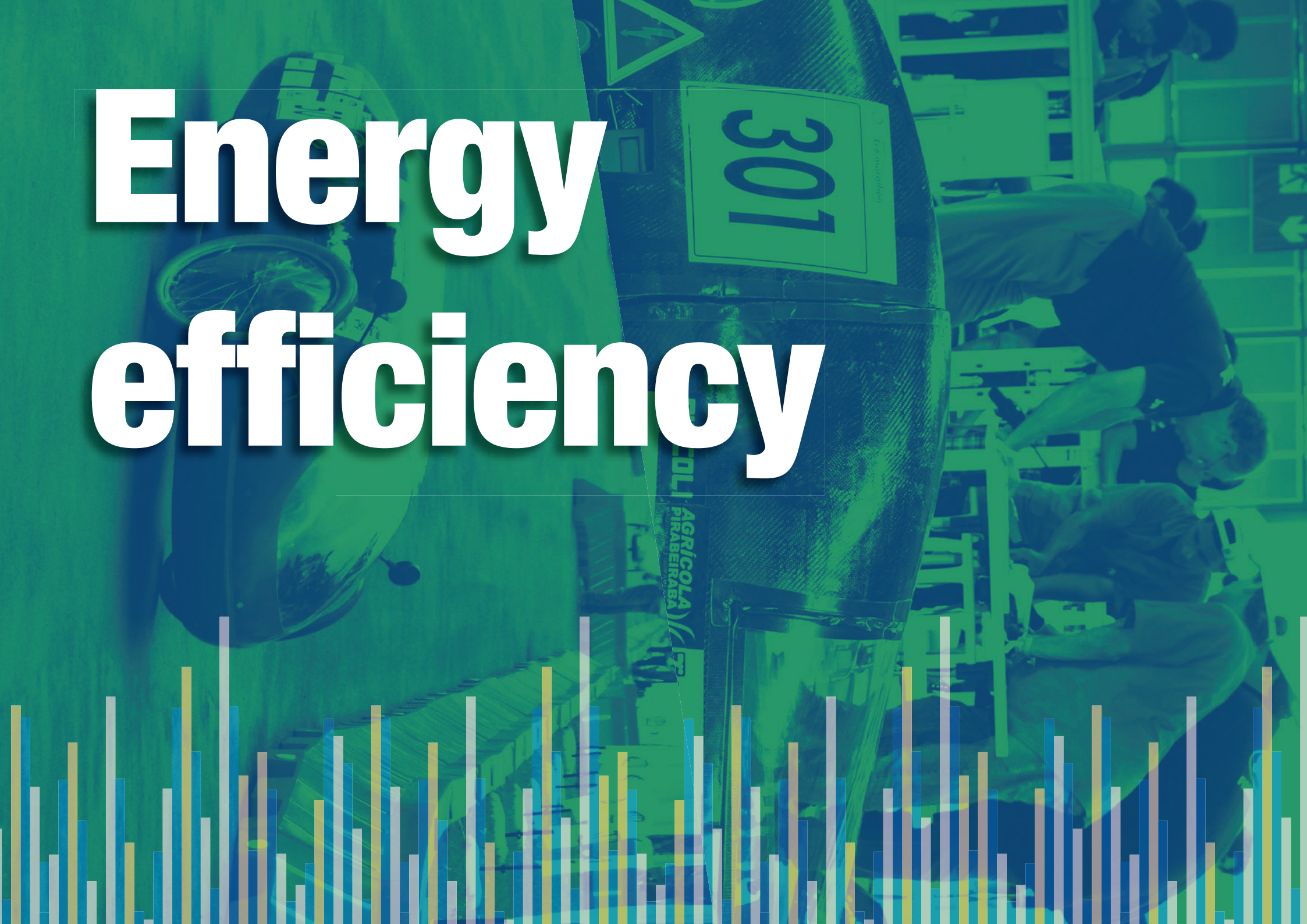
During 2018, in the first two quarters of the year, the group began its studies and weekly meetings, in which I had the opportunity to integrate with the other members and learn how the dynamics of the studies and the organization of texts worked.

After the study phase, in the second half of 2018, I participated in the selection process of the team that will represent UFSC in the 2019 competition. This time, I was able to apply as a speaker. The selection process itself was already a great training in terms of English language practice, rhetoric and oratory, as well as in relation to the study of the matters that involve international commercial arbitration and material law (CISG).

Hence, the competition is extremely important in my academic life, since it enables me not only to learn but also to experience how the dynamics in an arbitral tribunal works, allowing me to act just as a real lawyer. In addition, the competition is a very interesting networking environment, where you can have contact with several teams and also with great referees and authors of great relevance for International Arbitration.

Captain:
Juliana Blanco de Oliveira, Law

Captain: Juliana Blanco de Oliveira, Law
Members:
Ana Paula Roberti Cristofolini, Law
Camila Feltrin Azevedo, Law
Guilherme da Silva Francisconi, Law
Hamilton Zardo Neto, Law
Israel Weingartner, Law
Juliana Blanco de Oliveira, Law
Kristyan Kauany Martins de Quadros, Law
Maria Emília Vieira Antônio, Law
Tobias Pereira Klen, Law
Vitória Linhares Malucelli, Law



Energy efficiency

Eficem (since 2012)

Website: http://eficem.ufsc.br/
Contact information: eficem@contato.ufsc.br

Advisor:
Prof. Diego Santos Greff
Department of Mobility Engineering, Joinville School of Technology, UFSC, Joinville, SC, Brazil
Email: diego.greff@ufsc.br

Main competitions

Shell Eco Marathon Brazil, Rio de Janeiro, RJ, Brazil
Shell Eco Marathon Americas, Sonoma, CA, USA

Main results

National

- 1st place, Shell Eco Marathon Brazil, Rio de Janeiro (2017)

International

- 3rd place, Shell Eco Marathon Americas, Detroit (2017)
- 5th place, Shell Eco Marathon Americas, Detroit (2016)
- Lightest Prototype (2015, 2016, 2017)
- Latin America Energy Efficiency Record 363.7 km/kWh (2017)

Eficem is a team created by engineering students at the Universidade Federal de Santa Catarina, Joinville Campus, in 2012, with the mission of being among the best energy efficiency teams in the country, in the categories of electric motorization and internal combustion prototypes. Throughout its history, prototypes capable of traveling up to 860 kilometers while spending the equivalent of 1 real of electric energy were developed. The team is guided by the search for the continuous improvement of its results, seeking to obtain greater visibility in the academic environment and the community and to contribute to UFSC's development and achievement of outstanding positions in Brazil and abroad.

Eficem

It has important missions, which include: to contribute to the technological development of the automotive, electronics and composite industries through sustainable, innovative and low environmental impact solutions; and to contribute to the diffusion of project management, design and development of vehicular products with energy efficiency. Eficem is a multidisciplinary group that integrates students of Aerospace Engineering, Mechatronics Engineering, Automotive Engineering, Civil Engineering, Infrastructure Engineering, Transportation and Logistics Engineering, Railway and Subway Engineering, Naval Engineering and Science and Technology Programs. There are currently 51 members distributed in seven different areas: administrative, fairing, chassis, combustion, marketing, embedded systems and urban concept; all committed to results, sustainability, innovation and teamwork.

Captain: Eduardo Felipe Benczik, Automotive Engineering
Members:
Aldo Pires e Silva, Automotive Engineering
Augusto Ricci Ferreira, Aerospace Engineering
Brenda Siqueira Santos, Interdisciplinary Program in Science and Technology
Bruno Fissmer Sardagna, Automotive Engineering
Bruno Soares Almeida, Mechatronics Engineering
Derek Mattos Lisboa, Naval Engineering
Edgard Haenisch Porto, Automotive Engineering
Eduardo Felipe Benczik, Automotive Engineering
Emilly Costa Schmidt, Railway and Subway Engineering
Euler Adriano Pereira do Carmo, Mechatronics Engineering
Flávio Bruni Nunes, Automotive Engineering
Gabriel Ari Valle, Automotive Engineering
Gabriel Jesus Ienaga, Mechatronics Engineering
Giovanni Manzini Ormeneze, Automotive Engineering
Guilherme Bortolotto Gonçalves, Automotive Engineering
Guilherme Zanella Teodoro, Aerospace Engineering
Guinther Schwambach, Automotive Engineering
Helder Mohr Heinzen, Automotive Engineering
Igor Faria Quandt, Mechatronics Engineering
Jefferson Mika, Aerospace Engineering
João Gustavo de Souza, Mechatronics Engineering
Johann August Ramcke, Automotive Engineering
Jose Henrique Baptista, Interdisciplinary Program in Science and Technology
Júlia Beatriz Dias da Silva, Interdisciplinary Program in Science and Technology
Julia Maria Rech Christ, Mechatronics Engineering
Juliana Pereira Meireles, Mechatronics Engineering
Juliano Link dos Santos, Automotive Engineering

(cont.)
Karen Santos de Assis, Interdisciplinary Program in Mobility
Luana Aparecida Gomes, Mechatronics Engineering
Lucas Carvalho de Borba, Aerospace Engineering
Luiz Felipe Sabbagh de Almeida Santos, Mechatronics Engineering
Luiz Pscheidt, Aerospace Engineering
Marcelo Savian, Aerospace Engineering
Maria Eduarda Rosa da Silva, Automotive Engineering
Maria Luiza Ricardo Martins, Interdisciplinary Program in Mobility
Mayra Silvyane Lopes da Silva Conceição, Transportation and Logistics Engineering
Naila Roberta Maccari, Naval Engineering
Natan Pereira Vital dos Santos, Automotive Engineering
Pablo Freitas Santos, Mechatronics Engineering
Pablo Rodrigues Jorge, Aerospace Engineering
Raphael de Freitas Bernardo, Aerospace Engineering
Rodrigo Nathan Fretola Baessa, Mechatronics Engineering
Ruan José da Silva, Interdisciplinary Program im Mobility
Samuel Fabrizio Scarpari, Aerospace Engineering
Saul Andres Serrano Ossorio, Mechatronics Engineering
Stefany de Souza, Automotive Engineering
Thiago Almeida Eidt, Mechatronics Engineering
Timóteo Felzke da Rosa, Automotive Engineering
Vilson Garcia, Mechatronics Engineering
Vitória Ferreira Curado, Automotive Engineering
Yasmin Kioko Shimabuku da Silva, Aerospace Engineering

Captain:
Eduardo Felipe Benczik, Automotive Engineering

Captain's Message:

The Eficem team has provided me with knowledge that is beyond the university. It was the place where I was able to link what I studied in the classroom with the practice, being able to develop and apply new knowledge. That's where I've been able to figure out which way I should really go in my professional career and to find out what I really want for my future as an engineer. It brought me the will to deepen my studies and to apply and discover new ideals.

It also gave me the first opportunity to get to know another country, with its different cultures, universities and students, and to share my own culture with them.

Such a large baggage of responsibilities brought me many benefits; without a doubt the greatest of them was the competitive advantage to be recognized in the job market and to be hired by a global company.

E3 - UFSC Energy Efficiency Team (since 2009)

Website: http://www.e3.ufsc.br
Contact information: petersonpereiradacosta@gmail.com

Advisor:
Prof. Henrique Simas
Department of Mechanical Engineering, School of Technology, UFSC, Florianópolis, SC, Brazil
Email: henrique.simas@ufsc.br

E3-EQUIPE UFSC
DE EFICIÊNCIA ENERGÉTICA

Main competitions

- Etapa Sul Brasileira de Eficiência Energética, Joinville, SC, Brazil
- Shell Eco-Marathon Brazil - Challenger Event, Rio de Janeiro, RJ, Brazil
- Shell Eco-Marathon Americas, Houston, Detroit, and Sonoma, USA

Main results

- Etapa Sul-Brasileira de Eficiência Energética
  Champion in the gasoline vehicle category (2016)
  Vice-champion in the gasoline category (2017)
- 1ª Shell Eco-Marathon Brazil - Challenger Event
  3rd place in the gasoline vehicle category (2016)
  1st place in the gasoline vehicle category, making the Latin American record of 525.6km/ L (2017)
  2nd place in the gasoline vehicle category (2018)
- Shell Eco-Marathon Americas:
  7th place - Houston, TX, USA (2012)
  8th place - Sonoma, CA, USA (2018)
- Holder of the Latin American energy efficiency record 525.6 km/L

The e3 - UFSC Energy Efficiency Team - was created in 2009 by students from several degree programs at Universidade Federal de Santa Catarina. Aiming to build a vehicle that travels the longest distance with the lowest possible energy consumption, the team competes with other universities and educational centers in national and international events. The training, experience and knowledge acquired over the years of the e3's existence has allowed the team to be the current holder of the Latin American energy efficiency record for the gasoline category, with its car being able to cover the equivalent of 525.6 kilometers with a liter of gasoline. This milestone is a source of pride for e3's team members and symbolizes an incentive in the search for more expressive results in the competition rankings in which they participate. In the e3, interdisciplinarity is highly valued and we currently have 18 active members coming from various programs and areas of study at UFSC who work voluntarily in the team. Students of the mechanical engineering, electronic engineering, automation and control engineering, oceanography, architecture and chemistry programs are outstanding. In the past, physics, journalism, psychology and mathematics students, among others, were also part of the team. In the calls for new members, the aim is to encourage the recruitment of students from different areas, in order to further expand the variety of knowledge shared among members and enrich their academic experience. The team's challenge is to develop innovative and optimized solutions to minimize vehicle fuel consumption. The project consists of the construction of vehicles with gasoline- and ethanol-driven engines, using the experience and technology developed at UFSC and by the volunteer group of students.

The mission of e3 – to contribute to the research and development of efficient vehicles – goes beyond the purely technological aspects, as it advances in the consolidation of a training culture that integrates professionals from the most diverse areas of study at UFSC. Students who are part of the e3 team are attentive and build the necessary knowledge to seek excellence in their work, aiming at society's quality of life from the development of more sustainable technologies.

Captain: Peterson Pereira da Costa, Mechanical Engineering
Members:
Daniel Cabral da Silva, Mechanical Engineering
Fábio Alves Villalon, Mechanical Engineering
Felipe Gabriel, Mechanical Engineering
Guilherme Batista, Automation and Control Engineering
Gustavo Finger Stresser, Mechanical Engineering
Jucemar Paes Neto, Electronic Engineering
Letícia Pamplona Cabral, Mechanical Engineering
Lucas de Deus Silva, Mechanical Engineering
Lucas Firme de Azevedo, Chemistry
Marcelo Freitas Merizi, Mechanical Engineering
Matheus Eduardo da Silva Diogo, Mechanical Engineering
Matheus Macedo de Roma, Mechanical Engineering
Maycon Elder da Cunha Filho, Mechanical Engineering
Nicolas da Silva, Materials Engineering
Pedro Bissaro Carvalho, Electronic Engineering
Peterson Pereira da Costa, Mechanical Engineering

E3 - UFSC Energy Efficiency Team

Captain:
Peterson Pereira da Costa, Mechanical Engineering

Captain's message

Academic life is not easy, especially when it comes to engineering. During the program, I felt unmotivated countless times, because of the difficulties of the degree. I noticed that everyone in the team shared the same feeling, but everyone was always motivated to work on the project; even with the struggles of academic life, the team met to work and build the car. As we shared experiences and helped each other, there was a multiple motivation. When members were thinking of giving up some course because they did not do well in a test, for example, they arrived at the workshop and changed their minds, because the others told them from their own experience that the situation was reversible. In this sense, the project goes far beyond building cars, it builds human relationships among members. Funny moments, sad moments, happy moments and delicate moments: all of them aggregate into professional training.


Formula

Ampera Racing (since 2012)

Website: http://amperaracing.com/
Contact Information: contato@amperaracing.com

Advisor:
Prof. Marcelo Lobo Heldwein
Department of Electrical Engineering, School of Technology, UFSC, Florianópolis, SC, Brazil
Email: marcelo.heldwein@ufsc.br

Main Competition
Formula SAE Brazil, Piracicaba, SP, Brasil

Main Results
- 3rd Place Overall, Formula SAE Brazil - Eletric (2014)
- 3rd Place Overall, Formula SAE Brazil - Eletric (2016)
- 2nd Place Cost Report, Formula SAE Brazil - Eletric (2016)
- 2nd Place Academic Panel, Veículo Elétrico Latino Americano (2016)
- 5th Place Overall, Formula SAE Brazil - Eletric (2017)

The Ampera Racing project consists in structuring a team made up of students from different degree programs at the Universidade Federal de Santa Catarina (UFSC), such as Electrical Engineering, Mechanical Engineering, Automation and Control Engineering, Materials Engineering, Production Engineering and others, to participate in an engineering competition. The team aims to develop and implement a competitive electric vehicle with a fully electric propulsion system to participate in the Formula SAE Brazil - Electric competition events. The purpose of the team is to act as a spokesperson for electric mobility by developing its members and transforming ideas into performance, always taking into account the group's values: sense of ownership, team spirit, sense of excellence, valuing people, hard work and hands-on learning. Through its participation in the Formula SAE Brazil - Electric competion, the Ampera Racing group seeks to provide training to its members in a way that they can acquire experiences in activities of the auto industry during their undergraduate studies. Working in groups, students deal with all aspects of an automotive engineering project, including project design, graphic design, cost studies, safety, manufacturing and testing steps. Currently, the project team is divided into two major areas: technical projects and management. The technical projects area is subdivided into the following branches: a) Materials, b) Powertrain, c) Electronics, d) Structure, and e) Dynamics, which are responsible for the planning, simulation and construction of the car design. The management area, in its turn, is subdivided into the following branches: f) Human Resources, g) Marketing, and h) Formula SAE, which are responsible for the operational, strategic and financial management of the project - this includes seeking financial and material support and promoting or participating in events, allowing the car design to advance and the electric mobility to be widespread.

Captain: Gustavo Rodrigues Nolla, Electrical Engineering
Members:
Alessandro Henrique Zamboni, Electrical Engineering
Alexandre Henrique Bresscovitt, Electrical Engineering
André Brüning Tenfen de Andrade, Civil Production Engineering
André Furlaneti de Melo, Electrical Engineering
André Luiz Fantinel, Electrical Engineering
Carlos Alfredo Pavão Ribeiro Guarda, Mechanical Engineering
Daniel Schmitt, Electrical Engineering
Douglas da Silva Santos, Mechanical Engineering
Eduardo de Souza Mangrich, Automation and Control Engineering
Eduardo Jordão de Castro, Mechanical Engineering
Fabricio Fontoura, Electrical Engineering
Felipe Trindade Radovanovic, Electronic Engineering
Francesco Bianchini Orlandi, Electrical Engineering
Gabriel Soares Flores, Computer Science
Gustavo Rodrigues Nolla, Electrical Engineering
Heloísa Kirchner Feldhaus, Materials Engineering
Jéssica Krawulski de Oliveira, Materials Engineering
João Luiz Caldas Duda, Mechanical Engineering
Juliana Klemba Bristot, Materials Engineering
Laíza Milena Scheid Parizotto, Mechanical Engineering
Laura Silva, Materials Engineering
Léo Vitor Peron, Mechanical Engineering
Leonardo Rodrigues Sbolci, Mechanical Engineering
Leticia Marques Alves, Product Design
Luís Eduardo Guollo Bertan, Mechanical Production Engineering
Luiza Machado Espíndola, Materials Engineering
Mariana Elias Machado, Electrical Engineering
Mariana Martignago Mezzari, Mechanical Engineering
Mateus Henrique Rodrigues Spiess, Mechanical Engineering
Matheus Antonio Bruxel, Materials Engineering
Matheus Hohmann, Electrical Engineering
Michelly Cardozo Gonçalves, Psychology
Paulo Henrique Pelegrini, Electrical Engineering
Renan Luz Mesquita, Psychology
Rhanna Kaenna Auler, Automation and Control Engineering
Rodrigo Miguel Costa, Electronic Engineering
Thiago Teixeira da Motta, Electronic Engineering
Vinicius Marcelino Orlandi, Automation and Control Engineering
Vitor Hammerschmitt da Veiga, Electrical Production Engineering

Ampera Racing

Captain:
Gustavo Rodrigues Nolla,
Electrical Engineering

Captain's message

Ampera is one of the best projects in the university to establish a connection between what we learn in the classroom and what we apply on real life. With a hands-on philosophy and a team made up of over 60 students from different areas of study, I was able to get in contact with the development of high-end technologies that are reshaping the future of tomorrow's mobility. Together with the technical know-how, team members are also confronted with the challenge of managing people, resources and time; and that's not all, since the team is always trying to innovate and to take charge in our community. In my 3 years in the team, we participated in over 10 events in Brazil and 2 abroad – interacting, in all of them, with companies, organizations and people that share with us the same vision: that of building an electrified and sustainable future. We also hosted 3 editions of our own event about the theme, bringing together several members of the government and the industry.

As team captain, I was able to work with more than 10 project leaders, learning how to plan, inspire and lead. One of the major challenges was to create a strategy to keep the team in a good position in the short and long term - helping members to build a better vision of project and people management and definitely helping me share one of the best experiences in my life.

Formula CEM - Combustion and Electric Motorsport (since 2010)

Website: http://www.formulacem.ufsc.br/
Contact information: formulacem@gmail.com

Advisor:
Prof. Modesto Hurtado Ferrer
Department of Mobility Engineering, Joinville School of Technology, UFSC, Joinville, SC, Brazil
Email: ferrer.m.h@ufsc.br

Main competition
Formula SAE Brazil, Piracicaba, SP, Brazil.

Main results
- 1st place Real Case (2016)
- 1st place Management (2015)
- 3rd place Drivetrain (2016)
- 3rd place Frame (2015)
- 3rd place Cost Report (2015)
- 3rd place Cost Report EV (2017)
- 5th place Real Case EV (2017)

The main goal of the Formula CEM team is to develop competition vehicle prototypes with internal combustion engine (IC) and electric engine (EV) for the formula SAE competition. Its vision is to become a national reference in the next three years, aimed at solving engineering problems with creativity and innovation, coupled with the socio-environmental commitment.

The mission pursued by the team is to contribute to the development of competencies and ethical principles in its members, to promote innovative solutions applicable to the design and development of formula SAE prototypes, and to act as agents of transformation for the national and international industry.

The values that support the work are: spirit of creativity and innovation; reliability; results orientation; systemic vision; commitment to costs; commitment to the environment; teamwork; and self-confidence.

The composition of the team is multidisciplinary and its members are students of the engineering programs from the Joinville School of Technology (CTJ). The team is organized in two sectors - technical and administrative - which are subdivided in areas (engine, body/frame, fahrwerk, electric, drivetrain, marketing, fundraising, and logistics) to meet the design specificities of both vehicles.

To be part of the team, students must have: good interpersonal relationship skills; resilience; proactivity; responsibility; commitment; self-knowledge; and leadership.

Since its inception, the team has been driven by enthusiasm and challenges, committed to working for the development of competitive and sustainable prototypes and adopting a philosophy of work similar to that used by an assembly company, in a laboratory scale.

In this sense, the use of tools for project management, geometric and numerical modeling, control of manufacturing processes and quality management of processes and products have contributed to a more careful analysis of problems and more assertive decision making, allowing a harmonious teamwork and a daring, rational and competitive project.

An indispensable factor in the execution of the project has been the integration of the team with local companies and with the faculty body, which contribute with materials, equipment, engineering services and technical advice. It is important to acknowledge the institutional support received from the Programs' Advisors, the School's Dean and the Prorector for Outreach and Extension.

Within the scope of the University, the project has been targeted for the development of curricular activities in undergraduate courses, as well as for final projects, scientific initiation projects and extension activities, contributing for the consolidation of the Institutional Educational Project.

Formula CEM - Combustion and Electric Motorsport

Captains:
Alan Moura Pastre (Combustion Engine – IC)
Giórgio Gabriel Spricigo (Electrical Engine – EV)
Members:
Agustinho José Dalprá, Automotive Engineering
Alan Moura Pastre, Automotive Engineering
André Filipe Lambert Pereira, Automotive Engineering
Anna Carolina Uhlemann, Transportation and Logistics Engineering
Ariel Gustavo Avi, Automotive Engineering
Arthur Henrique Mallmann, Mechanical Engineering
Brandon Gonçalves Eler, Automotive Engineering
Bruno Granella Serpa, Aerospace Engineering
Bruno Korb, Automotive Engineering
Caio Luiz Anderle de Souza, Automotive Engineering
Carlos Roberto Schwaab, Automotive Engineering
Daniel José Beber, Mechatronics Engineering
Eron Moraes Espíndola, Automotive Engineering
Estephane M. M. Tagata Tenguan, Automotive Engineering
Fabio Knabben, Automotive Engineering
Fernanda Maragno Freitas, Automotive Engineering
Gabriel Borges Marthendal, Automotive Engineering
Gabriela Zatta Gallo, Mechatronics Engineering
Giorgio Gabriel Spricigo, Aerospace Engineering
Guilherme Brunelli Zanelato, Automotive Engineering
Gustavo Cisz Reinert, Automotive Engineering
Herick Douglas Pereira, Automotive Engineering
Jhordan Bif de Pelegrini, Automotive Engineering
João Paulo Vaccaro, Automotive Engineering
João Vitor Pessoa, Automotive Engineering
José Peteck Júnior, Mechatronics Engineering
Keila da Silva Sant'Anna, Naval Engineering
Leonardo Batista da Silva, Aerospace Engineering
Leone S. Vieiras Dalla Bernardina, Automotive Engineering
Luccas Scaravelli, Automotive Engineering
Luckyan Kanigoski Quintino, Automotive Engineering
Luryan Fortkamp Marques, Automotive Engineering
Marcus Vinicius Becker, Automotive Engineering
Matheus Beuther, Automotive Engineering
Matheus Birkhan Dias, Automotive Engineering
Matheus De Moraes Macagnan, Automotive Engineering
Matheus Strobel, Automotive Engineering
Paulo Bloemer, Automotive Engineering
Pedro Antonio, Automotive Engineering
Pedro H. de Oliveira Dellagiustina, Automotive Engineering
Pedro Henrique Stella Costa, Automotive Engineering
Pedro Teles Gandolpho, Automotive Engineering
Renan Koji Minakawa Fujii, Automotive Engineering
Rodrigo Inocencio Cane, Automotive Engineering
Samuel Henrique Vieira Marques, Automotive Engineering
Valdir Lopes de Araújo Junior, Automotive Engineering
Vanderleia Pries, Transportation and Logistics Engineering
Vinícius Akio Nomura, Automotive Engineering
Vinícius Almeida, Interdisciplinary Program in Science and Technology
Vinicius Batista Zilli, Aerospace Engineering
Yago Matheus Rex, Automotive Engineering

Captain:
Alan Moura Pastre
(Combustion Engine – IC)

Captain:
Giórgio Gabriel Spricigo
(Electrical Engine – EV)

Captain's message

The team has shown me the reality of an engineering professional. Only attending engineering classes, I wouldn't have the same opportunities as a project member. Being in contact with major industry partners and being able to carry out all the steps of a project, reaching the development and validation of racing cars, is an experience that is difficult to achieve today even if working as an automotive engineer.

In 2018, I will be completing 5 years in this extension project focused on prototype competition. Throughout my experience as a university student, I looked for environments that allowed me to expand my knowledge and develop skills in automotive engineering subjects. During my involvement with the Formula SAE Extension Project, I worked in several areas, starting as the responsible person for the exhaustion project and working today as the team captain. In the team, I had the opportunity to gain expertise in developing a complex project and in the art of managing people facing various engineering problems. I am a young man with many challenges ahead and I am sure that all the experiences and knowledge acquired so far constitute the basis for reaching new steps.

Formula UFSC (since 2010)

Website: http://formula.ufsc.br/
Contact information: formula.ufsc@gmail.com

Advisor:
Prof. Rodrigo de Souza Vieira
Department of Mechanical Engineering, School of Technology, UFSC, Florianópolis, SC, Brazil
Email: rodrigo.vieira@ufsc.br

Main competition
Formula SAE Brazil, Piracicaba, São Paulo, Brazil

Main results
- 5th place - Business Presentation, 14th Formula SAE Brazil, Piracicaba, São Paulo, Brazil (2018)
- 6th place - Cost Report and Presentation, 14th Formula SAE Brazil, Piracicaba, São Paulo, Brazil (2018)
- 15th place overall, 8th Formula SAE Brazil, Piracicaba, São Paulo, Brazil (2012)
- 16th place overall, 10th Formula SAE Brazil, Piracicaba, São Paulo, Brazil (2014)
- 20th place overall, 14th Formula SAE Brazil, Piracicaba, São Paulo, Brazil (2018)

Established in 2010, the Formula UFSC team has the mission of training its members through the challenges of designing, building and testing a high-performance single-seater car, powered by a combustion engine, to take part in the Formula SAE competition – an event organized by the Society of Automotive Engineers (SAE). With multidisciplinary work teams, research and testing, all members have the possibility to apply in real life the theoretical knowledge learned in undergraduate courses, develop interpersonal skills and prepare themselves for the job market.

The Brazilian Event takes place every year in Piracicaba City, São Paulo State. Along four days of competition, judges evaluate the projects and prototypes, which are divided into internal combustion and electric powered vehicle categories. A number of tests are carried out on the track to check aspects such as safety, acceleration and endurance.

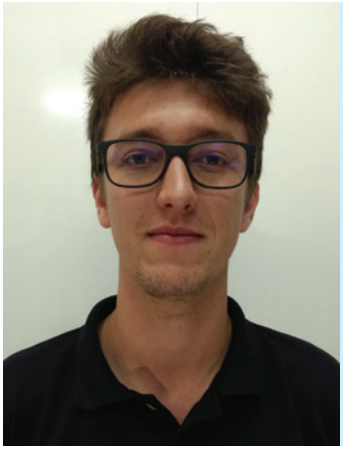
After participating seven times in the national competition, Formula UFSC is composed of 40 members, among undergraduate and graduate students of different degree programs at the Universidade Federal de Santa Catarina.

The competition requires high level of technical, administrative and managerial knowledge, since the work involves much more than basic calculations, including structural and fluid dynamics simulation, fundraising, project development methodologies and team management. The team is divided into the areas of: aerodynamics, chassis, vehicular dynamics, electronics, external relations, powertrain and main administration, which is responsible for the administrative affairs and the team management.

In addition to learning with practice, members improve their knowledge by participating in various internal training sessions. High performance is sought through efficient management for the development of a lighter and efficient vehicle. In this way, the team seeks to fulfill its purpose of developing and improving the performance of the prototype and disseminating the knowledge acquired.

Captain: Diego dos Santos, Mechanical Engineering
Members:
Adriano Calicz, Mechanical Engineering
Andre Lenz Barbosa, Mechanical Engineering
Antônio Edson Rocha Filho, Mechanical Engineering (Graduate Program)
Ayan Cardoso Monteiro, Mechanical Engineering
Bruna Carpes de Freitas, Automation and Control Engineering
Diego dos Santos, Mechanical Engineering
Diogo Yu Xavier Ikeda, Graduate – Mechanical Engineering
Eduardo Tambosi Lazzari, Mechanical Engineering
Felipe Dalla Vecchia Lourenço, Mechanical Production Engineering
Felipe de Lima Rosa, Automation and Control Engineering
Fellipe Augusto Filipim Lavaqui, Mechanical Engineering
Filipe Schurhaus Machado, Mechanical Production Engineering
Gabriel dos Santos Grings, Mechanical Engineering
Gabriel Pereira Da Silva Morais, Mechanical Engineering
Gabriel Pintarelli, Design
Guilherme Henrique Almeida Silva, Mechanical Engineering
Guilherme Santos Machado, Mechanical Engineering
Hugo Tanabe do Livramento, Administration
Jéssica Schroeder, Food Engineering
Lucas Leichtweis Dos Santos, Mechanical Engineering
Lucas Schroeder, Mechanical Engineering
Luis Felipe Ávila D'Aquino Noronha, Mechanical Engineering
Luis Otavio Cortes Magalhaes, Mechanical Engineering
Luiz Paulo Guimarães de Azevedo Sousa, Mechanical Engineering
Maria Claudia Régio e Silva, Mechanical Engineering
Maria Júlia Mezzari, Mechanical Engineering
Mateus Laner, Mechanical Engineering
Milton Júnior Schneider, Mechanical Engineering
Murilo Muniz Ozol, Mechanical Engineering
Norberto Koch Mendes Junior, Mechanical Engineering
Patrick Metzner Morais, Electrical Production Engineering
Rafael Henrique Fank Eidt, Mechanical Engineering
Rômulo Renan Serafin, Graduate – Mechanical Engineering
Ruham Victor de Souza Jacy, Mechanical Engineering
Samuel Henrique dos Santos van Riel, Automation and Control Engineering
Tassiane Neves Astute, Material Engineering
Thiago de Jesus de Araujo Rios, Mechanical Engineering (Graduate Program)
Thiago Martins Prim, Mechanical Engineering
Thiales Barbosa Madalena, Mechanical Engineering
Vitor Hélio, Mechanical Engineering
Vitor Hugo Patzlaff, Mechanical Engineering

Formula UFSC



Captain:
Diego dos Santos,
Mechanical Engineering

Captain's message

I always dreamed about working on Formula 1, and that is why I wanted to join to the Formula UFSC team in the first semester of my undergraduate studies. Since then, I have had the opportunity to learn much more about the automotive world. I have been able to experience what engineering is all about. Here we use design and simulation softwares, we learn about the manufacturing of mechanical components, among other topics concerning both high-performance automotive projects, and other engineering areas.

Becoming the team captain, after being the leader of the powertrain team, I have had the opportunity to manage a project and an entire work group. In this new experience, I had to learn different techniques for managing activities, time, people and projects in order to provide to all of us with the best season the team has ever experienced. Always aiming to create a strong and solid team, I was able to learn in practice how relevant human resources management really is in a technical project and I understood the importance of teamwork to achieve any goal.

Thanks to the complexity involved in designing a Formula SAE vehicle, to the team's freedom to innovate and deepen its knowledge in areas of interest, and also to the experience of working with such a diverse group, I feel much more complete and ready to face the challenges that will arise in the job market. I recommend everyone who wants better qualifications to look for competition teams or other extension activities. It made all the difference in my academic life, and I believe it is indispensable for those who want to stand out.

Prototypes in infrastructure

InfraTec (since 2016)

Website: http://infratec.ufsc.br/
Contact information: infratec.jve@contato.ufsc.br

Advisor:
Prof. Marcelo Heidemann
Department of Mobility Engineering, Joinville School of Technology, UFSC, Joinville, SC, Brazil
Email: marcelo.heidemann@ufsc.br

Main competition

APO-Ibracon, Congresso Brasileiro de Concreto, Brazil

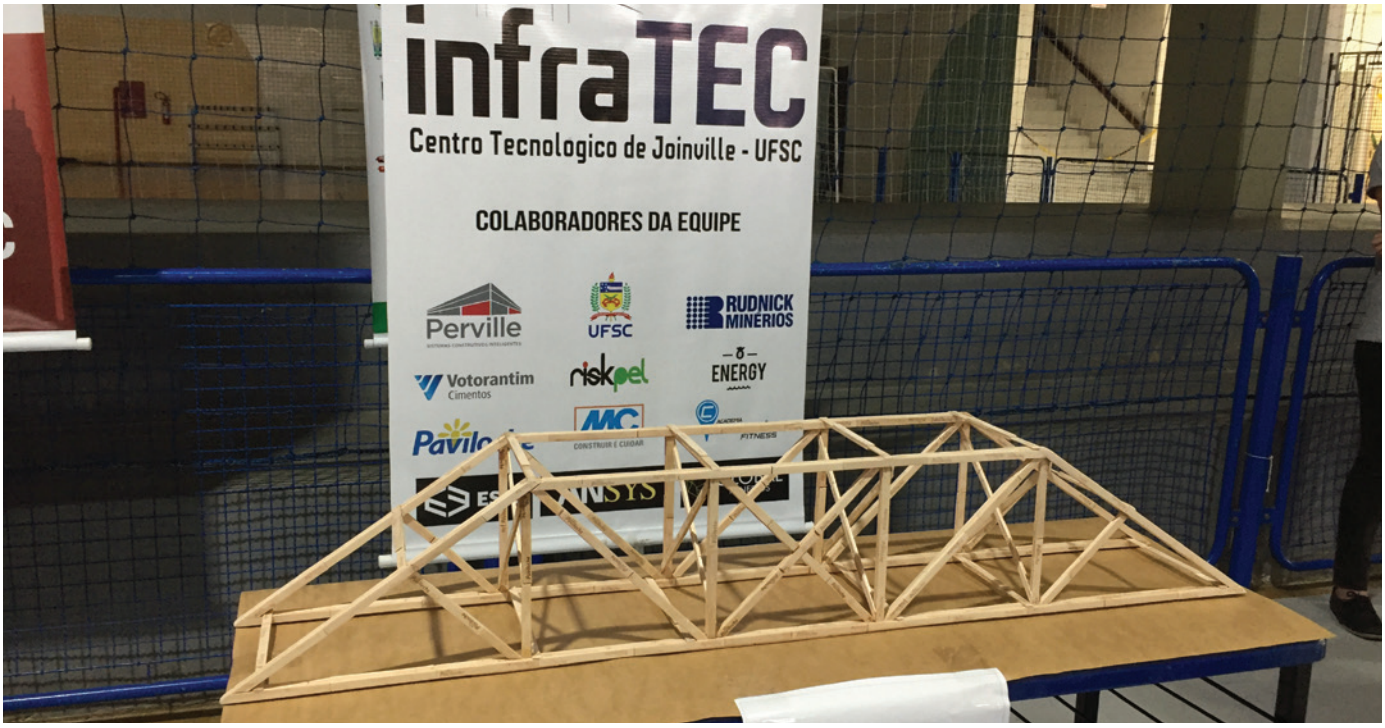
Main results

- Champion of UDESC/Maccaferri Slope Challenge 2018, Joinville, SC, Brazil
- Champion of UDESC Bridges Challenge 2018, Joinville, SC, Brazil

The objective of the team is to develop the project, execution and performance evaluation of prototypes and to participate in competitions. Examples of such prototypes are bridges using alternative materials, porticos made with high performance materials and soil retaining structures, all of them in reduced scale. Additionally, the team promotes competitions and challenges among students of the Joinville Campus, in order to increase the number of people reached by the team's activities and to improve the quality of its projects. The team also visits high schools where it develops challenges aiming to encourage the students' interest in subjects related to engineering and technology.

InfraTec is composed of two main sectors: the administrative and the technical sector. The administrative sector is subdivided into marketing, finance and secretariat. The technical sector is subdivided into :

- Structures, aimed at the elaboration of structural prototypes in general, prioritizing truss structures with alternative materials. Currently, the group works in the development of bridges/structures using popsicle sticks.



- Geotechnics, focused on the execution of prototypes for slope stabilization, such as reinforced and nailed soil, gravity walls and sheet pile walls.
- Construction materials, working with high performance concrete and aimed at obtaining high strength materials (under flexural and compression loads) with low density for application to reinforced concrete frames.

The members of InfraTEC are students of the Civil Infrastructure Engineering Program at UFSC, Joinville Campus. The main characteristics of its members are: commitment, responsibility, proactivity, determination and competitiveness.

Captain: Maria Eduarda Paul, Civil Infrastructure Engineering
Members:
Alecsander Nogueira Moro, Civil Infrastructure Engineering
Bruna Carolina de Souza, Civil Infrastructure Engineering
Bruna Sell, Civil Infrastructure Engineering
Denio Gilson Ferreira, Civil Infrastructure Engineering
Douglas Stasiak, Civil Infrastructure Engineering
Edilson VidalCivil Infrastructure Engineering
Edson Alvim Krüger Junior, Civil Infrastructure Engineering
Felipe Muchalovisk, Civil Infrastructure Engineering
Geandle Fagundes, Civil Infrastructure Engineering
Guilherme Weiss, Civil Infrastructure Engineering
Gustavo Moreira Ramos, Civil Infrastructure Engineering
Homero Pytlovanciw, Civil Infrastructure Engineering
Igor de Jesus, Civil Infrastructure Engineering
Marcela Spada, Civil Infrastructure Engineering
Maria Augusta Chiamolera, Civil Infrastructure Engineering
Maria Eduarda Paula, Civil Infrastructure Engineering
Mariana Lara Monteiro Vieira, Civil Infrastructure Engineering
Matheus Marcos Martins, Civil Infrastructure Engineering
Monique Fin de Oliveira, Civil Infrastructure Engineering
Tulio Henrique Costa Souza Pimenta, Civil Infrastructure Engineering
Victor Hugo Duarte de Andrade, Civil Infrastructure Engineering
Vinícius Ramon Krause, Civil Infrastructure Engineering
Vinícuios Hunzicker Ferreira, Civil Infrastructure Engineering
William Pereira, Civil Infrastructure Engineering

InfraTec

Captain's message

For me, the InfraTec team is very important. It is an achievement for all Civil Infrastructure Engineering students as this is where we can develop and apply our knowledge. Since the team was created, I grew together with my colleagues, whether in successful or difficult moments.

With the practical activities, I learned many issues further than theory, as, for example, the construction of soil retaining structures. But we learned more than engineering-related matters. We are a large group with different thoughts and opinions, and this coexistence is nice, because we deal with differences and plurality, while all of us are working towards the same goals.

We have 3 technical areas and this make us a large family. We are always together for any situation. Despite our difficulties, people are trying to do the best for our team and this partnership gives me a lot of good personal and academic experiences.

Captain: Maria Eduarda Paul, Civil Infrastructure Engineering


Robotics

Quantum Team (since 2017)

Website: quantumteamufsc.wixsite.com/home
Contact information: quantumteamufsc@gmail.com

Advisor:
Prof. Luciano Lopes Pfitscher
Department of Energy and Sustainability, School of Sciences, Technologies and Health, UFSC, Araranguá, SC, Brazil
Email: luciano.pfitscher@ufsc.br

Main competition
Winter Challenge, São Caetano do Sul, SP, Brazil.

Main results

The team participated in the 13th and 14th Winter Challenge, in São Caetano do Sul, SP, Brazil, in 2017 and 2018, respectively. The Winter Challenge is promoted by Robocore and it is the greatest robot combat event in Latin America. In 2018, 540 robots were registered to compete in all classes of the event.

In the "Combat" class, the best position of Quantum Team in the ranking was in 2017, with the "Antares" Robot, winning 11th place in the Lightweight Combat category. Antares was the first robot developed by the team. The Lightweight category admits robots up to 27.2 Kg and it is the maximum category of the competition.

In the "Sumo" class, the best position of Quantum Team in the ranking was in 2018, with the "Gordox" Robot, winning 9th place in the Radio-Controlled 3kg Sumo category.

Quantum Team is a competition team in the area of robotics founded in May 2017 by students of the School of Sciences, Technologies and Health at the Universidade Federal de Santa Catarina (UFSC), Araranguá Campus, Brazil. The main objective of the team is to develop robots for national and international competitions.

Currently, the team has 24 student members of the Computer Engineering, Energy Engineering and Information and Communication Technologies Programs. In its members, the following positive characteristics stand out: leadership, creativity, search for innovation, motivation and teamwork.

To consolidate its work, the team is structured in sectors: Administrative, Financial, Marketing and Project (Planning and Development) sectors, in which each member plays an essential role for the team's success.

The main competition in which the team participates is the "Winter Challenge", held regularly in July, in São Caetano do Sul, São Paulo. The event is promoted by Robocore and it is ranked as one of the main robot combat events in Latin America. Quantum Team participates with robots in the Lightweight Combat, Featherweight Combat and Radio Controlled 3kg Sumo categories.

The development of robots involves knowledge of electronics, sensors and actuators, microcontroller programming, communication systems, storage and efficient use of energy, materials, and competition strategies. Reusable materials (gears, bearings, motors and batteries) are prioritized for the construction of the prototypes, as well as donated and/or low-cost materials. In addition, the team has the support from and uses manufacturing equipment of the Instituto Federal de Santa Catarina (IFSC) - Araranguá for the construction of the robots.

With the participation in competitions, new experiences are acquired, leading to improvements in the developed projects. Knowledge is shared among team members and with society, such as in schools and exhibition events. The team also uses social networks - Facebook, Instagram and Youtube - to promote and encourage the development of projects in the areas of engineering and robotics. In this sense, the project contributes to UFSC and its mission to produce, systematize and socialize knowledge with a view to building a just and democratic society and guaranteeing quality of life.

The team believes that academic competition is a way to develop positive skills and attitudes in people, such as leadership, discipline, communication, teamwork, and so on. The developed activities promote the academic and professional qualification of the involved students, contribute to their learning process and encourage the application of the interdisciplinary knowledge acquired in undergraduate courses.

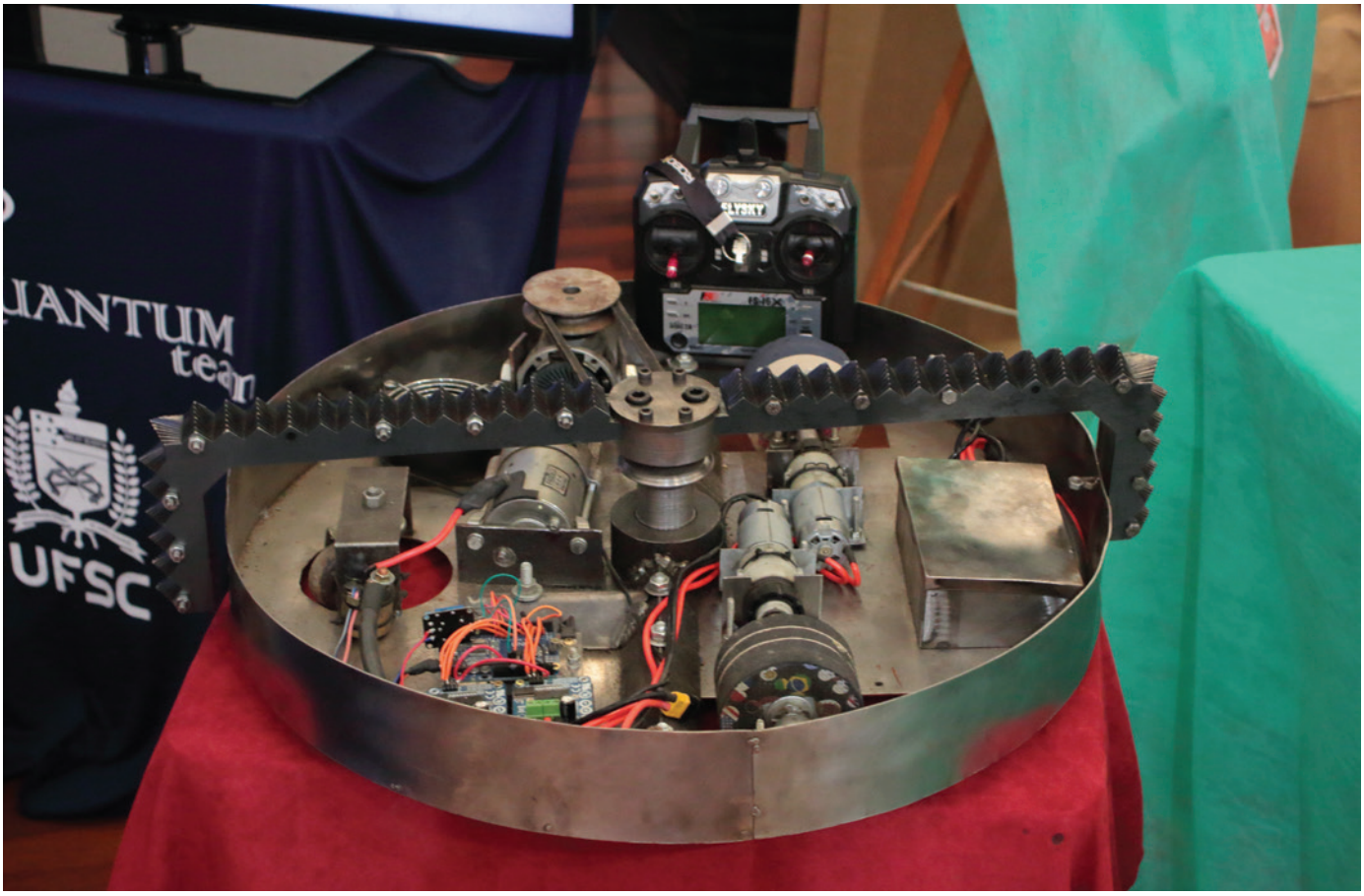
Captain: Alef Julio Schaefer Cerutti, Energy Engineering
Members:
Artur Augusto Ribeiro Cardoso, Energy Engineering
Bruno da Silva Cipriano, Energy Engineering
Deividi Ricardo Salame, Energy Engineering
Felipe Henrique Verones Pereira dos Santos, Computer Engineering
Fernando Justino da Silva Dias, Energy Engineering
Filipe Antunes, Energy Engineering
Gabriel Garcia Prudencio, Energy Engineering
Gustavo Mohr, Energy Engineering
Henrique Vefago Albino, Information and Communication Technologies
Isaque Machado, Energy Engineering
Jonathan Possenti Damasceno, Energy Engineering
João Vitor da Rosa Batista, Computer Engineering
Julia Rauber Silveira, Energy Engineering
July Chassot Scherer, Computer Engineering
Leandro Seiti Kakimoto Silva, Computer Engineering
Luis Fernando Pinto de Lara, Computer Engineering
Matheus Francisco Batista Machado, Computer Engineering
Mayza Sousa Stein, Energy Engineering
Nicolas Beraldo, Computer Engineering
Nicolas Cechinel Rosa, Computer Engineering
Samuel Augusto Pasquali de Azevedo, Energy Engineering
Sulivan Graebin, Energy Engineering
Vitor Mihael Harissis, Computer Engineering

Quantum Team

Captain:
Alef Julio Schaefer Cerutti, Energy Engineering

Captain's message

The Quantum Team is currently composed of 24 members, and it is growing and gaining space. Gradually, we are making the Team not just a group of people who represents the University, but also a kind of professional propeller. Our University has three basic pillars: teaching, research and outreach. I believe that our team relies on these pillars when we apply the knowledge acquired in the classroom, allied to the scientific knowledge obtained through research, to build something which will finally be brought to the community, and in our case also to competitions. The sectors within the team enable us to develop knowledge in areas such as project, management and finance, giving us real insights on how to deal with these issues in practice. In addition, the teamwork is also a way of working beyond the classroom, motivating students to remain in the University and contributing to reducing dropout rates. Furthermore, the team allows us to suggest and test our ideas, think, create, learn, work in group and establish new friendships and ties that allow us to become citizens more concerned and committed to the evolution of science and humanity.



UNIVERSIDADE FEDERAL DE SANTA CATARINA
Pró-Reitoria de Extensão - PROEX

Rua Desembargador Vitor Lima, 222, sala 301, Bairro Trindade
Florianópolis – Santa Catarina – Brasil | CEP: 88040-400
http://proex.ufsc.br | proex@contato.ufsc.br | +55 (48) 3721-7428