

INSTITUTO MAUÁ DE TECNOLOGIA



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ELECTRONIC ENGINEERING SÃO CAETANO DO SUL

# ELEC TRONIC



## WHAT DOES AN ELECTRONIC ENGINEER DO?

Electronic engineers are responsible for feasibility studies, as well as the supervision and execution of services related to systems employing electronic components, equipment and devices. They are responsible for projects ranging from immense communication networks, development of applications with programmable electronic systems and embedded systems, telecommunications projects, to the design of tiny electronic circuits.

Electronic engineers are qualified to work in the following areas:

- Industries including Electronics and Home Appliance Automation;
- Development and design of new devices and systems, involving signal processing and information, electronic automation, telecommunications, biomedical and embedded systems;
- Developing automatic start systems for industrial machines;
- Industrial process management;
- Providing technical consultancy and expertise services;
- Implementation of projects and inspection of industrial facilities associated with the development and/or use of electronic circuits;
- Scientific and technological research.

## THE JOB MARKET

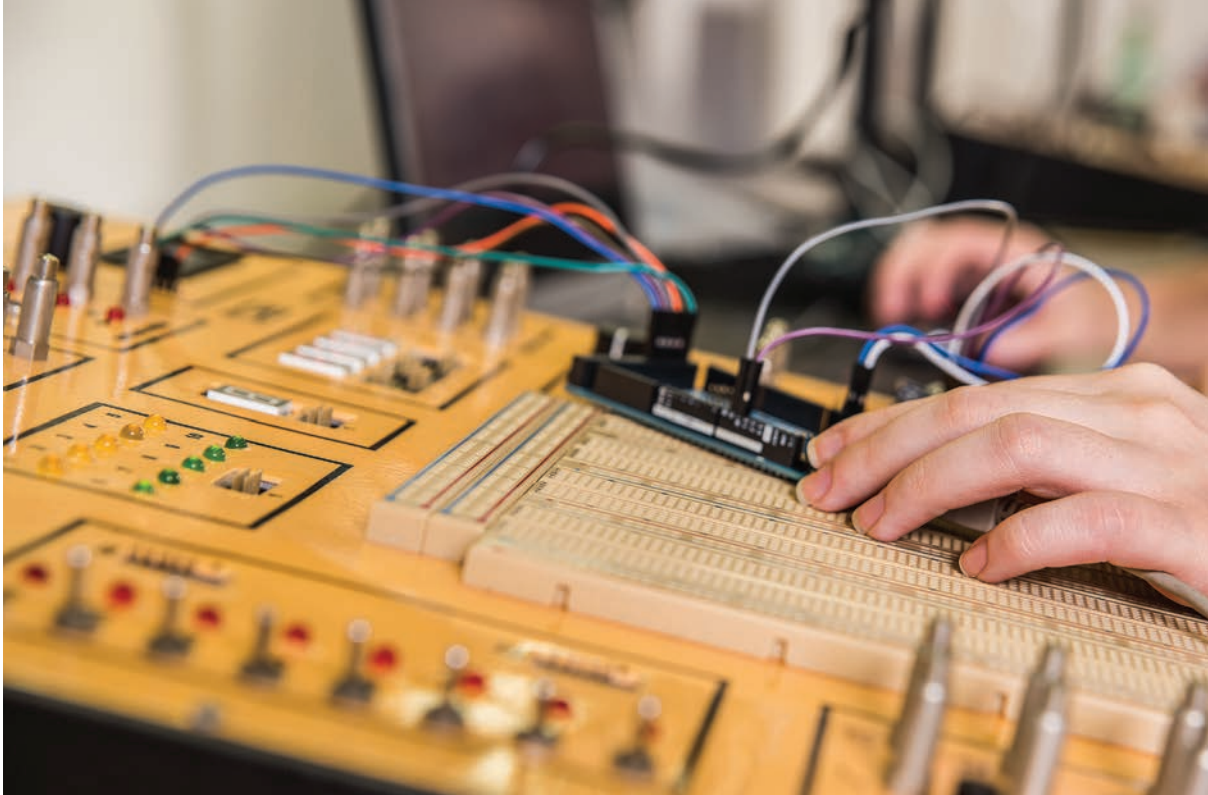
The job market for electronic engineers offers a wide range of opportunities and demands a large number of professionals, especially in regions with large concentration of manufacturing, retail and industry-specific companies. Currently, the lack of qualified professionals has created an enormous shortage of engineers qualified to work in technology-intensive fields.



# ELEC TRONIC

**PROGRAM LENGTH:  
DAYTIME CLASSES: 5 YEARS.**

**LOCATION:  
SÃO CAETANO DO SUL CAMPUS**



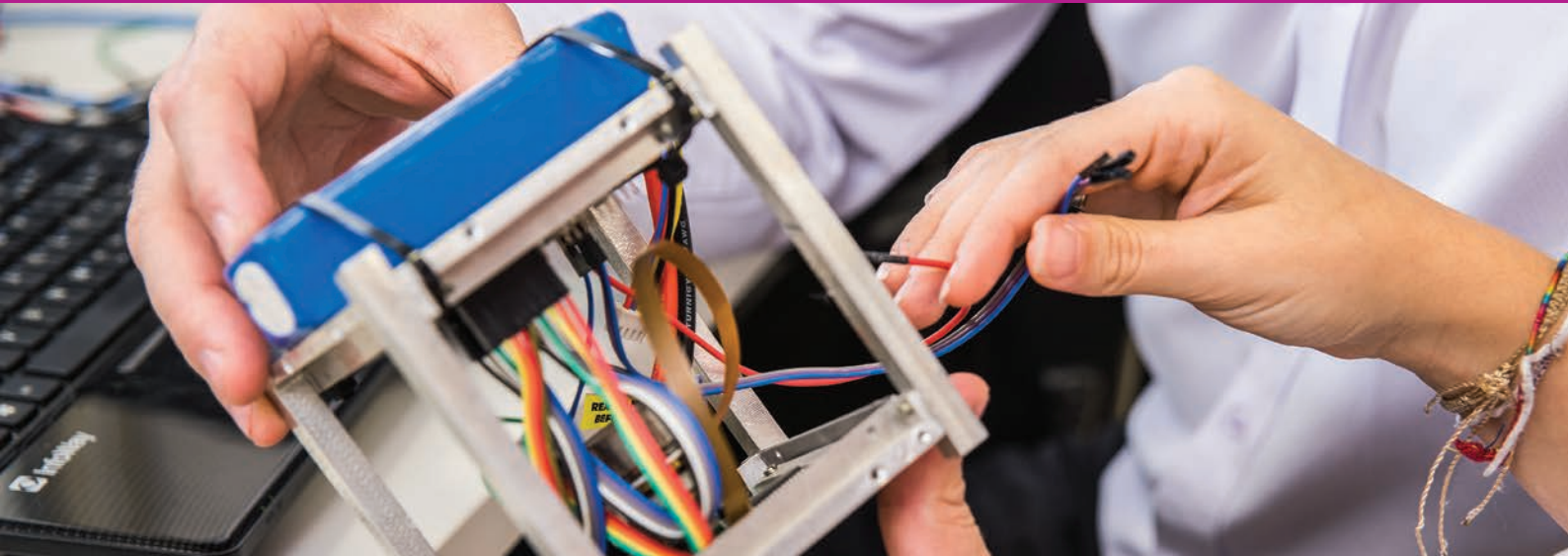
## **THE ELECTRONIC ENGINEERING PROGRAM AT IMT**

IMT provides a broad-based education for Electronic Engineering students, integrating the Telecommunications, Computer Systems, Embedded Electronics and Industrial Process Automation fields. In addition to developing scientific and technological skills, the program also offers human and social focus, giving students a unique advantage in the job market.

**DURING THE FIRST YEAR OF THE ENGINEERING PROGRAM AT IMT, ALL STUDENTS PURSUE THE SAME COURSE OF STUDY. WHEN ENROLLING FOR THEIR SECOND YEAR, STUDENTS CAN CHOOSE THEIR MAJOR.**

# THE PROGRAM OFFERS:

- The best laboratory infrastructure in Brazil, with state-of-the-art equipment and software;
- Integration between theory and practice: students involved in project development since their first year in the program;
- Development of integrated projects involving all Engineering disciplines, Design and Business Administration;
- Contact with the labor market: projects developed in partnership with businesses, solving real-world problems;
- Integration with the Research Center, which offers opportunities for internships and jobs in companies from several industries;
- Opportunity to be in constant contact with professionals already working in the field through lectures, workshops and events.
- Flexible learning path;
- Development and analysis of Electronic Engineering projects, using computer and lab simulations and studies of real-life situations in the field;
- Several opportunities to participate in academic competitions, technological studies and undergraduate research;
- Differentiated curriculum that allows students to develop new skills – communication, collaboration, creativity, innovation, critical thinking, problem solving, planning and management, diversity, and much more;
- Innovation, Leadership and Entrepreneurship Week, integrating the Engineering, Design and Business Administration fields.







## AWARDS AND ACCREDITATIONS

- 4 stars in Guia do Estudante
- Partnerships with large corporations: Globo (Broadcasting and Entertainment), GS1, Omnisys, Metalfrio and Synergy.
- Student teams have won numerous academic competitions: Baja SAE, Fórmula SAE, SAE Aerodesign, the Energy Efficiency Collegiate Marathon and at other various Robotics Competitions.

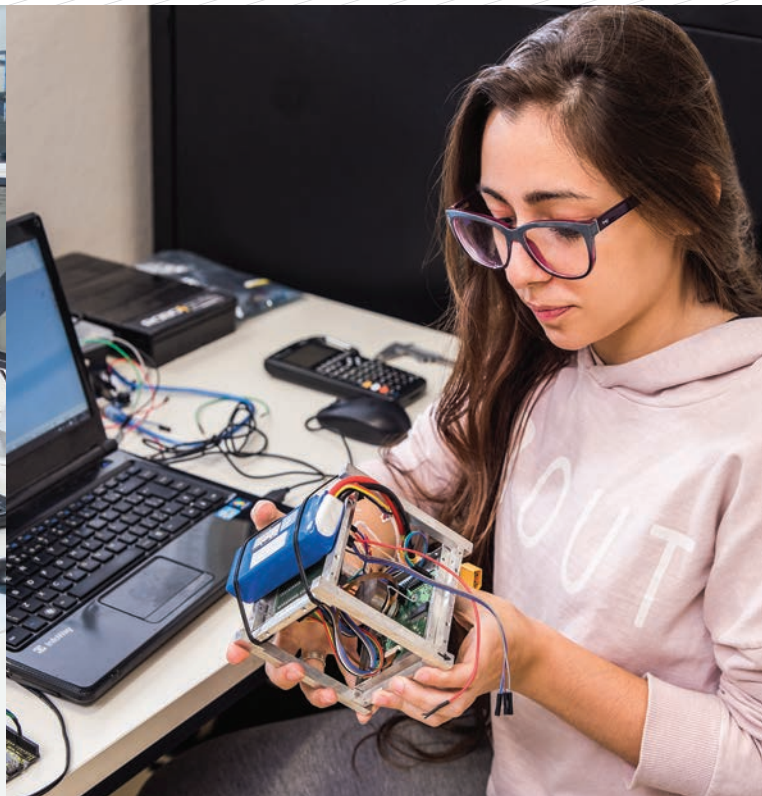
## SPECIAL PROJECTS AND ACTIVITIES

In addition to conventional classes, students engage in essentially practical projects and activities in which they must work in groups composed of students enrolled in different programs and program years. There are more than a hundred projects and activities in progress, which take advantage of the excellent infrastructure available at IMT.

## ACADEMIC COMPETITIONS

- Aerodesign
- Model Aircraft
- Baja Mauá
- Concreto Mauá
- Gravity Car Race
- Inova Mauá
- Eco Mauá
- Mauá Racing
- Robótica Mauá
- Mauá Júnior - Student-led non-profit strategy consulting firm
- eSports Mauá







# PART NER SHIPS

INTERNATIONAL  
PARTNERSHIPS



## SANDWICH YEAR

Cooperation agreement (with partial or full scholarships available) with several international Higher Education Institutions, where students attend a semester or a year in an institution abroad, earn international experience and may transfer some of their credits back to their program in Brazil.

## INTERNATIONAL PARTNERSHIPS AND OPPORTUNITIES



# IMT KEY FEATURES



Built on over 130,000 square meters, São Caetano do Sul campus offers some of the best-equipped higher education facilities in the country.



Over 100 laboratories – two labs per conventional classroom –, including the brand-new Fab Lab.



Comfort and safety – the campus has several cafes, snack bars and different social areas, as well as free parking for approximately 1,400 vehicles.



Several exchange programs offered in prestigious international institutions: dual degree agreements, sandwich and study abroad programs. Students can apply for scholarships, and transfer some of their credits back to IMT.



Distinguished academic staff that blends subject-matter experts with extensive industry experience, and professors holding Master's and PhDs from some of the best universities in Brazil and abroad.



A new and innovative educational approach that requires active learning experiences – from outside the classroom – for the purpose of curriculum integration: academic competition, partnerships with the business community, undergraduate research, teaching assistantships, and much more.



An academic environment that includes close cooperation with industry technology development projects involving both the faculty and student bodies.



# IMT KEY FEATURES



Activities focused on developing the social and emotional skills students need to succeed in their professional careers.



Special support to help students transition to academic life: assistance available at non-classroom hours, access to vast digital content (video lessons and exercises), tutoring.



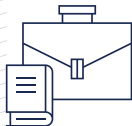
Curriculum flexibility, allowing students to choose complementary graduation projects and activities, as well as elective courses.



Minor programs, which provide students with an undergraduate specialization that is both complementary to and distinct from their main major, in areas such as Project Management, Business Management, Design and Innovation, Energy and Sustainability (programs revised on an annual basis).



A teaching philosophy focused on preparing students for innovation and entrepreneurship, developing projects that integrate Management, Design and Engineering.



Partnerships with the business community and mentoring by experienced executives to assist students with their term papers, adding a strong business focus, and connect their research to the marketplace issues and routine.



Undergraduate research opportunities offered in several IMT research groups that make significant contributions to scientific and technological advancement.

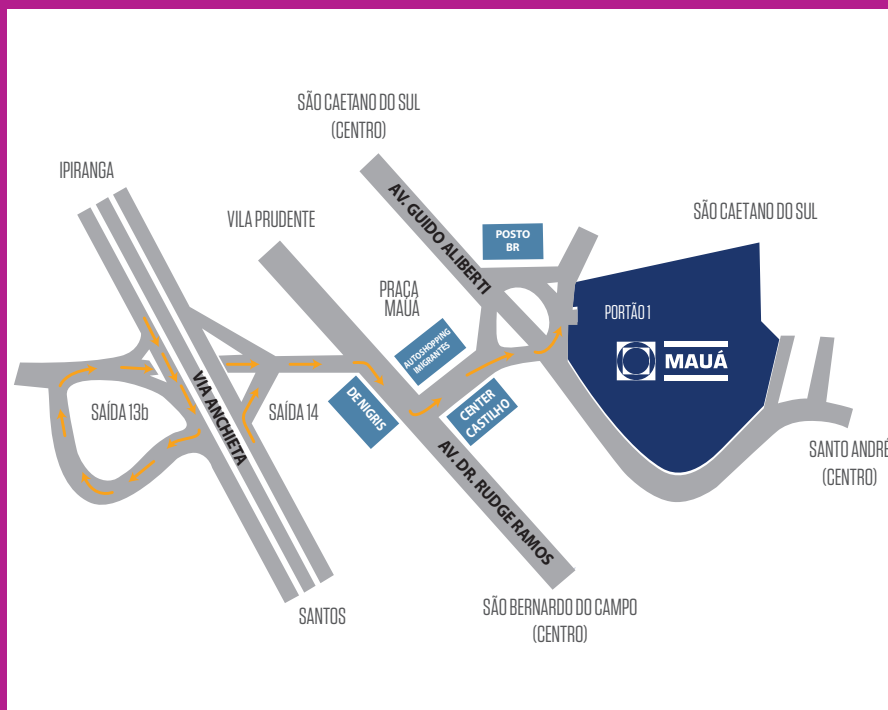






SÃO CAETANO DO SUL CAMPUS

# CAMPUS DIRECTION MAPS



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São Caetano do Sul, SP  
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