



### BACHELOR IN COMPUTER ENGINEERING





Create and Manage technologies and data systems for a wide range of applications.

- Duration 4 Years
- Total Credits 120 US credits
- **Modalities** Online and On Campus (Miami)
- **Department and Faculty** Bachelor of Science
- Language English and Spanish
- Scholarship Opportunities
- **Personal Tutor** Guides you through the whole journey
- Accreditation Accredited by the Accrediting Council for Independent Colleges & Schools (ACICS)
- **License** Issued by the Florida Department of Education, Commission for Independent Education (CIE)



### **Program Introduction**

The Bachelor's Degree in Computer Engineering aims to prepare students to mature into professionals that have an active role in their chosen field. The program is offered On Line and On Campus. The Bachelor's Degree in Computer Engineering prepares the graduate for developing and using technologies, as well as being able to design, produce and manage data elaboration systems in a wide range of applications.



At the end of the Computer Engineering Bachelor's Degree, graduates will have acquired a wide range of fundamental knowledge, especially in the math, information science (computing, electronics, telecommunications) and engineering management fields. By considering the rapid rise in society's need for information, the student will have developed the capacity to understand and value the working principles of processing systems, both in hardware (system architecture) and software aspects, being able to identify, formulate and resolve the diverse problems by using updated methods, techniques and instruments.

The following professional activities are included in the training course for the computer engineer:

The design and production of company information systems, the computerizing of public and private agency services through web technology, the development of multimedia and hypermedia systems and, the modeling and control of productive processes and complex systems, the development of computer systems based on the project techniques of HW/SW, the planning of systems based on architectural and network computing.



The graduates in Computer
Engineering will find jobs in
industries for automations and
robotics and public and private
firms involved in project,
development and management of
informatics and telematics systems.

Employment can be find in the following areas:

- Software Applications Planning and Implementing.
- · Computer Procedures Analysis.
- · Web Infrastructures Engineering.
- Software Engineering and Development.
- Networks and Embedded Systems architectural Engineering.
- Systems and Networks
   Administration and Management.
- · Web Master and Web Designing.



#### **1st Semester**

- · English Composition I (3 credits).
- · Sociology (3 credits).
- · College Mathematics I (3 credits).
- · Advanced Writing Techniques (3 credits).

### **2nd Semester**

- · College Mathematics II (3 credits).
- · English Composition II (3 credits).
- · General Psychology (3 credits).
- · Speech (3 credits).

#### **3rd Semester**

- · Macroeconomics (3 credits).
- · Microeconomics (3 credits).
- · World History (3 credits).
- · Statistics (3 credits).

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### 4th Semester

- · Operating Systems (3 credits).
- · Physics (3 credits).
- · Computer Architecture and System Software (3 credits).

### **5th Semester**

- · Algorithms and Complexity (3 credits).
- · Human-Computer Interaction (3 credits).
- · Computer Structure (3 credits).

### **6th Semester**

- · Computer Programming (3 credits).
- · Neural Networks and Fuzzy Logic (3 credits).
- · Networks and the Internet (3 credits).
- · Data Structures and Algorithm Analysis in C++ (3 credits).



#### 7th Semester

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- · Web Application Development (3 credits).
- · Information Retrieval (3 credits).
- · Fundamentals of Software Engineering (3 credits).
- · Artificial Intelligence and Knowledge Engineering (3 credits).

### **8th Semester**

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- · Advanced Algorithm Design (3 credits).
- · Project Management (3 credits).

### **9th Semester**

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- · Advanced Computer Programming (3 credits).
- · Information and Encoding (3 credits).
- · Installations and Systems Performance and Quality (3 credits).



#### **10th Semester**

- · Online Information System for Business (3 credits).
- · Intelligent Web System (3 credits).
- · Software Engineering and Quality (3 credits).

#### 11th Semester

- · Information System and Safety (3 credits).
- · Wireless Network and System (3 credits).
- · Embedded Software Engineering (3 credits).
- · Simulation Methods and Languages (3 credits).

#### **12th Semester**

· Computer Engineering Capstone Project (6 credits).

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### **Marconi International** University

The University is engaged in significant research and innovation in accordance with societal changes and progress, promoting the use of innovative learning methodologies by merging advanced technological solutions with traditional activities like lectures, workshops and seminars. A commitment to excellence and quality inspires our programs that prepare students to face global changes and to successfully apply their academic knowledge to real-life situations.



Marconi's mission is to provide innovative and affordable high-quality degree programs and learning opportunities to both domestic and international students alike, utilizing the latest technologies and responding to students' needs in their pursuit of academic, personal, and professional integrity.

We provide you...

- · Highly qualified international faculty ONLINE and ON CAMPUS courses.
- · Average of 12 students per class
- · Multi-cultural educational environment.
- · Opportunity to study in Miami.
- · Access to professional orientation services.
- · USA F1 VISA.
- Scholarship opportunities for applicants.



# Faculty and Professors

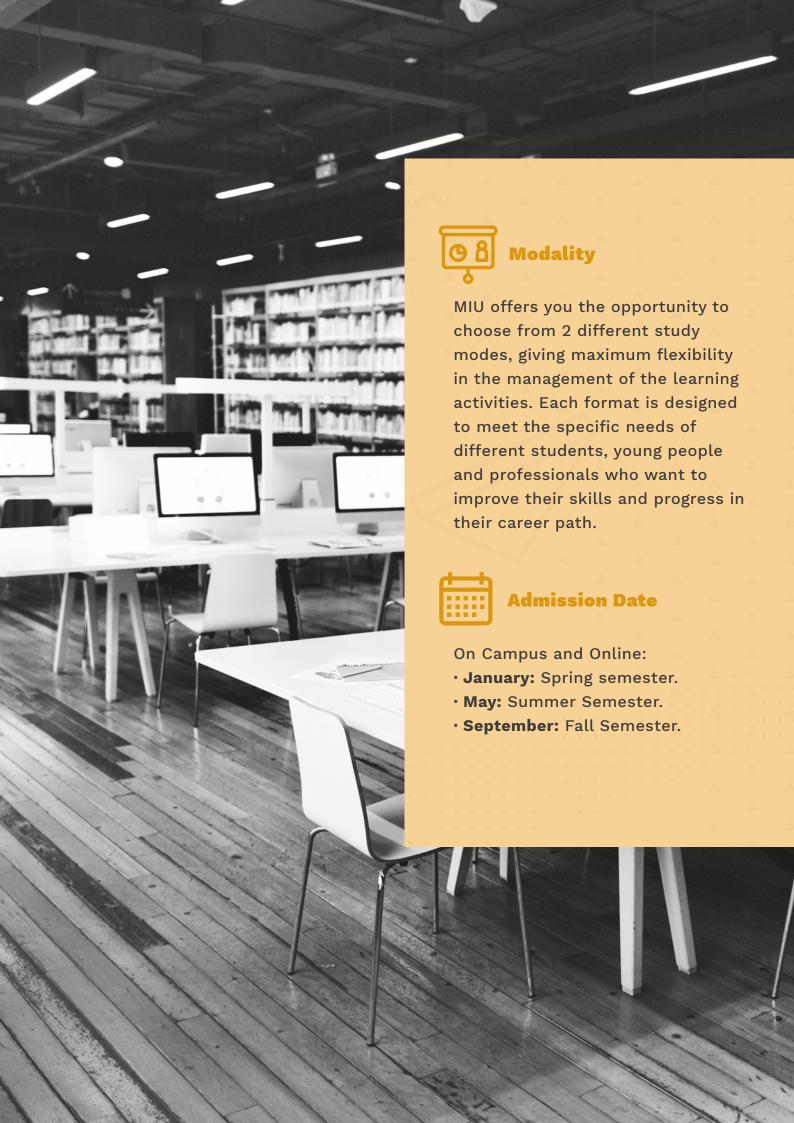
The Bachelor's faculty is characterized by highly qualified professionals in the field of Management, Finance and Marketing at the international level. The professors have been selected on the basis of their professional experience, so as to provide students with highly professional and immediate skills and knowledge in the workplace. Each teacher is engaged in research at national and international level and has positions at managerial level. Multiculturalism, which distinguishes the Professors' tutorial, ensures a continuous interaction and current content of the proposed content.



# License and Accreditation

Marconi International is licensed by the Florida Department of Education's Commission for Independent Education to offer post-secondary education programs and has authority to grant degrees under the laws of the State of Florida (www.fldoe.org).

The University is also accredited by ACICS - Accrediting Council for Independent Colleges and Schools (www.acics.org). Marconi International University is part of the Proeduca Group (www.grupoproeduca.com).





A new concept of online university as part of the PROEDUCA Group, Marconi International University offers 100% online teaching, a flexible educational solution which meets the needs of today's students. Marconi's innovative educational model integrates state-of-the-art technology with a personalized and high-quality education. The 100% online modality allows students to study wherever they are, interacting, collaborating and sharing experiences with their classmates and teachers. Around the world the PROEDUCA Group currently has:

- · More than 41,000 on campus and online students.
- More than 10,000 international students.
- Presence in 90 countries on 5 continents.
- More than 130 Undergraduate and Postgraduate degrees.
- More than 4,000 collaboration agreements signed to provide internship places for students.

At MIU we offer an effective pedagogical model that is based on 4 fundamental pillars:

- Learning Resources, like the Library, where you can access material, books and digital documents to prepare your subjects.
- Personal tutor, who supports and guides you from day one.
- Live online classes, also saved on the platform so you can see them at another time and as many times as you want.
- Continuous evaluation system, for a progressive and constant learning process.



The main campus of Marconi
International University is located
in the buzzing financial and
commercial center of Miami, in the
area between Downtown and
Brickell, Miami's largest growth
district, where the most prestigious
Florida colleges are located,
including Miami Dade University of
Miami, Miami International
University of Art and Design, Florida
International University.

The University has an area of 7210 square feet and has been specially restructured and designed to accommodate students, teachers and administrative staff.

#### The location includes:

- 4 classrooms for a capacity of 20 students each.
- An Auditorium that can accommodate up to 70 people.
- A library available for students and teachers, and a lounge area and a cafeteria for students.
- · A reception area.
- An audio-video recording studio.
   used by the professors to develop their online classes.
- · 7 Coffee lounge area.





Marconi has a Commission Credit Transfer Agreement that is responsible for carrying out the relevant recognition of prior learning. Call us and an advisor will analyze your particular case.

According to the regulations established by Marconi, the following may be recognized:

- · Credits obtained in other basic training subjects belonging to the branch of knowledge of the degree to which you want to accede.
- Other credits may be recognized, taking into account the cross-over of knowledge and competencies between subjects in the curriculum and other subjects taken previously by the student.
- Recognition of complete subjects is limited to those taken in Official Degrees. In the case of recognition of work experience, the student must accredit the corresponding professional experience according to specific criteria. All applications will be considered.