

## COMPUTER SCIENCE CAREER

### General Objective

To train Computer Engineers with a firm foundation in technical and scientific knowledge supported by a humanistic approach with ethical and social responsibility capable of leading, innovating and developing technological responses to solve society's problems and allow the development of the country aligned to national and international quality standards.

### Program Educational Objectives

PEO1: Our graduates will develop products and services based on computer systems that meet national and international quality standards.

PEO2: Our graduates will be able to lead, innovate and develop computer-based systems that contribute to the search for solutions to problems in various industries and academia.

PEO3: Our graduates will gain solid foundation of technical and scientific knowledge supported by a humanistic approach and ethical responsibility.

### Specific Objectives linked to knowledge:

- Develop the capacity for evaluation, scientific research and discernment of problems with regard to the treatment of the different fields of Computer Science.
- Strengthen the academic preparation, abilities, skills and methods required to enable the graduate the effective interaction with all the members of the organization where they participate in order to promote the use of technology, the application of system tools and the internal improvement processes.

### Specific Objectives linked to pertinence:

- Train professionals with leadership, entrepreneurship and innovation skills to address the occupational needs of public and private companies, and establish comprehensive ICT solutions in fields that affect the growth of Information and Communication Technologies, and the development of the knowledge Society.

### Specific objectives linked to learning.

- Assess the development of the Computer Science in different contexts with the help of a constructivist approach by using conventional and alternative methods and analysis in order to respond to the exponential changes in the field of Information and Communication Technologies.
- Perform practices in state-of-the-art laboratories to develop diagnostic, research and

analysis skills to respond to problems in the field of Computer Science, as well as to experience with new technologies.

- Use software and simulators to carry out practices focused on research and contribute with the development of different areas of knowledge related to Computer Science.
- Develop specific skills and abilities as future professional in Computer Science throughout accomplishing pre-professional internship activities in institutions, business or community environments, in public or private sectors which are considered appropriate to strengthen learning.

**Specific objectives related to integral citizenship.**

- Take action in the solution of the society's concerns with regard to the Computer Science field with technical solvency criteria, and taking part as human being mainly with reasoning based upon the Salesian principles.
- Understand the human being as an integral being and contribute to strengthen an intercultural and inclusive society to promote good living.
- Undertake actions guided by ethical principles, defend rights and promote the right to exercise citizenship in freedom and with the good customs.