

# PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE College of Engineering

### **Major in Electrical Engineering**

## I. Program Educational Objectives:

Students finishing successfully the program requirements obtain the Bachelor of Science in Engineering, with Major in Electrical Engineering.

The Program Educational Objectives for Major in Electrical Engineering are:

- Our graduates will have the knowledge and proficiency necessary for professional practice in Electrical and Electronic Engineering, including technical skills in areas such as Robotics and Automation, Electrical Energy, Signal Processing, Telecommunications, Astronomical Instrumentation, and Electronics.
- 2. Our graduates will develop technological innovation projects in Chile and/or abroad, generating solutions to complex engineering problems.
- 3. Our graduates will seek to grow professionally through lifelong learning and/or graduate studies within Electrical Engineering and beyond.
- 4. Our graduates will demonstrate a critical spirit on their performance and will conduct themselves with a personal and professional code of ethics, seeking to serve society.
- 5. Our graduates will have the ability to analyze and understand the relationships between technology and organizations, applying engineering methodologies in order to improve their management.
- 6. Our graduates will be able to collaborate globally, participating in interdisciplinary and culturally diverse teams, and advance in leadership positions throughout their careers.



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#### II. Student Outcomes:

- 1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- 2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- 3. An ability to communicate effectively with a range of audiences.
- 4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- 5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
- 6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- 7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

#### II. Student Admissions:

Students are initially admitted to a common study program that is the same for any engineering area. As student progress in time, programs differentiate according the engineering area.

Student Admission*		
Year	N° Students	
2011	543	
2012	553	
2013	716	
2014	732	
2015	719	
2016	726	
2017	732	
2018	740	
2019	772	

<sup>\*</sup>Regular Admission (PSU) and Special Admission (PSU Process).



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## III. Program Enrollment:

The official enrollment in the Major occurs in the third semester of the study program. The students register their preference in our Intranet information system (Siding) in an annual registration process, since this study program began in 2013 (2013 Curriculum or C2013).

Status	N° Students
Enrolled Students, cohort	33
2013	
Enrolled Students, cohort	51
2014	
Enrolled Students, cohort	41
2015	
Enrolled Students, cohort	53
2016	
Enrolled Students, cohort	43
2017	
Enrolled Students, cohort	40
2018	
Enrolled Students, cohort	48
2019	

## IV. Bachelor of Science in Engineering

The numbers below are from the biannual ceremony.

Bachelor of Science in Engineering	
YEAR	N° Students
2016	-
2017	16
2018	25
2019	50
Total	91