

Major in Electrical Engineering

I. Program Educational Objectives:

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

The Program Educational Objectives for Major in Electrical Engineering are:

- 1. Our graduates will have the quality 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 the management of both of them.
- 6. Our graduates will be able to collaborate globally, participating in interdisciplinary and culturally diverse teams, and advance in leadership positions throughout their careers.



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	

^{*}Regular Admission (PSU) and Special Admission (PSU Process).



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).

C2013		
Cohort	Status	N° Students
2013	Enrolled Students	4
	Students with no preference registered	1
2014	Enrolled Students	24
	Students with no preference registered	4
2015	Enrolled Students	43
	Students with no preference registered	9
2016	Enrolled Students	56
	Students with no preference registered	24
2017	Enrolled Students	57
	Students with no preference registered	68
2018	Enrolled Students	44
	Students with no preference registered	282



IV. Bachelor of Engineering Science Degree:

The numbers below are from the biannual ceremony.

Bachelor of Engineering Science Degree		
YEAR	N° Students	
2016	1	
2017	16	
2018	27	
2019	25	
Total	69	