

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:

- 1. 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.

PEOs approved by all constituents of the EE Program. Final promulgation by EE Program Committee on 19 January 2021.



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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.



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III. 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							
2020	808							
2021	827							
2022	844							
2023	811							

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

IV. Program enrollment and degree data:

ACADEMIC	ENROLLMENT YEAR*				UNDERGRAD PER COHORT						TOTAL		
YEAR	1st	2nd	3rd	4th	5th+	2013	2014	2015	2016	2017	2018	2019	UNDERGRAD**
2022	37	32	46	45	86	0	2	2	6	13	11	1	35
2021	33	46	47	48	100	0	2	5	22	23	4		56
2020	26	54	46	52	94	1	8	17	18	0			44
2019	52	44	54	59	101	10	24	20	3				57
2018	66	42	66	53	89	9	16	1					26
2017	48	66	61	65	41	14	2						16
2016	61	56	66	39		1							1
2015	49	64	34										
2014	39	34											
2013	30												

Last update April 11th, 2023.

- (a) First-year students declare their preference for Major during the first semester.
- (b) Second year students formally enroll Major during the first semester.