

# 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.

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.

## 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								
2024	819								

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



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# IV. Program enrollment and degree data:

ACADEMIC	ENROLLMENT YEAR				UNDERGRAD PER COHORT						TOTAL			
YEAR	1st(a)	2nd(b)	3rd	4th	5th+	2013	2014	2015	2016	2017	2018	2019	2020	UNDERGRAD
2023	50	62	38	50	56	2	1	0	2	5	10	12	0	32
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 March 7<sup>th</sup>, 2024.

<sup>(</sup>a) First-year students declare their preference for Major during the first semester.

<sup>(</sup>b) Second year students formally enroll Major during the first semester.