

# PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE College of Engineering

## Major in Mechanical Engineering

#### I. Program Educational Objectives:

Students graduating from the program obtain the Bachelor of Science in Engineering, with Major in Mechanical Engineering.

The Program Educational Objectives for the Major in Mechanical Engineering (B. Sc. Eng.) are the following:

1. Our graduates will demonstrate a self-critical and ethical spirit in their job performance in order to improve themselves through further studies in engineering fields to advance to leadership positions in the profession.

2. Our graduates will excel in the professional field of Mechanical Engineering by applying a deep working knowledge in areas such as: mechanical systems, energy systems, design for manufacture, and reliable material selection.

3. Our graduates will promote the creation of companies and innovate in broad areas of Mechanical Engineering, being capable of identifying new products, processes or services opportunities and find solutions to engineering problems.

4. Our graduates will collaborate and communicate effectively as members of interdisciplinary teams, to address the needs of the society and customers.

PEOs approved by all constituents of the ME Program. Final promulgation by ME Program Committee on 2021.

## 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



# PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE

College of Engineering

- 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*								
N° Students								
543								
553								
716								
732								
719								
726								
732								
740								
772								
808								
827								
832								

\*Regular Admission (PSU) and Special Admission (PSU Process).

#### 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	UNDERGRAD
2021	43	51	45	52	96	2	6	4	24	8	3	47
2020	48	39	54	28	111	4	8	15	11	1		39
2019	32	53	30	56	100	10	11	16	1			38
2018	52	30	68	58	102	18	22	3				43
2017	30	64	67	66	69	16	5					21
2016	67	61	71	70		6						
2015	72	63	71									
2014	50	34										
2013	39											

(a) First-year students declare their preference for Major during the first semester 2021.

(b) Second year students formally enroll Major during the first semester 2021.