

PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE College of Engineering

Major in Engineering in Operations Research

I. Program Educational Objectives:

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

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

- 1. Our graduates will be able to analyze complex systems and decision-making processes in their field of employment through the lens of operations research.
- 2. Our graduates will engage in lifelong learning, seeking out technical and professional growth, paired with an equally enriched ethical consciousness.
- 3. Our graduates will advance the objectives of their organizations, profession, and society in a rapidly changing world.
- 4. Our graduates will be global collaborators, and effective communicators, participating in interdisciplinary and culturally diverse teams.

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	

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

II. 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 2013	175
Enrolled Students, cohort 2014	208
Enrolled Students, cohort 2015	190
Enrolled Students, cohort 2016	170
Enrolled Students, cohort 2017	220



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Enrolled Students, cohort 2018	150
Enrolled Students, cohort 2019	149

III. Bachelor of Engineering Science Degree:

The numbers below are from the biannual ceremony.

Bachelor of Engineering Science Degree		
YEAR	N° Students	
2016	9	
2017	64	
2018	147	
2019	172	
Total	392	