

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 Science in Engineering, 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.

PEOs approved by all constituents of the OR Program. Final promulgation by OR Program Committee on 2020.

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.



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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					

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

IV. Program enrollment and degree data:

ACADEMIC YEAR	ENROLLMENT YEAR*				UNDERGRAD PER COHORT				TOTAL UNDERGRAD**	
	1st	2nd	3rd	4th	5th+	2013	2014	2015	2016	
2019	156	176	247	205	463	44	106	65	5	220
2018	176	247	206	238	401	79	82	12		173
2017	247	206	239	275	198	60	11			71
2016	206	239	276	208		10				10
2015	239	276	209							
2014	276	209								
2013	209									

*At the begginning of each academic year

** At the end of each academic year