

# TRANSCRIPT OF RECORDS

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<b>Name</b>	MADRID BECERRA, NATALIA MARCELA	<b>ID #</b>	18.728.716-2
<b>Career</b>	Industrial Engineering (3309-2010-01)		

Year	Period	Code	Subject	Credits	Grade
2012	1st Quar	510145	Introduction to University Physics	3	5,2
		520145	Introduction to University Mathematics	6	4,9
		530023	Introduction to University Chemistry	3	6,1
2012	2nd Quar	510147	Physics I	3	5,1
		525147	Algebra I	3	5,5
		527147	Calculus I	3	6,0
		530024	General Chemistry I	3	4,6
2012	3rd Quar	510148	Physics II	3	5,9
		525148	Algebra II	3	5,3
		527148	Calculus II	3	5,1
		530025	General Chemistry II	3	5,7
2013	1st Sem	503201	Programming Language	4	6,0
		521218	Ordinary Differential Equations	4	6,4
		521227	Calculus III	5	5,6
		523210	Statistics	4	5,5
		541251	Industrial Drawing	3	5,6
		546210	Introduction to Industrial Engineering	2	6,2
2013	2nd Sem	503401	Computing and Programming	4	6,1
		521230	Numerical Analysis	4	5,0
		521236	Complements of Calculus (Calculus IV)	4	5,3
		541202	Mechanics	4	4,6
		546320	Graphs and Algorithms	4	5,1
		890050	Communicative English, Basic Level I	5	5,8
2014	1st Sem	510226	Electromagnetism	4	5,4
		523311	Statistical Inference	4	5,7
		541203	Thermodynamics	4	5,8
		545518	Systems Theory	3	5,9
		546402	Optimization Methods I	4	5,7
		890051	Communicative English, Basic Level II	5	5,1
2014	2nd Sem	541209	Fluid Mechanics	4	4,0
		546201	Microeconomics	4	5,9
		546310	Statistical Data Analysis	4	6,7
		546319	Industrial Management	4	5,7
		546407	Optimization Methods II	4	5,9
2015	1st Sem	254406	Ergonomics	3	6,4
		503312	Computer Systems	4	6,6
		541215	Heat Transfer	4	5,7
		543202	Circuits and Electrical Machines	4	6,5
		544555	Introduction to Environmental Sciences	3	5,9
		546202	Macroeconomics	4	5,8
2015	2nd Sem	503380	Systems Development	4	5,9
		541450	Manufacturing Processes	3	6,4
		545315	Methods Engineering	3	5,9
		545328	General and Cost Accounting	3	5,8
		546419	Commercial Management	3	5,8
		546423	Simulation	4	6,5
		890052	Communicative English, Intermediate Level I	5	5,1

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<b>Career</b>	Industrial Engineering (3309-2010-01)		

Year	Period	Code	Subject	Credits	Grade
2016	1st Sem	540440	Industrial Chemical Processes	4	6,2
		546403	Economic Engineering	4	6,1
		546404	Production Systems Design	4	5,6
		546420	Financial Management	4	6,6
		546422	Production Control	4	6,2
		546446	Corporate Finance	3	6,6
2016	2nd Sem	546401	Production Scheduling and Planning	4	5,8
		546417	Project Preparation and Evaluation	3	6,2
		546431	Systemic Analysis of Industrial Plants	4	5,6
		546474	Human Resources Management	3	5,8
		580330	Multivariate Statistical Analysis Applied to Finance	3	6,8
		580430	International Financial Management and Financial Derivatives	3	6,7
2017	1st Sem	546421	Project Workshop	3	6,4
		546425	Strategic Management	3	5,9
		546430	Production Workshop	4	6,5
		546504	Industrial Projects Management	3	6,5
		805533	Legal Aspects of Business	3	5,5
2017	2nd Sem	546499	Undergraduate Thesis	20	7,0

**Notes:**

- Scoring range: 1,0 - 7,0. Passing grade: 4,0.
- Final Grade: 60% Subjects + 40% Undergraduate Thesis.
- One semester is equivalent to 17 weeks of classes. One quarter is equivalent to 11 weeks of classes.
- One credit is equivalent to one hour of theory lessons or two/three hours of practical lessons or laboratory per week.

**Undergraduate Thesis title:**

"Ex-post evaluation of the R&D tax incentive law in Chile"

**Final grade:** 6,3 (Approved with maximum distinction)

**Completion of curriculum:** June 25th, 2018




**Claudia Carrasco Carrasco**  
Associate Dean

CONCEPCIÓN (CHILE). January 24th, 2022

The Secretary General of University of Concepción who subscribes certifies that the signature of this document belongs to the Associate Dean of the Faculty of Engineering, Professor CLAUDIA CARRASCO CARRASCO. Concepción, Chile, January 25th, of 2022.



**MARCELO TRONCOSO ROMERO**  
SECRETARY GENERAL



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