



**MASTER'S DEGREE IN  
CHEMICAL AND BIOTECHNOLOGICAL PROCESS ENGINEERING  
DEGREE PROGRAMME 2025/2026**

Course contents are available at this [link](#)

**1<sup>st</sup> year**

Sem	Teaching course	SSD*	TAF*	Credits	h
1	Applied Statistics for Industrial Engineering	ING-IND/26	B	9	90
1	Principles of Chemical Engineering and Processes	ING-IND/24	B	9	90
2	Integrated course: Industrial and Energetic Processes				
2	- Module: Industrial Processes	ING-IND/27	B	6	60
2	- Module: Hydrogen Technology and Fuel Cells	ING-IND/27	B	6	60
2	Environmental Conscious Energy and Chemical Processes	ING-IND/25	B	9	90

**2<sup>nd</sup> year**

Sem	Teaching course	SSD*	TAF*	Credits	h
1	Process modeling and simulation	ING-IND/26	B	9	90
1	Chemical and Biological Reactors	ING-IND/24	B	9	90
1	Integrated course: Safety and environmental chemical engineering with design project				
1	- Module: Safety and Reliability of Chemical Processes	ING-IND/25	B	6	60
2	- Module: Environmental Chemical Engineering	ING-IND/25	B	6	60
2	Advanced systems of process control	ING-IND/26	B	9	90

**Additional credits to be acquired**

Sem	Activity	SSD*	TAF*	Credits	h
	2 courses from tab 1		C	12	
	Elective activities <sup>1</sup>		D	9	
	English Language Test - B2 or other activities <sup>2</sup>		F	3	
	Internship		F	6	
	Final Examination		E	12	


**TOTAL CREDITS 120**

- (1) The elective activities must be consistent with the personal educational plan and they need approval by the Degree Programme Board.



- (2) The credits of European language level can be acquired passing the English language test at B2 European level (CEFR) at Centro Linguistico d'Ateneo. If the student can show appropriate certification of B2 European level (CEFR) knowledge other activities could be acquired.

Tab 1. Courses TAF C (2 from the list)

Sem	Teaching course	SSD*	TAF*	Credits	h
1	Fundamentals of Machine Design	ING-IND/14	C	6	
1	Industrial Energy Technologies	ING-IND/09	C	6	
1	Biochemistry	BIO/10	C	6	
1	Project management	SECS-P/08	C	6	
1	Applied Thermodynamics	ING-IND/11	C	6	
1	Surface Forces and Adsorption 	CHIM/02	C	6	
2	Chemistry and Technology of Food	CHIM/10	C	6	
2	Microbiology	MED/07	C	6	

The semester could change; check in [Course bulletin](#) of the academic year.

**\*Abbreviations**

SSD	Scientific Disciplinary Sector
TAF	Type of Educational Activity