







**MASTER'S DEGREE IN  
CHEMICAL AND BIOTECHNOLOGICAL PROCESS ENGINEERING  
DEGREE PROGRAMME 2021/2022**

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: Energetic Processes	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	Safety and environmental chemical engineering with design project 	ING-IND/25	B	12	120
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 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	Applied Biotechnology	CHIM/08	C	6	
1	Biochemistry	BIO/10	C	6	
1	Chemistry and Technology of Food	CHIM/10	C	6	
1	Physical Chemistry of Interphases*	CHIM/02	C	6	
1	Project management	SECS-P/08	C	6	
2	Microbiology	MED/07	C	6	

**\*Abbreviations**

SSD	Scientific Disciplinary Sector
TAF	Type of Educational Activity