







MASTER'S DEGREE IN ELECTRONIC ENGINEERING
DEGREE PROGRAMME 2024/2025

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


1st year

Sem	Teaching course	SSD*	TAF*	Credits	h
Common courses					
1	Integrated Course: Electronic Systems and Components				
1	- Module: Reliability of Electronic Components	ING-INF/01	B	5	50
1	- Modulo: Design of Integrated Systems	ING-INF/01	B	6	60
1	Integrated Course: Integrated Circuits				
1	- Module: Digital Integrated Circuits	ING-INF/01	B	5	50
1	- Module: Analog Integrated Circuits	ING-INF/01	B	5	50
2	Automatic Measurement Systems	ING-INF/07	B	6	60
2	Integrated Course: Pervasive Electromagnetics				
2	- Module: Pervasive wireless systems	ING-INF/02	B	5	50
2	- Module: Radio-Frequency Planar Circuits	ING-INF/02	B	5	50
2	Integrated Course: Control and Wireless Communication Systems				
2	- Module: Wireless Networks Access Technologies	ING-INF/03	C	3	30
2	- Module: Digital Control	ING-INF/04	C	3	30
Curriculum Embedded Electronics					
2	Machine Learning 	ING-INF/05	C	7	70
Curriculum Electronic Technologies for Emerging Applications					
2	Nanoelectronics 	FIS/03	C	5	50

2nd year

Sem	Teaching course	SSD*	TAF*	Credits	h
Common courses					
1	Mixed-signal circuits and systems 	ING-INF/01	B	6	60
Curriculum Embedded Electronics 					
1	Advanced embedded systems	ING-INF/01	B	8	80
1	Artificial Intelligence	ING-INF/05	C	6	60
1	Internet of Things and Digital Twins	ING-INF/03	C	6	60
2	Integrated Course: Cyber-Physical Systems				
2	- Module: Analysis and control of cyber-physical systems	ING-INF/04	C	6	60
2	- Module: Cyber-physical system architectures	ING-INF/01	B	5	50



Curriculum Electronic Technologies for Emerging Applications 					
1	Data acquisition technologies	ING-INF/07	B	6	60
1	Microwave systems and sensors	ING-INF/02	B	7	70
1	Optoelectronics, diagnostics and aerospace applications	ING-INF/01	B	7	70
Integrated Course: Advanced Technologies for Electronic Devices and Applications					
2	- Module: Flexible Electronics and Applications	ING-INF/01	B	7	70
2	- Module: Biosensors and Bioelectronics	ING-INF/06	C	6	60

Additional credits to be acquired

Sem	Activity	SSD*	TAF*	Credits	h
	Elective activities ¹		D	12	
	Other activities or English Language Test ²		F	3	
	Other activities		F	3	
	Final Examination		E	15	

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 must be acquired.

***Abbreviations**

SSD	Scientific Disciplinary Sector
TAF	Type of Educational Activity