



**MASTER'S DEGREE IN
ENVIRONMENTAL ENGINEERING FOR SUSTAINABLE DEVELOPMENT
DEGREE PROGRAMME 2026/2027**

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

1st year

Sem	Teaching course	SSD*	TAF*	Credits	h
Common courses					
1	Numerical Computing: Methods, Models and Algorithm	MATH-05/A	C	6	60
1	Scientific Computing Workshop	MATH-05/A	F	3	30
1	Environmental Geoengineering	CEAR-02/B	B	6	60
1	Environmental Fluid Mechanics	CEAR-01/A	B	6	60
	Integrated Course: Remediation and Chemical-Physical Treatment of Soils				
1	- Module: Chemical-Physical Treatment of Soils	CEAR-02/C	B	6	60
2	- Module: Contaminated Sites Remediation	CEAR-02/C	B	6	60
2	Applied Geophysics	GEOS-04/B	B	6	60
2	Geodesign Lab	CEAR-12/A	F	3	50
2	Hydrogeology	GEOS-03/B	B	6	60
2	Impact Assessment and Environmental Rehabilitation	CEAR-02/B	B	6	60

2nd year

Sem	Teaching course	SSD*	TAF*	Credits	h
Common courses					
	<i>One course among:</i>				
1	Foundations and Earth Retaining Structures	CEAR-05/A	C	6	60
1	Computational Fluid Mechanics	CEAR-01/A	C	6	60
1	Remote Sensing for Environment Monitoring and Modelling	CEAR-04/A	C	6	60
1	Recovery of Secondary Raw Materials	CEAR-02/C	C	6	60
1	Urban and Regional Sustainability: Smart Cities and Ecosystem Services in Planning 	CEAR-12/A	C	6	60
2	Geochemical characterization	GEOS-01/D	C	6	60
2	Green and Applied Chemistry	CHEM-06/A	C	6	60
2	Environmental Economics	ECON-03/A	C	6	60
2	Design of Environmental Remediation and Decontamination Systems	CEAR-02/A	C	6	60
2	Safety and Project Management at Construction Sites	CEAR-02/B	C	6	60
2	Renewable Energy Technologies	IIND-06/B	C	6	60
	Integrated Course: Digital Platforms for Monitoring				
2	- Module: Hardware Platforms for IoT	IINF-01/A	C	3	30
2	- Module: Data Processing and Transmission	IINF-03/A	C	3	30



Curriculum Environmental remediation technologies					
1	Sustainable Solid Waste Management: materials and energy recovery 	CEAR-02/A	B	9	90
1	Wastewater Treatment Plants 	CEAR-02/A	B	9	90
2	Integrated Course: Treatment of Fluids and Waste Gases	CEAR-02/C	B	6	60
2	- Module: Treatment of Fluids				
2	- Module: Control and treatment of atmospheric emissions 	CEAR-02/A	B	6	60
Curriculum Geo-engineering and Land protection					
1	Integrated Course: Hydrogeological Protection				
1	- Module: Watershed and Stream Restoration Engineering	CEAR-01/B	B	6	60
1	- Module: Slope Instability and Hydrogeological Risk	GEOS-03/B	B	6	60
1	Integrated Course: Rock Engineering				
1	- Module: Rock Mechanics	CEAR-02/B	B	6	60
2	- Module: Excavation Engineering and Underground Works	CEAR-02/B	B	6	60
2	<i>Choose between:</i>				
2	Coastal Hydraulics	CEAR-01/A	B	6	60
2	Design and Management of Geoengineering Works for Environment Protection	CEAR-02/B	B	6	60
Curriculum Spatial and Environmental Planning					
1	Geodesign	CEAR-12/A	B	6	60
1	Integrated Course: Strategic Environmental Planning				
1	- Module: Environmental Planning 	CEAR-12/A	B	6	60
2	- Module: Strategic planning 	CEAR-12/A	B	6	60
1	Integrated Course: Planning Energy System				
1	- Module: Sustainable Urban and Territorial Planning	CEAR-12/A	B	6	60
2	- Module: Territorial Energy Systems: Analysis and Design	IIND-07/B	C	6	60

Additional credits to be acquired

Sem	Activity	SSD*	TAF*	Credits	h
	Elective activities ¹		D	12	
	English Language Test – B2 ²		F	3	
	Final Examination		E	15	

TOTAL CREDITS 120

- The elective activities must be consistent with the personal educational plan and they need approval by the Degree Programme Board.
- The credits of European language level can be acquired:
 - passing the English language test at B2 European level (CEFR) at Centro Linguistico d'Ateneo,
 - showing appropriate certification of B2 European level (CEFR) knowledge.



The Study Programme includes also the following laboratories which can be chosen by students to satisfy part of the credits of own free choice:

Sem	Laboratory	SSD*	TAF*	Credits	h
1	Advanced Biorefinery Laboratory 	CEAR-02/A		2	25
2	Environmental Geophysics Lab	GEOS-04/B		3	30
2	Workshop of Regional Planning	CEAR-12/A		3	45
2	Laboratory of Safety and Project Management at Construction Sites	CEAR-02/B		3	25

Other optional activities can be communicated on course web site.

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

***Abbreviations**

SSD	Scientific Disciplinary Sector
TAF	Type of Educational Activity