

MASTER'S DEGREE PROGRAMME IN ELECTRICAL ENGINEERING

Study programme for students enrolled in the academic year 2024-2025

1st YEAR	
MANDATORY UNITS FOR ALL	CREDITS
STATIC POWER CONVERTERS	9
COMPUTATIONAL ELECTRICAL ENGINEERING	9
ELECTRICAL MEASUREMENTS	9
ELECTRICAL POWER SYSTEMS	9
MANDATORY UNITS BY ADDRESS "GREEN TECHNOLOGIES & ENERGY INFRASTRUCTURES"	CREDITS
ELECTRICAL ENERGY GENERATION PLANTS	9
2st YEAR	
MANDATORY UNITS BY ADDRESS "GREEN TECHNOLOGIES & ENERGY INFRASTRUCTURES"	CREDITS
POWER SYSTEMS FOR INDUSTRY AND MOBILITY INFRASTRUCTURES	9
MANDATORY UNITS BY ADDRESS "MACHINES & DRIVES FOR INDUSTRY AND MOBILITY"	CREDITS
ELECTRIC DRIVES	9
ELECTRICAL MACHINE DESIGN	9
FREE-CHOICE UNITS (CARATTERIZZANTI) AMONG THE FOLLOWING ACTIVITIES (18 credits, max 21)	
UNITS	CREDITS
ELECTROHEAT TECHNOLOGIES FOR SUSTAINABILITY (1st YEAR)	9
RENEWABLE ELECTRIC ENERGY CONVERSION AND STORAGE (1st YEAR)	9
SYSTEMS FOR AUTOMATION (2st YEAR)	9
INDUSTRIAL ELECTROMAGNETIC COMPATIBILITY (2st YEAR)	9
NUCLEAR FISSION AND FUSION PLANTS (2st YEAR)	9
TECHNOLOGIES FOR HVAC AND HVDC TRANSMISSION SYSTEMS (1st YEAR)	6

COMPLITED ACCIOTED ELECTROMA OMETIC DECION (4 AND AR)	
COMPUTER ASSISTED ELECTROMAGNETIC DESIGN (1st YEAR)	6
ROAD ELECTRIC VEHICLES (2st YEAR)	6
PIEZOELECTRIC DEVICES (2st YEAR)	6
MEASUREMENTS AND TESTING OF ELECTRICAL MACHINES AND INSTALLATIONS (2st YEAR)	6
APPLIED CONTROL OF ELECTRIC CONVERTERS AND DRIVES (2st YEAR)	6
ENERGY STORAGE ENGINEERING (2st YEAR)	6
HIGH VOLTAGE MEASUREMENTS AND MODELS (2st YEAR)	6
FREE-CHOICE UNITS (AFFINI) AMONG THE FOLLOWING ACTIVITIES (12 credits)	
UNITS	CREDITS
ADVANCED CONTROL SYSTEMS (1st YEAR)	6
PHOTOVOLTAIC SCIENCE AND TECHNOLOGY (1st YEAR)	6
ELECTRICITY MARKET (1st YEAR)	6
PLASMA-BASED TECHNOLOGY FOR INDUSTRIAL APPLICATIONS (1st YEAR)	6
	6
BUSINESS MANAGEMEN (2st YEAR)	6
BUSINESS MANAGEMEN (2st YEAR) LIGHT ENGINEERING AND PHOTOMETRY (2st YEAR)	
	6
LIGHT ENGINEERING AND PHOTOMETRY (2st YEAR)	6
LIGHT ENGINEERING AND PHOTOMETRY (2st YEAR) ENERGY SYSTEM MODELLING AND SCENARIOS (2st YEAR)	6
LIGHT ENGINEERING AND PHOTOMETRY (2st YEAR) ENERGY SYSTEM MODELLING AND SCENARIOS (2st YEAR) COGENERATION AND COMBINED PLANTS (2st YEAR) ADDITIONAL FREE-CHOICE UNITS	6

FINAL NOTES:

The master's degree course proposes two addresses:

- GREEN TECHNOLOGIES & ENERGY INFRASTRUCTURES
- MACHINES & DRIVES FOR INDUSTRY AND MOBILITY

There are no preparatory units for attending second year activities.

Although not mandatory, classroom attendance is strongly recommended.

Students are required to submit their study plan through the UNIWEB platform as early as **the first enrolment year.**

This document was prepared in Spring 2024. Therefore, **it is strongly recommended to check**, at the beginning of each academic year, the correct placement of the course units in the semesters and the actual activation of the free-choice activities.