INSPIRING GLOBAL CHANGE SINCE 1222

SCHOOL OF ENGINEERING

ELECTRICAL ENGINEERING

The Master's degree programme in Electrical Engineering aims at training highly qualified professionals able to manage complex design problems and foster technological innovation in the field of electrical power systems. It provides a solid background in the domains of power electronics and electrical drives, electrical machine design, electromagnetic engineering, measurement and diagnostic techniques, and digital signal processing. Students also develop specific skills in the areas of electrical energy and renewable sources, electrical systems in transportation, and electrical system design and automation.



ELECTRICAL ENGINEERING

LEVEL Master

SCHOOL Engineering

DEPARTMENT Industrial Engineering

DURATION 2 years (120 ECTS)

START DATE October

LOCATION Padua, Italy

PROGRAMME COORDINATOR

Paolo Bettini

WFB

www.unipd.it/en/electricalengineering

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ENTRY REQUIREMENTS

- Bachelor's degree (or equivalent) in Electrical Engineering or related fields with proven skills in Mathematics, Physics, Industrial engineering, Electrical machines, Electrical power systems, and Electrical measurements.
- English language: B2 level (CEFR) or equivalent

PROGRAMME STRUCTURE

Common course units: Static Power Converters and Applications, Electrical Power Systems, Electrical Measurements, Computational Electrical Engineering.

Study track Machines and Drives for Industry and Mobility: Design of Electrical Machines, Applied Control of Electric Drives and Converters, Industrial Electromagnetic Compatibility, Computer Assisted Electromagnetic Design, Measurements on Electrical Machine and Plants, Road Electric Vehicles, Electrical and Electromagnetic Micronanodevices.

Study track Green Technologies and Energy Infrastructures: Power Plants for Energy Generation, Technologies for HVAC and HVDC Transmission Systems, Electroheat Technologies for Sustainability, Systems for Automation, Renewable Electric Energy Conversion and Storage, Nuclear Plants.

TUITION FEES AND SCHOLARSHIPS

Annual fees: up to € 2,900 (3 instalments)
Scholarships and fee-waivers for international students
available: www.unipd.it/en/funding-and-fees

CAREER OPPORTUNITIES

Graduates in Electrical Engineering easily find employment in many different fields. The main areas providing employment opportunities for electrical engineers are generation, transmission, distribution and utilisation of electrical energy; manufacturing of electrical machines and power electronic equipment; design, production, and operation of electrical systems for transportation (automotive, rail, maritime, and aerospace); industrial automation; electricity market.