

Electrotechnics

1. Admission Requirements:

• Prerequisites:

- Successful completion of high school studies and obtaining a baccalaureate degree or equivalent.
- Non-EU Citizens - Contingent upon the presentation of the Graduation Certificate from the preparatory year (excluding those who have completed their previous studies in the Romanian language) and obtaining the Letter of Acceptance issued by the Ministry of Education.
- EU Citizens + Swiss Confederation - Contingent upon the presentation of the Graduation Certificate from the preparatory year (excluding those who have completed their previous studies in the Romanian language) and the recognition of their studies by the National Centre for Recognition and Equivalence of Diplomas (CNRED).

• Entrance Exams:

The admission average of registered candidates is made up of:

- Average of the baccalaureate exam - weight 100%.

2. Degree Levels:

- Bachelor's Degree: 4-year program.

3. Curriculum:

• Core Courses:

Mandatory courses that all students in the program must take:

- Computer Aided Graphics.
- Computer Programming and Programming Languages.
- Mechanics and Strength of Materials.
- Electrical Circuit Theory.
- Digital Systems.
- Electromagnetic Field Theory.
- Electronics.
- Electrical and Electronic Measurements.
- Electrotechnical Materials.
- Systems Theory and Automatic Control.
- Numerical Modelling of the Electromagnetic Field.
- Modelling and Simulation of Electrical Circuits.
- Electromechanical Converters.
- Electrical Equipment.

- Electroluminescent Systems and Electric Lighting.
- Heating, Ventilation and Air Conditioning Equipment.

• **Electives:**

- Virtual Instrumentation in Electrical Engineering.
- Measuring Techniques and Sensors.
- Hydraulic and Pneumatic Drives.
- Technological Methods and Processes.
- Renewable Energy Sources.
- Distributed Power Generation Systems.
- Electricity Generation, Transmission and Distribution.
- Special Electrical Machines.
- Network Modelling and Simulation.
- Electric traction.

• **Major/Concentration:**

- Electrical Systems; Power Electronics and Electrical Drives; Instrumentation and Data Acquisition; Electrical Engineering Informatics; Electrical, Electronic and Energy Economic Engineering.

• **General Education Requirements:**

- Successful completion of the mandatory courses, seminars and labs, completion of the three internships and the bachelor thesis.

4. **Credits:**

- Each semester carries a weight of 30 ECTS, with a total of 240 ECTS required for graduation.

5. **Internships and Practical Experience:**

- Students have the opportunity to carry out their internship in companies and enterprises in Dambovită county and its surroundings, as well as in the teaching and research laboratories of the faculty or the Institute for Scientific and Multidisciplinary Research.

6. **Research Requirements:**

- Students carry out research activities in order to prepare their bachelor thesis.

7. **Academic Advising:**

- A supervising professor is assigned to each year of study and partially assisted activities are coordinated by supervising professors.
- The bachelor thesis is also supervised by a scientific supervisor.

8. **Extracurricular Activities:**

- Students have the option to participate in clubs, organizations, or extracurricular activities related to their field of study or personal interests.

9. **Examinations:**

- The courses will span 14 weeks during each semester and conclude with oral, written, or practical examinations. Successful completion of these exams is mandatory to earn study credits.

10. Thesis Defense:

The prerequisites for presenting a bachelor thesis before a committee include:

- Attainment of 240 ECTS credits throughout the program.
- Obtaining the approval of the scientific supervisor to present the bachelor thesis.

11. Graduation Requirements:

- Graduation necessitates the fulfilment of all program requirements, encompassing the completion of the required credit hours and the successful completion of the bachelor thesis.

12. Degree Awarding:

- Bachelor's Degree (Engineer) in Electrotechnics.