

POWER ENGINEERING AND **NUCLEAR TECHNOLOGIES**

DEGREE TYPE UPON GRADUATION

Bachelor's Degree

DURATION

4 years (8 semesters)

TEACHING LANGUAGE

Romanian

ECTS POINTS

240

PROGRAMME DESCRIPTION

Power Engineering and Nuclear Technologies is one of the newest study programmes of the University of Pitesti, created in response to the needs of the Romanian employers in the field of nuclear energy.

TUITION

EU citizens: 3900 RON (approx. € 780)

Non-EU citizens: € 2430

ENTRY REQUIREMENTS

Baccalaureate Diploma

REASONS TO CHOOSE THIS PROGRAMME

- Power Engineering and Nuclear Technologies is one of the forward-looking areas of engineering
- Top employers on a local, national and international level
- European level study and training conditions

CAREER OPPORTUNITIES

- Nuclear research
- Energy research
- Power Engineering

- Nuclear engineering
- Education

PROGRAMME DETAILS

I st YEAR					
I st SEMESTER			II nd SEMESTER		
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment
Mathematical Analysis	3	E	Special Mathematics	4	E
Linear Algebra, Analytic and Differential Geometry	3	E	Computer Aided Graphics	3	E
Technical Drawing and Infographics	5	E	Statistics and Experimental Data Processing	3	C
Applied Computer Science	4	E	Physics	5	E
Physics	5	E	Computer Programming and Programming Languages	5	C
Chemistry	5	C	Mechanics	5	E
Materials Technology	3	C	General Economics	3	E
Physical Education and Sport I *	3	V	Physical Education and Sport I *	3	V
English Language	2	C	English Language	2	C

* course credit points (ECTS) are not taken into account within the semester credit points (ECTS)

II nd YEAR					
I st SEMESTER			II nd SEMESTER		
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment
Basics of Electrical Engineering I	5	E	Numerical Methods	3	C
Physics	5	E	Physics	5	E
Fluid Mechanics	4	E	Thermotechnics	4	E
Strength of Materials II	4	C	Optoelectronics	4	E
Electronics	5	E	Heat and Mass Transfer	4	E
General Energetics	5	E	Use of Water Energy	4	E
Physical Education and Sport I *	1	V	Physical Education and Sport I *	1	V
European Institutions and European Administration	2	C	Practice	4	C
English Language	2	C	Sustainable Development	2	C
			English Language	2	V

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III rd YEAR					
I st SEMESTER			II nd SEMESTER		
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment
Electrical and Electronic Measurements	5	E	Renewable Sources	4	C
Electrical Machines and Drives	5	E	High-performance Technologies for Energy Production	5	E
Thermal Equipment and Installations	4	E	Electrical Side of Power Plants and Stations	4	E
Electrical Devices	5	E	Electrical Networks	5	E
Hydraulic Machines	4	E	Specialty Practice	4	C
Theory of Automatic Regulation	2	C	Basics of Nuclear Reactor Theory	4	E
Energy and the Environment	3	C	Dosimetry and Radioprotection	4	E
Artificial Intelligence Techniques	2	C	Thermohydraulics of Nuclear Installations *	3	V
Eco-ethics *	2	V			
Methodology of Grant Project Development *	3	V			

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IV th YEAR					
I st SEMESTER			II nd SEMESTER		
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment

Reliability	4	E	Engineering and Technology of Nuclear Reactors	4	E
Ceramic Materials. Powder Technology	4	C	Systems in Nuclear Power Plants	4	E
Treatment of Radioactive Waste	4	E	Advanced NPPs; the Alfred reactor; Testing Facilities	4	E
Quality assurance at NPPs	4	E	Non-Energetic Nuclear Technologies	3	E
Nuclear Materials and Technologies	4	E	Management	3	E
Nuclear Safety	4	C	Preparation of the Bachelor's Diploma Project	5	C
Electricity Transmission and Distribution	4	E	Practice for Bachelor's Diploma Project	4	C
Management of Nuclear Waste	2	C	Energy Automation	2	C
			Technological Sources of Environmental Pollution	1	C

* course credit points (ECTS) are not taken into account within the semester credit points (ECTS)

* V = test taken in the last two weeks of the semester (about 10% of the final grade)

* C = test taken in the last two weeks of the semester (about 30% of the final grade)

* E = exam taken during the exam period (at least 50% of the final grade)