

“VASILE ALECSANDRI” UNIVERSITY OF BACAU

Faculty of Engineering

Calea Mărășești, Nr. 157, Bacău, 600115, Tel./Fax +40 234 580170

<http://inginerie.ub.ro>; e-mail: decaning@ub.ro



Field: **Energy Engineering**

Study programme: *Industrial Energetics*

2023/2024 academic year

CURRICULUM 1st year of study

No	Subject	Number of ECTS credits	Examination form	Semester
1.	Mathematical Analysis	5	WO	1
2.	Linear Algebra, Analytic And Differential Geometry	4	WO	1
3.	Chemistry	4	W	1
4.	Computer Programming and Programming Languages 1	9	W	1
5.	Communication	2	C	1
6.	Materials Science and Engineering	3	W	1
7.	Physical Education and Sports 1	1	P/F	1
8.	English for Engineering 1 / French for Engineering 1	2	C	1
9.	Special Mathematics	4	WO	2
10.	Physics	4	WO	2
11.	Computer Graphics	4	C	2
12.	Computer Programming and Programming Languages 2	3	C	2
13.	Materials Technology	4	W	2
14.	Mechanics	4	W	2
15.	Physical Education and Sports 2	1	P/F	2
16.	General Economics	4	C	2
17.	English for Engineering 2 / French for Engineering 2	2	C	2

W - exam

WO - written and oral exam

C – colloquium

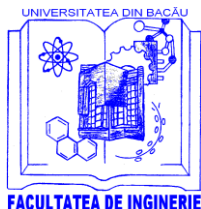
P/F – pass/fail

Dean,

Assoc. Prof. Ph.D. Eng. Panainte-Lehăduș Mirela

Head of department,

Prof. Ph.D. Eng. Culea George



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CURRICULUM 2nd year of study

No	Subject	Number of ECTS credits	Examination form	Semester
1.	Strength of Materials	4	WO	1
2.	General Energetics	5	C	1
3.	Electrotechnics	5	WO	1
4.	Thermotechnics	4	C	1
5.	Heat and Mass Transfer	5	W	1
6.	Applied Informatics	4	W	1
7.	Physical Education and Sports 3	1	P/F	1
8.	English for Engineering 3/French for Engineering 3	2	C	1
9.	Power Electronics	3	C	2
10.	Measurement Of Electrical And Non-Electrical Quantities 1	4	W	2
11.	Turbomachines	4	W	2
12.	Electrical Machines and Electric Actuators	3	W	2
13.	English for Engineering 4/French for Engineering 4	2	C	2
14.	Fluid Mechanics	3	W	2
15.	Hydraulic Machines	4	W	2
16.	Automated Adjustment Theory	3	W	2
17.	Domain practice- 3 weeks × 30 hours	4	C	2

W - exam

WO - written and oral exam

C – colloquium

P/F – pass/fail

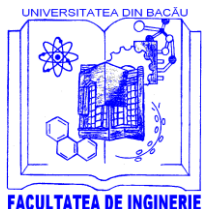
C - Colocviu

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CURRICULUM 3rd year of study

No.	Subject	Number of ECTS credits	Examination form	Semester
1.	Electrical Networks	7	WO	1
2.	Measurement Of Electrical And Non-Electrical Quantities 2	4	W	1
3.	Thermal Equipment And Installations	7	WO	1
4.	Renewable Energy Sources	5	W	1
5.	Occupational Safety And Health	3	C	1
6.	Artificial Intelligence Techniques	4	W	1
7.	Finite Element Method	3	C	2
8.	Energy Agents Transportation	5	W	2
9.	Electrical Part of Power Plants And Stations	5	C	2
10.	Electrical and Thermal Energy Generation	6	W	2
11.	Electrical Equipment	4	W	2
12.	Management	3	C	2
13.	Specialized practice - 3 weeks × 30 hours	4	C	2

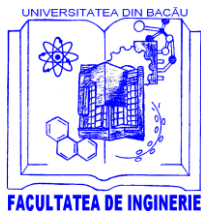
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WO - written and oral exam

C – colloquium

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CURRICULUM 4th year of study

No.	Subject	Number of ECTS credits	Examination form	Semester
1.	The Thermal Part of Power Plants	4	C	1
2.	Energy Data Acquisition Systems	4	W	1
3.	Reliability	3	C	1
4.	Technical Creativity	3	C	1
5.	Optimization Techniques in Energy	4	W	1
6.	Relay Protections: Classic and Numerical	4	WO	1
7.	Numerical Driving Systems	4	W	1
8.	Environmental Protection	4	C	1
9.	Automation	3	WO	2
10.	Ergonomics	3	C	2
11.	Utilisation of Electricity	3	W	2
12.	Utilisation of Thermal Energy	3	W	2
13.	Preparing the Bachelor Final Project	4	C	2
14.	Entrepreneurship	1	C	2
15.	Human Resource Management	2	C	2
16.	Internet of Things (IoT)	1	C	2
17.	Practice for preparing and writing the Bachelor Final project – 2 weeks × 30 hours	10	C	2

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C – colloquium

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