

# ACADEMIC YEAR 2023/2024

## List of courses offered in English

(21/09/2023)

### Courses of Engineering:

[First semester / Fall semester](#)

[Second semester / Spring semester](#)

[Full academic year](#)

[Project Works – Master Thesis](#)

### USAC courses

### Courses of Business and Management

## COURSES OF ENGINEERING

First Semester / Fall Semester (September-January)

Code	Subject	ECTS	Bachelor's Degree or Master	Year
25110	<a href="#">Statistics</a>	6	BSc in Industrial Technology Engineering	2
25971	<a href="#">Calculus (Industrial Eng.)</a>	6	BSc in Environmental Engineering BSc in Industrial Organization Engineering BSc in Industrial Technology Engineering BSc in Industrial Electronics and Automatics Engineering	1
25991	<a href="#">Automatic Regulation</a>	6	BSc in Industrial Electronics and Automatics Engineering BSc in Computer Engineering in Management and Informations Systems	3
26571	<a href="#">Chemistry</a>	6	BSc in Environmental Engineering BSc in Industrial Organization Engineering BSc in Industrial Technology Engineering	1
26592	<a href="#">Electrical Technology</a>	6	BSc in Industrial Technology Engineering	4
26609	<a href="#">Thermal Engineering</a>	6	BSc in Electrical Engineering BSc in Industrial Electronics and Automatics Engineering BSc in Mechanical Engineering	2
26611	<a href="#">Environmental Technologies</a>	6	BSc in Electrical Engineering BSc in Industrial Electronics and Automatics Engineering BSc in Mechanical Engineering	4
27303	<a href="#">Linear Algebra I</a>	4,5	BSc in Environmental Engineering BSc in Industrial Organization Engineering BSc in Industrial Technology Engineering	1
27306	<a href="#">Graphics in Engineering</a>	6	BSc in Environmental Engineering BSc in Industrial Organization Engineering BSc in Industrial Technology Engineering	1
27308	<a href="#">Fundamentals of Materials Science</a>	6	BSc in Industrial Technology Engineering	2
27309	<a href="#">Extended Mathematics</a>	6	BSc in Industrial Technology Engineering	2

27311	<a href="#">Fluid Mechanics</a>	6	BSc in Industrial Technology Engineering	2
27316	<a href="#">Analysis &amp; Operation of Electrical Machinery I</a>	4,5	BSc in Industrial Technology Engineering	3
27319	<a href="#">Thermotechnics</a>	6	BSc in Industrial Technology Engineering	3
27320	<a href="#">General Electronics</a>	6	BSc in Industrial Technology Engineering	3
27342	<a href="#">Extended Mathematics</a>	7,5	BSc in Telecommunications Engineering	2
27353	<a href="#">Basic Electronics</a>	6	BSc in Telecommunications Engineering	1
27387	<a href="#">Digital Systems</a>	6	BSc in Telecommunications Engineering	3
27448	<a href="#">English I (only Marine and Nautical topics)</a>	6	BSc in Nautical Studies and Maritime Transport BSc in Marine Studies	1
27678	<a href="#">Industrial Electronics</a>	6	BSc in Electrical Engineering BSc in Industrial Electronics and Automatics Engineering BSc in Mechanical Engineering	2
27681	<a href="#">Materials Science</a>	6	BSc in Electrical Engineering BSc in Industrial Electronics and Automatics Engineering BSc in Mechanical Engineering	2
27684	<a href="#">Project Management</a>	6	BSc in Electrical Engineering BSc in Industrial Electronics and Automatics Engineering BSc in Mechanical Engineering	4
27697	<a href="#">Discrete Mathematics</a>	6	BSc in Computer Engineering in Management and Information Systems	1
503333	<a href="#">Scientific Writing and Presentation</a>	4,5	Master in Advanced Materials Engineering	1
503907	<a href="#">Chemical Process Design</a>	3	Master In Industrial Engineering	1
504119	<a href="#">English for the Maritime Business</a>	6	Master in Nautical Studies and Maritime Transport	1
504247	<a href="#">Green Design and Manufacture</a>	6	Master in Mechanical Engineering	2
504888	<a href="#">Project Context</a>	3	Master in Project Management	1

504899	<a href="#">Sustainability</a>	3	Master in Project Management	2
504893	<a href="#">Social Competences</a>	3	Master in Project Management	1
504900	<a href="#">Project Planning</a>	3	Master in Project Management	1
504904	<a href="#">Project Monitoring and Control</a>	3	Master in Project Management	1
504908	<a href="#">Research in Project Management</a>	3	Master in Project Management	2
504910	<a href="#">EFQM Excellence Model</a>	3	Master in Project Management	2
504911	<a href="#">Ecodesign and Circular Economy</a>	3	Master in Project Management	2
504912	<a href="#">Product Life Cycle Management</a>	3	Master in Project Management	2
504914	<a href="#">Technologies for Project Management</a>	3	Master in Project Management	2

## COURSES OF ENGINEERING

### Second Semester / Spring Semester (January-June)

Code	Subject	ECTS	Bachelor's Degree or Master	Year
25998	<a href="#">Robotics</a>	6	BSc in Industrial Electronics and Automatics Engineering BSc in Computer Engineering in Management and Informations Systems	3
26518	<a href="#">English for Industrial Engineering</a>	6	BSc in Electrical Engineering BSc in Industrial Electronics and Automatics Engineering BSc in Mechanical Engineering	4
26570	<a href="#">Computer Science</a>	6	BSc in Environmental Engineering BSc in Industrial Organization Engineering BSc in Industrial Technology Engineering	1
26677	<a href="#">Advanced Numerical Methods</a>	6	BSc in Industrial Technology Engineering	3
27304	<a href="#">Extended Physics</a>	6	BSc in Environmental Engineering BSc in Industrial Organization Engineering BSc in Industrial Technology Engineering	1
27307	<a href="#">Extended Engineering Graphics</a>	6	BSc in Environmental Engineering BSc in Industrial Organization Engineering BSc in Industrial Technology Engineering	1
27310	<a href="#">Electrical Technology</a>	6	BSc in Industrial Technology Engineering	2
27312	<a href="#">Thermodynamics</a>	6	BSc in Industrial Technology Engineering	2
27313	<a href="#">Extension of Differential Equations</a>	6	BSc in Industrial Technology Engineering	2
27316	<a href="#">Analysis &amp; Operation of Electrical Machinery II</a>	4,5	BSc in Industrial Technology Engineering	3
27321	<a href="#">Chemical Technology</a>	6	BSc in Industrial Technology Engineering	3
27324	<a href="#">Environmental Science &amp; Technology</a>	6	BSc in Industrial Technology Engineering	4
27354	<a href="#">Electronic Devices &amp; Circuits</a>	6	BSc in Telecommunications Engineering	1

27382	<a href="#">Treatment of Signals</a>	6	BSc in Telecommunications Engineering	1
27452	<a href="#">English II (Marine and Nautical topics)</a>	6	BSc in Nautical Studies and Maritime Transport BSc in Marine Studies	1
27674	<a href="#">Fluid Mechanics</a>	6	BSc in Electrical Engineering BSc in Industrial Electronics and Automatics Engineering BSc in Mechanical Engineering	2
27718	<a href="#">English for Information Technology</a>	6	BSc in Computer Engineering in Management and Informations Systems	4
27725	<a href="#">Hydraulic Facilities and Machinery</a>	6	BSc in Mechanical Engineering	3
502149	<a href="#">Modelling of Wind/Marine Current Turbine-Driven Electric Generators</a>	3	Master's in Integration of Renewable Energies in the Electric System	1
502150	<a href="#">Impact of Distributed Generation on the Electric Power System</a>	3	Master's in Integration of Renewable Energies in the Electric System	1
502153	<a href="#">Electrical Grid Operation. Transportation and Distribution</a>	3	Master's in Integration of Renewable Energies in the Electric System	1
503910	<a href="#">Fluid Machinery and Installations</a>	4,5	Master In Industrial Engineering	1
503947	<a href="#">Applied Chemical Thermodynamics</a>	4,5	Master In Industrial Engineering	1
503948	<a href="#">Chemical Process Engineering: Simulation, Design, Optimisation and Synthesis</a>	4,5	Master In Industrial Engineering	1
504890	<a href="#">Project Organization</a>	3	Master in Project Management	1
504896	<a href="#">Program and portfolio management</a>	3	Master in Project Management	1
504901	<a href="#">Communication, negotiation and conflict management</a>	3	Master in Project Management	1
504903	<a href="#">Risk management</a>	3	Master in Project Management	1
504907	<a href="#">Information and Knowledge Management</a>	3	Master in Project Management	1

## COURSES OF ENGINEERING

Full academic year (from September to June)

Code	Subject	ECTS	Bachelor's Degree or Master	Year
25971	<a href="#">Calculus</a>	12	BSc in Electrical Engineering BSc in Industrial Electronics and Automatics Engineering BSc in Mechanical Engineering	1
27303	<a href="#">Linear Algebra I</a>	9	BSc in Environmental Engineering BSc in Industrial Organization Engineering BSc in Industrial Technology Engineering	1
27414	<a href="#">Physics I</a>	9	BSc in Environmental Engineering BSc in Industrial Organization Engineering BSc in Industrial Technology Engineering	1
27673	<a href="#">Fundamentals of Physics in Engineering</a>	12	BSc in Electrical Engineering BSc in Industrial Electronics and Automatics Engineering BSc in Mechanical Engineering	1
27675	<a href="#">Chemical Fundamentals of Engineering</a>	9	BSc in Electrical Engineering BSc in Industrial Electronics and Automatics Engineering BSc in Mechanical Engineering	1
27677	<a href="#">Graphic Expression</a>	9	BSc in Electrical Engineering BSc in Industrial Electronics and Automatics Engineering BSc in Mechanical Engineering	1
504889	<a href="#">Standards and trends</a>		Master in Project Management	

## Project Works / Master Thesis

Original exercise performed individually, consisting of a work in the field of the specific technologies of the Degree. This work will result in a written document or report. The student should take into account the specific indications of the supervisor in its writing and presentation.

Code	Subject	ECTS	Bachelor's Degree or Master	Year
27340	Project Work in Industrial Topics	6	BSc in Industrial Technology Engineering	4
27391	Project Work in Telecommunication Topics	12	BSc in Telecommunications Engineering	4
27413	Project Work in Management Topics	6	BSc in Industrial Organization Engineering	4
27482	Project Work in Nautical topics	12	BSc in Nautical Studies and Maritime Transport	4
27505	Project Work in Marine topics	12	BSc in Marine Studies	4
27692	Project Work in Electronics and Automatics	12	BSc in Industrial Electronics and Automatics	4
27719	Project Work in Information Systems	12	BSc in Computer Engineering in Management and Information Systems	4
27730	Project Work in Mechanics	12	BSc in Mechanical Engineering	4
27735	Project Work in Electrical Topics	12	BSc in Electrical Engineering	4
27797	Project Work in Civil Engineering	12	BSc in Civil Engineering	4
27848	Project Work in Environmental Topics	6	BSc in Environmental Engineering	4
504003	Master Thesis in Industrial Topics	24	Master In Industrial Engineering	2
504066	Master Thesis in Telecommunication Topics	24	Master in Telecommunications Engineering	2
504122	Master Thesis in Nautical Topics	6	Master in Nautical Studies and Maritime Transport	1
504177	Master Thesis in Marine Topics	6	Master in Marine Studies	1



## USAC (Universities Studies Abroad Consortium) Courses

Incoming students can also take USAC courses that have the restriction of two or three courses per Semester. The courses are held in the Faculty of Economics and Business, Elcano section. **Groups are small, so there are very few places. In addition, if number of students interested in a course is not enough as to full the corresponding group, that course will not be offered finally.**

USAC has very strict rules regarding these courses. To apply for them, students have to ask for the Registration Form to [incoming.eib@ehu.eus](mailto:incoming.eib@ehu.eus) before September 1<sup>st</sup> / January 2<sup>nd</sup>. Afterwards, USAC will send a message with the courses they can attend to. **Late applications will not be considered.**

Students are not allowed to start attending the classes later than the starting date. Attendance is compulsory in every session.

On the other hand, USAC teachers want their students to have the compulsory textbook in the starting date. So that, students need to get the exact textbook on the correct edition when they start following the lectures. If not, they will not be allowed to attend the courses.

### USAC Courses – 2023 Fall semester

Subject	ECTS
Consumer Behavior	6
Corporate Finance	6
Global Economics	6
Human Resource Management	6
International Strategic Management	6
Marketing Principles	6

### USAC Courses – 2024 Spring semester

Subject	ECTS
Consumer Behavior (BUS/MKT)	6
Corporate Finance (FIN)	6
Economic & Political Institutions of the European Union	6
International Marketing (BUS/MKT)	6
Management & Leadership (BUS/MGT)	6
Operations Management (BUS/MGT)	6

## COURSES OF BUSINESS AND MANAGEMENT

Exchange students are allowed to attend courses at the [Faculty of Economics and Business Studies, Elcano section](#). There are also some courses offered in English, corresponding to the BSc in Business Management.