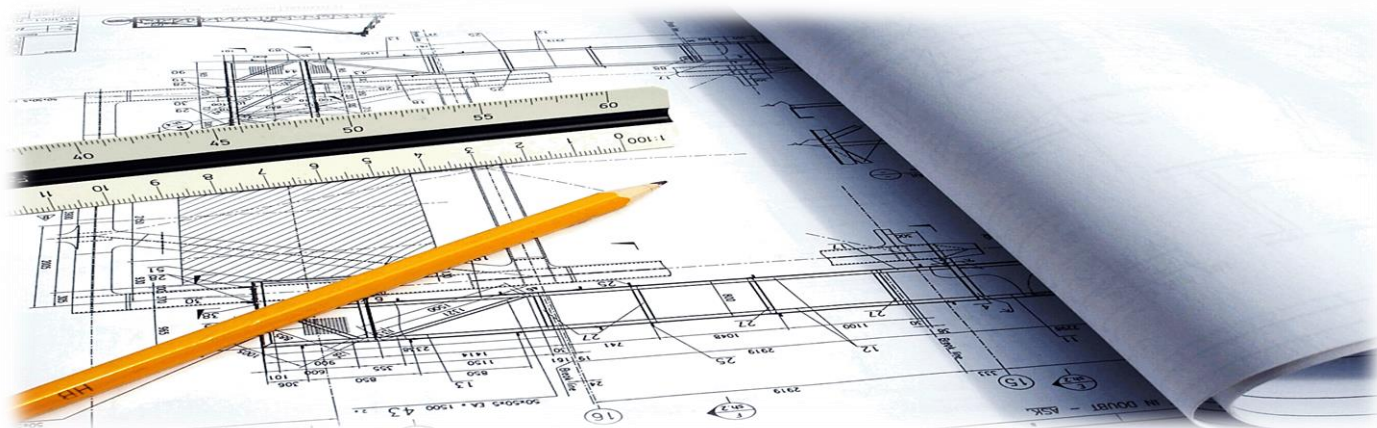


# Bachelor's Degree in Industrial Technologies Engineering



This degree trains professionals with ability to design, build, maintain and manage industrial equipment and installations. Its field of work includes both traditional and future-oriented areas: energy, environment, product design, electricity, construction and industrial, mechanical, production, industrial organization, electronics, automation, materials, automotive and transportation.

## Distribution of credits

Basic courses	Compulsory courses	Optional courses	Bachelor Thesis	Total ECTS Credits
60.00	148.50	19.50	12	240.00

## First year

Code	Course Name	Term	ECTS Credits
11406	Industrial Business and Economy	A	6
11402	Physics I	A	9
11400	Mathematics I	A	9
11404	Computer Science	A	6
11403	Chemistry	B	6
11401	Physics II	B	6
11405	Technical Drawing	B	6
11398	Statistics	B	6
11399	Mathematics II	B	6
Total			60

## Second year

Code	Course Name	Term	ECTS Credits
11411	Materials Science	A	4.5
11415	Thermodynamics	A	4.5
11417	Fundamentals of Business Organization	A	4.5
11435	Mathematics III	A	6
11436	Physics III	A	6
	Language	A	6
11409	Circuits analysis	B	4.5
11412	Elasticity and Strength of Materials	B	4.5
11410	Theory of machines	B	4.5
11413	Heat Transfer	B	4.5
11434	Mathematical Methods	B	6
11414	Fluid Mechanics	B	4.5
Total			60

**Third year**

Code	Course Name	Term	ECTS Credits
11407	Control systems	A	4.5
11408	Electronic systems	A	4.5
11416	Production and Manufacturing Systems	A	4.5
11418	Environmental Technology	A	4.5
11423	Machine technology	A	6
11426	Structures	A	6
11420	Thermal machines	B	4.5
11422	Materials technology	B	4.5
11429	Electrical machines	B	4.5
11430	Control and automation technology	B	6
11431	Electronic technology	B	6
11433	Operational research	B	4.5
		<b>Total</b>	<b>60</b>

**Fourth year (Compulsory)**

Code	Course Name	Term	ECTS Credits
11419	Projects	A	6
11421	Hydraulic Machines	A	4.5
11425	Construction Technology	A	4.5
11424	Graphic engineering	A	4.5
11428	Electric technology	A	6
11427	Energy technology	A	4.5
11432	Industrial informatic technology	B	4.5
	Optional Courses (to choose from the list below)	B	13.5
11467	Bachelor Thesis	B	12
		<b>Total</b>	<b>60</b>

**Fourth year (Optional)**

Code	Course Name	Term	ECTS Credits
13442	Basic CAD in building engineering	B	4.5
13242	CAD for industrial structures design	B	4.5
13437	Development of applications for mobile devices	B	4.5
13238	Computer-aided mechanical design	B	4.5
13233	Ethics and social entrepreneurship responsibilities	B	4.5
13441	Executive abilities for engineers	B	4.5
13438	3D printing and digital fabrication	B	4.5
13232	Innovation and Entrepreneurship	B	4.5
13235	Internet and network services	B	4.5
13239	Introduction to renewable energies	B	4.5
13237	Control system laboratory	B	4.5
13240	Computational Fluid Mechanics	B	4.5
13236	Thermal engines for automotive applications	B	4.5
13444	Participatory decision making and conflict resolution	B	4.5
13445	Practical cases in strategic management and entrepreneurship	B	4.5
13234	Work risks prevention	B	4.5
13440	Technical integration of automation and control equipment for installations and electrical machines	B	4.5
13751	Physical concepts in historical and cultural perspective	B	4,5
13752	Applied Photochemistry	B	4,5
13753	Organizational performance measurement systems	B	4,5
13754	Programming embedded systems in C	B	4,5
13755	Life cycle assessment	B	4,5