

**FACULTY OF
MECHANICAL
ENGINEERING
AND
DESIGN**

- Bachelor's degree programme of **MECHANICAL ENGINEERING**
- Bachelor's degree programme of **MECHATRONICS**
- Bachelor's degree programme of **VEHICLE ENGINEERING**
- Bachelor's degree programme of **AVIATION ENGINEERING**
- Courses from the Bachelor's degree programme **FASHION ENGINEERING/ TEXTILE ENGINEERING**
- Master's degree programme of **INDUSTRIAL ENGINEERING AND MANAGEMENT**
- Master's degree programme of **MECHANICAL ENGINEERING**
- Courses from the Master's degree programme **FASHION ENGINEERING/ TEXTILE ENGINEERING**
- **DISCRETE COURSES**

**Bachelor's degree programme
MECHANICAL ENGINEERING**

2nd semester

P130B002	Mathematics 2	6
P190B101	Physics 1	6
P175B145	Introduction to Programming for Engineers	6
T210B199	Computer-Aided Design (CAD)	6
T450B103	Materials Science and Engineering	6

4th semester

T190B270	Electrical and Electronic Circuits	6
T200B109	Applied Thermodynamics and Hidromechanics	6
T210B501	Strength of Structural Elements	3

6th semester

T125B001	Automatic Control Fundamentals	6
T130B012	Manufacturing Engineering	6
T210B036	Computer-Aided Analysis of Structures	6
T210B196	Design of Mechanical System	6

Bachelor's degree programme MECHATRONICS

2nd semester

P130B100	Mathematics 3	3
P190B101	Physics 1	6
P175B145	Introduction to Programming for Engineers	6
T210B001	Fundamentals of Mechatronics	3
T210B301	Computer Drawing	3
T450B102	Materials Engineering	3

4th semester

T190B270	Electrical and Electronic Circuits	6
T210B501	Strength of Structural Elements	3
T200B109	Applied Thermodynamics and Fluid Mechanics	6

6th semester

T120B007	Microprocessor Technique	6
T130B012	Manufacturing Engineering 1	6
T125B001	Automatic Control Fundamentals	6
T170B140	Semester Project	6
T210B446	Theory of Mechanisms and Machines	6

Courses from the Bachelor's degree programme FASHION ENGINEERING/ TEXTILE ENGINEERING

Course code	Course title	ECTS Credits	Semester
T150B189	Computer-aided Design of Clothing 1*	6	spring
T150B171	Technology of Clothing*	6	spring
T470B131	Design and Technology of Knits*	6	spring
T150B194	Workshop of Fashion Product*	6	spring
T470B147	Design and Technologies of Woven Fabrics*	6	spring
T150B144	Computed Clothing Manufacturing*	6	spring
T000B148	Practice*	15	spring
T470B142	Nonwoven Textiles*	6	autumn/spring
PR00B123	Semester Project*	6	autumn/spring

***Important note!**

Some courses will be offered only if a sufficient number of students register for the course.

Courses from the Bachelor's degree programme VEHICLE ENGINEERING/ AVIATION ENGINEERING

Course code	Course title	ECTS Credits	Semester
T310B107	Fundamentals of Aerodynamics	6	spring
T200B115	Fluid Mechanics and Thermodynamics	6	spring
T450B105	Materials of Transport Facilities	6	spring

***Important note!**

Particular elective course will be offered only if a sufficient number of students register for the course.

Master's degree programme FASHION ENGINEERING/ TEXTILE ENGINEERING*

Course code	Course title	ECTS Credits	Semester
T150M128	Simulation of Clothing Exploitation Processes *	6	spring
T000M186	Research Project 1	6	spring

*Important note!

Particular elective course will be offered only if a sufficient number of students register for the course.

Master's degree programme INDUSTRIAL ENGINEERING AND MANAGEMENT

2nd semester

T210M134	Industrial Maintenance	6
T130M020	Engineering Operations Strategy	6
S191M013	Industrial Marketing	6
T000M014	Research Project 1	6
T210M023	Computer-Aided Analysis of Structures	6

4th semester

T130M125	International Industry and Business	6
T000M126	Research Project 2	6
S190M102	Engineering Projects Management	6

Master's degree programme MECHANICAL ENGINEERING

2nd semester

T210M015	Experimental Mechanics	6
T210M108	Analysis and Modelling of Mechanical Systems	6
T210M110	Dynamics of Mechatronic Systems	6
T000M014	Research project 1	6

DISCRETE COURSES*

Course code	Course title	ECTS Credits	Semester
Bachelor's level courses			
T460B518	Wood Finishing Technology	6	spring
T150B184	Basics of 3D design	9	spring
T130B009	Media Publishing Technologies	6	spring
W200B103	User experience design	6	spring
W240B102	Bionics & Design	3	spring
W240B010	Product Design	6	spring
W240B100	Sketch	6	spring

W210B705	Graphic Design	6	spring
W200B104	Image Design and Communication	3	autumn/ spring
Master's level courses			
T140M155	Thermodynamics	6	spring
T310M103	Air Traffic Control Systems	6	spring
T290M003	Vehicle and Road Safety	6	spring

***Important note!**

Particular discrete course will be offered only if a sufficient number of students register for the course.