

## FACULTY OF

# Mechanical Engineering and Design

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

**\*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 MECHANICAL ENGINEERING

### 1<sup>st</sup> semester (autumn)

Course code	Course title	ECTS Credits
<a href="#">T210B198</a>	Engineering Drawing	6
<a href="#">T210B193</a>	Introduction to Mechanical Engineering	6

### 2<sup>nd</sup> semester (spring)

Course code	Course title	ECTS Credits
<a href="#">P190B231</a>	Theoretical Mechanics	6
<a href="#">T450B103</a>	Materials Science and Engineering	6

### 3<sup>rd</sup> semester (autumn)

Course code	Course title	ECTS Credits
<a href="#">T210B199</a>	Computer-Aided Design	6
<a href="#">P190B504</a>	Mechanics of Materials	6
<a href="#">T130B178</a>	Technological Machines and Tools	6

### 4<sup>th</sup> semester (spring)

<a href="#">T200B109</a>	Applied Thermodynamics and Hydromechanics	6
<a href="#">T170B168</a>	Fundamentals of Electrotechnic and Electronic	6
<a href="#">T210B147</a>	Structural Integrity	6
<a href="#">T210B200</a>	Machine Dynamics	6

### 5<sup>th</sup> semester (autumn)

Course code	Course title	ECTS Credits
<a href="#">T210B116</a>	Machine Elements	9
<a href="#">T130B012</a>	Manufacturing Engineering	6
<a href="#">T110B405</a>	Measurements	6
<a href="#">P240B100</a>	Thermal Hydromechanics	6

**Courses from the Bachelor's degree programme**  
**MECHATRONICS**

**2<sup>nd</sup> semester (spring)**

Course code	Course title	ECTS Credits
<a href="#">P190B231</a>	Theoretical Mechanics	6
<a href="#">T210B001</a>	Fundamentals of Mechatronics	3
<a href="#">T450B102</a>	Materials Engineering	3

**3<sup>rd</sup> semester (autumn)**

Course code	Course title	ECTS Credits
<a href="#">T210B199</a>	Computer-Aided Design	6
<a href="#">P190B504</a>	Mechanics of Materials	6
<a href="#">T450B112</a>	Technologies of Structural Materials	6

**4<sup>th</sup> semester (spring)**

<a href="#">T170B168</a>	Fundamentals of Electrotechnic and Electronic	6
<a href="#">T210B147</a>	Structural Integrity	6
<a href="#">T200B109</a>	Applied Thermodynamics and Fluid Mechanics	6
<a href="#">T120B008</a>	Signals Theory	3
<a href="#">T125B005</a>	Computer-aided Devices Control Systems	3

**5<sup>th</sup> semester (autumn)**

Course code	Course title	ECTS Credits
<a href="#">T210B403</a>	Machine Elements	6
<a href="#">T130B012</a>	Manufacturing Engineering	6
<a href="#">T110B405</a>	Measurements	6

**6<sup>th</sup> semester (spring)**

<a href="#">T120B007</a>	Microprocessor Technique	6
<a href="#">T125B001</a>	Automatic Control Fundamentals	6

**Courses from the Bachelor's degree programme**  
**FASHION ENGINEERING**

Course code	Course title	ECTS Credits	Semester
<a href="#">T150B174</a>	Clothing Special Technologies	6	autumn
<a href="#">T150B194</a>	Workshop of Fashion Product	6	autumn
<a href="#">T150B144</a>	Computed Clothing Manufacturing	6	autumn
<a href="#">T150B189</a>	Computer-aided Design of Clothing 1	6	spring
<a href="#">T470B131</a>	Design and Technology of Knits	6	spring

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

Course code	Course title	ECTS	Semester
<a href="#">T280B101</a>	Sustainable Transport: Technologies, Environment and Interaction	6	autumn
<a href="#">T210B436</a>	Fluid Power Systems	3	autumn
<a href="#">T310B109</a>	Aviation Materials	6	autumn
<a href="#">T310B108</a>	Aviation Engines	6	autumn
<a href="#">T310B100</a>	Human Factors in Aviation	3	autumn

**Courses from the Master's degree programme  
Fashion Innovation Technologies**

Course code	Course title	ECTS Credits	Semester
<a href="#">T150M121</a>	Smart Textiles and Wearable Technologies	6	autumn
<a href="#">T00M161</a>	Research Project	6	spring
<a href="#">T150M147</a>	Fashion Product Exploitation Modelling	6	spring

**Courses from the Master's degree programme  
INDUSTRIAL ENGINEERING AND MANAGEMENT**

**1<sup>st</sup> semester (autumn)**

<a href="#">T130M008</a>	Industrial Production	6
<a href="#">S181M004</a>	Managerial Finance	6
<a href="#">T130M009</a>	Manufacturing Planning and Control	6
<a href="#">T130M100</a>	Methods of Research and Quality Control	6

**3<sup>rd</sup> semester (spring)**

<a href="#">T130M125</a>	International Industry and Business	6
<a href="#">T130M833</a>	Computer Integrated Manufacturing	6
<a href="#">S190M102</a>	Engineering Projects Management	6

**Courses from the Master's degree programme  
MECHANICAL ENGINEERING**

<a href="#">T210M150</a>	Basics of Scientific Research	6
<a href="#">T210M015</a>	Experimental Mechanics	6
<a href="#">T210M435</a>	Mechanical Vibrations	6

**Courses from the Master's degree programme  
MECHATRONICS**

<a href="#">T130M833</a>	Computer Integrated Manufacturing	6
<a href="#">T210M153</a>	Adaptive Mechanics and Mechatronic Systems	6
<a href="#">T210M009</a>	Finite Element Method	6

**Courses from the Master's degree programme  
VEHICLE ENGINEERING**

<a href="#">T280M634</a>	Design of Vehicles	6
<a href="#">T280M107</a>	Unmanned Ground Vehicles Systems	6
<a href="#">T280M002</a>	Vehicle Dynamics, Interaction and Energy Efficiency	6