



UNIVERSITY OF BIELSKO-BIALA

FACULTY OF MECHANICAL ENGINEERING AND COMPUTER SCIENCE

Internship for Erasmus Students (16th June -16th September 2025)

International week
16th June-24th June

Intensive internship block (210 hours)
25th June-14th August

MODULE #1: Dedicated for the following fields of studies:

- Mechanical Engineering
- Industrial Engineering
- Management and Production Engineering
- Automatics and Robotics
- Mechatronics

Language module (60 hours)

- *Polish language course*
- *English specialist, technical language course*

Management and Interpersonal module (30 hours)

- *Communication skills workshops*
- *Management skills (CSR, Human resources management skills)*
- *Culture shock – stereotypes and overcoming them*
- *Cultural diplomacy and soft power in international relations*
- *The conditions and the history of European Union integration process after the Second World War*
- *European labour market nowadays*
- *Social Responsibility in Management – the aspects of communication with external stakeholders*
- *The examples of CSR – good practices*
- *Building relations in multicultural environment – culture aspects at work*
- *The mass media history – introduction*

- *Frames and networks in communication process*
- *Agenda Setting Theory – Maxwell McComb and Donald Show – how we can shape the reality in customers minds*
- *Shaping of regional brand based on the example of the city Bielsko-Biala*
- *Shaping your own cities/universities brand*

Specialist module (120 hours)

- *Dynamics and programming of robots*
- *Metallographic specimens preparation*
- *3D modeling and designing using Inventor or Unigraphics or CATIA system,*
- *Experimental and theoretical studies of mechanical properties of polymer composites*
- *Statistics for engineers*
- *Investigations of dynamics of vehicle*
- *Electric and hybrid drive*
- *Operation programming of CNC machine tools (SINUMERIK)*
- *Mechatronical systems*
- *Emerson PLC and PAC systems integration*
- *Emerson controllers programming*
- *Applications and operation of industrial robots*
- *Management of Health and Safety at Work*
- *Modelling and simulation of production processes*
- *Decision support systems*
- *Computer Integration Manufacturing*
- *Static tensile test of metal specimens*
- *Strength tests of plastics*
- *Static and dynamic tests of structures using the MTS system*
- *Fluid dynamics*
- *3D printing*
- *Devices working in FDM, SLA and SLS technologies*

MODULE #2: Dedicated for the following field of study:

- **Computer Science**

Language module (60 hours)

- *Polish language course*
- *English specialist, technical language course*

Management and Interpersonal module (30 hours)

- *Communication skills workshops*
- *Management skills (CSR, Human resources management skills)*
- *Culture shock – stereotypes and overcoming them*
- *Cultural diplomacy and soft power in international relations*
- *The conditions and the history of European Union integration process after the Second World War*
- *European labour market nowadays*
- *Social Responsibility in Management – the aspects of communication with external stakeholders*
- *The examples of CSR – good practices*
- *Building relations in multicultural environment – culture aspects at work*
- *The mass media history – introduction*
- *Frames and networks in communication process*

- *Agenda Setting Theory – Maxwell McComb and Donald Show – how we can shape the reality in customers minds*
- *Shaping of regional brand based on the example of the city Bielsko-Biala*
- *Shaping your own cities/universities brand*

Specialist module (120 hours)

- *External modules for AI*
- *Reinforcement learning: AI for healthcare*
- *AI for image processing*
- *Encryption and steganography governed by AI*
- *Coping with NLP*
- *AI population control*
- *Cybersecurity towards AI*
- *Intelligent biometrics*

Work on individual raport
18th August-15th September

Final project presentations
16th September

Official closing ceremony
17th September