



**MASTER'S DEGREE COURSE IN
MECHATRONICS ENGINEERING**

Study programme for students enrolled in the academic year 2025-2026

1st YEAR	
MANDATORY COURSES	CREDITS
POWER ELECTRONICS	9
EMBEDDED SYSTEMS PROGRAMMING	9
DESIGN AND MANAGEMENT OF INDUSTRIAL SYSTEMS	9
LINEAR SYSTEMS THEORY AND CONTROL	9
ADVANCED ELECTRIC DRIVES	6
DYNAMICS AND VIBRATIONS	9
2nd YEAR	
MANDATORY COURSES	CREDITS
CONTROL OF MECHANICAL SYSTEMS	9
INDUSTRIAL ROBOTICS	6
SELECTION AMONG 1 OF THE FOLLOWING PATHS	
PATH A - AUTOMATIC MACHINES AND SMART INDUSTRY	CREDITS
ADVANCED MOTION PROGRAMMING OF MULTI-AXIS MACHINES (2nd Year)	6
MECHANICAL COMPONENTS (2nd Year)	6
1 FREE-CHOICE COURSE AMONG THE FOLLOWING:	CREDITS
INDUSTRIAL APPLICATIONS OF COMPUTER VISION (1st YEAR)	6
CONTROL SYSTEMS DESIGN (2nd YEAR)	6
PATH B - ENERGY SYSTEMS FOR INDUSTRY AND ELECTRIC MOBILITY	CREDITS
ELECTRONICS FOR ENERGY AND E-MOBILITY (2nd YEAR)	6
ELECTRIC POWERTRAIN (2nd YEAR)	6
1 FREE-CHOICE COURSE AMONG THE FOLLOWING:	CREDITS
THERMAL ENERGY MANAGEMENT IN INTEGRATED SYSTEMS (1st YEAR)	6
APPLIED ELECTROMAGNETIC COMPATIBILITY (2nd YEAR)	6

PATH C -ADVANCED MODELLING AND CONTROL	CREDITS
CONTROL SYSTEMS DESIGN (2nd YEAR)	6
APPLIED MACHINE LEARNING (2nd YEAR)	6
1 FREE-CHOICE COURSE AMONG THE FOLLOWING:	CREDITS
APPLICATIONS OF LINEAR ALGEBRA AND GEOMETRY (1st YEAR)	6
MULTIBODY SYSTEM DYNAMICS AND SIMULATION (2nd YEAR)	6
12 ADDITIONAL FREE-CHOICE CREDITS	
INTERNSHIP/PRACTICAL TRAINING	6
FINAL THESIS/DISSERTATION	18

ANY FURTHER NOTES

Educational activities are organized in semesters.
Class attendance is not compulsory but strongly recommended.