

# Recommended subjects in English for Erasmus + students 2021/2022

**Study programs:** Electrical Engineering and Informatics

Nanotechnology

Mechatronics

#### For all Erasmus+ students:

#### Winter and Summer semester:

KGE/ICR-E Introduction to the Czech Republic Geography 5 ECTS credits

KCJ/CREK Czech Language (basic) 4 ECTS credits

Master's courses are not recommended for bachelor students!

For a small number of students, the subject will not be opened.

For further information, please contact the faculty coordinator for mobility

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# **Courses taught within the winter semester:**

## Master's Degree:

ITE/IMA	Image Processing	5 ECTS credits
ITE/PZS	Computer-Based Signal Processing	5 ECTS credits
MTI/VI	Virtual Instrumentation	3 ECTS credits
MTI/STR	State Space Control Systems	5 ECTS credits
NTI/SH	Introduction to shell	3 ECTS credits
NTI/OPS	Operating Systems	5 ECTS credits
NTI/BMM	Non-Contact Measurement Methods	5 ECTS credits
NTI/SZO	Image recording and processing	4 ECTS credits
NTI/DR	Differential equations	4 ECTS credits
NTI/EMM	Experimental methods in solid mechanics	5 ECTS credits
NTI/SES	Simulation of Electromechanical Systems	5 ECTS credits

## **Courses taught within the summer semester:**

## Master's Degree:

KCH/KNA	Introduction to Nanostructures	4 ECTS credits
KCH/PPN	Semicondustor Nanostructures (odd years)	4 ECTS credits
KCH/MMS	Molecular Modeling and Simulation	4 ECTS credits
KCH/FCN	Functionalization of Nanomaterials	6 ECTS credits
NTI/KOP	Construction of optical instruments	5 ECTS credits
NTI/PRK	Compilers	5 ECTS credits

#### Courses that you can choose when opening the Mechatronics study program:

MTI/OPT	OPTIMIZATION PROBLEMS	2 ECTS CREDITS WS
MTI/FPS	FI FCTRIC DRIVES	6 FCTS CREDITS WS

#### - These subjects include an entrance test to verify knowledge.

MTI/VKE	POWER ELECTRONICS	5 ECTS CREDITS WS
MTI/CRI	DIGITAL CONTROL	5 ECTS CREDITS WS
MTI/CT	COMMUNICATION TECHNOLOGY	5 ECTS CREDITS WS
MTI/IRO	INTELLIGENT ROBOTICS	5 ECTS CREDITS SS
MTI/RTC	REAL TIME CONTROL SYSTEMS	5 ECTS CREDITS SS
MTI/SSA	SMART SENSORS AND ACTUATORS	5 ECTS CREDITS SS
MTI/TDG	TECHNICAL DIAGNOSTICS	5 ECTS CREDITS SS

<sup>\*</sup> In the case of opening the Mechatronics study program, the incoming student can exchange his / her chosen subjects for newly opened subjects from the table. For more information, please contact the faculty coordinator.