

SPECIALIZACE PANELU GA ČR OK1 - Technické vědy

(od 1. dubna 2025)

Strojní inženýrství (Mechanical engineering) - P101

- Biomechanical engineering
- Control engineering, mechatronics and robotics
- Fluid mechanics and thermal engineering
- Acoustics and noise control (excl. architectural acoustics)
- Dynamics, vibration and vibration control
- Numerical modelling and mechanical characterisation
- Solid mechanics
- Tribology

Elektrotechnika a elektronika (Electrical and electronic engineering) - P102

- Communications engineering
- Electrical engineering
- Electronics, sensors and digital hardware
- Microelectromechanical systems (MEMS)
- Nanoelectronics
- Lasers and quantum electronics
- Photonics, optoelectronics and optical communications

Počítačové a informační inženýrství (Computer and information engineering) - P103

- Bioinformatic methods development
- Control engineering
- Simulation, modelling, and programming of mechatronics systems
- Artificial intelligence
- Computer vision and multimedia computation
- Data management and data science
- Distributed systems and algorithms
- Computer graphics
- Human-computer interaction
- Information modelling, management and ontologies
- Machine learning
- Software engineering

Stavební inženýrství (Civil engineering) - P105

- Civil geotechnical engineering
- Structural dynamics
- Structural engineering
- Timber engineering
- Transport engineering
- Water resources engineering
- Architectural science and technology
- Building science, technologies and systems
- Transport planning
- Urban analysis and development
- Architectural engineering

Chemické inženýrství (Chemical engineering) - P106

- Reaction engineering and catalysis
- Bioprocess engineering
- Separation processes
- Fluid flow, heat and mass transfer
- Engineering thermodynamics and properties of matter
- Process systems engineering, modelling and control
- Particle technology and dispersed systems
- Processes in micro- and nanosystems
- Energy conversion and storage
- Water, food, and pharmaceutical process engineering
- Environmental technologies, waste processing and sustainability

Anorganická materiálová věda a inženýrství (Inorganic materials science and engineering) - P107

- Metals and alloy materials
- Ceramics
- Glass
- Ceramic, metal and inorganic polymer composites
- Magnetic materials
- Superconducting materials
- Inorganic salt materials
- Refractory materials
- Cements and concretes

Organické materiály a biomateriály: věda a inženýrství (Organic materials and biomaterials science and engineering) - P108

- Macromolecular materials
- Polymers and plastics
- Natural and synthetic fibers
- Polymer composites
- Biocomposites
- Biomaterials
- Biomimetic materials
- Organic adhesives and sealants
- Timber, pulp and paper

Pokročilá materiálová věda a inženýrství (Advanced materials science and engineering) - P109

- Nanomaterials
- Functional materials
- Energy materials
- Advanced coatings
- Semiconductors
- Molecular materials for electronics
- Emergent materiál