VSB TECHNICAL UNIVERSITY OF OSTRAVA | FACULTY OF MECHANICAL ENGINEERING

Mechanical Engineering Technology

Generated: 28. 11. 2026

Faculty	Faculty of Mechanical Engineering
Type of study	Follow-up Master
Language of instruction	English
Code of the programme	N0715A270022
Regular period of the study	2 years
Cost	50,000 CZK per semester
Coordinating department	Department of Machining, Assembly and Engineering Metrology
Coordinator	prof. Ing. Marek Sadílek, Ph.D.

About study programme

Mechanical engineering technology programme graduates gain theoretical knowledge in the field of new manufacturing technology including comprehensive knowledge of experimental and numerical methods of scientific research in the field of manufacturing technologies and systems, manufacturing processes including auxiliary and service processes. Students prove gained level by making and defence of diploma thesis.

Graduate's employment

Graduates find their use by all employers which are busy with development, production, distribution and service of manufacturing products. Requirements of industry on number of Mechanical engineering technology programme graduates are currently several times higher than expected numers of number of Mechanical engineering technology programme graduates.
Graduate can be employed in praxis as:
• expert in academic sphere in other deparments there are concerned with science, research, development and inovations,
• designer and manager,
• technical and working engineer,
• computer engineer, designer of technological facilities, tools and jigs,
• technologist, engineer in departments of preparation and organisation of production,
• expert in control and quality management,
• expert in level review of technical projekts in bussines and financial sphere,
• designer of manufacturing systems, projet manager,
• engineer in departments of maintenance and in other service departements.

Study aims

Goal of study in two-years study programme Mechanical engineering technology is education of experts with extensive theoretical and practical knowledge of basic manufacturing technologies used in mechanical engineering. Students gain knowledge from basic scope of programme as engineering materials, and their surface finish, manufacturing technology of mechanical components and their assembly. Students deepen their knowledge by study of metalurgy and limit state of materials, cutting tools, jigs, NC manufacturing maschines, automatic and flexible manufacturing systems, pojection and management. Important part of teaching is control and quality management, organization and economic evaluation of manufacturing too.

Graduate's knowledge

Mechanical engineering technology study programme make strudents ready for wide range of technical position in manufacturing enterprises. Study programme educate technical experts and technologists which are able to design and innovate technological processes and products for specific applications, experts and managers for technical and human resources.

Graduate's skills

Graduates- engineers- will be able to analyze technological processes from theoretical and practical view, design appropriate inpu proces parameters and with use of suitable software tools to solve processes and to interpret gained results for needs of industrial praxis.

Graduate's general competence

Expert qualifications make graduates possible to be employed as engineers in technical, working, design, projection, contol, bussines and leader posts, in departments of company quality control and company management in manufacturing industry and in field of manufacturing and non-manufacturing sphere. Mechanical engineering technology programme graduates find employment in production working in manufacturing and in other fields of industry, in departments of preparation and organisation of production in departments of design and planning of technological facility, tools and jigs, in departments of maintenance and in other service departements.

Professions

- Rapid prototyping technology engineer
- Forming technology manager
- Materials production technologist
- Leading technologist
- Production system engineer
- Research team worker
- Technologist
- Production manager
- Auditor of quality management systems
- Industrial engineer
- Academic staff member

Hard skills

- Design of technological processes of production
- Evaluation of production and pre-production processes
- Processing of drawing documentation
- Metrology
- CNC machining technology
- Preparation of production
- Design with the support of CAD system Invertor
- Design of technological workplaces
- Reading technical documentation
- Knowledge in the field of production technologies
- Knowledge of machine tool construction
- Procedures for production of machined parts

Study curriculum

- form Full-time (en)