

Diplomirani inženir strojništva (un)/diplomirana inženirka strojništva (un)

Selected qualifications

Name of qualification	Diplomirani inženir strojništva (un)/diplomirana inženirka strojništva (un)
Translated title (no legal status)	Bachelor of Science in mechanical engineering
Type of qualification	Diploma prve stopnje (UN)
Category of qualification	Izobrazba
Type of education	Academic bachelor's education
Duration	3 years
Credits	180 credits

Admission requirements

- Matura or
- vocational matura in any secondary school programme and an examination in one of the following matura subjects: Mathematics, foreign language, Electrical Engineering, Computing, Physics or Mechanics; the selected subject may not be a subject which the candidate has already taken in the vocational matura; or
- school-leaving examination before 1 June 1995.

ISCED field

Field
Tehnika, proizvodne tehnologije in gradbeništvo

ISCED subfield

subfield metalurgija, strojništvo in kovinarstvo

Qualification level

SQF 7
EQF 6
First level

Learning outcomes

The qualification holder will be able to:

(general competences)

- demonstrate mastery of research methods, procedures and processes in the field of mechanical engineering, using a professionally critical approach;
- self-critically assess and responsibly design, plan, construct, manufacture and maintain products, machines and systems;
- take into account professional excellence, social utility, ethical responsibility, a commitment to professional ethics and criteria for the environmental integrity of their creations;
- plan, design and build products, machines, devices and complex installations in such a way that they will meet functional, design, quality, cost and environmental criteria, applying systemic concepts and principles of universality;
- carry out an independent technical assessment on the basis of scientific analysis and synthesis;

(subject-specific competences)

- design and construct mechanical elements, assemblies, devices, machines and installations;
- use and develop computer-aided construction;
- use and develop procedures and tools to model, optimise and simulate processes, machines, devices, manufacturing processes, products and manufacturing installations;
- plan and develop machines, devices and systems for energy, process and environmental engineering;
- devise, develop and use modern production technologies, automation of production and new production concepts;
- manage information, material and energy flows in the planning, design, construction, building, assembly, disassembly and maintenance of products;
- manage existing production processes and technologies, analyse, assess and evaluate them, and update them as necessary;

- organise and manage the production process;
- assure the appropriate quality of products by performing relevant quality measurements and checks;
- ensure measures for the faultless operation, maintenance and environmental integrity of products throughout their life cycle;
- demonstrate interdisciplinary understanding of activities in production systems;
- continuously develop skills in the application of knowledge in a specific professional field;
- use modern computer, information and communication technologies and systems in the professional field;
- demonstrate familiarity with and understanding of the history of mechanical engineering and its disciplines.

Assessment and completion

Students' knowledge is assessed by means of practical exercises and seminar papers, and also via products, projects, performances, services, etc. and by examinations. Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: solid results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5-1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10).

Progression

In order to progress to the second year, students must pass first-year examinations totalling at least 45 ECTS credits.

If a student fails to meet all progression requirements, the studies committee of the relevant university member may approve enrolment in the second year at the student's request provided he or she has completed more than half of the first-year course units (more than 30 credits), was unable to complete the course units for justified reasons, as laid down in the Statute of the University of Maribor, and may be expected to complete the course units.

In order to progress to the third year, students must have passed all first-year examinations (60 credits) and second-year examinations totalling at least 40 credits.

Transitions

Second-cycle master's study programmes (SQF level 8)

Condition for obtaining certificate

Students complete their studies when they have successfully met all prescribed requirements of a study programme.

Awarding body

Faculty of Mechanical Engineering, University of Maribor

URL

<http://www.fs.um.si/en/study/study-programme/>
