

# Magister inženir strojništva/magistrica inženirka strojništva

# **Selected qualifications**

Name of qualification

Magister inženir strojništva/magistrica inženirka strojništva

Translated title (no legal status)

Master of Science of Mechanical Engineering

Type of qualification

Diploma druge stopnje

Category of qualification

Izobrazba

Type of education

Master's education

**Duration** 

2 years

**Credits** 

120 credits

# Admission requirements

In order to be eligible to enrol in the Master of Mechanical Engineering – Engineering and the Automotive Industry study programme, the candidates must have completed:

- a 1st cycle study course from appropriate fields of study: mechanical engineering, electrical engineering, energy engineering, computer science, municipal engineering, hydraulic engineering, civil engineering, physics, mathematics, chemistry, or any other study programme comparable to the above;
- a 1st cycle study course from fields of expertise other than described in item a), if prior to enrolling they have completed study obligations corresponding to a total of 14 ECTS from the following subjects that form part of the 1st cycle Engineering and the Automotive Industry higher education professional and academic study course: Technology, Technical documentation and machine elements:
- a higher education professional study programme adopted before 11 June 2004 from appropriate fields of expertise: mechanical engineering, electrical engineering, energy engineering, computer science, municipal engineering, hydraulic engineering, civil engineering, physics, mathematics, chemistry, or any other study programme comparable to the above:
- a higher education professional study programme adopted before 11 June 2004 from fields of expertise other than described in item c), if prior to enrolling they have completed study obligations crucial for the continuation of studies corresponding to a total of 14 ECTS from the following subjects that form part of the 1st cycle Engineering and the Automotive Industry higher education professional and academic study course: Technology, Technical documentation and machine elements.

If more candidates apply than there are posts available, then the candidates will be selected in accordance with their rates of success at the undergraduate level (average grade 80%, grade of the thesis 20%).

## **ISCED** field

Field

Tehnika, proizvodne tehnologije in gradbeništvo

## **ISCED** subfield

subfield interdisciplinarne izobraževalne aktivnosti/izidi, pretežno tehnika, proizvodne tehnologije in gradbeništvo

## **Qualification level**

SQF 8 EQF 7 Second level

## **Learning outcomes**

The qualification holder will be able to:

#### General competences:

- The ability to analyse and solve problems in the field of technology;
- The ability to develop and use modern methods and tools;
- Strategic orientation, i.e. the capacity to design strategies;
- The ability to carry out project and team work;
- The ability to perform development work;
- The ability to perform research work;
- The ability to lead technological processes and introduce modern methods;
- The ability to lead development and technology and introduce innovation;
- The ability to use research methods and their application in practice;
- The knowledge and implementation of the mission, strategy and vision in the economic sector and society in general.

#### Subject-specific competences:

- The ability to understand and create innovative solutions in the field of energy and information systems in vehicles;
- The understanding, use and synthesis of various types of knowledge;
- The ability to design and develop informatics programmes;
- The ability to introduce and use informatics programmes;
- The ability to develop a virtual product;
- The ability to perform development work;
- The ability to develop and have full command of comprehensive quality;
- The ability to design diagnostics and continuous progress;
- The ability to introduce automatization and robotization in technological processes;
- Full command and implementation of development engineering in the industry;
- The knowledge of microprocessor systems in vehicles; and
- The knowledge of machine learning and artificial intelligence.

## **Assessment and completion**

Examination performance is graded 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**

The students are eligible to progress to year 2 if they have acquired the knowledge prescribed in the study programme and completed the obligations from year 1 (lectures, field/laboratory exercise, project assignments) and accumulated a minimum of 42 credit points.

The students are also able to enrol in the same year if they have fulfilled at least 1/3 of the obligations (20 credit points) of the current year and have not yet used the option of repeating a year.

By advancing or repeating a year, the full-time students will keep their student status and the related statutory rights and benefits.

In accordance with the law, the students are also able to request to have their student status extended, yet for a maximum of one year.

## **Transitions**

Third-cycle doctoral study programmes (SQF level 10)

## **Condition for obtaining certificate**

The condition for the completion of the study course is a successful completion of all study obligations under the proposed study programme, and the preparation, writing and successful defence of a master's thesis.

The study course will be completed once the students have accumulated 120 credit points as set out in this programme.

# **Awarding body**

University of Novo mesto, Faculty of mechanical engineering

URL

https://fs.uni-nm.si/