
Magister inženir/magistrica inženirka računalništva in informacijskih tehnologij

Selected qualifications

Name of qualification	Magister inženir/magistrica inženirka računalništva in informacijskih tehnologij
Translated title (no legal status)	Master of Science in computer and information technology 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

- A first Bologna cycle study programme comprising at least 180 ECTS credits from the relevant vocational fields or
- a first Bologna cycle study programme comprising at least 180 ECTS credits from other scientific-technical fields, and additional study requirements from other computer science topics totalling at least 24 credits or
- a first-cycle professional education study programme from the field of computer and information sciences adopted prior to 11 June 2004, or
- a first-cycle professional education study programme from other scientific-technical fields adopted prior to 11 June 2004, and additional study requirements from other computer science fields totalling at least 24 credits

ISCED field

Field
Informacijske in komunikacijske tehnologije (IKT)

ISCED subfield

subfield informacijske in komunikacijske tehnologije (ikt),
podrobneje neopredeljeno

Qualification level

SQF 8
EQF 7
Second level

Learning outcomes

The qualification holder is qualified to:

(general competences)

- think analytically and break down complex problems and situations,
- understand technical, technological and developmental problems,
- participate in project teams with creative contributions and well-argued positions from the profession,
- be technically critical and responsible, and demonstrate initiative and independence in decisions regarding and cooperation in major development or entrepreneurial projects,
- understand methodologies, methods and techniques used in development and technological-manufacturing projects, and be able to link and enhance them,
- follow the current state of technology and constantly update associated knowledge,
- master development approaches and introduce technical and technological improvements, devices and services, and master the associated patent engineering,
- analyse and synthesise complex solutions and development or technological-manufacturing projects, and implement, control and manage those solutions, and
- possess the technical, theoretical and empirical basis to continue studies at the third cycle or doctoral level, and for inclusion in scientific research work, primarily in all computer and information science fields.

(subject-specific competences)

- possess broad understanding of computer and information technologies that further enhance the seven compulsory subjects in the first and second semesters of study: Algorithms, Principles of Programming Languages and Development of Programming Systems, Web Technologies with Multimedia, Basics of Intelligent Methods and Computer Processing of Signals and Images,
- possess in-depth understanding of computer systems, their architectures, virtualisation, advanced operating systems, the web, and intelligent services and communication structures,
- enhance knowledge in the fields of modelling, and mathematical-analytical, statistical and optimisation bases for computer solutions,
- master the development and quality of software solutions, mobile and ubiquitous computing, the principles of information systems, application servers and the field of security and protection,
- demonstrate understanding of and the ability to develop and provide components that add a great deal of value-added to the broad segment of computer supported products, and
- perform key management tasks in technological-manufacturing and development projects, and possess the capacity to continue studies at the third cycle or doctoral level.

Assessment and completion

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

Students progress to the second year if they have met first-year requirements and accumulated at least 42 ECTS credits.

Transitions

Third-cycle doctoral study programmes (SQF level 10)

Condition for obtaining certificate

Master's degree students must meet all requirements defined by the study programme, and thus accumulate 120 ECTS credits, to complete their studies.

Awarding body

University of Maribor, Faculty of Electrical Engineering and Computer Science

URL

<https://feri.um.si/en/>
