

Magister inženir informatike in tehnologij komuniciranja/magistrica inženirka informatike in tehnologij komuniciranja

Selected qualifications

Name of qualification	Magister inženir informatike in tehnologij komuniciranja/magistrica inženirka informatike in tehnologij komuniciranja
Translated title (no legal status)	Master of Science in information and communication technology
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 vocational fields (e.g. technological, scientific-mathematical, business-economic or organisational fields) and additional study requirements from the field of computer science totalling at least 18 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 vocational fields (e.g. technological, scientific-mathematical, business-economic or organisational fields) adopted prior to 11 June 2004, and additional study requirements from the information science field 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:

- think systematically, which facilitates the graduate's inclusion in interdisciplinary groups for the development of complex ICT solutions and systems in various problematic fields relating to the recognition of the methodological bases of development,
- implement and administer ICT solutions and information systems,
- perform basic scientific research activities based on the knowledge, mastery and application of theoretical concepts,
- apply knowledge in practice, and transfer and apply theoretical knowledge to practical problematic domains, and resolve problems effectively in a quality manner based on facts,
- think critically,
- resolve scientific and technical problems by searching for sources of knowledge and applying scientific methods,
- perform independent research work that facilitates the identification of research and development topics and their logical integration in practice,
- search for new sources of knowledge and apply methods for communicating within the profession and between professions with the aim of achieving effective solutions, and

- cooperate and work in a group, and proactively search for new solutions and approaches.

(subject-specific competences, elective for the module)

Business processes management

- in-depth understanding of business process management methods and approaches,
- understanding of the role, importance and architectures for the effective implementation of electronic operations,
- architectural and functional understanding of integrated information solutions, and
- advanced understanding of simulations and operational research to resolve complex problems.

Intelligent information solutions

- in-depth knowledge and understanding of and the ability to implement intelligent systems,
- mastery of intelligent solution development technologies,
- knowledge of business intelligence procedures and methods, and
- mastery of and ensuring the quality of data.

State-of-the-art IT platforms and architectures

- knowledge of the concepts, technologies and architectures of contemporary IT platforms,
- knowledge and understanding of and the ability to apply architectural samples,
- understanding and knowledge of technologies for ubiquitous computing, and
- in-depth knowledge of the most state-of-the-art web application concepts.

Information systems security and managing security

- in-depth knowledge of selected information security technologies, approaches and concepts,
- knowledge of the most state-of-the-art algorithms for cryptography and application thereof,
- comprehensive mastery of information security, and
- provision of reliable information systems.

Service science

- understanding of service science and innovations,
- qualifications for management services,
- knowledge of the theoretical bases of IT services and the associated legal framework, and
- mastery and understanding of socio-technological models.

Communication and cooperation

- documentation and reporting in information sciences,
- mastery and application of cooperation technologies,
- detailed knowledge of strategic planning, and
- mastery of communication with clients and users.

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/>
