

# Diplomirani inženir telekomunikacij (un)/diplomirana inženirka telekomunikacij (un)

# **Selected qualifications**

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

Admission requirements	<ul> <li>Matura or</li> <li>vocational matura in any secondary school programme,</li> <li>school-leaving examination (prior to 1 June 1995) under any four-year secondary school programme</li> </ul>
ISCED field	Field Tehnika, proizvodne tehnologije in gradbeništvo
ISCED subfield	subfield elektronika in avtomatizacija
Qualification level	SQF 7 EQF 6 First level

#### Learning outcomes

The qualification holder will be able to:

(general competences)

- apply knowledge and methods, skills and modern tools in the pursuit of their occupation,
- use current knowledge and adapt to progress in the field of the application of mathematical/scientific, engineering and technological knowledge,
- think abstractly and recognise analogies and basic patterns,
- design and carry out experiments, analyse and interpret data and use the results obtained to improve processes,
- design a system, component or process that will meet specified requirements,
- work in multidisciplinary teams,
- identify, formulate and resolve problems and anticipate the consequences of solutions,
- communicate effectively using professional and established terminology in their mother tongue and a foreign language,
- recognise the need and capacity for learning up to the end of a professional career (lifelong learning),
- demonstrate awareness of their own ethical and professional responsibility, and a commitment to quality, timeliness and constant improvement,
- recognise current narrow professional issues and local and global socioeconomic issues.

(subject-specific competences)

- demonstrate familiarity with and apply the mathematical concepts, rules and methods that are the basis of the transfer and processing of information,
- demonstrate familiarity with and apply the physical concepts and rules that are the basis of the transfer of information,
- demonstrate familiarity with and apply the basic principles of the transfer of various types of information (data, speech, images, etc.),
- demonstrate familiarity with hardware for the creation, transfer, reception and processing of information (transmission media, electronic circuits, transmission systems, network hubs and

terminal equipment, etc.),

- design, develop and implement hardware components for the creation, transfer, reception and processing of information,
- demonstrate familiarity with software for the creation, transfer, reception and processing of information (communication protocols, image and speech processing, telecommunications services, user interfaces, etc.),
- design, develop and implement software components for the creation, transfer, reception and processing of information,
- plan and implement telecommunications networks on a limited scale,
- participate in the analysis of the functioning, management and maintenance of telecommunications systems, networks and services,
- keep abreast of new developments in the field of communications technology products and services, access their suitability for use and use them,
- demonstrate understanding of the influence of telecommunications solutions on society in the narrow sense and in the broader, global sense,
- successfully continue studies at the postgraduate level in the field of communications technologies, and also in other fields that can contribute to supplementing knowledge in the fields of engineering, management and enterprise.

#### 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 have passed first-year examinations totalling at least 54 ECTS credits.

In order to progress to the third year, students must have passed all first-year examinations and secondyear examinations totalling at least 48 ECTS credits.

## **Transitions**

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

### **Condition for obtaining certificate**

To complete their studies, students must complete all course units prescribed by the study programme.

## Awarding body

Faculty of Electrical Engineering and Computer Science, University of Maribor

URL

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