SLOVENSKO
OGRODJE
KVALIFIKACIJ

Magister tekstilni inženir/magistrica tekstilna inženirka

Selected qualifications

Name of qualification	Magister tekstilni inženir/magistrica tekstilna inženirka
Translated title (no legal status)	Master of Arts in textile 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 completed first-cycle study programme in: textiles technology, natural sciences, engineering, technology, computer science, information science, economics, organisation of work or design; or
• a completed first-cycle programme in another field, if prior to enrolment the candidate has completed course units essential for further studies, totalling 10–60 ECTS credits; or
• a completed pre-Bologna professional higher education programme in: textile technology, natural science, engineering, technology, computer science, information science, economics, organisation of work or design; or
• a completed professional higher education programme under the former programme in another field, if prior to enrolment the candidate has completed course units essential for further studies, consisting of 10–60 credits.

ISCED field

Field
Tehnika, proizvodne tehnologije in gradbeništvo

ISCED subfield

subfield tekstilna, oblačilna, čevljarska in usnjarska tehnologija

Qualification level

SQF 8
EQF 7
Second level

Learning outcomes

The qualification holder will be able to:

(general competences)

- demonstrate mastery of advanced technical knowledge acquired through the study of theoretical and methodological concepts, linked to training in searching for new sources of knowledge using scientific research methods,
- undertake critical reflection,
- experiment and visually communicate various intellectual concepts,
- learn independently in their own professional and academic field,
- demonstrate understanding of the interdependence of technology and design,
- demonstrate understanding of artistic language and its technological translation into graphic products,
- show initiative and autonomy in decision-making and in managing the most complex working systems,
- demonstrate social and communication skills in leading teamwork, including in the field of projects based on integration of scientific laws from various fields,
- demonstrate professional, ethical and environmental responsibility,
- use modern tools and skills, above all from the ICT field, in everyday professional work and research,

(subject-specific competences)

- demonstrate advanced knowledge of mathematics, technical mechanics, organic and physical chemistry and a developed capacity for scientific thinking,
- demonstrate detailed knowledge of high-performance (HP) fibres, their structure at various structural levels (nanometric, microfibrillar, macrofibrillar), morphology and achievements, use of HP fibres in high technology: in medicine, pharmacy, biomedicine, biotechnology, optics, electronics, transport technology, information science, nuclear energy; and fibres with specially modified properties of standard fibres, enabling specific comfort in use (high-touch fibres),
- demonstrate understanding of scientific methods, critical analysis and synthesis and their application in the addressing of concrete problems: analysis, development and manufacture of advanced products with improved characteristics and high added value (yarns, nonwoven textiles, knitted textiles, knitting yarns); plan, analyse and implement advanced mechanical textile processes,
- integrate knowledge from the fields of the structural, mechanical, physical and chemical properties of textiles with finishing processes, for the purpose of the technological design of a multifunctional textile with high added value,
- demonstrate understanding of the difference between innovation management and management of routine operation,
- demonstrate in-depth theoretical familiarity with the integrated process of textile planning, taking into account design and functional starting points,
- demonstrate in-depth knowledge of the effects of climate conditions, human thermophysiological responses and sensory responses on the planning of clothing for different purposes of use,
- demonstrate familiarity with innovations in modern textiles, in particular intelligent textiles and high-comfort textiles, which are based on multifunctionality and an interdisciplinary approach to development,
- demonstrate mastery of knowledge of the latest special processes of physical and chemical modification of fibre-forming polymers.

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

In order to enrol in the second year, students must have completed at least 54 ECTS credits.

Transitions

Third-cycle doctoral study programmes (SQF level 10)

Condition for obtaining certificate

To complete their studies, students must complete all course units in all subjects in which they have enrolled and prepare and defend a master's thesis.

Awarding body

University of Ljubljana, Faculty of Natural Sciences and Engineering

URL

http://www.ntf.uni-lj.si/en/