

# Diplomirani tekstilni inženir (un)/diplomirana tekstilna inženirka (un)

## **Selected qualifications**

Name of qualification	Diplomirani tekstilni inženir (un)/diplomirana tekstilna inženirka (un)
Translated title (no legal status)	Bachelor of Science in textile engineering
Type of qualification	Diploma prve stopnje (UN)
Category of qualification	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 and an examination in one of the matura subjects; the selected subject may not be a subject which the candidate has already taken in the vocational matura; or</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 tekstilna, oblačilna, čevljarska in usnjarska tehnologija
Qualification level	SQF 7 EQF 6 First level

#### Learning outcomes

The qualification holder will be able to:

(general competences)

- demonstrate mastery of professional knowledge acquired through the study of theoretical and methodological concepts,
- transfer and apply theoretical knowledge in practice and resolve problems, above all by seeking new sources of knowledge and applying scientific methods,
- experiment and visually communicate various intellectual concepts,
- pursue own learning in their own professional field,
- show initiative and autonomy in decision-making and in managing the most complex work,
- communicate with co-workers and experts from related disciplines, thus enabling active cooperation on joint work, and in the field of projects based on the integration of technical laws with design practice,
- demonstrate professional, ethical and environmental responsibility,
- use modern tools and skills, above all from the ICT field, in everyday professional work,

(subject-specific competences)

- demonstrate mastery of advanced mathematics, physics and chemistry knowledge and scientific thinking,
- assess the properties of fibres and link these to their morphological structure or the way they change during technological processing,
- demonstrate understanding of the interdisciplinary nature of the development of modern fibreforming polymers through the accommodation of different scientific disciplines (chemistry, biology/biotechnology, nanotechnology, informatics) in order to create responsive and intelligent fibre-forming polymers,
- relate the influence of various raw materials and technological factors to the structure and

properties of spinning yarn, woven fabrics, knitting yarns, knitted fabrics and fibres,

- demonstrate familiarity with basic woven and knitted structures; the characteristics that derive from them and their advantages and disadvantages,
- optimise fundamental technological processes in clothing manufacture through the transfer of theoretical knowledge into practice and achieve greater quality of finished products,
- demonstrate familiarity with the theoretical bases of finishing, which are the basis for autonomous creative research in the fields of dyeing, printing, refining and textile care,
- plan pre-finishing, dyeing, printing and refining processes with regard to the structural characteristics of textiles, while taking into account environmental requirements,
- demonstrate mastery of computer modelling of yarns, woven fabrics, knitting yarns, knitwear and patterns for printing,
- supervise, analyse and manage the production process, plan the production process using network planning methods, identify opportunities for the deployment of computer applications in the production process and evaluate them from the point of view of costs and the humanisation of work,
- demonstrate understanding of modern concepts of quality management systems and their importance in the context of global competitiveness.

#### **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 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 progress to the next year, students must obtain confirmation of enrolment and attendance for all subjects in the previous year and have completed all practical classes and the following number of ECTS credits:

- for enrolment in the second year: at least 54 ECTS credits,
- for enrolment in the third year: 60 first-year ECTS credits and at least 54 second-year 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 in all subjects in which they have

enrolled and prepare and defend a diploma thesis.

### Awarding body

University of Ljubljana, Faculty of Natural Sciences and Engineering

URL

https://www.ntf.uni-lj.si/toi/en/study/bachelors-degree-2/textile-and-clothing-planning-un/general-informati on-2/