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# Doktor znanosti/doktorica znanosti s področja prometno inženirstvo

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## Selected qualifications

<b>Name of qualification</b>	Doktor znanosti/doktorica znanosti s področja prometno inženirstvo
<b>Translated title (no legal status)</b>	Doctor of Philosophy in the field of transport engineering
<b>Type of qualification</b>	Doktorat
<b>Category of qualification</b>	Izobrazba
<b>Type of education</b>	Doctoral education
<b>Duration</b>	3 years
<b>Credits</b>	180 credits

## Admission requirements

- A completed second-cycle study programme,
- an academic higher education programme adopted prior to 11 June 2004, or
- a professional higher education programme adopted before 11 June 2004 and a study programme leading to a specialisation. Prior to enrolment in the programme, course units totalling 45 credits will be determined for such candidates. These course units are subjects from the Transport Engineering programme: Mathematics D, Technology of Multimodal Transport, Transport Planning Methods, Statistics B, Transport Infrastructure Planning, Sustainable Transport Concepts, Modern Aspects of Means of Transport, Mobility Management, or
- a study programme that leads to vocations governed by EU directives, or another non-structured master's degree programme assessed at 300 credits.

## ISCED field

Field  
Tehnika, proizvodne tehnologije in gradbeništvo

## ISCED subfield

subfield interdisciplinarne izobraževalne aktivnosti/izidi, pretežno tehnika, proizvodne tehnologije in gradbeništvo

## Qualification level

SQF 10  
EQF 8  
Third level

## Learning outcomes

Qualification holders are qualified to:

(general competences)

- demonstrate in-depth understanding of theoretical and methodological concepts,
- demonstrate mastery of research methods, procedures and processes in transport engineering,
- independently apply acquired theoretical knowledge to solve problems in practice,
- use judgement to take strategic decisions in the transport engineering field,
- demonstrate autonomy in research,
- show cooperativeness, work in a group,
- work and create in an international environment,
- develop communication skills and expertise, in particular constant communication in the international environment,
- show curiosity and an inclination for training for continuous study,
- manage time, materials and human and financial resources,
- act as mentor to younger colleagues at the university or in industry,
- lead large technical groups and research teams,
- demonstrate a capacity for ethical reflection and a deep commitment to professional ethics,
- show creativity and innovation as the result of the interdisciplinary nature of the study programme,

(subject-specific competences)

- demonstrate in-depth knowledge of mathematical content and knowledge of multimodal transport systems, the management of an integrated transport system, research into transport provision, modelling and simulation of transport flows, transport in terminals, transport infrastructure management technology,
- transport infrastructure project management, EU transport policy, business policy of mega-transport undertakings, intelligent transport systems, automation in transport, modern means of transport, the economics of the global transport industry, transport safety and simulation models of safety analyses in transport, spatial planning and the impact of the transport system on the environment,
- demonstrate in-depth understanding of theoretical and methodological concepts in selected narrow sub-fields of transport engineering,
- logically address specific problems in the field of intermodal transport systems,
- resolve specific problems on an ongoing basis through the application of modern scientific methods and procedures,
- demonstrate understanding of new information and interpretations and place them in the context of transport engineering and engineering in general.

## 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 from the first year to the second year, students must complete at least 45 credits, which must include an examination in a core subject and individual research 1.

In order to progress from the second year to the third year, students must have completed a total of 120 credits, i.e. all first- and second-year course units. Students must submit the topic of their doctoral dissertation by the third year at the latest.

## Condition for obtaining certificate

In order to complete the third-cycle Transport Engineering programme, students must complete all course units prescribed by the programme and defend a doctoral dissertation, for a total of 180 credits.

Before defending his/her doctoral dissertation, the student must publish (or obtain confirmation of publication), as lead author, findings from the doctoral dissertation in at least one original scholarly article (SICRIS categorisation 1.01) in a scholarly journal indexed by SCI, SSCI or A&H/C with an impact factor greater than 0.

## Awarding body

Faculty of Construction and Civil Engineering, University of Maribor

URL

<https://www.fgpa.um.si/en/>

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