SLOVENSKO OGRODJE KVALIFIKACIJ

Archived

Magister inženir sadjarstva/magistrica inženirka sadjarstva

Selected qualifications

Diplomirani industrijski in unikatni oblikovalec (UN)/diplomirana industrijska in unikatna oblikovalka (UN)

Name of qualification	Magister inženir sadjarstva/magistrica inženirka sadjarstva
Translated title (no legal status)	Master’s degree in fruit growing 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

• Completed first-cycle academic or professional higher education programme in a life discipline or biotechnology discipline provided by the Biotechnical Faculty or another faculty in or university, or
• completed first-cycle academic or professional higher education programme in another technical field comprising at least 180 credits, of which at least 120 credits should be in subject matter compliant with a programme of continuation at the IMFS. Candidates who do not meet that condition may enrol if they additionally gain 10 to 60 credits in subjects of the first-cycle academic programme in Agriculture – agronomy, or
• completed professional higher education programme adopted prior to 11 June 2004 in a life discipline or biotechnology discipline provided by the Biotechnical Faculty or another faculty in or university, or
• completed professional higher education programme adopted prior to 11 June 2004 in another field, if the candidate additionally completes 10–60 credits from the selection of subjects under the first-cycle academic programme Agriculture – agronomy.

ISCED field

Field
Kmetijstvo, gozdarstvo, ribištvo in veterinarstvo

ISCED subfield

subfield hortikultura

Qualification level

SQF 8
EQF 7
Second level

Learning outcomes

The qualification holder will be able to:
(general competences)

- analyse horticultural issues, synthesise knowledge and information and envisage potential solutions, their implementation and consequences,
- solve problems through an interdisciplinary approach and analytical thinking, using research methods and various sources, and transfer and use acquired knowledge in practice,
- demonstrate independence and self-criticism in making decisions in complex and unexpected situations, and take responsibility for their consequences for the sustainable development of horticulture and natural resources,
- link together acquired in-depth theoretical and practical knowledge and its use in existing and new technological solutions in practice,
- independently and autonomously create improvements to existing technological processes and create new technologies in the field of horticulture,
- master communication skills for open, interdisciplinary dialogue in solving problems and making decisions in the national and international area (EU),
- take professional and ethical responsibility in managing renewable natural resources in the horticulture sector and design ethical standards in this field,

- pursue team work for innovation on the national and international level; cooperate in various EU institutions that include horticulture,

(job-specific competences)

- know and understand horticulture from the theoretical and practical aspects as an interdisciplinary activity that includes production and maintenance activities and impacts socio-economic dimensions and the appearance of the cultural landscape,
- understand the factors of horticultural development and its importance in context of agriculture and the general economic, social and sustainable development of Slovenia,
- identify and solve specific technological and work problems by selecting appropriate scientific qualitative and quantitative methods (e.g. planning experiments/observations and their evaluation) to implement decisions in independent and group work in the field of horticulture,
- understand the growth and development and specific requirements of horticultural plants and their response to factors of growth and development in natural and agro-ecosystems; link this knowledge and other natural science and social studies knowledge in an interdisciplinary manner in order to apply them to new technological solutions,
- understand the impact of physiological processes (e.g. differentiation of fruiting buds, flowering, fertilisation) on the growth and development of fruit plants, vegetables, grapevines, ornamental and medicinal plants, on the generation of primary (quantity and quality) and secondary metabolites (bioactive substances) and apply this knowledge to improve existing technological solutions and plan new ones,
- understand the general structure of horticulture and the connection between systems of production in fruit growing, wine growing, horticultural gardening, ornamental and medicinal plants,
- recognise and solve technological, ecological and organisational problems in the field of horticulture and formulate strategies related directly or indirectly to the existing technology of horticultural plant production,
- plan new technological processes and critically evaluate existing ones while applying modern entrepreneurial principles and methods of critical analysis with minimal energy consumption and maximum adherence to sustainable use of environmental resources,
- preserve genetic resources and perform target selection and breeding of new cultivars, be familiar with modern knowledge and methods of genetics, plant breeding and biotechnology,
- know and understand systems of cultivation, annual and life cycles, production methods (integrated, organic) of fruit trees, grapevines, vegetables, ornamental and medicinal plants from the aspect of sustainable use, and develop new skills for more efficient use of renewable resources,
- be familiar with harmful organisms, their functioning and developmental properties related to protection measures in terms of good agricultural practices of plant protection (familiarity with the use of plant protection agents, their selectivity, ecotoxicology, persistence and resistance),
- develop and apply new methods for determining the quality of horticultural products (understanding the primary and secondary plant metabolism), understand the principles of generating and synthesising new information in various fields, its critical analysis regarding specific informational needs in the horticultural context and include new information in solving problems at various levels,
- understand professional and scientific literature in the field of specific horticultural disciplines,
- search new relevant information using modern information and communication technology and systems and critically evaluate it and apply it logically in the area of horticulture on various levels of decision-making.

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

To enrol in the second year, students must have completed all practical classes and have completed 45 credits.

Transitions

Third-cycle doctoral study programmes (SQF level 10)

Condition for obtaining certificate

To complete their studies, students must meet all requirements for all subjects in which they have enrolled, and produce and defend a master’s thesis.

Awarding body

University of Ljubljana, Biotechnical Faculty

URL

http://www.bf.uni-lj.si/en/deans-office/study-programmes/master-study-programs-second-cycle/