SLOVENSKO
OGRODJE
KVALIFIKACIJ

Magister inženir živilstva/magistrica inženirka živilstva

Selected qualifications

Name of qualification	Magister inženir živilstva/magistrica inženirka živilstva
Translated title (no legal status)	Master of Science in Food Science
Type of qualification	Diploma druge stopnje
Category of qualification	Izobrazba
Type of education	Master's education
Duration	2 years
Credits	120 credits

Admission requirements

In order to enrol in the second-cycle master's study Food science candidates must have completed:
• first-cycle higher education study programme Food Science and Nutrition or a comparable first-cycle study programme at another university;
• first-cycle university study programme at the Biotechnical Faculty or another faculties in Slovenia or abroad which do not belong to the chosen narrow/related study field (a related study field is defined in the points a) and c)), if they additionally accumulate 30 credits among the subject of the first-cycle higher education study programme Food science and Nutrition. Namely:
    ◦ a) graduates of the study programmes in the fields of life sciences, like Biotechnical Faculty, completes the subjects from the range of compulsory technical subjects (Methods of analysis in Food science, Food chemistry, Food microbiology, Food hygiene, Packaging and transport techniques, Technology processing, Technologies of plant food processing, Technologies of animal food processing, Basics of Biotechnologies),
    ◦ b) graduates of the study programmes with a comparable range of fundamental subjects (Mathematical methods, Chemistry, Biology, Physics, Biochemistry) complete the subjects from the range of compulsory technical subjects (Methods of analysis in Food science, Food chemistry, Food microbiology, Food hygiene, Packaging and transport techniques, Technology processing, Technologies of plant food processing, Technologies of animal food processing, Basics of Biotechnologies) and
    ◦ c) graduates of all the other study fields without a comparable range of fundamental and technical subjects, the additional credits are determined from the range of compulsory fundamental and compulsory technical subjects;
• first-cycle higher education professional study programme in the field of Food science and Nutrition under the old or the new programme or a first-cycle higher education professional study programme at another university;
• a first-cycle higher education professional study programme or a former higher education professional study programme at the Biotechnical Faculty or other faculties in Slovenia and abroad, which do not belong in the selected narrow/related study field (a related study field is defined in the points a) and c)), if they additionally accumulate up to 60 credits among the subjects of the first-cycle studies Food Science and Nutrition. Namely: a) graduates of study programmes in the fields of life sciences, like Biotechnical Faculty, complete the subjects (up 30 credits) from the range of compulsory professional subjects (Analytical methods in Food science, Food chemistry, Food microbiology, Food Hygiene, Packaging and transport techniques, Technology processing, Technologies of plant food processing, Technologies of animal food processing, Basics of biotechnologies), b) graduates of the study programmes with a comparable extent of fundamental subjects (Mathematical (methods, Chemistry, Physics, Biochemistry) complete the subjects (up to 40 credits) from the range of compulsory technical subjects (Methods of analysis in Food science, Food chemistry, Food microbiology, Food hygiene, Packaging and transport techniques, Technological processing, Technologies of plant food processing, Technologies of animal food processing, Basics of Biotechnologies) and c) graduates of all the other fields of study without a comparable range of fundamental and technical subjects are given credits from the range of compulsory fundamental and compulsory technical subjects.

ISCED field

Field
Tehnika, proizvodne tehnologije in gradbeništvo

ISCED subfield

subfield živilska tehnologija

Qualification level

SQF 8
EQF 7
Second level

Learning outcomes

The qualification holder will be able to:

- demonstrate knowledge of fundamental natural science and biotechnological knowledge,
- work in an interdisciplinary team,
- demonstrate specialist knowledge acquired through the study of theoretical and practical cases,
- coherently apply acquired knowledge in practice,
- demonstrate research capability and intuition,
- transfer, critically asses and apply theoretical knowledge in practice and problem-solving, especially by seeking out new sources of knowledge, through interdisciplinary work and through the application of scientific methods,
- generate new ideas,
- address problems and make decisions in practice,
- make decisions in complex and unexpected situations,
- communicate in an open manner and demonstrate proficiency in the use of information technologies,
- demonstrate readiness for a lifelong learning,
- communicate various intellectual concepts,
- demonstrate autonomy and a critical spirit,
- show professional ethical responsibility.

Subject-specific competences

Students will be able to:

- think scientifically,
- demonstrate in-depth theoretical and practical knowledge of specific contents of chemistry, biochemistry, microbiology and sensory analysis of food, mastery of all analytical methods used for food control, numerical methods and planning of
- process engineering.
- demonstrate detailed knowledge of raw materials for food industry, technological processes of production of all the important groups of food, conservation methods, storage, process control of production and final control of quality, of
- special microbiology of food and microbiological analysis, of sensory analysis, of safety, toxicology and contamination of food, of legislation governing all these fields.
- broad engineering knowledge: of material and energy transfer in various processes of food processing, of technological processes of cooling, freezing, heat treatment, dehydration,

concentration, irradation and packaging of food
- products; of technological processes and lines design; of quality management with an emphasis on hygiene and food safety (HACCP), of new products creation and development, of waste water (or environment) management in the food industry and of good manufacturing practice (GMP).
- demonstrate an in-depth scientific insight into the new techniques and technologies in the field of food engineering (the use of high pressure, ultrasound, microwaves; nanotechnology, new foods, genetically modified food, functional foods, ecological and indigenous foods).
- demonstrate the knowledge necessary of planning, design, management and operation of new technological processes and knowledge of business economics, entrepreneurship and management.
- conduct research work, and work in laboratories for analysis and control, and inspection services.

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

Students may enrol in the next year if by the end of the academic year they have completed all prescribed requirements in the syllabuses and achieved a minimum of 48 ECTS credits.

Transitions

Third-cycle doctoral study programmes (SQF level 10)

Condition for obtaining certificate

Students complete the studies when they have completed (passed) all the prescribed requirements in the study programme in the extent of 120 credits. Students must prepare a master’s thesis which must receive a positive grade, and successfully publicly present and defend it.

Awarding body

University of Ljubljana, Biotechnical Faculty

URL

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