

Additional information on study programmes:

<http://www.fkkt.uni-lj.si/en/study/>

Student's office:

Head: Maja Belavič, PhD, maja.belavic@fkkt.uni-lj.si

Phone: +386 1 479 8403

2nd Cycle (Master) University Study Programme

CHEMICAL EDUCATION

Study programme **Chemical Education** educates the prospective teachers of chemistry in general secondary schools (»gimnazija«) and vocational secondary schools with broader curriculum of chemistry. Students gain a broad knowledge of chemistry, general and special didactics. They are enabled to conduct pedagogical research in schools. With the gained knowledge, they are able to confidently, clearly and successfully teach chemistry. They are also able of lifelong self-education in their professional and special didactic area, taking into account the fact that the knowledge in the area of chemistry and other natural sciences is doubled every five years.

Access requirements:

- a first-cycle (at least) study programme with at least 180 ECTN credits in Chemistry or Biochemistry; or an equivalent study program complying to the previous legislation in Republic Slovenia or abroad;
- a first-cycle (at least) study programme with at least 180 ECTN credits in other professional areas; or an equivalent study program complying to the previous legislation in Republic Slovenia or abroad; provided that study obligations essential for the continuation of studies have been fulfilled prior to enrolment in the programme. Study obligations in the range 10 to 60 ECTN credits are determined by the FKKT Study Committee.

Study programme is a 2-year (4 semester) programme with 120 credit points. Graduates are awarded the title Master Professor of Chemistry: (M) "magister profesor kemije" or (F) "magistrica profesorica kemije" or (abbreviated) "mag. prof. kem."

Graduates are employable in the general secondary schools ("gimnazija"), vocational secondary schools, and primary schools as teachers of chemistry, as well as in the public institutions. Completed 2nd Cycle Study Programme Chemical Education enables the enrolment in 3rd cycle (doctoral) study programmes.

What to do after the completion of the study programme?

Graduates of all 2nd cycle study programmes at UL FKKT have good employment possibilities. For those who want to continue their studies, UL FKKT offers a 3rd Cycle (Doctoral) Study Programme Chemical Sciences with the following areas: chemistry, chemical engineering, and biochemistry. UL FKKT also participates in the interdisciplinary doctoral study programmes Biomedicine, Biosciences, Environmental Protection, and Materials Science and Engineering.

What else is there for students of UL FKKT?

Students can join and actively participate in the science research work during the 2nd cycle studies. Their research projects successful obtain the eminent Prešernova, Krka and other awards; they also participate at international competitions.

Faculty encourages student international exchange via Erasmus+ programme, which makes possible for students to conduct part of the studies or research work abroad at renowned universities across Europe.

Students can join the Student Council FKKT, whose members are only students and whose function is to represent the students in various working bodies of the Faculty. Student Council also organizes different events, such as Freshmen's Night (Brucovanje), participation at sports and scientific competition Tehnologijada, exhibitions and other projects.

Student Organization FKKT organizes various additional activities for students: excursions, workshops, sports and recreation activities, picnics, charity days...

**You will never be bored at UL FKKT!
Come and enrol in our study programmes!**

University of Ljubljana
Faculty of Chemistry and Chemical Technology



2nd Cycle (Master) University Study Programmes at

UL FKKT

Faculty of Chemistry and Chemical Technology,

University of Ljubljana, offers five 2nd cycle study programmes. Chemical studies have a long tradition at UL, since the University foundation in year 1919. Faculty is very active in the field of scientific research and the interested students can actively participate in the research. At the same time, Faculty is active and strongly connected with Slovenian chemical and similar industries. Completion of the UL FKKT study programmes thus opens broad employment possibilities.

Faculty of Chemistry
and Chemical Technology

Faculty of Computing
and Informatics

Biological
center

Faculty of
Biotechnology



2nd Cycle (Master) University Study Programme CHEMISTRY

Chemistry is one of the fundamental natural sciences with a strong experimental emphasis. New knowledge is gained mainly by practical experiments and by continuously examining and rebuilding the theoretical bases and models. In the 2nd Cycle University Study Programme Chemistry, students gain a broad knowledge and understanding of chemistry, at the same time gaining the suitable competencies for the employment as professional chemists in the chemical and similar industries, as well as public institutions. They also gain competencies needed for the autonomous further studies, research work and their own expert development.

Access requirements:

- A first-cycle programme in Chemistry worth at least 180 credits or an equivalent study programme completed pursuant to previous regulations in the Republic of Slovenia or abroad;
- A first-cycle programme in other professional fields worth at least 180 credits or an equivalent study programme completed pursuant to previous regulations in the Republic of Slovenia or abroad, provided that the candidate has previously passed all obligations required for further study. These obligations are stipulated by the UL FKKT Committee for Master's Programmes and are worth from 10 to no more than 60 credits.

Study programme is a 2-year (4 semester) programme with 120 credit points. Graduates are awarded the title Master in Chemistry: (M) "magister kemije" or (F) "magistrica kemije" or (abbreviated) "mag. kem."

Graduates are employable in the chemical laboratories of the chemical and similar industries; research and public health institutes; surveillance and inspection institutions; several of them start private businesses. Completed 2nd Cycle Study Programme Chemistry enables a direct enrolment in 3rd Cycle (Doctoral) Study Programme in Chemical Sciences or in the interdisciplinary doctoral study programmes. Masters of chemistry from UL FKKT are employable also abroad, since the study programme has been synchronized with the European requirements and has gained an international label Chemistry Euromaster.

2nd Cycle (Master) University Study Programme CHEMICAL ENGINEERING

Chemical engineering is one of the fundamental technical disciplines, but different from other engineering sciences due to its profound interdisciplinary character. It is based on chemistry, mathematics, physics, and biology, which enables the multilevel approach to the processes and technologies: molecular, nanomaterial, microtechnological, industrial, and global. In the 2nd Cycle University Study Programme Chemical Engineering, students gain the knowledge and modern engineering tools, methods, and techniques needed for the research and development work in the area of chemical products and processes. They are able to identify and solve complex engineering problems by using innovative experimental techniques. At the same time, they gain communication and management skills.

Access requirements:

- A first-cycle programme in Chemical Engineering worth at least 180 credits or an equivalent study programme completed pursuant to previous regulations in the Republic of Slovenia or abroad;
- A first-cycle programme in other professional fields worth at least 180 credits or an equivalent study programme completed pursuant to previous regulations in the Republic of Slovenia or abroad, provided that the candidate has previously passed all obligations required for further study. These obligations are stipulated by the UL FKKT Committee for Master's Programmes and are worth from 10 to no more than 60 credits.

Study programme is a 2-year (4 semester) programme with 120 credit points. Graduates are awarded the title Master of Chemical Engineering: (M) "magister inženir kemijskega inženirstva" or (F) "magistrica inženirka kemijskega inženirstva" or (abbreviated) "mag. inž. kem. inž."

Graduates are employable in the chemical, food, pharmaceutical, biotechnological, and electronics industries; in the energetics; environmental technologies; also in the research, educational and counselling institutions. Completed 2nd Cycle Study Programme Chemical Engineering enables a direct enrolment in 3rd Cycle (Doctoral) Study Programme Chemical Sciences or in the interdisciplinary doctoral study programmes. Graduates of chemical engineering from UL FKKT are employable also abroad, since the study programme has been synchronized with the European requirements and is enlisted in the FEANI INDEX of the principal European engineering organisation FEANI.

2nd Cycle (Master) University Study Programme BIOCHEMISTRY

Biochemistry studies the structure, synthesis, degradation, and functioning of the compounds in living organisms, as well as their role in life processes in health and in disease. Biochemists' field of research is in the laboratories and the acquired data are further processed by biochemical informatics methods. In the 2nd Cycle University Study Programme Biochemistry, students gain a comprehensive knowledge and understanding of biochemistry, as well as the ability to solve problems in new or unknown environment and in broader (multidisciplinary) environments in connection with life sciences. They are confident with the skills needed for the work in biochemical laboratory.

Access requirements:

- A first-cycle programme in Biochemistry worth at least 180 credits or an equivalent study programme completed pursuant to previous regulations in the Republic of Slovenia or abroad;
- A first-cycle programme in other professional fields worth at least 180 credits or an equivalent study programme completed pursuant to previous regulations in the Republic of Slovenia or abroad, provided that the candidate has previously passed all obligations required for further study. These obligations are stipulated by the UL FKKT Committee for Master's Programmes and are worth from 10 to no more than 60 credits.

Study programme is a 2-year (4 semester) programme with 120 credit points. Graduates are awarded the title Master of Biochemistry: (M) "magister biokemije" or (F) "magistrica biokemije" or (abbreviated) "mag. biokem."

Graduates are employable in biochemical laboratories in the chemical, pharmaceutical, cosmetics, and food industry; in the research and public health institutes; surveillance and inspection institutions; in the sales and representatives offices of biotechnological companies. Completed 2nd Cycle Study Programme Biochemistry enables a direct enrolment in 3rd Cycle (Doctoral) Study Programme Chemical Sciences or in the interdisciplinary doctoral study programmes.

2nd Cycle (Master) University Study Programme TECHNICAL SAFETY

Technical safety is an interdisciplinary science dealing with industrial problems regarding the safety, occupational safety, fire safety, safety aspects of environmental protection, risk analysis, and risk management. Research work is conducted on realistic examples from the production processes. In the 2nd Cycle University Study Programme Technical Safety, students gain expert knowledge enabling them to include the safety concepts in the processes on the basis of risk analysis. They are also able to research in the area of safety, fire safety and environmental safety, thus influencing the state-of-the art of technical safety as a professional and scientific area.

Access requirements:

- 1st cycle (at least) study programme with at least 180 ECTS from the following disciplines: safety, technical sciences, living nature sciences, and nonliving nature sciences, or an equivalent study programme by the previous regulations in Republic Slovenia or abroad;
- 1st cycle (at least) study programme with at least 180 ECTS from the other disciplines, or an equivalent study programme by the previous regulations in Republic Slovenia or abroad (before enrolment, candidate must fulfill essential study obligations for the continuation of studies; they are determined by the study committee of UL FKKT in the range of 10 to 60 ECTS).

Study programme is a 2-year (4 semester) programme with 120 credit points. Graduates are awarded the title Master of Technical Safety: (M) "magister inženir tehniške varnosti" or (F) "magistrica inženirka tehniške varnosti" or (abbreviated) "mag. inž. teh. var."

Graduates are employable in the various industries, companies, and private businesses in the field of occupational safety and fire safety; as well as surveillance and inspection institutions. Completed 2nd Cycle Study Programme Technical Safety enables the enrolment in 3rd cycle (doctoral) study programmes.

