University of Maribor

Faculty of Chemistry and Chemical Engineering

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2ND-CYCLE STUDY PROGRAMMES:

1. **CHEMICAL ENGINEERING**
2. **CHEMISTRY**

Location: Maribor
Duration: 120 ECTS, 2 years

Access requirements:

1. **CHEMICAL ENGINEERING**

Study options:
1. Chemical Engineering
2. Biochemical Engineering
3. Biopharmaceutical Engineering

Candidates select a desired option in their application. Options are implemented in the first semester.

Candidates who completed the following may apply for the 2nd-cycle (master's) study programme in *Chemical Engineering*:

1. A 1st-cycle (bachelor's) study programme in one of the following fields: chemical engineering (0711), chemistry (0531), chemical technology (0711), chemical and process engineering (0711), process technology (0711), biochemical technologies and engineering (0711), or training for teachers in natural science subjects – chemistry (0114).
2. A 1st-cycle (bachelor's) study programme in one of the following fields: engineering and engineering trades (0788) or science (0588).
   Prior to enrolment, candidates shall pass the following courses corresponding to 47 ECTS credits under the 1st-cycle (bachelor's) study programme, a supplementary study programme, or by taking bridging exams: *General Chemistry* (8 ECTS), *Inorganic Chemistry* (4 ECTS), *Organic Chemistry I* (4 ECTS), *Organic Chemistry II* (7 ECTS), *Physical Chemistry I* (4 ECTS), *Heat Transfer* (5 ECTS), *Mass Transfer* (5 ECTS), *Separation Processes I* (5 ECTS), and *Chemical Reaction Engineering I* (5 ECTS).
3. An undergraduate professional study programme adopted prior to 11 June 2004 in one of the following fields: chemistry (0531), chemical technology (0711), chemical and process engineering (0711), process technology (0711), or biochemical technologies and engineering (0711).
4. An undergraduate professional study programme adopted prior to 11 June 2004 in one of the following fields: engineering and engineering trades (0788) or science (0588).
   Prior to enrolment, candidates shall pass the following courses corresponding to 47 ECTS credits under the 1st-cycle (bachelor's) study programme, a supplementary study programme, or by taking bridging exams: *General Chemistry* (8 ECTS), *Inorganic Chemistry* (4 ECTS), *Organic Chemistry I* (4 ECTS), *Organic Chemistry II* (7 ECTS), *Physical Chemistry I* (4 ECTS), *Heat Transfer* (5 ECTS), *Mass Transfer* (5 ECTS), *Separation Processes I* (5 ECTS), and *Chemical Reaction Engineering I* (5 ECTS).
5. An undergraduate academic study programme adopted prior to 11 June 2004 in one of the following fields: chemistry (0531), chemical technology (0711), chemical and process engineering (0711), process technology (0711), biochemical technologies and engineering (0711), or training for teachers in natural science subjects – chemistry (0114).
   Candidates are typically awarded 60 ECTS credits* and may enrol in the second year of study provided they satisfy the transfer criteria laid down in the accredited study programme.
6. An undergraduate academic study programme adopted prior to 11 June 2004 in one of the following fields: engineering and engineering trades (0788) or science (0588).
   Candidates are awarded up to 30 ECTS credits* and may enrol in the corresponding year of study.
7. A specialisation following an undergraduate professional study programme adopted prior to 11 June 2004 in one of the following fields: chemistry (0531), chemical technology (0711), chemical and process engineering (0711), process technology (0711), or biochemical technologies and engineering (5243).
   Candidates are typically awarded 60 ECTS credits* and may enrol in the second year of study provided they satisfy the transfer criteria laid down in the accredited study programme.
8. A specialisation following an undergraduate professional study programme adopted prior to 11 June 2004 in one of the following fields: engineering and engineering trades (0788) or science (0588).

Candidates are awarded up to 30 ECTS credits* and may enrol in the corresponding year of study.

*The Academic Affairs Committee decides on the recognition of study obligations on a case-by-case basis. In addition, the Committee decides on the admission of candidates from other fields on a case-by-case basis.

Selection criteria in the event of limited enrolment:

If the number of applications exceeds the number of available enrolment places, candidates shall be ranked according to:

- grade awarded for the thesis (20%),
- grade point average (50%), and
- average grade in the *Mathematics III* or *Mathematics C* and *Chemical Reaction Engineering I* courses (30%).

Transfer criteria:

In accordance with the Higher Education Act and Criteria for Transferring Between Study Programmes, a transfer means a cessation of studies in the first study programme and the continuation of studies in a new study programme. All or part of fulfilled study obligations from the first study programme are recognised as fulfilled obligations of the new programme.
Candidates may transfer to the 2nd-cycle (master's) study programme in *Chemical Engineering* from study programmes in the field of chemical engineering, chemistry, chemical technology, chemical and process engineering, process technology, biochemical technologies and engineering, or from the double-major long-cycle (master's) study programme of Subject Teacher, Educational Chemistry and … option, provided they lead to the acquisition of comparable competences or learning outcomes and that at least half of the study obligations evaluated according to the ECTS credit system of the previous study programme relating to compulsory courses of the new study programme are recognised.

Depending on the extent of the recognised study obligations from the first study programme in the Republic of Slovenia or abroad, the candidate may enrol in the second year of the 2nd-cycle (master's) study programme in *Chemical Engineering*. Under the recognition procedure, fulfilled study obligations that may be recognised fully or partially are identified, and study obligations required for completion of the new study programme are laid down. Candidates shall submit an official printout of the study programme and a certificate of passed exams. The Academic Affairs Committee decides on admissions and transfers from affiliated fields on a case-by-case basis.

Mode of study: full-time

2. CHEMISTRY

Candidates who completed the following may apply for the 2nd-cycle (master's) study programme in *Chemistry*:

1. A 1st-cycle (bachelor's) study programme in one of the following fields: chemistry (0531), biochemistry (0512), pharmacy (0916), chemical engineering (0711), chemical technology (0711), or training for teachers in natural science subjects – chemistry (0114).
2. A 1st-cycle (bachelor's) study programme in the following field: science (0588).
   Prior to enrolment, candidates shall pass the following courses corresponding to 45 ECTS credits under the 1st-cycle (bachelor's) study programme, a supplementary study programme, or by taking bridging exams: *General Chemistry* (12 ECTS), *Inorganic Chemistry* (4 ECTS), *Organic Chemistry I* (4 ECTS), *Organic Chemistry II* (7 ECTS), *Analytical Chemistry I* (8 ECTS), *Analytical Chemistry II* (6 ECTS), and *Physical Chemistry I* (4 ECTS).
3. An undergraduate professional study programme adopted prior to 11 June 2004 in one of the following fields: chemistry (0531), chemical technology (0711), chemical and process engineering (0711), or biochemical technologies and engineering (0711).
4. An undergraduate professional study programme adopted prior to 11 June 2004 in the following field: science (0588).
   Prior to enrolment, candidates shall pass the following courses corresponding to 45 ECTS credits under the 1st-cycle (bachelor's) study programme, a supplementary study programme, or by taking bridging exams: *General Chemistry* (12 ECTS), *Inorganic Chemistry* (4 ECTS), *Organic Chemistry I* (4 ECTS), *Organic Chemistry II* (7 ECTS), *Analytical Chemistry I* (8 ECTS), *Analytical Chemistry II* (6 ECTS), and *Physical Chemistry I* (4 ECTS).
5. An undergraduate academic study programme adopted prior to 11 June 2004 in one of the following fields: chemistry (0531), biochemistry (0512), pharmacy (0916), chemical technology (0711), chemical and process engineering (0711), biochemical technologies and engineering (0711), or training for teachers in natural science subjects – chemistry (0114).
   Candidates are typically awarded 60 ECTS credits* and may enrol in the second year of study provided they satisfy the transfer criteria laid down in the accredited study programme.
6. An undergraduate academic study programme adopted prior to 11 June 2004 in the following field: science (0588).
   Candidates are awarded up to 30 ECTS credits* and may enrol in the corresponding year of study.
7. A specialisation following an undergraduate professional study programme adopted prior to 11 June 2004 in one of the following fields: chemistry (0531), biochemistry (0512), pharmacy (0916), chemical technology (0711), chemical and process engineering (0711), or biochemical technologies and engineering (0711).
   Candidates are typically awarded 60 ECTS credits* and may enrol in the second year of study provided they satisfy the transfer criteria laid down in the accredited study programme.

8. A specialisation following an undergraduate professional study programme adopted prior to 11 June 2004 in the following field: science (0588).
   Candidates are awarded up to 30 ECTS credits* and may enrol in the corresponding year of study.

*The Academic Affairs Committee decides on the recognition of study obligations on a case-by-case basis. In addition, the Committee decides on the admission of candidates from other fields on a case-by-case basis.

Selection criteria in the event of limited enrolment:

If the number of applications exceeds the number of available positions, candidates shall be ranked according to:

- grade awarded for the thesis (20%),
- grade point average (50%), and
- average grade in the *Mathematics III* or *Mathematics C* and *Organic Synthesis* courses (30%).

Transfer criteria:

In accordance with the Higher Education Act and Criteria for Transferring Between Study Programmes, a transfer means a cessation of studies in the first study programme and the continuation of studies in a new study programme. All or part of fulfilled study obligations from the first study programme are recognised as fulfilled obligations of the new programme.
Candidates may transfer to the 2nd-cycle (master's) study programme in *Chemistry* from study programmes in the field of chemistry, biochemical technologies and engineering, pharmacy, chemical technology, or from the double-major long-cycle (master's) study programme of Subject Teacher, Educational Chemistry and … option, provided they lead to the acquisition of comparable competences or learning outcomes and that at least half of the study obligations evaluated according to the ECTS credit system of the previous study programme relating to compulsory courses of the new study programme are recognised.

Depending on the extent of the recognised study obligations from the first study programme in the Republic of Slovenia or abroad, the candidate may enrol in the second year of the 2nd-cycle (master's) study programme in *Chemistry*. Under the recognition procedure, fulfilled study obligations that may be recognised fully or partially are identified, and study obligations required for completion of the new study programme are laid down. Candidates shall submit an official printout of the study programme and a certificate of passed exams. The Academic Affairs Committee decides on admissions and transfers from affiliated fields on a case-by-case basis.

Mode of study: full-time

THE 3RD-CYCLE STUDY PROGRAMME IN CHEMISTRY AND CHEMICAL ENGINEERING

Location: Maribor
Duration: 240 ECTS, 4 years

Access requirements:

Study options:
1. Chemical Engineering
2. Chemistry

Candidates select a study option when applying to enrol. Study options are implemented in the first semester of study.

Candidates who completed the following may apply for the 3rd-cycle (doctoral) study programme in *Chemistry and Chemical Engineering*:

1. A 2nd-cycle (master's) study programme in any field.
2. An undergraduate academic study programme adopted prior to 11 June 2004.
3. A specialisation following an undergraduate professional study programme adopted prior to 11 June 2004.
   Prior to enrolment, candidates shall fulfil study obligations in the field of chemistry and chemical engineering corresponding to 30 ECTS credits that shall be determined by the Academic Affairs Committee.
4. A study programme educating students for professions regulated by EU directives or another integrated (long-cycle) master's study programme (also in fields not related to chemistry and chemical engineering) corresponding to 300 ECTS credits.

Selection criteria in the event of limited enrolment:

If the number of applications exceeds the number of available positions, candidates shall be ranked according to:

- grade awarded for the thesis (20%) and
- grade point average (80%).

Transfer criteria:

In accordance with the Higher Education Act and Criteria for Transferring Between Study Programmes, a transfer means a cessation of studies in the first study programme and the continuation of studies in a new study programme. All or part of fulfilled study obligations from the first study programme are recognised as fulfilled obligations of the new programme.

In accordance with the Criteria for Transferring Between Study Programmes, candidates who completed the following may be admitted to the second year of study of the 3rd-cycle (doctoral) study programme in *Chemistry and Chemical Engineering*:
- A master of science study programme adopted prior to 11 June 2004. Candidates are awarded 60 ECTS credits.
- A specialisation following an undergraduate academic study programme adopted prior to 11 June 2004. Candidates are awarded 60 ECTS credits.

Candidates may transfer to the study programme provided they fulfil the following criteria:
- they are transferring from a study programme leading to the acquisition of comparable competences or learning outcomes;
- at least half of the study obligations evaluated according to the ECTS credit system of the previous study programme relating to compulsory courses of the new study programme are recognised.

A competent department of the Faculty decides on the recognition of study obligations on a case-by-case basis.

Mode of study: part-time

Number of available enrolment places: The number of available enrolment places is published in tables that represent an integral part of the Call.