



Double MSc Degree in Life Sciences with the University of Chemistry and Technology, Prague

Specialisation in Chemical Engineering and Pharmatechnology

Study one additional semester in the MSc in Synthesis and Manufacturing in Pharmaceuticals (Specialisation Manufacturing of Pharmaceuticals) at UCT Prague and you will obtain two diplomas: MSc in Life Sciences FHNW and MSc in Synthesis and Manufacturing Pharmaceuticals UCT Prague. This combination of degrees is especially helpful for students aiming to pursue a PhD.

Master's Thesis (fourth semester)

Depending on the choice of the student, the MSc Thesis is either conducted under the auspices of the FHNW School of Life Sciences or UCT Prague and jointly supervised and evaluated. The viva for the MSc Thesis is combined with the Czech State Exam.

Application Deadlines

Apply for the double degree programme by March 15th respectively September 15th preceding the exchange semester to Prof. Dr. Georg Lipps (georg.lipps@fhnw.ch). Selected students will then be asked to submit an application to UCT Prague by July 1st respectively December 1st.

Financial Support

Double degree students are eligible for the Swiss-European Mobility Programme (SEMP) and may receive financial support.

After the first two semesters of the MSc in Life Sciences you attend the third semester at UCT Prague:

Module offer Autumn Semester (ECTS)

For Chemical Engineering:

All of:

Engineering in Chemical and Pharmaceutical Processes (5)
Fundamentals of Chemistry of Pharmaceuticals (3)
Technical Catalysis (5)
Laboratory project II (pre-diploma) (8)

Recommended electives:

Chemistry and Physics of Solids (5)
Computations and Visualization of Molecules (4)
Engineering Thermodynamics (5)
Food and Biochemical Process Engineering (4)
Physics of Polymers (4)
Trends in Biotechnologies (5)

For Pharmatechnology:

All of:

Engineering in Chemical and Pharmaceutical Processes (5)
Laboratory project II (pre-diploma) (8)

One of:

Fundamentals of Chemistry of Pharmaceuticals (5)
Fundamentals of Chemical Engineering (5)

One of:

Fine Chemicals (5)
Chemistry and Physics of Solids (5)

Recommended electives:

Bioengineering I (4)
Characterization of Particles and Microstructures (5)
Chemistry and Physics of Solids (5)
Computations and Visualization of Molecules (4)
Engineering Thermodynamics (5)
Food and Biochemical Process Engineering (4)
Microstructure and Properties of Heterogeneous Materials (5)
Physical Chemistry of Polymers (5)
Thermodynamics of Materials (4)
Trends in Biotechnologies (5)

In total 30 ECTS have to be gained.

Module offer Spring Semester (ECTS)

All of:

Fundamentals of Chemistry of Pharmaceuticals (5)
Specialized Practice (3)
Engineering in Chemical and Pharmaceutical Processes (5)
Laboratory project I (7)

Further elective modules:

Membrane Processes (4)
Analysis of Bioactive Compounds (4)
Organic Technology (5)
Applied Reaction Kinetics (5)
Process and System Engineering (5)
Process Design (5)
Macromolecular Chemistry (4)
Structural Analysis (4)
X-Ray Phase Analysis II (4)

In total 30 ECTS have to be gained.

