# Studies Plan

## EDCH - Chemistry and Chemical Engineering 2018-19

### Core courses

<table>
<thead>
<tr>
<th>Courses</th>
<th>Language Code</th>
<th>Section</th>
<th>Teacher</th>
<th>Exam</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced electroanalytical chemistry (II session)</td>
<td>ECH-700(2)</td>
<td>EDCH</td>
<td>Girault, Lesch</td>
<td>Project report</td>
<td>1</td>
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<tr>
<td>Advanced electroanalytical chemistry I</td>
<td>ECH-700(1)</td>
<td>EDCH</td>
<td>Girault, Lesch</td>
<td>Project report</td>
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<tr>
<td>Advanced Solid State and Surface Characterization</td>
<td>CH-633</td>
<td>EDCH</td>
<td>Mensi, Oveisi, Schouwink</td>
<td>Oral</td>
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<tr>
<td>Basic and advanced NMR - Level 1 A (EPFL)</td>
<td>CH-601(x)</td>
<td>EDCH</td>
<td>Bornet, Emsley, Stevanato</td>
<td>Oral</td>
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<tr>
<td>Basic and advanced NMR - Level 1 B (Sion)</td>
<td>CH-601(y)</td>
<td>EDCH</td>
<td>Bornet, Emsley</td>
<td>Oral</td>
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<tr>
<td>Basic and advanced NMR - Level 2 (EPFL)</td>
<td>CH-703</td>
<td>EDCH</td>
<td>Bornet, Emsley, Stevanato</td>
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<tr>
<td>Basic principles of drug action at the cardiovascular system</td>
<td>CH-602</td>
<td>EDCH</td>
<td>Diviani, Hummler, Beermann, Kellenberger</td>
<td>Written</td>
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<tr>
<td>Basic principles of drug action at the nervous system</td>
<td>CH-603</td>
<td>EDCH</td>
<td>Katanaev, Kellenberger</td>
<td>Written</td>
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<tr>
<td>Challenges and Opportunities in Energy Research</td>
<td>CheE-803</td>
<td>EDCH</td>
<td>Buonsanti, Various lecturers</td>
<td>Written &amp; Oral</td>
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<tr>
<td>Chemical Probes for Imaging in Biology</td>
<td>CH-634</td>
<td>EDCH</td>
<td>Johnsson</td>
<td>Oral presentation</td>
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<tr>
<td>Chemosensory receptors: Applications for biosensors and medical therapies</td>
<td>CH-628</td>
<td>EDCH</td>
<td>Pick</td>
<td>Oral</td>
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<tr>
<td>Colloidal synthesis of nanoparticles and their energy applications</td>
<td>CheE-604</td>
<td>EDCH</td>
<td>Buonsanti, Loiudice</td>
<td>Oral</td>
<td>2</td>
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<tr>
<td>Current Topics in Chemical Biology 1</td>
<td>CH-629(1)</td>
<td>EDCH</td>
<td>Fierz, Heinis, Vacat</td>
<td>Written</td>
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<tr>
<td>Course Title</td>
<td>Duration</td>
<td>Instructor(s)</td>
<td>Mode</td>
<td>Units</td>
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<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>Current Topics in Chemical Biology 2</td>
<td>(Next time: Spring semester 2019)</td>
<td>Fierz Heinis Vacat</td>
<td>Written</td>
<td>1</td>
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<tr>
<td>Efficient Synthetic Routes Towards Bioactive Molecules</td>
<td>(Next time: Winter 2018)</td>
<td>Cramer</td>
<td>Multiple</td>
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<tr>
<td>Frontiers in Chemical Synthesis. Towards Sustainable Chemistry</td>
<td>(Next time: Spring 2020)</td>
<td>Hu Waser</td>
<td>Multiple</td>
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<tr>
<td>Gene transfer and recombinant protein expression in animal cells</td>
<td>(Postponed shall be transferred to EDMS program)</td>
<td>Hacker Pick</td>
<td>Oral presentation</td>
<td>2</td>
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<tr>
<td>Highlights in Energy Research (1)</td>
<td>(Next time: Spring semester 2019)</td>
<td>Queen Various lecturers</td>
<td>Project report</td>
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<tr>
<td>Highlights in Energy Research (2)</td>
<td>(Next time: Fall semester 2018)</td>
<td>Queen Various lecturers</td>
<td>Project report</td>
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<tr>
<td>High pressure in chemical kinetics and equilibria</td>
<td>(Next time: December 2019)</td>
<td>Laurenczy</td>
<td>Project report</td>
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<tr>
<td>Information literacy for chemists</td>
<td>(Postponed until further notice)</td>
<td>Borel</td>
<td>Project report</td>
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<tr>
<td>Inorganic chemistry &quot;Applications and spin-offs&quot;</td>
<td>(Next time: Fall semester 2020)</td>
<td>Dyson Mazzanti Severin</td>
<td>Oral presentation</td>
<td>2</td>
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<tr>
<td>Inorganic chemistry &quot;Fundamentals and properties&quot;</td>
<td>(Next time: Fall semester 2019)</td>
<td>Dyson Mazzanti Severin</td>
<td>Oral presentation</td>
<td>2</td>
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<tr>
<td>Inorganic chemistry &quot;Techniques and methods&quot;</td>
<td>(Next time: Fall semester 2018)</td>
<td>Dyson Mazzanti Severin</td>
<td>Oral presentation</td>
<td>2</td>
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<tr>
<td>Interfacial Electrochemistry of Metals and Semiconductors for Energy Conversion and Storage</td>
<td>(Next time: Spring 2019)</td>
<td>Hagfeldt Vlachopoulos</td>
<td>Multiple</td>
<td>2</td>
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<tr>
<td>Leading research in Chemical Engineering (1)</td>
<td>(Next time: Fall semester 2018)</td>
<td>Luterbacher Vacat</td>
<td>Term paper</td>
<td>1</td>
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<tr>
<td>Leading research in Chemical Engineering (2)</td>
<td>(Next time: Spring semester 2019)</td>
<td>Luterbacher Vacat</td>
<td>Term paper</td>
<td>1</td>
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<tr>
<td>Mass spectrometry, principles and applications</td>
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</table>
| Solar photovoltaics and energy systems  
(next time Spring 2020) | ChE-600 | EDEY | Guijarro Carratala Sivula Tress | Multiple | 2 |