## EDCH - Chemistry and Chemical Engineering 2017-18

### Core courses

<table>
<thead>
<tr>
<th>Courses</th>
<th>Language Code</th>
<th>Section</th>
<th>Teacher</th>
<th>Exam</th>
<th>Credit</th>
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<tbody>
<tr>
<td>Advanced electroanalytical chemistry (II session)</td>
<td>E CH-700(2)</td>
<td>EDCH</td>
<td>Lesch, Peljo</td>
<td>Project report</td>
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<td>(Next time: November 2018)</td>
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<tr>
<td>Advanced electroanalytical chemistry I</td>
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<td>Lesch, Peljo</td>
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<tr>
<td>Basic and advanced NMR - Level 1 A (EPFL)</td>
<td>E CH-601(x)</td>
<td>EDCH</td>
<td>Bornet, Emsley, Stevanato, Viger-Gravel</td>
<td>Oral</td>
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<tr>
<td>(Next time: Winter 2018)</td>
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<tr>
<td>Basic and advanced NMR - Level 1 B (Sion)</td>
<td>E CH-601(y)</td>
<td>EDCH</td>
<td>Emsley, Stevanato, Various lecturers, Viger-Gravel</td>
<td>Oral</td>
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<tr>
<td>Basic and advanced NMR - Level 2 (EPFL)</td>
<td>E CH-703</td>
<td>EDCH</td>
<td>Bornet, Emsley, Stevanato, Viger-Gravel</td>
<td>Oral</td>
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<td>(Next time: Winter 2018)</td>
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<td>Basic principles of drug action at the cardiovascular system</td>
<td>E CH-602</td>
<td>EDCH</td>
<td>Diviani, Hummler, Beermann, Kellenberger</td>
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<td>Basic principles of drug action at the nervous system</td>
<td>E CH-603</td>
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<td>Katanaev, Kellenberger</td>
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<td>Biomimetic membrane systems and their applications</td>
<td>E CH-727</td>
<td>EDCH</td>
<td>Terrettaz</td>
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<td>Challenges and Opportunities in Energy Research</td>
<td>E ChE-803</td>
<td>EDCH</td>
<td>Buonsanti, Various lecturers</td>
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<td>Chemosensory receptors: Applications for biosensors and medical therapies</td>
<td>E CH-628</td>
<td>EDCH</td>
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<tr>
<td>Colloidal synthesis of nanoparticles and their energy applications</td>
<td>E ChE-604</td>
<td>EDCH</td>
<td>Buonsanti, Loiudice</td>
<td>Oral</td>
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<td>(Next time: December 2018)</td>
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<td>Computation of molecular properties</td>
<td>E CH-704</td>
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<td>Current Topics in Chemical Biology 1</td>
<td>E CH-629(1)</td>
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<td>Fierz, Heinis, Vacat</td>
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<tr>
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<tbody>
<tr>
<td>Current Topics in Chemical Biology 2</td>
<td>CH-629</td>
<td>Fierz, Heinis, Vacat</td>
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<tr>
<td>Efficient Synthetic Routes Towards Bioactive Molecules</td>
<td>CH-620</td>
<td>Cramer</td>
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<tr>
<td>Frontiers in Chemical Synthesis. Towards Sustainable Chemistry</td>
<td>CH-707</td>
<td>Hu, Waser</td>
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<tr>
<td>Frontiers in Organic Synthesis. Part III Stereochemistry</td>
<td>CH-709</td>
<td>Hu, Waser</td>
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<td>Frontiers in Organic Synthesis. Part II Synthesis of carbocycles and hetero-cycles</td>
<td>CH-708</td>
<td>Hu, Waser</td>
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<tr>
<td>Gene transfer and recombinant protein expression in animal cells</td>
<td>CH-710</td>
<td>Baldi, Unser, Hacker</td>
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<td>Highlights in Energy Research(1)</td>
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<td>Highlights in Energy Research (2)</td>
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<td>High pressure in chemical kinetics and equilibria</td>
<td>CH-617</td>
<td>Laurenczy</td>
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<td>Information literacy for chemists</td>
<td>ENG-619</td>
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<td>Inorganic chemistry “Applications and spin-offs”</td>
<td>CH-711</td>
<td>Dyson, Mazzanti, Severin</td>
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<td>Inorganic chemistry “Fundamentals and properties”</td>
<td>CH-610</td>
<td>Dyson, Mazzanti, Severin</td>
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<td>Inorganic chemistry “Techniques and methods”</td>
<td>CH-611</td>
<td>Dyson, Mazzanti, Severin</td>
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<td>Interfacial Electrochemistry of Metals and Semiconductors for Energy Conversion and Storage</td>
<td>ChE-603</td>
<td>Hagfeldt, Vlachopoulos</td>
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<td>Leading research in Chemical Engineering (a)</td>
<td>ChE-601(a)</td>
<td>Luterbacher, Various lecturers</td>
<td>Term paper</td>
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<td>Leading research in Chemical Engineering (b)</td>
<td>ChE-601(b)</td>
<td>Luterbacher, Various lecturers</td>
<td>Term paper</td>
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### Mass spectrometry, principles and applications

(Next time: March+September 2018)

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Exam</th>
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<tbody>
<tr>
<td>CH-728</td>
<td>EDCH</td>
<td>Boyarkine, Gasilova, Menin, Ortiz, Trujillo, Patiny, Sepulveda</td>
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### Perspectives in Modern Organic Chemistry (OCS) 1

(Next time: Fall 2018)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Section</th>
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<th>Exam</th>
<th>Credit</th>
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<tbody>
<tr>
<td>CH-621(1)</td>
<td>EDCH</td>
<td>Cramer, Vacat, Zhu</td>
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### Perspectives in Modern Organic Chemistry (OCS) 2

(Next time: Spring 2018)

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<td>CH-621(2)</td>
<td>EDCH</td>
<td>Cramer, Vacat, Zhu</td>
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### Principles and Applications of X-ray Diffraction

(Next time: Winter 2017/Spring 2018 (EPF Lausanne/Sion))

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<thead>
<tr>
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<td>CH-632</td>
<td>EDCH</td>
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### Scientific Writing (EDCH) (1)

(Remarque Fall 2018 (block))

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### Scientific Writing (EDCH) (2)

(One more session: April 6th: 9h à 13h, room BCH5310)

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<td>ENG-613(2)</td>
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### Seminars in Physical Chemistry (1)

(Next time: Fall 2018)

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<th>Section</th>
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<th>Credit</th>
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<td>CH-630(1)</td>
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### Seminars in Physical Chemistry (2)

(Next time: Spring semester 2018)

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<td>CH-630(2)</td>
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### Surface and thin films processes

(Next time: Fall 2018)

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<td>Karimi</td>
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### Synergism between Art of Total Synthesis and High Level Strategic Design (MOM)

(Next time: Summer 2018)

<table>
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<tr>
<td>CH-622</td>
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### Other doctoral courses (EDOC) ()

<table>
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<tbody>
<tr>
<td>Solar photovoltaics and energy systems</td>
<td>E, ChE</td>
<td>EDEY</td>
<td>Guijarro, Carratala, Sivula, Tress</td>
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