

# Chemical Biology

300 credits

Civilingenjör i kemisk biologi - med valbar utgång till  
naturvetenskaplig kandidat

6CKEB

Valid from:

**Determined by**

**Date determined**

## Entry requirements

### Degree in Swedish

Civilingenjör 300 hp och Teknologie master 120 hp alt. Naturvetenskaplig kandidat, 180 hp

# Curriculum

## Semester 8 (Spring 2017)

### *Specialisation: Industrial Biotechnology and Production*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TFTB32	Design of Biotechnical Process and Production Systems, Project Course	6*	A1X	1	C
TMMT03	Biotechnical Production Systems	6	A1X	3	C
TMQU46	Quality Management	6	G2X	4	C
TBMI26	Neural Networks and Learning Systems	6	A1N	2	E
TFYA85	Alternative Energy Sources and their Applications	6	G2X	4	E
TGTU01	Technology and Ethics	6	G1X	1	E
TSRT07	Industrial Control Systems	6	A1X	2	E
<b>Period 2</b>					
NKED20	Drug Discovery and Pharmaceutical Development	6	A1X	2	C
TFTB32	Design of Biotechnical Process and Production Systems, Project Course	6*	A1X	1	C
TFTB39	Biotechnology Manufacturing	6	A1X	3/4	C
NKED82	Biomolecular Design	6	A1X	1	E

*Specialisation: Protein Science and Technology*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TFKE58	Applied Structural Biology	6*	A1X	3	C
TFTB34	Biosensor Technology	6	A1X	2	C
NBID64	Molecular Physiology and Cell Signaling Mechanisms	6	A1N	2	E
TBMI26	Neural Networks and Learning Systems	6	A1N	2	E
TFTB35	Surface Science	6	A1X	1	E
TFYA85	Alternative Energy Sources and their Applications	6	G2X	4	E
TGTU01	Technology and Ethics	6	G1X	1	E
TMQU46	Quality Management	6	G2X	4	E
TSRT07	Industrial Control Systems	6	A1X	2	E
<b>Period 2</b>					
TFKE56	Industrial Enzyme Engineering	6	A1X	3	C
TFKE58	Applied Structural Biology	6*	A1X	4	C
NKED20	Drug Discovery and Pharmaceutical Development	6	A1X	2	C/E
NKED82	Biomolecular Design	6	A1X	1	C/E
TGTU76	Philosophy of Science	6	G1X	4	E

## Semester 9 (Autumn 2017)

### *Specialisation: Industrial Biotechnology and Production*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIO20	Entrepreneurship and New Business Development	6*	G2X	3	C
TSRT62	Modelling and Simulation	6	A1X	3	C/E
TDDC76	Programming and Data Structures	8*	G2X	2	E
TEIO90	Innovation Management	6	A1X	2	E
TFTB46	Advanced Bioinformatics	6	A1X	2	E
TFYA47	Surfaces and Interfaces	6	A1X	2	E
TRTE18	The Biogas Process	6	A1N	1	E
TVMB26	Molecular Virology	6	A1X	1	E
<b>Period 2</b>					
TEIO20	Entrepreneurship and New Business Development	6*	G2X	4	C
TAOP61	Optimization of Realistic Complex Systems	6	A1N	3	E
TDDC76	Programming and Data Structures	8*	G2X	2	E
TGTU04	Leadership	6	G2X	2	E
TGTU49	History of Technology	6	G1F	3	E
TMQU12	Lean Production	6	A1X	2	E
TVCB13	Stem Cell Engineering	6	A1X	3	E

*Specialisation: Protein Science and Technology*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIO20	Entrepreneurship and New Business Development	6*	G2X	3	C
TFTB46	Advanced Bioinformatics	6	A1X	2	C
TATM38	Mathematical Models in Biology	6	A1N	3	C/E
TSRT62	Modelling and Simulation	6	A1X	3	C/E
TEAE01	Industrial Economics, Basic Course	6	G1X	2	E
TRTE18	The Biogas Process	6	A1N	1	E
TVMB26	Molecular Virology	6	A1X	1	E
<b>Period 2</b>					
TEIO20	Entrepreneurship and New Business Development	6*	G2X	4	C
TGTU04	Leadership	6	G2X	2	C
TAOP61	Optimization of Realistic Complex Systems	6	A1N	3	E
TFKE30	Analytical Chemistry	6	G1X	4	E
TFYA30	Supramolecular Chemistry	6	A1X	1	E
TKMJ24	Environmental Engineering	6	G1X	3	E
TVCB13	Stem Cell Engineering	6	A1X	3	E

**Semester 10 (Spring 2018)**

*Specialisation: Industrial Biotechnology and Production*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	C
<b>Period 2</b>					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	C

*Specialisation: Protein Science and Technology*

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	C
<b>Period 2</b>					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	C

ECV = Elective / Compulsory / Voluntary

\*The course is divided into several semesters and/or periods