

# **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
Period 1					
TFTB32	Design of Biotechnical Process and Production Systems, Project Course	6*	A1X	1	С
TMMT03	Biotechnical Production Systems	6	A1X	3	С
TMQU46	Quality Management	6	G2X	4	С
TBMI26	Neural Networks and Learning Systems	6	A1X	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
Period 2					
NKED20	Drug Discovery and Pharmaceutical Development	6	A1X	2	С
TFTB32	Design of Biotechnical Process and Production Systems, Project Course	6*	A1X	1	С
TFTB39	Biotechnology Manufacturing	6	A1X	3/4	С
NKED82	Biomolecular Design	6	A1X	1	E



#### Specialisation: Protein Science and Technology

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TFKE58	Applied Structural Biology	6*	A1X	3	С
TFTB34	Biosensor Technology	6	A1X	2	С
NBID64	Molecular Physiology and Cell Signaling Mechanisms	6	A1N	2	E
TBMI26	Neural Networks and Learning Systems	6	A1X	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
Period 2					
TFKE56	Industrial Enzyme Engineering	6	A1X	3	С
TFKE58	Applied Structural Biology	6*	A1X	4	С
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

	Specialisation: Industrial Biolectifology and Froduction				
Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIO20	Entrepreneurship and New Business Development	6*	G2X	3	С
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	A1X	1	E
TVMB26	Molecular Virology	6	A1X	1	E
Period 2					
TEIO20	Entrepreneurship and New Business Development	6*	G2X	4	С
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
Period 1					
TEIO20	Entrepreneurship and New Business Development	6*	G2X	3	С
TFTB46	Advanced Bioinformatics	6	A1X	2	С
TATM38	Mathematical Models in Biology	6	A1X	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	A1X	1	E
TVMB26	Molecular Virology	6	A1X	1	E
Period 2					
TEIO20	Entrepreneurship and New Business Development	6*	G2X	4	С
TGTU04	Leadership	6	G2X	2	С
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
Period 1					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	С
Period 2					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	С



#### Specialisation: Protein Science and Technology

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	С
Period 2					
TQXX33	Degree project - Master's Thesis	30*	A1X	-	С



ECV = Elective / Compulsory /Voluntary
\*The course is divided into several semesters and/or periods