300 credits

Civilingenjör i medicinsk teknik

6CMED

Valid from:

Determined by

Date determined

Entry requirements

Degree in Swedish

Civilingenjör 300 hp och Teknologie master 120 hp

Curriculum

Semester 8 (Spring 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAOP07	Introduction to Optimization	6	G1X	3	E
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TBMT02	Medical Imaging	6	A1F	3	E
TBMT09	Physiological Pressures and Flows	6	A1X	1	E
TEIO20	Entrepreneurship and New Business Development	6*	G2X	4	E
TFFM40	Analytical Methods in Materials Science	6*	A1X	1	E
TFTB34	Biosensor Technology	6	A1X	2	E
TFYA21	Physical Metallurgy	6	A1F	3	E
TFYA85	Alternative Energy Sources and their Applications	6	G2X	4	E
TGTU01	Technology and Ethics	6	G1X	1	E
THEN18	English	6*	G1X	4	E
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E
TKMJ15	Environmental Management Strategies	6	G1X	3	E
TSBB15	Computer Vision	12*	A1X	1	E
TSBK07	Computer Graphics	6*	A1X	4	E
Period 2					
TBME08	Biomedical Modeling and Simulation	6	A1X	3	E
TBMT26	Technology in Intensive Care and Surgery	6	A1X	1	E
TDDD74	Databases for Bioinformatics	6	G2X	4	E
TEIO20	Entrepreneurship and New Business Development	6*	G2X	4	E
TFFM40	Analytical Methods in Materials Science	6*	A1X	1	E
TFKE52	Fundamentals of Chemistry	6	G1X	2	E
TFMT19	Chemical Sensor Systems	6	A1X	4	E
THEN18	English	6*	G1X	4	E

Course code	Course name	Credits	Level	Timetable module	ECV
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E
TSBB15	Computer Vision	12*	A1X	3	E
TSBK02	Image and Audio Coding	6	A1X	4	E
TSBK07	Computer Graphics	6*	A1X	1	E

Specialisation: Biomedical Imaging and Visualization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMT02	Medical Imaging	6	A1F	3	C
TSBK07	Computer Graphics	6*	A1X	4	C
TAOP07	Introduction to Optimization	6	G1X	3	E
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TBMT09	Physiological Pressures and Flows	6	A1X	1	E
TSBB15	Computer Vision	12*	A1X	1	E
Period 2					
TSBK07	Computer Graphics	6*	A1X	1	C
TBME08	Biomedical Modeling and Simulation	6	A1X	3	E
TSBB15	Computer Vision	12*	A1X	3	E
TSBK02	Image and Audio Coding	6	A1X	4	E

Specialisation: Biomedical Materials

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TFFM40	Analytical Methods in Materials Science	6*	A1X	1	C
TFYA21	Physical Metallurgy	6	A1F	3	C
TBMT09	Physiological Pressures and Flows	6	A1X	1	E
TFTB34	Biosensor Technology	6	A1X	2	E
Period 2					
TFFM40	Analytical Methods in Materials Science	6*	A1X	1	C
TFKE52	Fundamentals of Chemistry	6	G1X	2	C
TBME08	Biomedical Modeling and Simulation	6	A1X	3	E
TBMT26	Technology in Intensive Care and Surgery	6	A1X	1	E
TFMT19	Chemical Sensor Systems	6	A1X	4	E

Specialisation: Biomedical Modelling

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMT09	Physiological Pressures and Flows	6	A1X	1	C
TAOP07	Introduction to Optimization	6	G1X	3	E
TBMI03	Medical Information Models and Ontologies	6	A1X	4	E
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TBMT02	Medical Imaging	6	A1F	3	E
Period 2					
TBME08	Biomedical Modeling and Simulation	6	A1X	3	C
TBMT26	Technology in Intensive Care and Surgery	6	A1X	1	E
TDDD74	Databases for Bioinformatics	6	G2X	4	E

Semester 9 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAMS39	Multivariate Statistical Methods	6	A1X	4	E
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	E
TBMT36	Biomedical Optics	6	A1X	1	E
TFFM08	Experimental Physics	6*	A1X	1	E
TFYA43	Nanotechnology	6	G2X	3	E
TFYA51	Project Course in Physics - Design and Fabrication of Sensor Chip, CDIO	12*	A1X	4	E
TNM067	Scientific Visualization	6	A1X	3	E
TSBB08	Digital Image Processing	6	A1X	4	E
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	E
Period 2					
TBMI02	Medical Image Analysis	6	A1X	1	E
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	E
TFFM08	Experimental Physics	6*	A1X	1	E
TFYA30	Supramolecular Chemistry	6	A1X	1	E
TFYA37	Soft Condensed Matter Physics	6	A1X	1	E
TFYA51	Project Course in Physics - Design and Fabrication of Sensor Chip, CDIO	12*	A1X	4	E
TGTU04	Leadership	6	G2X	2	E
TNM086	Virtual Reality Techniques	6	A1X	2	E
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	E

Specialisation: Biomedical Imaging and Visualization

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	C
TAMS39	Multivariate Statistical Methods	6	A1X	4	E
TBMI19	Medical Information Systems	6*	A1X	2	E
TBMT36	Biomedical Optics	6	A1X	1	E
TNM067	Scientific Visualization	6	A1X	3	E
TSBB08	Digital Image Processing	6	A1X	4	E
Period 2					
TBMI02	Medical Image Analysis	6	A1X	1	C
TSBB11	Images and Graphics, Project Course CDIO	12*	A1X	4	C
TBMI19	Medical Information Systems	6*	A1X	3	E
TNM086	Virtual Reality Techniques	6	A1X	2	E

Specialisation: Biomedical Materials

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	C/E
TFYA51	Project Course in Physics - Design and Fabrication of Sensor Chip, CDIO	12*	A1X	4	C/E
TBMT36	Biomedical Optics	6	A1X	1	E
TFYA43	Nanotechnology	6	G2X	3	E
Period 2					
TFYA30	Supramolecular Chemistry	6	A1X	1	C
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	C/E
TFYA51	Project Course in Physics - Design and Fabrication of Sensor Chip, CDIO	12*	A1X	4	C/E

Specialisation: Biomedical Modelling

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	C
TBMT36	Biomedical Optics	6	A1X	1	C
TAMS39	Multivariate Statistical Methods	6	A1X	4	E
TSBB06	Multidimensional Signal Analysis	6*	A1X	2	E
Period 2					
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	C
TBMI02	Medical Image Analysis	6	A1X	1	E
TSBB06	Multidimensional Signal Analysis	6*	A1X	3	E

Semester 10 (Spring 2018)

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

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