

# Biomedical Engineering, Master's programme

120 credits

Biomedical Engineering, masterprogram

6MBME

Valid from:

**Determined by**

Faculty Board of Institute of Technology

**Date determined**

2015-01-16

## Introduction

For the complete syllabus, also see "Tekniska högskolans studiehandbok":  
[https://kdb.it.liu.se/KDB/kdb-5.liu.se/liu/lith/studiehandboken/enutbplanf655-2016.html?&up\\_year=2016&up\\_ladokkod=6MBME](https://kdb.it.liu.se/KDB/kdb-5.liu.se/liu/lith/studiehandboken/enutbplanf655-2016.html?&up_year=2016&up_ladokkod=6MBME)

## Entry requirements

### Degree in Swedish

Master of Science (120 credits) with a major in Biomedical Engineering

### Degree in English

Master of Science (120 credits) with a major in Biomedical Engineering

## Curriculum

### Semester 2 (Spring 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TBMT02	Medical Imaging	6	A1X	3	C
TBMT09	Physiological Pressures and Flows	6	A1X	1	C
THEN24	Communication, Ethics and Sustainable Development	6*	G1X	-	C
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
<b>Period 2</b>					
TBME08	Biomedical Modeling and Simulation	6	A1X	3	C
TBMT26	Technology in Intensive Care and Surgery	6	A1X	1	C
THEN24	Communication, Ethics and Sustainable Development	6*	G1X	-	C
TFMT19	Chemical Sensor Systems	6	A1X	4	E
TFTB40	Biomedical Materials	6	A1X	1	E
TFYA38	Optoelectronics	6	A1X	3	E

### Semester 3 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TAMS39	Multivariate Statistical Methods	6	A1X	4	E
TATM38	Mathematical Models in Biology	6	A1X	3	E
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	E
TBMT36	Biomedical Optics	6	A1X	1	E
TDTS06	Computer Networks	6	G2X	1	E
TFYA43	Nanotechnology	6	G2X	3	E
TFYA88	Additive Manufacturing: Tools, Materials and Methods	6	A1X	3	E
TNM067	Scientific Visualization	6	A1X	3	E
TSBB06	Multidimensional Signal Analysis	6*	A1X	2	E
TSBB08	Digital Image Processing	6	A1X	4	E
<b>Period 2</b>					
TBMI02	Medical Image Analysis	6	A1X	1	E
TBMT14	Biomedical Engineering - Project Course	12*	A1X	4	E
TDDD37	Database Technology	6	G2X	1	E
TMMS07	Biomechanics	6	A1X	4	E
TSBB06	Multidimensional Signal Analysis	6*	A1X	3	E

### Semester 4 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TQXX30	Degree project - Master's Thesis	30*	A1X	-	C
<b>Period 2</b>					
TQXX30	Degree project - Master's Thesis	30*	A1X	-	C

ECV = Elective / Compulsory / Voluntary

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