

# Media Technology and Engineering, M Sc in Engineering

300 credits

Civilingenjör i medieteknik

6CMEN

Valid from: 2016 Spring semester

**Determined by**

Board of Studies for Computer Science  
and Media Technology

**Date determined**

2016-01-19

## Entry requirements

### Degree in Swedish

Civilingenjör 300 hp och Teknologie master 120 hp

## Curriculum

### Semester 2 (Spring 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TNA003	Calculus I	6	G1X	2	C
TNA005	Applied Mathematics in Science and Technology	6*	G1X	4	C
TND002	Object-Oriented Programming	6	G1X	1	C
<b>Period 2</b>					
TNA004	Calculus II	6	G1X	2	C
TNA005	Applied Mathematics in Science and Technology	6*	G1X	4	C
TNM046	Computer Graphics	6	G1X	1	C

### Semester 3 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TNA006	Calculus III	6	G1X	3	C
TNE043	Mechanics and Wave Physics	6	G2X	1	C
TNM040	Communication and User Interfaces	6*	G1X	2	C
<b>Period 2</b>					
TNA007	Vector Analysis	6	G2X	4	C
TNG033	Programming in C++	6	G2X	3	C
TNM040	Communication and User Interfaces	6*	G1X	2	C

## Semester 4 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TNG032	Applied Transform Theory	6	G2X	4	C
TNM059	Graphic Arts	6	G1X	3	C
TNM061	3-D Computer Graphics	6*	G2X	1	C
<b>Period 2</b>					
TNG006	Statistics	6	G2X	1	C
TNG015	Signals and Systems	6	G2X	3	C
TNM061	3-D Computer Graphics	6*	G2X	4	C
TPT06	Industrial Placement	6	G1X	-	E

## Semester 5 (Autumn 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TFYA65	Physics of Sound	6	G2X	1	C
TNG028	Automatic Control	6	G2X	2	C
TNM093	Practical Data Visualization and Virtual Reality	6*	G2X	3	C
<b>Period 2</b>					
TNG022	Modelling and Simulation	6	G2X	1	C
TNM087	Image Processing and Analysis	6	G2X	2	C
TNM093	Practical Data Visualization and Virtual Reality	6*	G2X	3	C

## Semester 6 (Spring 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TNM085	Modelling Project	6	G2F	1	C
TNM094	Media Technology - Bachelor Project	18*	G2X	-	C
<b>Period 2</b>					
TND004	Data Structures	6	G2X	3	C
TNM094	Media Technology - Bachelor Project	18*	G2X	-	C

## Semester 7 (Autumn 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDE45	Software Design and Construction	6	A1X	4	E
TEIO87	Project Management	6*	G2X	1	E
TGTU01	Technology and Ethics	6	G1X	4	E
THEN09	Advanced English	6*	G2X	4	E
TNCG15	Advanced Global Illumination and Rendering	6	A1X	4	E
TNM031	Network Programming and Security	6	A1X	3	E
TNM067	Scientific Visualization	6	A1X	3	E
TNM103	Sound Technology	6	A1X	2	E
TNM108	Machine Learning for Social Media	6*	A1X	3	E
<b>Period 2</b>					
TDDC73	Interaction Programming	6	G2X	1	E
TEAE11	Intellectual Property Rights	6	G1X	2	E
TEIO87	Project Management	6*	G2X	1	E
THEN09	Advanced English	6*	G2X	4	E
TNA009	Computational Methods for Science and Engineering	6	G2X	2	E
TNM034	Advanced Image Processing	6	A1X	3	E
TNM069	Graphics Design and Communication	6	A1X	1	E
TNM084	Procedural Methods for Images	6	A1X	4	E
TNM086	Virtual Reality Techniques	6	A1X	2	E
TNM108	Machine Learning for Social Media	6*	A1X	3	E
TSBB09	Image Sensors	6	A1X	4	E

## Semester 8 (Spring 2020)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TEIE53	Industrial Economics	6	G1N	1	E
TNKA10	Rethoric in Speech, Texts and Images	6*	G1F	1	E
TNM048	Information Visualisation	6	A1X	3	E
TNM097	Image Reproduction and Image Quality	6	A1X	2	E
TNM100	Structural Methods for User Experience (UX)	6*	A1X	1	E
TSBK35	Audio and Image Compression	6	A1X	4	E
<b>Period 2</b>					
TDDD27	Advanced Web Programming	6	A1N	3	E
TNKA10	Rethoric in Speech, Texts and Images	6*	G1F	1	E
TNM079	Modelling and Animation	6	A1X	2	E
TNM096	Artificial Intelligence - Principles and Techniques	6	G2X	1	E
TNM098	Advanced Visual Data Analysis	6	A1X	4	E
TNM100	Structural Methods for User Experience (UX)	6*	A1X	3	E

## Semester 9 (Autumn 2020)

Course code	Course name	Credits	Level	Timetable module	ECV
<b>Period 1</b>					
TDDE45	Software Design and Construction	6	A1X	4	E
TNCG15	Advanced Global Illumination and Rendering	6	A1X	4	E
TNM031	Network Programming and Security	6	A1X	3	E
TNM067	Scientific Visualization	6	A1X	3	E
TNM089	Imaging Technology	6	A1X	1	E
TNM091	Media Production for Immersive Environments	6*	A1X	1	E
TNM095	Artificial Intelligence for Interactive Media	6	A1X	2	E
TNM103	Sound Technology	6	A1N	2	E
TSBK03	Advanced Game Programming	6*	A1X	1	E
<b>Period 2</b>					
TNM107	Scientific Method	6	A1X	3	C
TDDC73	Interaction Programming	6	G2X	1	E
TDDD56	Multicore and GPU Programming	6	A1X	2	E
TNCG13	SFX - Tricks of the Trade	6	A1X	4	E
TNM084	Procedural Methods for Images	6	A1X	4	E
TNM086	Virtual Reality Techniques	6	A1X	2	E
TNM091	Media Production for Immersive Environments	6*	A1X	1	E
TSBK03	Advanced Game Programming	6*	A1X	-	E

## Semester 10 (Spring 2021)

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