Mechanical Engineering, M Sc in Engineering

300 credits

Civilingenjör i maskinteknik

6CMMM

Valid from: 2016 Spring semester

Determined by
Board of Studies for Mechanical Engineering and Design

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
Period 1					
TATA41	Calculus in One Variable 1	6	G1X	3	C
TEAE04	Industrial Economics and Organisation	6	G1X	2	C
TMMT04	Experimental Mechanical Engineering	6*	G1X	1	C
THEN18	English	6*	G1X	4	E
TGTU35	Introduction to University Studies	2*	G1X	-	V
Period 2					
TATA42	Calculus in One Variable 2	6	G1X	3	C
TMME63	Engineering Mechanics - Statics	6	G1X	2	C
TMMT04	Experimental Mechanical Engineering	6*	G1X	1	C
THEN18	English	6*	G1X	4	E
TGTU35	Introduction to University Studies	2*	G1X	-	V

Semester 3 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATA69	Calculus in Several Variables	6	G1X	4	C
TMHL22	Solid Mechanics	6	G2X	3	C
TMPS34	Manufacturing Engineering	6*	G1X	2	C
Period 2					
TMME28	Engineering Mechanics - Dynamics	6	G1X	2	C
TMMV11	Fluid Mechanics and Heat Transfer	6	G2X	3	C
TMPS34	Manufacturing Engineering	6*	G1X	4	C

Semester 4 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAMS11	Probability and Statistics, first course	6	G2X	1	C
TMKA02	Mechanical Design Methodology and Product Development	6*	G2X	2	C
TMKM12	Engineering Materials Metals	6	G1X	4	C
Period 2					
TKMJ24	Environmental Engineering	6	G1N	4	C
TMHL63	Introduction to Computational Mechanics	6	G2X	1	C
TMKA02	Mechanical Design Methodology and Product Development	6*	G2X	2	C
TPTE06	Industrial Placement	6	G1X	-	E

Semester 5 (Autumn 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMEL08	Electrical Systems	6	G2X	4	C
TMHL24	Solid Mechanics - Design Criteria	6	G2X	3	C
TMKM14	Industrial Material Selection	6*	G2X	1	C
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E
Period 2					
TMKM14	Industrial Material Selection	6*	G2X	1	C
TMKT39	Machine Elements	6	G2X	2	C
TSRT19	Automatic Control	6	G2X	4	C
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E

Semester 6 (Spring 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMMS21	Mechatronics	6	G2X	1	C
TMMT31	Bachelor Thesis - Mechanical Engineering	18*	G2X	-	C
TPPE91	Production System Planning and Management	6	G2X	2	C
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E
Period 2					
TMMT31	Bachelor Thesis - Mechanical Engineering	18*	G2X	-	C
THFR05	Communicative French	6*	G1X	4	E
THSP05	Spanish	6*	G1X	4	E
THTY05	German	6*	G1X	4	E

Semester 7 (Autumn 2019)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TANA21	Scientific Computing	6	G1X	3	E
TDDE18	Programming C++	6*	G2X	2	E
TEIM11	Industrial Marketing	6	G2X	3	E
TETS37	Basics in Logistics Management	6	G2X	4	E
TFMT08	Measurement Technology	6	G2X	3	E
TFYA88	Additive Manufacturing: Tools, Materials and Methods	6	A1X	3	E
TFYA88	Additive Manufacturing: Tools, Materials and Methods	6	A1X	3	E
TKMJ31	Biofuels for Transportation	6	A1N	1	E
TMAL02	Aircraft and Vehicle Design	6	G2F	4	E
TMES09	Industrial Energy Systems	6	A1X	3	E
TMES27	Modelling of Energy Systems	6	A1N	3	E
TMHP02	Fluid Power Systems	6	G2X	2	E

Course code	Course name	Credits	Level	Timetable module	ECV
TMKM17	Polymer Materials	6	A1X	2	E
TMKT69	Conceptual Design - Project Course	6	A1N	4	E
TMKT80	Wood - Material	6	G2X	2	E
TMME14	Machine Elements, Second Course	6	A1X	3	E
TMME40	Vibration Analysis of Structures	6	A1X	3	E
TMME64	Biomechanics, basic course	6	G2X	2	E
TMMI68	CAD and Drafting Techniques, Continued Course	6*	G2X	2	E
TMMS11	Models of Mechanics	6*	A1X	3	E
TMMV01	Aerodynamics	6	A1X	2	E
TMPS33	Virtual Manufacturing	6	A1N	4	E
TMPT03	Production Engineering - Continuing Course	6	G2F	2	E
TMQU03	Quality Management and Engineering	6	G2X	2	E
TPPE16	Manufacturing Strategies	6	A1X	2	E
TSFS09	Modelling and Control of Engines and Drivelines	6*	A1X	4	E
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1X	1	E
TMPP02	Project Course - Race Vehicle Engineering	6*	G1X	-	V
Period 2					
TATA71	Ordinary Differential Equations and Dynamical Systems	6	G2X	2	E
TDDE18	Programming C++	6*	G2X	1	E
TEIE42	Industrial Sales Management	6	A1X	4	E
TEIM10	Industrial Service Development	6	A1X	2	E
TETS27	Supply Chain Logistics	6	A1X	2	E
TFYA96	The physics behind technology	6	G2X	4	E
TGTU04	Leadership	6	G2X	2	E
TGTU49	History of Technology	6	G1X	3	E
TKMJ28	Management Systems and Sustainability	6	A1X	2	E
TMES25	Energy Resources	6	A1X	3	E
TMES45	Energy Planning and Modelling of Communities	6	A1F	4	E
TMHL03	Mechanics of Light Structures	6	A1X	3	E

Course code	Course name	Credits	Level	Timetable module	ECV
TMHP03	Engineering Systems Design	6	A1X	4	E
TMKA03	Industrial Design	6	G2X	1	E
TMKM90	Engineering Materials - Deformation and Fracture	6	A1X	2	E
TMKT71	Affective Engineering	6	A1X	2	E
TMKT81	Wood - Realisation	6	G2X	1	E
TMKU02	Wood - Realisation	6	G2X	1	E
TMME50	Flight Mechanics	6	A1X	2	E
TMMI68	CAD and Drafting Techniques, Continued Course	6*	G2X	4	E
TMMS07	Biomechanics	6	A1X	4	E
TMMS11	Models of Mechanics	6*	A1X	4	E
TMMV18	Fluid Mechanics	6	A1X	2	E
TMMV54	Computational Heat Transfer	6	A1X	1	E
TMPS22	Assembly Technology	6	A1X	3	E
TMPS31	Sustainable Manufacturing	6	A1X	1	E
TMQU12	Lean Production	6	A1X	2	E
TPPE76	Operations Planning and Control	6	A1X	4	E
TSEA81	Computer Engineering and Real-time Systems	6	A1X	4	E
TSFS02	Vehicle Dynamics and Control	6	A1X	1	E
TSFS09	Modelling and Control of Engines and Drivelines	6*	A1X	3	E
TSIU02	Computer Hardware and Architecture	4	G1X	2	E
TSRT06	Automatic Control, Advanced Course	6	A1X	2	E
TSRT78	Digital Signal Processing	6	A1X	2	E
TMPP02	Project Course - Race Vehicle Engineering	6*	G1X	-	V

Specialisation: Aeronautical Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMAL02	Aircraft and Vehicle Design	6	G2F	4	C
TMMV01	Aerodynamics	6	A1X	2	C
TMME40	Vibration Analysis of Structures	6	A1X	3	E
Period 2					
TMHP03	Engineering Systems Design	6	A1X	4	C
TMME50	Flight Mechanics	6	A1X	2	C
TMHL03	Mechanics of Light Structures	6	A1X	3	E

Specialisation: Energy and Environmental Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAOP88	Engineering Optimization	6	G2X	1	C
TMES09	Industrial Energy Systems	6	A1X	3	C
TKMJ31	Biofuels for Transportation	6	A1N	1	E
TMES27	Modelling of Energy Systems	6	A1N	3	E
Period 2					
TMES25	Energy Resources	6	A1X	3	C
TKMJ28	Management Systems and Sustainability	6	A1X	2	E
TMES45	Energy Planning and Modelling of Communities	6	A1F	4	E

Specialisation: Engineering Design and Product Development

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAOP88	Engineering Optimization	6	G2X	1	C
TMKT69	Conceptual Design - Project Course	6	A1N	4	C
TMME14	Machine Elements, Second Course	6	A1X	3	E
TMMI68	CAD and Drafting Techniques, Continued Course	6*	G2X	2	E
TMPT03	Production Engineering - Continuing Course	6	G2F	2	E
Period 2					
TMHP03	Engineering Systems Design	6	A1X	4	E
TMKT71	Affective Engineering	6	A1X	2	E
TMMI68	CAD and Drafting Techniques, Continued Course	6*	G2X	4	E
TMMV18	Fluid Mechanics	6	A1X	2	E
TMMV54	Computational Heat Transfer	6	A1X	1	E

Specialisation: Engineering materials

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAOP88	Engineering Optimization	6	G2X	1	C
TMKM17	Polymer Materials	6	A1X	2	C
TFYA95	Principles of Materials Science	6	A1X	2	E
TMKT69	Conceptual Design - Project Course	6	A1N	4	E
TMKT80	Wood - Material	6	G2X	2	E
TMME14	Machine Elements, Second Course	6	A1X	3	E
TMPT03	Production Engineering - Continuing Course	6	G2F	2	E
Period 2					
TMKM90	Engineering Materials - Deformation and Fracture	6	A1X	2	C
TMHL03	Mechanics of Light Structures	6	A1X	3	E
TMMV54	Computational Heat Transfer	6	A1X	1	E
TMPS31	Sustainable Manufacturing	6	A1X	1	E

Specialisation: Engineering Mechanics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAOP88	Engineering Optimization	6	G2X	1	C
TMME40	Vibration Analysis of Structures	6	A1X	3	E
TMMS11	Models of Mechanics	6*	A1X	3	E
Period 2					
TMHL03	Mechanics of Light Structures	6	A1X	3	E
TMMS11	Models of Mechanics	6*	A1X	4	E
TMMV18	Fluid Mechanics	6	A1X	2	E
TMMV54	Computational Heat Transfer	6	A1X	1	E

Specialisation: Logistics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAOP88	Engineering Optimization	6	G2X	1	C
TETS37	Basics in Logistics Management	6	G2X	4	C
TEIM11	Industrial Marketing	6	G2X	3	E
TMQU03	Quality Management and Engineering	6	G2X	2	E
TPPE16	Manufacturing Strategies	6	A1X	2	E
Period 2					
TETS27	Supply Chain Logistics	6	A1X	2	C
TMQU12	Lean Production	6	A1X	2	E
TPPE76	Operations Planning and Control	6	A1X	4	E

Specialisation: Mechatronics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAOP88	Engineering Optimization	6	G2X	1	C
TMHP02	Fluid Power Systems	6	G2X	2	C
TSFS09	Modelling and Control of Engines and Drivelines	6*	A1X	4	C
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1X	1	E
Period 2					
TSFS09	Modelling and Control of Engines and Drivelines	6*	A1X	3	C
TSRT06	Automatic Control, Advanced Course	6	A1X	2	C
TMME50	Flight Mechanics	6	A1X	2	E
TSFS02	Vehicle Dynamics and Control	6	A1X	1	E

Specialisation: Operations Management

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAOP88	Engineering Optimization	6	G2X	1	C
TMPS33	Virtual Manufacturing	6	A1N	4	E
TMPT03	Production Engineering - Continuing Course	6	G2F	2	E
TPPE17	Corporate Finance	6	G2X	4	E
Period 2					
TMQU12	Lean Production	6	A1X	2	C
TMPS22	Assembly Technology	6	A1X	3	E
TMPS31	Sustainable Manufacturing	6	A1X	1	E
TPPE76	Operations Planning and Control	6	A1X	4	E

Specialisation: Production Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAOP88	Engineering Optimization	6	G2X	1	C
TMPT03	Production Engineering - Continuing Course	6	G2F	2	C
TETS37	Basics in Logistics Management	6	G2X	4	E
TMPS33	Virtual Manufacturing	6	A1N	4	E
TMQU03	Quality Management and Engineering	6	G2X	2	E
TPPE16	Manufacturing Strategies	6	A1X	2	E
Period 2					
TPPE76	Operations Planning and Control	6	A1X	4	C
TMPS22	Assembly Technology	6	A1X	3	E
TMPS31	Sustainable Manufacturing	6	A1X	1	E
TMQU12	Lean Production	6	A1X	2	E

Specialisation: Qaulity Management

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAOP88	Engineering Optimization	6	G2X	1	C
TMQU03	Quality Management and Engineering	6	G2X	2	C
TEIM11	Industrial Marketing	6	G2X	3	E
TETS37	Basics in Logistics Management	6	G2X	4	E
TPPE16	Manufacturing Strategies	6	A1X	2	E
Period 2					
TMQU12	Lean Production	6	A1X	2	C
TETS27	Supply Chain Logistics	6	A1X	2	E

Semester 8 (Spring 2020)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIO13	Leadership and Organizational Change	6	A1X	4	E
TEIO46	Technology-based Projects and Organisations	6*	G2X	4	E

Course code	Course name	Credits	Level	Timetable module	ECV
TEIO94	Entrepreneurship and Idea Development	6*	G2X	4	E
TETS57	Logistics Analysis	6	A1X	2	E
TGTU91	Oral and Written Communication	6	G1X	2	E
TGTU94	Technology and Ethics	6	G1X	1	E
TKMJ10	Industrial Ecology	6	A1X	1	E
TKMJ15	Environmental Management Strategies	6	G1F	3	E
TMAL51	Aircraft Conceptual Design	6	A1F	2	E
TMAL56	Aircraft Systems Engineering	6	A1F	1	E
TMES17	Building Energy Systems	6	A1N	3	E
TMES43	Analysis and Modelling of Industrial Energy Systems	6	A1F	1	E
TMHL41	Continuum Mechanics	6	A1X	2	E
TMHL62	The Finite Element Method; advanced course	6	A1X	4	E
TMHP51	Hydraulic Servo Systems	6	A1X	3	E
TMKA04	Wood - Innovation	6	A1X	1	E
TMKO01	Advanced materials and the environment	6	A1X	2	E
TMKT48	Design Optimization	6	A1X	3	E
TMKT59	Computers as Design Tools	6*	G2X	3	E
TMKT74	Advanced CAD	6	A1X	4	E
TMMS30	Multi Body Dynamics and Robotics	6	A1X	1	E
TMMV08	Computational Fluid Dynamics	6	A1X	3	E
TMPS42	Production System Automation	6	A1X	1	E
TMQU31	Statistical Quality Control	6	A1X	2	E
TPPE78	Quantitative Models and Analysis in Operations Management	6	A1X	1	E
TRTE16	Basic Principles for Environmental Chemistry	6*	G1X	1	E
TSFS04	Electrical Drives	6	G2X	4	E
TSIU51	Project with Microcontroller	8*	G1X	3	E
TSRT07	Industrial Control Systems	6	A1N	2	E
TMPP02	Project Course - Race Vehicle Engineering	6*	G1X	-	V
Period 2					
TANA31	Computational Methods for Ordinary and Partial Differential Equations	6	A1X	2	E

Course code	Course name	Credits	Level	Timetable module	ECV
TDDD12	Database Technology	6	G2X	4	E
TEAE13	Civil and Commercial Law	6	G1X	2	E
TEIO46	Technology-based Projects and Organisations	6*	G2X	1	E
TEIO94	Entrepreneurship and Idea Development	6*	G2X	4	E
TETS36	Sustainable Logistics Systems	6	A1X	4	E
TETS56	Logistics and Quality in Health Care	6	A1X	2	E
TGTU95	Philosophy of Science and Technology	6	G1X	4	E
TKMJ29	Resource Efficient Products	6	A1N	1	E
TMAL06	Aircraft Conceptual Design - Project Course	6	A1X	2	E
TMHL61	Damage Mechanics and Life Analysis	6	A1X	2	E
TMKM09	Engineering Materials for Lightweight Applications	6	A1X	3	E
TMKT57	Product Modelling	6	A1X	3	E
TMKT59	Computers as Design Tools	6*	G2X	3	E
TMKT77	System Safety	6	A1X	4	E
TMME11	Road Vehicle Dynamics	6	A1X	1	E
TMME19	Mechanics, second course	6	A1N	1	E
TMMS10	Fluid Power Systems and Transmissions	6	A1X	2	E
TMMV07	Computational Fluid Dynamics, advanced course	6	A1X	4	E
TMMV56	Aerodynamics, Continued Course	6	A1X	3	E
TMPS27	Production Systems	6	A1X	3	E
TMQU04	Six Sigma Quality	6	A1X	2	E
TMQU13	Customer Focused Product and Service Development	6	A1N	4	E
TPPE74	Design and Development of Manufacturing Operations	6	A1F	4	E
TRTE16	Basic Principles for Environmental Chemistry	6*	G1X	1	E
TSFS03	Vehicle Propulsion Systems	6	A1X	3	E
TSFS06	Diagnosis and Supervision	6	A1N	1	E
TSFS11	Electrical and Energy Technology	6	G2F	4	E
TSIU51	Project with Microcontroller	8*	G1X	-	E
TMPP02	Project Course - Race Vehicle Engineering	6*	G1X	-	V

Specialisation: Aeronautical Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMAL51	Aircraft Conceptual Design	6	A1F	2	C
TMMV08	Computational Fluid Dynamics	6	A1X	3	C
TMAL56	Aircraft Systems Engineering	6	A1F	1	E
TMHL41	Continuum Mechanics	6	A1X	2	E
TMHL62	The Finite Element Method; advanced course	6	A1X	4	E
TMKO01	Advanced materials and the environment	6	A1X	2	E
TMMS30	Multi Body Dynamics and Robotics	6	A1X	1	E
Period 2					
TMAL06	Aircraft Conceptual Design - Project Course	6	A1X	2	C
TMHL61	Damage Mechanics and Life Analysis	6	A1X	2	E
TMKM09	Engineering Materials for Lightweight Applications	6	A1X	3	E
TMKT57	Product Modelling	6	A1X	3	E
TMME11	Road Vehicle Dynamics	6	A1X	1	E
TMMV07	Computational Fluid Dynamics, advanced course	6	A1X	4	E
TMMV56	Aerodynamics, Continued Course	6	A1X	3	E

Specialisation: Energy and Environmental Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TKMJ10	Industrial Ecology	6	A1X	1	C
TEIO46	Technology-based Projects and Organisations	6*	G2X	4	E
TMES17	Building Energy Systems	6	A1N	3	E
Period 2					
TKMJ29	Resource Efficient Products	6	A1N	1	C
TEIO46	Technology-based Projects and Organisations	6*	G2X	1	E

Specialisation: Engineering Design and Product Development

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMKT48	Design Optimization	6	A1X	3	C
TMKT74	Advanced CAD	6	A1X	4	C
TEIO46	Technology-based Projects and Organisations	6*	G2X	4	E
TMKO01	Advanced materials and the environment	6	A1X	2	E
Period 2					
TMKT77	System Safety	6	A1X	4	C
TEIO46	Technology-based Projects and Organisations	6*	G2X	1	E
TKMJ29	Resource Efficient Products	6	A1N	1	E
TMKM09	Engineering Materials for Lightweight Applications	6	A1X	3	E
TMKT57	Product Modelling	6	A1X	3	E
TMMS10	Fluid Power Systems and Transmissions	6	A1X	2	E

Specialisation: Engineering materials

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMKO01	Advanced materials and the environment	6	A1X	2	C
TEIO46	Technology-based Projects and Organisations	6*	G2X	4	E
TFFM40	Analytical Methods in Materials Science	6*	A1X	1	E
TFYA21	Physical Metallurgy	6	A1F	3	E
TMHL41	Continuum Mechanics	6	A1X	2	E
TMHL62	The Finite Element Method; advanced course	6	A1X	4	E
TMKT48	Design Optimization	6	A1X	3	E
Period 2					
TMKM09	Engineering Materials for Lightweight Applications	6	A1X	3	C/E
TEIO46	Technology-based Projects and Organisations	6*	G2X	1	E
TFFM40	Analytical Methods in Materials Science	6*	A1X	1	E
TMHL61	Damage Mechanics and Life Analysis	6	A1X	2	E

Specialisation: Engineering Mechanics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TEIO46	Technology-based Projects and Organisations	6*	G2X	4	E
TMHL41	Continuum Mechanics	6	A1X	2	E
TMHL62	The Finite Element Method; advanced course	6	A1X	4	E
TMKO01	Advanced materials and the environment	6	A1X	2	E
TMMS30	Multi Body Dynamics and Robotics	6	A1X	1	E
TMMV08	Computational Fluid Dynamics	6	A1X	3	E
Period 2					
TEIO46	Technology-based Projects and Organisations	6*	G2X	1	E
TMHL61	Damage Mechanics and Life Analysis	6	A1X	2	E
TMKM09	Engineering Materials for Lightweight Applications	6	A1X	3	E
TMME11	Road Vehicle Dynamics	6	A1X	1	E
TMME19	Mechanics, second course	6	A1N	1	E
TMMV07	Computational Fluid Dynamics, advanced course	6	A1X	4	E
TMMV56	Aerodynamics, Continued Course	6	A1X	3	E

Specialisation: Logistics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TETS57	Logistics Analysis	6	A1X	2	C
TEIO46	Technology-based Projects and Organisations	6*	G2X	4	E
Period 2					
TEIO46	Technology-based Projects and Organisations	6*	G2X	1	E
TETS36	Sustainable Logistics Systems	6	A1X	4	E
TETS56	Logistics and Quality in Health Care	6	A1X	2	E
TPPE74	Design and Development of Manufacturing Operations	6	A1F	4	E

Specialisation: Mechatronics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMHP51	Hydraulic Servo Systems	6	A1X	3	C
TEIO46	Technology-based Projects and Organisations	6*	G2X	4	E
TMMS30	Multi Body Dynamics and Robotics	6	A1X	1	E
TSFS04	Electrical Drives	6	G2X	4	E
TSRT07	Industrial Control Systems	6	A1N	2	E
Period 2					
TEIO46	Technology-based Projects and Organisations	6*	G2X	1	E
TMME11	Road Vehicle Dynamics	6	A1X	1	E
TMMS10	Fluid Power Systems and Transmissions	6	A1X	2	E
TSFS03	Vehicle Propulsion Systems	6	A1X	3	E
TSFS06	Diagnosis and Supervision	6	A1N	1	E

Specialisation: Operations Management

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TPPE78	Quantitative Models and Analysis in Operations Management	6	A1X	1	C/E
TEIO46	Technology-based Projects and Organisations	6*	G2X	4	E
TMPS42	Production System Automation	6	A1X	1	E
Period 2					
TPPE74	Design and Development of Manufacturing Operations	6	A1F	4	C
TEIO46	Technology-based Projects and Organisations	6*	G2X	1	E
TMPS27	Production Systems	6	A1X	3	E

Specialisation: Production Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMPS42	Production System Automation	6	A1X	1	C
TEIO46	Technology-based Projects and Organisations	6*	G2X	4	E
TMQU31	Statistical Quality Control	6	A1X	2	E
TPPE78	Quantitative Models and Analysis in Operations Management	6	A1X	1	E
Period 2					
TEIO46	Technology-based Projects and Organisations	6*	G2X	1	E
TMPS27	Production Systems	6	A1X	3	E
TMQU04	Six Sigma Quality	6	A1X	2	E
TMQU13	Customer Focused Product and Service Development	6	A1N	4	E
TPPE74	Design and Development of Manufacturing Operations	6	A1F	4	E

Specialisation: Qaulity Management

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMQU31	Statistical Quality Control	6	A1X	2	C
TAMS65	Mathematical Statistics, second course	6*	G2X	4	E
TEIO13	Leadership and Organizational Change	6	A1X	4	E
TEIO46	Technology-based Projects and Organisations	6*	G2X	4	E
TMQU14	Philosophy of Science and Research Methodology	6	A1X	-	E
Period 2					
TMQU04	Six Sigma Quality	6	A1X	2	C/E
TMQU13	Customer Focused Product and Service Development	6	A1N	4	C/E
TAMS65	Mathematical Statistics, second course	6*	G2X	2	E
TEIM07	Industrial Market Research	6	A1X	2	E
TEIO46	Technology-based Projects and Organisations	6*	G2X	1	E
TETS56	Logistics and Quality in Health Care	6	A1X	2	E
TPPE74	Design and Development of Manufacturing Operations	6	A1F	4	E

Semester 9 (Autumn 2020)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAOP34	Large Scale Optimization	6	A1X	3	E
TBME04	Anatomy and Physiology	6	G2X	3	E
TETS23	Purchasing	6	A1N	2	E
TMAL07	Prototype Realization - Project Course	6	A1X	-	E
TMHL19	Advanced Material and Computational Mechanics	6	A1X	1	E
TMKM99	Engineering Materials and Manufacturing Technology	6	A1X	2	E
TMKO02	Engineering Materials and Manufacturing Technology	6	A1X	2	E
TMKT79	Collaborative Multidisciplinary Design Optimization	6	A1X	2	E

Course code	Course name	Credits	Level	Timetable module	ECV
TMMS13	Electro Hydraulic Systems	6	A1X	3	E
TMMV12	Gas Turbine Engines	6	A1X	4	E
TMPS35	Emerging Factory Technologies	6	A1N	3	E
TPPE99	Simulation in Production and Logistics	6	A1X	3	E
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1X	1	E
TSRT92	Modelling and Learning for Dynamical Systems	6	A1X	3	E
TSTE25	Power Electronics	6	A1X	3	E
Period 2					
TAOP18	Supply Chain Optimization	6	A1X	1	E
TETS31	Logistics Strategies	6	A1X	4	E
TKMJ32	Integrated Product Service Engineering	6	A1N	3	E
TMAL08	Aircraft Systems Engineering - Project Course	6	A1X	-	E
TMES51	International Energy Markets	6	A1N	1	E
TMHL26	Aircraft Structures - Project Course	6	A1X	-	E
TMMS20	Structural Optimization	6	A1X	1	E
TSRT08	Optimal Control	6	A1X	3	E
TSRT78	Digital Signal Processing	6	A1X	2	E
TSTE26	Powergrid and Technology for Renewable Production	6	A1X	3	E

Specialisation: Aeronautical Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMAL07	Prototype Realization - Project Course	6	A1X	-	C
TMMV12	Gas Turbine Engines	6	A1X	4	C
Period 2					
TMAL08	Aircraft Systems Engineering - Project Course	6	A1X	-	C/E
TMHL26	Aircraft Structures - Project Course	6	A1X	-	C/E
TMMV26	Aircraft Aerodynamics - Project Course	6	A1X	-	C/E
TMKM90	Engineering Materials - Deformation and Fracture	6	A1X	2	E
TMMS20	Structural Optimization	6	A1X	1	E
TMMV54	Computational Heat Transfer	6	A1X	1	E

Specialisation: Energy and Environmental Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMPE08	Project Course Advanced - Energy and Environmental Engineering	12*	A1X	-	C
Period 2					
TMPE08	Project Course Advanced - Energy and Environmental Engineering	12*	A1X	-	C
TKMJ32	Integrated Product Service Engineering	6	A1N	3	E
TMES51	International Energy Markets	6	A1N	1	E

Specialisation: Engineering Design and Product Development

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMPM05	Project Course Advanced - Design Engineering and Product Development	12*	A1X	-	C
TMKT79	Collaborative Multidisciplinary Design Optimization	6	A1X	2	E
Period 2					
TMPM05	Project Course Advanced - Design Engineering and Product Development	12*	A1X	-	C
TMKU01	Design Automation of Customized Products	6	A1X	2	E

Specialisation: Engineering materials

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMPM09	Project Course Advanced - Engineering Materials	12*	A1X	-	C
TMKM99	Engineering Materials and Manufacturing Technology	6	A1X	2	C/E
TMKO02	Engineering Materials and Manufacturing Technology	6	A1X	2	C/E
TFYA88	Additive Manufacturing: Tools, Materials and Methods	6	A1X	3	E
TMHL19	Advanced Material and Computational Mechanics	6	A1X	1	E
TMMI68	CAD and Drafting Techniques, Continued Course	6*	G2X	2	E
Period 2					
TMPM09	Project Course Advanced - Engineering Materials	12*	A1X	-	C
TMMI68	CAD and Drafting Techniques, Continued Course	6*	G2X	4	E

Specialisation: Engineering Mechanics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMPM07	Project Course Advanced - Applied Mechanics	12*	A1X	-	C
TMHL19	Advanced Material and Computational Mechanics	6	A1X	1	E
TMKM99	Engineering Materials and Manufacturing Technology	6	A1X	2	E
TMKO02	Engineering Materials and Manufacturing Technology	6	A1X	2	E
TMMV59	Applied Computational Fluid Dynamics	6	A1X	2	E
Period 2					
TMPM07	Project Course Advanced - Applied Mechanics	12*	A1X	-	C
TMMS20	Structural Optimization	6	A1X	1	E

Specialisation: Logistics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TETS38	Logistics Project	12*	A1X	4	C
TETS23	Purchasing	6	A1N	2	E
TPPE99	Simulation in Production and Logistics	6	A1X	3	E
Period 2					
TETS38	Logistics Project	12*	A1X	2	C
TAOP18	Supply Chain Optimization	6	A1X	1	E
TETS31	Logistics Strategies	6	A1X	4	E

Specialisation: Mechatronics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMPM06	Project Course Advanced - Mechatronics	12*	A1F	-	C/E
TSRT10	Automatic Control - Project Course	12*	A1F	4	C/E
TMMS13	Electro Hydraulic Systems	6	A1X	3	E
TSFS12	Autonomous Vehicles - Planning, Control, and Learning Systems	6	A1X	1	E
TSRT92	Modelling and Learning for Dynamical Systems	6	A1X	3	E
Period 2					
TMPM06	Project Course Advanced - Mechatronics	12*	A1F	-	C/E
TSRT10	Automatic Control - Project Course	12*	A1F	4	C/E

Specialisation: Operations Management

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TPPE73	Operations Management - Project Course	12*	A1X	4	C
TPPE16	Manufacturing Strategies	6	A1X	2	C/E
TMPS35	Emerging Factory Technologies	6	A1N	3	E
TPPE99	Simulation in Production and Logistics	6	A1X	3	E
Period 2					
TPPE73	Operations Management - Project Course	12*	A1X	4	C
TAOP18	Supply Chain Optimization	6	A1X	1	E

Specialisation: Production Engineering

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMPM08	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	C
TMPS35	Emerging Factory Technologies	6	A1N	3	E
TPPE16	Manufacturing Strategies	6	A1X	2	E
TPPE99	Simulation in Production and Logistics	6	A1X	3	E
Period 2					
TMPM08	Project Course Advanced - Manufacturing Engineering	12*	A1X	-	C

Specialisation: Qaulity Management

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TMQU27	Quality Management - Project Course	12*	A1X	2	C
TMQU47	Quality Engineering and Design	6	A1X	4	E
Period 2					
TMQU27	Quality Management - Project Course	12*	A1X	4	C
TEIM10	Industrial Service Development	6	A1X	2	E

Semester 10 (Spring 2021)

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