

Mechanical Engineering, M Sc in Engineering

300 credits

Civilingenjör i maskinteknik

6CMMM

Valid from: 2014 Spring semester

Determined by

Board of Studies for Mechanical
Engineering and Design

Date determined

Entry requirements

Degree in Swedish

Civilingenjör 300 hp och Teknologie master 120 hp

Curriculum

Semester 6 (Spring 2017)

| 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 2017)

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|--|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TANA21 | Scientific Computing | 6 | G1X | 3 | E |
| TAOP88 | Engineering Optimization | 6 | G2X | 1 | E |
| TEIM11 | Industrial Marketing | 6 | G2X | 3 | E |
| TETS37 | Basics in Logistics Management | 6 | G2X | 4 | E |
| TKMJ31 | Biofuels for Transportation | 6 | A1X | 1 | E |
| TMAL02 | Aircraft and Vehicle Design | 6 | G2X | 4 | E |
| TMES09 | Industrial Energy Systems | 6 | A1X | 3 | E |
| TMES27 | Modelling of Energy Systems | 6 | A1X | 3 | E |
| TMHP02 | Fluid Power Systems | 6 | G2X | 2 | E |
| TMKM90 | Engineering Materials - Deformation and Fracture | 6 | A1X | 4 | E |
| TMKT80 | Wood - Material | 6 | G2X | 2 | E |

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|---|---------|-------|------------------|-----|
| TMME14 | Machine Elements, Second Course | 6 | A1X | 3 | E |
| TMME19 | Mechanics, second course | 6 | A1X | 4 | E |
| TMME19 | Mechanics, second course | 6 | A1X | 2 | E |
| TMME40 | Vibration Analysis of Structures | 6 | A1X | 3 | 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 |
| TMPP02 | Project Course - Race Vehicle Engineering | 6* | G2X | - | V |
| Period 2 | | | | | |
| TATA71 | Ordinary Differential Equations and Dynamical Systems | 6 | G2X | 3 | 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 |
| TGTU04 | Leadership | 6 | G2X | 2 | E |
| TGTU49 | History of Technology | 6 | G1F | 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 | A1X | 4 | E |
| TMHL03 | Mechanics of Light Structures | 6 | A1X | 3 | E |
| TMHP03 | Engineering Systems Design | 6 | A1X | 4 | E |
| TMKA03 | Industrial Design | 6 | G2X | 1 | E |
| TMKM17 | Polymer Materials | 6 | A1X | 2 | E |
| TMKT71 | Affective Engineering | 6 | A1X | 2 | E |
| TMKT81 | Wood - Realisation | 6 | G2X | 1 | E |

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---|---------|-------|------------------|-----|
| 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 |
| TPPE21 | Production Logistics | 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* | G2X | - | V |

Specialisation: Aeronautical Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|----------------------------------|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TMAL02 | Aircraft and Vehicle Design | 6 | G2X | 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 | A1X | 1 | E |
| TMES27 | Modelling of Energy Systems | 6 | A1X | 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 | A1X | 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 |
| TMKT77 | System Safety | 6 | A1X | 4 | C |
| TMKT80 | Wood - Material | 6 | G2X | 2 | E |
| TMME14 | Machine Elements, Second Course | 6 | A1X | 3 | E |
| TMMI68 | CAD and Drafting Techniques, Continued Course | 6* | G2X | 2 | E |
| Period 2 | | | | | |
| TMHP03 | Engineering Systems Design | 6 | A1X | 4 | E |
| TMKA03 | Industrial Design | 6 | G2X | 1 | E |
| TMKT71 | Affective Engineering | 6 | A1X | 2 | E |
| TMKT81 | Wood - Realisation | 6 | G2X | 1 | E |
| TMMI68 | CAD and Drafting Techniques, Continued Course | 6* | G2X | 4 | E |
| TMPS31 | Sustainable Manufacturing | 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 |
| TMKM90 | Engineering Materials - Deformation and Fracture | 6 | A1X | 4 | C |
| TFYA77 | Fundamentals in Materials Science | 6 | A1X | 2 | 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 | | | | | |
| TMKM17 | Polymer Materials | 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 |
| 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 |
| TPPE21 | Production Logistics | 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 |
| 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: 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 | | | | | |
| TPPE21 | Production Logistics | 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 |

Semester 8 (Spring 2018)

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|---|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TEIO20 | Entrepreneurship and New Business Development | 6* | G2X | 4 | E |
| TEIO46 | Technology-based Projects and Organisations | 6* | G2X | 4 | E |
| TETS57 | Logistics Analysis | 6 | A1X | 2 | E |
| TGTU01 | Technology and Ethics | 6 | G1X | 1 | E |
| TGTU91 | Oral and Written Communication | 6 | G1X | 2 | 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 | 4 | 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 |

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|---|---------|-------|------------------|-----|
| TMHP51 | Hydraulic Servo Systems | 6 | A1X | 3 | E |
| TMKA04 | Wood - Innovation | 6 | A1X | 1 | E |
| TMKM40 | Engineering Materials - New Materials | 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 | 1 | E |
| TMMS30 | Multi Body Dynamics and Robotics | 6 | A1X | 3 | 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 | A1X | 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 |
| TDDD12 | Database Technology | 6 | G2X | 4 | E |
| TEAE13 | Civil and Commercial Law | 6 | G1X | 2 | E |
| TEIO20 | Entrepreneurship and New Business Development | 6* | G2X | 4 | E |
| 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 | 4 | E |
| TGTU76 | Philosophy of Science | 6 | G1X | 4 | E |
| TKMJ29 | Resource Efficient Products | 6 | A1N | 1 | E |
| TMAL06 | Aircraft Conceptual Design - Project Course | 6 | A1X | 2 | E |
| TMAL56 | Aircraft Systems Engineering | 6* | A1F | 4 | E |
| TMHL61 | Damage Mechanics and Life Analysis | 6 | A1X | 2 | E |

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---|---------|-------|------------------|-----|
| TMKM09 | Engineering Materials for Lightweight Applications | 6 | A1X | 3 | E |
| TMKM18 | Engineering Materials, Welding and Manufacturing Technology | 6 | G2X | 2 | E |
| TMKT57 | Product Modelling | 6 | A1X | 3 | E |
| TMKT59 | Computers as Design Tools | 6* | G2X | 3 | E |
| TMKT69 | Conceptual Design - Project Course | 6 | A1N | 4 | E |
| TMME11 | Road Vehicle Dynamics | 6 | A1X | 1 | E |
| TMME19 | Mechanics, second course | 6 | A1X | 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 |
| TPPE74 | Design and Development of Manufacturing Operations | 6 | A1X | 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 | 4 | E |
| TMHL41 | Continuum Mechanics | 6 | A1X | 2 | E |
| TMHL62 | The Finite Element Method; advanced course | 6 | A1X | 4 | E |
| TMKM40 | Engineering Materials - New Materials | 6 | A1X | 2 | E |
| TMMS30 | Multi Body Dynamics and Robotics | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TMAL06 | Aircraft Conceptual Design - Project Course | 6 | A1X | 2 | C |
| TMAL56 | Aircraft Systems Engineering | 6* | A1F | 4 | 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 |
| 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 | 1 | C |
| TEIO46 | Technology-based Projects and Organisations | 6* | G2X | 4 | E |
| TMKM40 | Engineering Materials - New Materials | 6 | A1X | 2 | E |
| Period 2 | | | | | |
| TMKT69 | Conceptual Design - Project Course | 6 | A1N | 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 | | | | | |
| TMKM40 | Engineering Materials - New Materials | 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 |
| TMKM18 | Engineering Materials, Welding and Manufacturing Technology | 6 | G2X | 2 | 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 |
| TMKT69 | Conceptual Design - Project Course | 6 | A1N | 4 | 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 |
| TMKM40 | Engineering Materials - New Materials | 6 | A1X | 2 | E |
| TMMS30 | Multi Body Dynamics and Robotics | 6 | A1X | 3 | 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 |
| TMKM18 | Engineering Materials, Welding and Manufacturing Technology | 6 | G2X | 2 | 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 | | | | | |
| TEIO46 | Technology-based Projects and Organisations | 6* | G2X | 4 | E |
| TETS57 | Logistics Analysis | 6 | A1X | 2 | 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 | 4 | E |
| TPPE74 | Design and Development of Manufacturing Operations | 6 | A1X | 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 | 3 | E |
| TSFS04 | Electrical Drives | 6 | G2X | 4 | E |
| TSRT07 | Industrial Control Systems | 6 | A1X | 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: 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 |
| TPPE74 | Design and Development of Manufacturing Operations | 6 | A1X | 4 | E |

Semester 9 (Autumn 2018)

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|-------------|---------|-------|------------------|-----|
| Period 1 | | | | | |

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|---|---------|-------|------------------|-----|
| 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 |
| TMKT77 | System Safety | 6 | A1X | 4 | E |
| TMKT79 | Collaborative Multidisciplinary Design Optimization | 6 | A1X | 2 | E |
| TMMS13 | Electro Hydraulic Systems | 6 | A1X | 2 | E |
| TMMV12 | Gas Turbine Engines | 6 | A1X | 4 | E |
| TMPS35 | Emerging Factory Technologies | 6 | A1N | 3 | E |
| TMQU13 | Customer Focused Product and Service Development | 6 | A1X | 4 | E |
| TPPE73 | Operations Management - Project Course | 12* | A1X | 4 | E |
| TPPE99 | Simulation in Production and Logistics | 6 | A1X | 3 | E |
| TSRT10 | Automatic Control - Project Course | 12* | A1X | 4 | E |
| TSRT62 | Modelling and Simulation | 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 |
| TMKM13 | Experimental Evaluation of Engineering Materials | 6 | A1X | 4 | E |
| TMMS20 | Structural Optimization | 6 | A1X | 1 | E |
| TMMV17 | Aircraft Aerodynamics - Project Course | 6 | A1X | - | E |
| TPPE73 | Operations Management - Project Course | 12* | A1X | 4 | E |
| TSRT08 | Optimal Control | 6 | A1X | 3 | E |
| TSRT10 | Automatic Control - Project Course | 12* | A1X | 4 | E |

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---|---------|-------|------------------|-----|
| 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 |
| TMMV17 | 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 |

Specialisation: Engineering materials

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|--|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TMPM09 | Project Course Advanced - Engineering Materials | 12* | A1X | - | C |
| 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 |
| 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* | A1X | - | C/E |
| TSRT10 | Automatic Control - Project Course | 12* | A1X | 4 | C/E |
| TMMS13 | Electro Hydraulic Systems | 6 | A1X | 2 | E |
| TSRT62 | Modelling and Simulation | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TMPM06 | Project Course Advanced - Mechatronics | 12* | A1X | - | C/E |
| TSRT10 | Automatic Control - Project Course | 12* | A1X | 4 | C/E |

Specialisation: Production Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|---|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TMPI03 | Project Course Advanced - Industrial Manufacturing | 12* | A1X | - | C/E |
| TMPM08 | Project Course Advanced - Manufacturing Engineering | 12* | A1X | - | C/E |
| TMQU27 | Quality Management - Project Course | 12* | A1X | 2 | C/E |
| TMPS35 | Emerging Factory Technologies | 6 | A1N | 3 | E |
| TMQU13 | Customer Focused Product and Service Development | 6 | A1X | 4 | E |
| TPPE16 | Manufacturing Strategies | 6 | A1X | 2 | E |
| TPPE99 | Simulation in Production and Logistics | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TMPI03 | Project Course Advanced - Industrial Manufacturing | 12* | A1X | - | C/E |
| TMPM08 | Project Course Advanced - Manufacturing Engineering | 12* | A1X | - | C/E |
| TMQU27 | Quality Management - Project Course | 12* | A1X | 4 | C/E |

Semester 10 (Spring 2019)

| 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