

Industrial Engineering and Management - International, M Sc in Engineering

300 credits

Civilingenjör i industriell ekonomi - internationell

6CIEI

Valid from: 2014 Spring semester

Determined byBoard of Studies for Industrial
Engineering and Logistics

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 | | | | | |
| TEIM32 | Industrial Marketing | 6 | G2X | 4 | С |
| TDDD81 | Database Technology | 6* | G2X | 2 | E |
| TDDD83 | Computer Engineering - Bachelor Project | 18* | G2X | 1/3 | Е |
| TDDE11 | Object Oriented Programming in Java | 4 | G2X | 2 | E |
| TFBI23 | Ecology and the Environment | 6 | G1X | 3 | E |
| TFBI24 | Biotechnology - Bachelor Project | 18* | G2X | 2 | E |
| ТКМЈ39 | Resource Efficient Products and Production | 6 | G2X | 1 | E |
| TMKT14 | CAD and Machine Elements | 6 | G2X | 1 | E |
| TMMV16 | Energy Engineering - Bachelor Project | 18* | G2X | 3 | E |
| TMPS32 | Mechanical Engineering - Bachelor Project | 18* | G2X | 3 | E |
| TSEA56 | Electronics Engineering - Bachelor Project | 16* | G2X | 2 | E |
| Period 2 | | | | | |
| TDDD12 | Database Technology | 6 | G2X | 4 | E |
| TDDD81 | Database Technology | 6* | G2X | 4 | E |
| TDDD83 | Computer Engineering - Bachelor Project | 18* | G2X | 1/3 | E |
| TFBI24 | Biotechnology - Bachelor Project | 18* | G2X | 2/3/4 | E |
| TMMV16 | Energy Engineering - Bachelor Project | 18* | G2X | 3 | E |
| TMPS32 | Mechanical Engineering - Bachelor Project | 18* | G2X | 3 | E |
| TSEA56 | Electronics Engineering - Bachelor Project | 16* | G2X | | E |
| TSKS10 | Signals, Information and Communication | 4 | G2X | 3 | E |

Specialisation: Specialization Biotechnical Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|----------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TFBI23 | Ecology and the Environment | 6 | G1X | 3 | С |
| TFBI24 | Biotechnology - Bachelor Project | 18* | G2X | 2 | E |
| Period 2 | | | | | |
| TFBI24 | Biotechnology - Bachelor Project | 18* | G2X | 2/3/4 | E |
| | | | | | |



Specialisation: Specialization Computer Science and Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TDDD81 | Database Technology | 6* | G2X | 2 | Е |
| TDDD83 | Computer Engineering - Bachelor Project | 18* | G2X | 1/3 | Е |
| Period 2 | | | | | |
| TDDD12 | Database Technology | 6 | G2X | 4 | С |
| TDDD81 | Database Technology | 6* | G2X | 4 | E |
| TDDD83 | Computer Engineering - Bachelor Project | 18* | G2X | 1/3 | E |

Specialisation: Specialization Electrical Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TDDE11 | Object Oriented Programming in Java | 4 | G2X | 2 | С |
| TSEA56 | Electronics Engineering - Bachelor Project | 16* | G2X | 2 | E |
| Period 2 | | | | | |
| TSKS10 | Signals, Information and Communication | 4 | G2X | 3 | С |
| TSEA56 | Electronics Engineering - Bachelor Project | 16* | G2X | - | E |

Specialisation: Specialization Energy Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TKMJ39 | Resource Efficient Products and Production | 6 | G2X | 1 | С |
| TMMV16 | Energy Engineering - Bachelor Project | 18* | G2X | 3 | E |
| Period 2 | | | | | |
| TMMV16 | Energy Engineering - Bachelor Project | 18* | G2X | 3 | E |



Specialisation: Specialization Mechanical Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMKT14 | CAD and Machine Elements | 6 | G2X | 1 | С |
| TMPS32 | Mechanical Engineering - Bachelor Project | 18* | G2X | 3 | E |
| Period 2 | | | | | |
| TMPS32 | Mechanical Engineering - Bachelor Project | 18* | G2X | 3 | E |

Semester 7 (Autumn 2017)

| Period 1 THSP18 Spanish for Engineers III 6* G2X - C TAMS32 Stochastic Processes 6 A1X 1 E TAMS46 Probability Theory, Second Course 6 A1X 3 E TANA21 Scientific Computing 6 G1X 3 E TAOP34 Large Scale Optimization 6 A1X 3 E TATA34 Real Analysis, Honours Course 6* G2X 4 E TATA44 Vector Analysis 4 G1X 1 E TDDC17 Artificial Intelligence 6 G2X 3 E TDDC88 Software Engineering 12* A1X 1 E TDDD23 Design and Programming of Computer Games 6 A1X 2 E TDDD38 Advanced Programming in C++ 6* A1X 2 E TDDE18 Programming C++ 6* G2X 4 E T | Course code | Course name | Credits | Level | Timetable module | ECV |
|---|----------------|---|---------|-------|---------------------|-----|
| TAMS32 Stochastic Processes 6 A1X 1 E TAMS46 Probability Theory, Second Course 6 A1X 3 E TANA21 Scientific Computing 6 G1X 3 E TAOP34 Large Scale Optimization 6 A1X 3 E TATA34 Real Analysis, Honours Course 6* G2X 4 E TATA44 Vector Analysis 4 G1X 1 E TDDC17 Artificial Intelligence 6 G2X 3 E TDDC88 Software Engineering 12* A1X 1 E TDDD23 Design and Programming of Computer Games 6 A1X 2 E TDDD38 Advanced Programming in C++ 6* A1X 2 E TDDD43 Advanced Data Models and Databases 6* A1X 2 E TDDE18 Programming C++ 6* G2X 4 E TDE109 Strategic Application of IT: E-business and Knowledge Management 6 A1X 4 E TDE113 Enterprise Resource Planning Systems: Process and Implementation 6 A1X 4 E TEIE72 Corporate Strategies 6 A1X 4 E TEIO07 Project Based Organization and Management 6 A1X 4 E TEIO09 Innovation Management 6 A1X 2 E | Period 1 | | | | | |
| TAMS46 Probability Theory, Second Course 6 A1X 3 E TANA21 Scientific Computing 6 G1X 3 E TAOP34 Large Scale Optimization 6 A1X 3 E TATA34 Real Analysis, Honours Course 6* G2X 4 E TATA44 Vector Analysis 4 G1X 1 E TDDC17 Artificial Intelligence 6 G2X 3 E TDDC88 Software Engineering 12* A1X 1 E TDDD23 Design and Programming of Computer Games 6 A1X 2 E TDDD38 Advanced Programming in C++ 6* A1X 2 E TDDD43 Advanced Data Models and Databases 6* A1X 2 E TDDE18 Programming C++ 6* G2X 4 E TDE109 Strategic Application of IT: E-business and Knowledge Management 6 A1X 4 E TDE113 Enterprise Resource Planning Systems: Process and Implementation 6 A1X 4 E TEIE72 Corporate Strategies 6 A1X 4 E TEIO07 Project Based Organization and Management 6 A1X 4 E TEIO09 Innovation Management 6 A1X 2 E | THSP18 | Spanish for Engineers III | 6* | G2X | - | С |
| TANA21 Scientific Computing 6 G1X 3 E TAOP34 Large Scale Optimization 6 A1X 3 E TATA34 Real Analysis, Honours Course 6* G2X 4 E TATA44 Vector Analysis 4 G1X 1 E TDDC17 Artificial Intelligence 6 G2X 3 E TDDC88 Software Engineering 12* A1X 1 E TDDD23 Design and Programming of Computer Games 6 A1X 2 E TDDD38 Advanced Programming in C++ 6* A1X 2 E TDDD43 Advanced Data Models and Databases 6* A1X 2 E TDDE18 Programming C++ 6* G2X 4 E TDE109 Strategic Application of IT: E-business and Knowledge Management 6 A1X 4 E TDEI13 Enterprise Resource Planning Systems: Process and Implementation 6 A1X 4 E TEICO7 Project Based Organization and Management 6 A1X 4 E TEIO07 Innovation Management 6 A1X 2 E TEIO90 Innovation Management 6 A1X 2 E | TAMS32 | Stochastic Processes | 6 | A1X | 1 | E |
| TAOP34 Large Scale Optimization 6 A1X 3 E TATA34 Real Analysis, Honours Course 6* G2X 4 E TATA44 Vector Analysis 4 G1X 1 E TDDC17 Artificial Intelligence 6 G2X 3 E TDDC88 Software Engineering 12* A1X 1 E TDDD23 Design and Programming of Computer Games 6 A1X 2 E TDDD38 Advanced Programming in C++ 6* A1X 2 E TDDD43 Advanced Data Models and Databases 6* A1X 2 E TDDE18 Programming C++ 6* G2X 4 E TDE109 Strategic Application of IT: E-business and Knowledge Management 6 A1X 4 E TDEI13 Enterprise Resource Planning Systems: Process and Implementation 6 A1X 4 E TEIE72 Corporate Strategies 6 A1X 4 E TEIO07 Project Based Organization and Management 6 A1X 4 E TEIO09 Innovation Management 6 A1X 2 E | TAMS46 | Probability Theory, Second Course | 6 | A1X | 3 | E |
| TATA34 Real Analysis, Honours Course 6* G2X 4 E TATA44 Vector Analysis 4 G1X 1 E TDDC17 Artificial Intelligence 6 G2X 3 E TDDC88 Software Engineering 12* A1X 1 E TDDD23 Design and Programming of Computer Games 6 A1X 2 E TDDD38 Advanced Programming in C++ 6* A1X 2 E TDDD43 Advanced Data Models and Databases 6* A1X 2 E TDDE18 Programming C++ 6* G2X 4 E TDE109 Strategic Application of IT: E-business and Knowledge Management 6 A1X 4 E TDE113 Enterprise Resource Planning Systems: Process and Implementation 6 A1X 4 E TEIC72 Corporate Strategies 6 A1X 4 E TEIO07 Project Based Organization and Management 6 A1X 4 E TEIO90 Innovation Management 6 A1X 2 E | TANA21 | Scientific Computing | 6 | G1X | 3 | Е |
| TATA44 Vector Analysis 4 G1X 1 E TDDC17 Artificial Intelligence 6 G2X 3 E TDDC38 Software Engineering 12* A1X 1 E TDDD23 Design and Programming of Computer Games 6 A1X 2 E TDDD38 Advanced Programming in C++ 6* A1X 2 E TDDD43 Advanced Data Models and Databases 6* A1X 2 E TDDE18 Programming C++ 6* G2X 4 E TDE109 Strategic Application of IT: E-business and Knowledge Management 6 A1X 4 E TDE113 Enterprise Resource Planning Systems: Process and Implementation 6 A1X 4 E TEIE72 Corporate Strategies 6 A1X 4 E TEIO07 Project Based Organization and Management 6 A1X 4 E TEIO90 Innovation Management 6 A1X 2 E | TAOP34 | Large Scale Optimization | 6 | A1X | 3 | E |
| TDDC17Artificial Intelligence6G2X3ETDDC88Software Engineering12*A1X1ETDDD23Design and Programming of Computer Games6A1X2ETDDD38Advanced Programming in C++6*A1X2ETDDD43Advanced Data Models and Databases6*A1X2ETDDE18Programming C++6*G2X4ETDE109Strategic Application of IT: E-business and Knowledge Management6A1X4ETDE113Enterprise Resource Planning Systems: Process and Implementation6A1X2ETEIE72Corporate Strategies6A1X4ETEIO07Project Based Organization and Management6A1X4ETEIO90Innovation Management6A1X2ETETS23Purchasing6A1N2E | TATA34 | Real Analysis, Honours Course | 6* | G2X | 4 | E |
| TDDC88 Software Engineering 12* A1X 1 E TDDD23 Design and Programming of Computer Games 6 A1X 2 E TDDD38 Advanced Programming in C++ 6* A1X 2 E TDDD43 Advanced Data Models and Databases 6* A1X 2 E TDDE18 Programming C++ 6* G2X 4 E TDE109 Strategic Application of IT: E-business and Knowledge Management 6 A1X 4 E TDE113 Enterprise Resource Planning Systems: Process and Implementation 6 A1X 4 E TEIE72 Corporate Strategies 6 A1X 4 E TEIO07 Project Based Organization and Management 6 A1X 4 E TEIO90 Innovation Management 6 A1X 2 E TETS23 Purchasing 6 A1N 2 E | TATA44 | Vector Analysis | 4 | G1X | 1 | E |
| TDDD23 Design and Programming of Computer Games 6 A1X 2 E TDDD38 Advanced Programming in C++ 6* A1X 2 E TDDD43 Advanced Data Models and Databases 6* A1X 2 E TDDE18 Programming C++ 6* G2X 4 E TDEI09 Strategic Application of IT: E-business and Knowledge Management 6 A1X 4 E TDEI13 Enterprise Resource Planning Systems: Process and Implementation 6 A1X 4 E TEIE72 Corporate Strategies 6 A1X 4 E TEIO07 Project Based Organization and Management 6 A1X 4 E TEIO90 Innovation Management 6 A1X 2 E TETS23 Purchasing 6 A1N 2 E | TDDC17 | Artificial Intelligence | 6 | G2X | 3 | E |
| TDDD38 Advanced Programming in C++ 6* A1X 2 E TDDD43 Advanced Data Models and Databases 6* A1X 2 E TDDE18 Programming C++ 6* G2X 4 E TDE109 Strategic Application of IT: E-business and Knowledge Management 6 A1X 4 E TDEI13 Enterprise Resource Planning Systems: Process and Implementation 6 A1X 4 E TEIE72 Corporate Strategies 6 A1X 4 E TEIO07 Project Based Organization and Management 6 A1X 4 E TEIO90 Innovation Management 6 A1X 2 E TEIS23 Purchasing 6 A1N 2 E | TDDC88 | Software Engineering | 12* | A1X | 1 | E |
| TDDD43 Advanced Data Models and Databases 6* A1X 2 E TDDE18 Programming C++ 6* G2X 4 E TDEI09 Strategic Application of IT: E-business and Knowledge Management 6 A1X 4 E TDEI13 Enterprise Resource Planning Systems: Process and Implementation 6 A1X 4 E TEIE72 Corporate Strategies 6 A1X 4 E TEIO07 Project Based Organization and Management 6 A1X 4 E TEIO90 Innovation Management 6 A1X 2 E TETS23 Purchasing 6 A1N 2 E | TDDD23 | Design and Programming of Computer Games | 6 | A1X | 2 | E |
| TDDE18Programming C++6*G2X4ETDEI09Strategic Application of IT: E-business and Knowledge Management6A1X4ETDEI13Enterprise Resource Planning Systems: Process and Implementation6A1X2ETEIE72Corporate Strategies6A1X4ETEIO07Project Based Organization and Management6A1X4ETEIO90Innovation Management6A1X2ETETS23Purchasing6A1N2E | TDDD38 | Advanced Programming in C++ | 6* | A1X | 2 | E |
| TDEI09 Strategic Application of IT: E-business and Knowledge Management Enterprise Resource Planning Systems: Process and Implementation Electropic Resource Planning Systems: Alix 2 E TEIE72 Corporate Strategies 6 Alix 4 E TEIO07 Project Based Organization and Management 6 Alix 4 E TEIO90 Innovation Management 6 Alix 2 E TETS23 Purchasing 6 Alix 2 E | TDDD43 | Advanced Data Models and Databases | 6* | A1X | 2 | E |
| TDEI13 Enterprise Resource Planning Systems: Process and Implementation 6 A1X 2 E TEIE72 Corporate Strategies 6 A1X 4 E TEIO07 Project Based Organization and Management 6 A1X 4 E TEIO90 Innovation Management 6 A1X 2 E TETS23 Purchasing 6 A1N 2 E | TDDE18 | Programming C++ | 6* | G2X | 4 | E |
| TEIE72 Corporate Strategies 6 A1X 4 E TEIO07 Project Based Organization and Management 6 A1X 4 E TEIO90 Innovation Management 6 A1X 2 E TETS23 Purchasing 6 A1N 2 E | TDEI09 | - · · · | 6 | A1X | 4 | E |
| TEIO07 Project Based Organization and Management 6 A1X 4 E TEIO90 Innovation Management 6 A1X 2 E TETS23 Purchasing 6 A1N 2 E | TDEI13 | • • • | 6 | A1X | 2 | E |
| TEIO90 Innovation Management 6 A1X 2 E TETS23 Purchasing 6 A1N 2 E | TEIE72 | Corporate Strategies | 6 | A1X | 4 | E |
| TETS23 Purchasing 6 A1N 2 E | TEIO07 | Project Based Organization and Management | 6 | A1X | 4 | E |
| | TEIO90 | Innovation Management | 6 | A1X | 2 | E |
| TETS37 Basics in Logistics Management 6 G2X 4 E | TETS23 | Purchasing | 6 | A1N | 2 | E |
| | TETS37 | Basics in Logistics Management | 6 | G2X | 4 | E |



| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--|---------|-------|---------------------|-----|
| TKMJ31 | Biofuels for Transportation | 6 | A1X | 1 | E |
| TKMJ49 | Environmentally Driven Business Development | 6* | A1X | 3 | E |
| TMES09 | Industrial Energy Systems | 6 | A1X | 3 | E |
| TMES27 | Modelling of Energy Systems | 6 | A1X | 3 | E |
| TMKM16 | Materials Selection and Optimization | 6 | A1X | 4 | Е |
| ТМКМ90 | Engineering Materials - Deformation and Fracture | 6 | A1X | 4 | E |
| TMKT80 | Wood - Material | 6 | G2X | 2 | Е |
| TMPS35 | Emerging Factory Technologies | 6 | A1X | 3 | Е |
| TMQU03 | Quality Management and Engineering | 6 | G2X | 2 | Е |
| TPPE16 | Manufacturing Strategies | 6 | A1X | 2 | E |
| TPPE17 | Corporate Finance | 6 | G2X | 4 | E |
| TSBB06 | Multidimensional Signal Analysis | 6* | A1X | 2 | E |
| TSBB08 | Digital Image Processing | 6 | A1X | 4 | E |
| TSDT14 | Signal Theory | 6 | A1X | 1 | E |
| TSKS01 | Digital Communication | 6* | A1X | 4 | E |
| TSKS15 | Detection and Estimation of Signals | 6 | A1X | 2 | E |
| TSRT62 | Modelling and Simulation | 6 | A1X | 3 | E |
| TSTE86 | Digital Integrated Circuits | 6 | A1X | 2 | E |
| Period 2 | | | | | |
| THSP18 | Spanish for Engineers III | 6* | G2X | - | С |
| NBID31 | Modelling of Biological Systems | 6 | A1X | 3/4 | Е |
| TAOP04 | Mathematical Optimization | 6 | A1X | 4 | Е |
| TATA34 | Real Analysis, Honours Course | 6* | G2X | 4 | Е |
| TATA45 | Complex Analysis | 6 | G2X | 1 | Е |
| TDDC88 | Software Engineering | 12* | A1X | 1 | Е |
| TDDD07 | Real Time Systems | 6 | A1X | 4 | Е |
| TDDD38 | Advanced Programming in C++ | 6* | A1X | - | E |
| TDDD43 | Advanced Data Models and Databases | 6* | A1X | 2 | Е |
| TDDD55 | Compilers and Interpreters | 4 | G2X | 1 | Е |
| TDDD71 | Data Structures and Algorithms | 2 | G2X | 1 | Е |
| TDDE18 | Programming C++ | 6* | G2X | 3 | E |
| - | | | | | |



| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| TDEI19 | Management Control | 6 | A1X | 2 | 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 |
| TKMJ35 | Industrial Ecology | 6 | G2X | 3 | E |
| TKMJ49 | Environmentally Driven Business Development | 6* | A1X | 3 | Е |
| TMHL63 | Introduction to Computational Mechanics | 6 | G2X | 3 | Е |
| TMKT71 | Affective Engineering | 6 | A1X | 2 | E |
| TMKT81 | Wood - Realisation | 6 | G2X | 1 | Е |
| TMMV18 | Fluid Mechanics | 6 | A1X | 2 | Е |
| TMMV54 | Computational Heat Transfer | 6 | A1X | 1 | Е |
| TMPS18 | Engineering Design and Product Development | 6 | A1X | 3 | Е |
| TMPS22 | Assembly Technology | 6 | A1X | 3 | Е |
| TMQU12 | Lean Production | 6 | A1X | 2 | Е |
| TPPE21 | Production Logistics | 6 | A1X | 4 | Е |
| TPPE29 | Financial Markets and Instruments | 6 | A1X | 2 | Е |
| TSBB06 | Multidimensional Signal Analysis | 6* | A1X | 3 | Е |
| TSBB09 | Image Sensors | 6 | A1X | 4 | E |
| TSEA81 | Computer Engineering and Real-time Systems | 6 | A1X | 4 | Е |
| TSIT02 | Computer Security | 6 | G2F | 2 | Е |
| TSKS01 | Digital Communication | 6* | A1X | 4 | E |
| TSKS11 | Networks: Models, Algorithms and Applications | 6 | G2X | 3 | E |
| TSRT78 | Digital Signal Processing | 6 | A1X | 2 | Е |



| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TSDT14 | Signal Theory | 6 | A1X | 1 | С |
| TSRT62 | Modelling and Simulation | 6 | A1X | 3 | С |
| Period 2 | | | | | |
| TSEA81 | Computer Engineering and Real-time Systems | 6 | A1X | 4 | Е |
| TSRT78 | Digital Signal Processing | 6 | A1X | 2 | E |

Specialisation: Master Profile Computer Science and Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|----------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TDDC88 | Software Engineering | 12* | A1X | 1 | С |
| Period 2 | | | | | |
| TDDC88 | Software Engineering | 12* | A1X | 1 | С |

Specialisation: Master Profile Economic Information Systems

| Course code | Course name | Credits | Level | Timetable module | ECV | | |
|-------------|---|---------|-------|---------------------|-----|--|--|
| Period 1 | | | | | | | |
| TDEI09 | Strategic Application of IT: E-business and Knowledge Management | 6 | A1X | 4 | С | | |
| TDEI13 | Enterprise Resource Planning Systems: Process and Implementation | 6 | A1X | 2 | E | | |
| Period 2 | Period 2 | | | | | | |
| TDEI19 | Management Control | 6 | A1X | 2 | С | | |

Specialisation: Master Profile Energy Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|-----------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMES09 | Industrial Energy Systems | 6 | A1X | 3 | E |
| TMES27 | Modelling of Energy Systems | 6 | A1X | 3 | Е |
| Period 2 | | | | | |
| TMMV18 | Fluid Mechanics | 6 | A1X | 2 | Е |
| TMMV54 | Computational Heat Transfer | 6 | A1X | 1 | Е |



Specialisation: Master Profile Finance

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|-----------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TPPE17 | Corporate Finance | 6 | G2X | 4 | E |
| Period 2 | | | | | |
| TPPE29 | Financial Markets and Instruments | 6 | A1X | 2 | С |

Specialisation: Master Profile Industrial Marketing

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TEIE72 | Corporate Strategies | 6 | A1X | 4 | E |
| Period 2 | | | | | |
| TEIE42 | Industrial Sales Management | 6 | A1X | 4 | C/E |
| TEIM10 | Industrial Service Development | 6 | A1X | 2 | C/E |

Specialisation: Master Profile Logistics Management

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TETS37 | Basics in Logistics Management | 6 | G2X | 4 | С |
| TETS23 | Purchasing | 6 | A1N | 2 | E |
| Period 2 | | | | | |
| TETS27 | Supply Chain Logistics | 6 | A1X | 2 | C/E |

Specialisation: Master Profile Manufacturing

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|-------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMPS35 | Emerging Factory Technologies | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TMPS22 | Assembly Technology | 6 | A1X | 3 | С |



Specialisation: Master Profile Manufacturing Management

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TPPE16 | Manufacturing Strategies | 6 | A1X | 2 | С |
| Period 2 | | | | | |
| TPPE21 | Production Logistics | 6 | A1X | 4 | E |

Specialisation: Master Profile Product Development

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 2 | | | | | |
| TMPS18 | Engineering Design and Product Development | 6 | A1X | 3 | Е |

Specialisation: Master Profile Project, Innovation and Entrepreneurship

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TEIO90 | Innovation Management | 6 | A1X | 2 | С |
| TEIO07 | Project Based Organization and Management | 6 | A1X | 4 | E |
| TKMJ49 | Environmentally Driven Business Development | 6* | A1X | 3 | E |
| Period 2 | | | | | |
| TKMJ49 | Environmentally Driven Business Development | 6* | A1X | 3 | E |

Specialisation: Master Profile Quality Technology and Management

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|------------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMQU03 | Quality Management and Engineering | 6 | G2X | 2 | E |
| Period 2 | | | | | |
| TMQU12 | Lean Production | 6 | A1X | 2 | С |



Specialisation: Master Profile Signal and Image Processing

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|----------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TSBB08 | Digital Image Processing | 6 | A1X | 4 | С |
| TSDT14 | Signal Theory | 6 | A1X | 1 | С |
| TSBB06 | Multidimensional Signal Analysis | 6* | A1X | 2 | E |
| Period 2 | | | | | |
| TSBB06 | Multidimensional Signal Analysis | 6* | A1X | 3 | E |
| TSBB09 | Image Sensors | 6 | A1X | 4 | E |
| TSRT78 | Digital Signal Processing | 6 | A1X | 2 | E |

Specialisation: Master Profile Strategic Management and Control

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TEIE72 | Corporate Strategies | 6 | A1X | 4 | С |
| TEIO90 | Innovation Management | 6 | A1X | 2 | E |
| TKMJ49 | Environmentally Driven Business Development | 6* | A1X | 3 | E |
| TPPE16 | Manufacturing Strategies | 6 | A1X | 2 | E |
| Period 2 | | | | | |
| TDEI19 | Management Control | 6 | A1X | 2 | С |
| TEIE42 | Industrial Sales Management | 6 | A1X | 4 | E |
| TKMJ49 | Environmentally Driven Business Development | 6* | A1X | 3 | E |

Specialisation: Master Profile Telecommunication

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TSDT14 | Signal Theory | 6 | A1X | 1 | С |
| TSKS01 | Digital Communication | 6* | A1X | 4 | С |
| TSKS15 | Detection and Estimation of Signals | 6 | A1X | 2 | E |
| Period 2 | | | | | |
| TSKS01 | Digital Communication | 6* | A1X | 4 | С |
| TSIT02 | Computer Security | 6 | G2F | 2 | E |
| TSKS11 | Networks: Models, Algorithms and Applications | 6 | G2X | 3 | E |



| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--------------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMKT80 | Wood - Material | 6 | G2X | 2 | С |
| TMKM16 | Materials Selection and Optimization | 6 | A1X | 4 | E |
| Period 2 | | | | | |
| TMKT81 | Wood - Realisation | 6 | G2X | 1 | С |

Specialisation: Specialization Biotechnical Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|---------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TKMJ31 | Biofuels for Transportation | 6 | A1X | 1 | Е |
| Period 2 | | | | | |
| NBID31 | Modelling of Biological Systems | 6 | A1X | 3/4 | С |
| TKMJ35 | Industrial Ecology | 6 | G2X | 3 | E |

Specialisation: Specialization Computer Science and Engineering



| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TDDC88 | Software Engineering | 12* | A1X | 1 | С |
| TDDC17 | Artificial Intelligence | 6 | G2X | 3 | Е |
| TDDD23 | Design and Programming of Computer Games | 6 | A1X | 2 | E |
| TDDD38 | Advanced Programming in C++ | 6* | A1X | 2 | E |
| TDDE18 | Programming C++ | 6* | G2X | 4 | E |
| TSTE86 | Digital Integrated Circuits | 6 | A1X | 2 | E |
| Period 2 | | | | | |
| TDDC88 | Software Engineering | 12* | A1X | 1 | С |
| TDDD71 | Data Structures and Algorithms | 2 | G2X | 1 | С |
| TDDD38 | Advanced Programming in C++ | 6* | A1X | - | E |
| TDDD55 | Compilers and Interpreters | 4 | G2X | 1 | E |
| TDDE18 | Programming C++ | 6* | G2X | 3 | E |
| TSEA81 | Computer Engineering and Real-time Systems | 6 | A1X | 4 | E |
| TSIT02 | Computer Security | 6 | G2F | 2 | E |
| TSKS11 | Networks: Models, Algorithms and Applications | 6 | G2X | 3 | E |



Specialisation: Specialization Electrical Engineering

| | 1 | 9 | | 9 | |
|-------------|---|---------|-------|---------------------|-----|
| Course code | Course name | Credits | Level | Timetable module | ECV |
| Period 1 | | | | | |
| TSBB06 | Multidimensional Signal Analysis | 6* | A1X | 2 | Е |
| TSBB08 | Digital Image Processing | 6 | A1X | 4 | E |
| TSDT14 | Signal Theory | 6 | A1X | 1 | E |
| TSKS01 | Digital Communication | 6* | A1X | 4 | E |
| TSKS15 | Detection and Estimation of Signals | 6 | A1X | 2 | Е |
| TSRT62 | Modelling and Simulation | 6 | A1X | 3 | E |
| TSTE86 | Digital Integrated Circuits | 6 | A1X | 2 | E |
| Period 2 | | | | | |
| TSBB06 | Multidimensional Signal Analysis | 6* | A1X | 3 | E |
| TSBB09 | Image Sensors | 6 | A1X | 4 | Е |
| TSEA81 | Computer Engineering and Real-time Systems | 6 | A1X | 4 | E |
| TSIT02 | Computer Security | 6 | G2F | 2 | Е |
| TSKS01 | Digital Communication | 6* | A1X | 4 | E |
| TSKS11 | Networks: Models, Algorithms and Applications | 6 | G2X | 3 | E |
| TSRT78 | Digital Signal Processing | 6 | A1X | 2 | Е |
| | | | | | |

Specialisation: Specialization Energy Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|-----------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMES09 | Industrial Energy Systems | 6 | A1X | 3 | E |
| TMES27 | Modelling of Energy Systems | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TMMV18 | Fluid Mechanics | 6 | A1X | 2 | E |
| TMMV54 | Computational Heat Transfer | 6 | A1X | 1 | Е |



| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TANA21 | Scientific Computing | 6 | G1X | 3 | E |
| TMKM16 | Materials Selection and Optimization | 6 | A1X | 4 | E |
| ТМКМ90 | Engineering Materials - Deformation and Fracture | 6 | A1X | 4 | E |
| TMKT80 | Wood - Material | 6 | G2X | 2 | Е |
| TMPS35 | Emerging Factory Technologies | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TMKT71 | Affective Engineering | 6 | A1X | 2 | E |
| TMKT81 | Wood - Realisation | 6 | G2X | 1 | E |
| TMPS18 | Engineering Design and Product Development | 6 | A1X | 3 | E |
| TMPS22 | Assembly Technology | 6 | A1X | 3 | E |

Semester 8 (Spring 2018)

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TEIE06 | Corporate Planning | 6* | A1X | - | С |
| NBIC50 | Ecotoxicology and Environmental Monitoring | 6 | G2X | 1 | Е |
| TAMS29 | Stochastic Processes Applied to Financial Models | 6 | A1X | 3 | E |
| TATA53 | Linear Algebra, Honours Course | 6* | G2X | - | E |
| TBMI26 | Neural Networks and Learning Systems | 6 | A1X | 2 | E |
| TDDB68 | Concurrent Programming and Operating Systems | 6 | G2X | 3 | E |
| TDDD17 | Information Security, Second Course | 6* | A1X | 4 | E |
| TDDD20 | Design and Analysis of Algorithms | 6 | A1X | 3 | E |
| TDDD38 | Advanced Programming in C++ | 6* | A1X | 2 | E |
| TDDD41 | Data Mining - Clustering and Association Analysis | 6 | A1X | 3 | E |
| TDDD51 | Service Design and Innovation | 6 | A1X | 4 | E |
| TDDD57 | Physical Interaction and Game Programming | 6 | A1X | 1 | E |



| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| TDDD75 | Effect-Driven Development and Human- Centered Design of Interactive Systems | 6 | G2X | 3 | E |
| TDDD97 | Web Programming | 6 | G2X | 3 | Е |
| TDEI71 | Digitisation, Business Ecologies and Business Models | 6 | A1N | 4 | E |
| TDTS04 | Computer Networks and Distributed Systems | 8 | G2X | 2 | E |
| TEIE88 | Computer Law | 4 | G1X | 1 | E |
| TEIM09 | International Business | 6 | A1X | 2 | E |
| TEIO13 | Leadership and Organizational Change | 6 | A1X | 4 | E |
| TETS57 | Logistics Analysis | 6 | A1X | 2 | E |
| TFYA45 | Biotechnology Project | 6* | A1X | - | E |
| TFYA62 | Introduction to Biosensor Technology | 6 | G2X | 4 | E |
| TFYA85 | Alternative Energy Sources and their Applications | 6 | G2X | 4 | E |
| TGTU01 | Technology and Ethics | 6 | G1X | 1 | E |
| TGTU91 | Oral and Written Communication | 6 | G1X | 2 | Е |
| TKMJ10 | Industrial Ecology | 6 | A1X | 1 | Е |
| TKMJ47 | Environmental Systems Analysis | 6* | A1N | 2 | E |
| TMES17 | Building Energy Systems | 6 | A1N | 3 | E |
| TMES43 | Analysis and Modelling of Industrial Energy Systems | 6 | A1F | 1 | E |
| TMKA04 | Wood - Innovation | 6 | A1X | 1 | Е |
| TMKT48 | Design Optimization | 6 | A1X | 3 | E |
| TMMS21 | Mechatronics | 6 | G2X | 1 | E |
| TMPS42 | Production System Automation | 6 | A1X | 1 | E |
| TMQU31 | Statistical Quality Control | 6 | A1X | 2 | E |
| TPPE32 | Financial Risk Management | 6 | A1X | 2 | E |
| TPPE78 | Quantitative Models and Analysis in Operations Management | 6 | A1X | 1 | E |
| TSBB15 | Computer Vision | 12* | A1X | 1 | E |
| TSBK07 | Computer Graphics | 6* | A1X | 4 | E |
| TSBK08 | Data Compression | 6 | A1X | 2 | Е |
| TSKS13 | Wireless Communications | 6 | A1F | 4 | E |
| TSRT07 | Industrial Control Systems | 6 | A1X | 2 | Е |



| TSRT09 C | | | | module | ECV |
|-----------|--|----|-----|--------|-----|
| | Control Theory | 6 | A1X | 3 | Е |
| TSTE08 A | nalog and Discrete-Time Integrated Circuits | 6 | A1X | 3 | Е |
| TVCB11 C | Cellbiological Methodology | 6 | G2X | 1/4 | Е |
| Period 2 | | | | | |
| TEIE06 C | orporate Planning | 6* | A1X | - | С |
| TATA53 Li | inear Algebra, Honours Course | 6* | G2X | = | E |
| TDDC/X | rogramming of Parallel Computers - Methods nd Tools | 6 | A1X | 3 | E |
| TDDD05 C | Component Based Software | 6 | A1X | 1 | E |
| TDDD14 F | ormal Languages and Automata Theory | 6 | G2X | 2 | Е |
| TDDD17 Ir | nformation Security, Second Course | 6* | A1X | 4 | Е |
| TDDD27 A | dvanced Web Programming | 6 | A1X | 3 | E |
| TDDD38 A | dvanced Programming in C++ | 6* | A1X | - | E |
| 11)[1/1 | trategic Organisational Application of IT - Vorkflow and Knowledge Management | 6 | A1X | 4 | E |
| TDEI35 S | trategy and Management Control | 6 | A1X | 2 | E |
| TEAE13 C | ivil and Commercial Law | 6 | G1X | 2 | Е |
| TEIM07 Ir | ndustrial Market Research | 6 | A1X | 2 | E |
| TEIO06 Ir | nnovative Entrepreneurship | 6 | A1X | 2 | E |
| TEIO41 C | orporate Social Responsibility | 6 | A1X | 3 | E |
| TETS36 S | ustainable Logistics Systems | 6 | A1X | 4 | E |
| TETS56 Lo | ogistics and Quality in Health Care | 6 | A1X | 4 | E |
| TFYA45 B | iotechnology Project | 6* | A1X | - | E |
| TGTU76 P | hilosophy of Science | 6 | G1X | 4 | E |
| TKMJ47 E | nvironmental Systems Analysis | 6* | A1N | 2 | E |
| TMES21 Ir | ndustrial Energy Systems | 6 | A1F | 3 | Е |
| TMHL61 D | Damage Mechanics and Life Analysis | 6 | A1X | 2 | E |
| TMKT57 P | roduct Modelling | 6 | A1X | 3 | E |
| TMKT83 S | mall Scale Renewable Energy Conversion | 6 | A1X | 4 | Е |
| TMME11 R | load Vehicle Dynamics | 6 | A1X | 1 | Е |
| TMPS27 P | roduction Systems | 6 | A1X | 3 | E |
| TMQU04 S | ix Sigma Quality | 6 | A1X | 2 | Е |
| TPPE33 P | ortfolio Management | 6 | A1X | 2 | Е |



| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---|------------|---------|---------------------|-----|
| TPPE74 | Design and Development of Manufacturing Operations | 6 | A1X | 4 | E |
| TSBB15 | Computer Vision | 12* | A1X | 3 | Е |
| TSBK02 | Image and Audio Coding | 6 | A1X | 4 | E |
| TSBK07 | Computer Graphics | 6* | A1X | 1 | Е |
| TSFS06 | Diagnosis and Supervision | 6 | A1N | 1 | Е |
| TSKS14 | Multiple Antenna Communications | 6 | A1X | 2 | Е |
| TSRT14 | Sensor Fusion | 6 | A1X | 2 | E |
| TSTE06 | Digital Filters | 6 | A1X | 3 | Е |
| | Specialisation: Master Profile A | utomatia (| Control | 1 | |
| Course code | Course name | Credits | Level | Timetable module | ECV |
| Period 1 | | | | | |
| TSRT07 | Industrial Control Systems | 6 | A1X | 2 | E |
| TSRT09 | Control Theory | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TSFS06 | Diagnosis and Supervision | 6 | A1N | 1 | E |
| TSRT14 | Sensor Fusion | 6 | A1X | 2 | Е |
| S | Specialisation: Master Profile Computer | Science a | nd Eng | ineering | |
| Course code | Course name | Credits | Level | Timetable module | ECV |
| Period 2 | | | | | |
| TDDD05 | Component Based Software | 6 | A1X | 1 | С |
| | Specialisation: Master Profile Econom | ic Informa | ition S | ystems | |
| Course code | Course name | Credits | Level | Timetable module | ECV |
| Period 1 | | | | | |
| TDEI71 | Digitisation, Business Ecologies and Business Models | 6 | A1N | 4 | E |
| Period 2 | | | | | |
| TDEI21 | Strategic Organisational Application of IT - | 6 | A1X | 4 | E |

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TDEI35

Workflow and Knowledge Management

Strategy and Management Control

Specialisation: Master Profile Energy Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMES17 | Building Energy Systems | 6 | A1N | 3 | Е |
| TMES43 | Analysis and Modelling of Industrial Energy Systems | 6 | A1F | 1 | E |
| Period 2 | | | | | |
| TMES21 | Industrial Energy Systems | 6 | A1F | 3 | Е |
| TMKT83 | Small Scale Renewable Energy Conversion | 6 | A1X | 4 | E |

Specialisation: Master Profile Finance

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TPPE32 | Financial Risk Management | 6 | A1X | 2 | С |
| Period 2 | | | | | |
| TPPE33 | Portfolio Management | 6 | A1X | 2 | E |

Specialisation: Master Profile Industrial Marketing

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|----------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TEIM09 | International Business | 6 | A1X | 2 | C/E |
| Period 2 | | | | | |
| TEIM07 | Industrial Market Research | 6 | A1X | 2 | С |

Specialisation: Master Profile Logistics Management

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--------------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TETS57 | Logistics Analysis | 6 | A1X | 2 | C/E |
| Period 2 | | | | | |
| TETS36 | Sustainable Logistics Systems | 6 | A1X | 4 | E |
| TETS56 | Logistics and Quality in Health Care | 6 | A1X | 4 | Е |



Specialisation: Master Profile Manufacturing

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMPS42 | Production System Automation | 6 | A1X | 1 | Е |
| Period 2 | | | | | |
| TMPS27 | Production Systems | 6 | A1X | 3 | С |

Specialisation: Master Profile Manufacturing Management

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TPPE78 | Quantitative Models and Analysis in Operations Management | 6 | A1X | 1 | E |
| Period 2 | | | | | |
| TPPE74 | Design and Development of Manufacturing Operations | 6 | A1X | 4 | Е |

Specialisation: Master Profile Product Development

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMKT48 | Design Optimization | 6 | A1X | 3 | С |
| Period 2 | | | | | _ |
| TMKT57 | Product Modelling | 6 | A1X | 3 | С |

Specialisation: Master Profile Project, Innovation and Entrepreneurship

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--------------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TEIO13 | Leadership and Organizational Change | 6 | A1X | 4 | E |
| Period 2 | | | | | |
| TEIO06 | Innovative Entrepreneurship | 6 | A1X | 2 | E |
| TEIO41 | Corporate Social Responsibility | 6 | A1X | 3 | E |



| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TEIO13 | Leadership and Organizational Change | 6 | A1X | 4 | E |
| TMQU31 | Statistical Quality Control | 6 | A1X | 2 | E |
| Period 2 | | | | | |
| TDEI35 | Strategy and Management Control | 6 | A1X | 2 | E |
| TETS56 | Logistics and Quality in Health Care | 6 | A1X | 4 | E |
| TMQU04 | Six Sigma Quality | 6 | A1X | 2 | E |
| TPPE74 | Design and Development of Manufacturing Operations | 6 | A1X | 4 | E |

Specialisation: Master Profile Signal and Image Processing

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--------------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TBMI26 | Neural Networks and Learning Systems | 6 | A1X | 2 | E |
| TSBB15 | Computer Vision | 12* | A1X | 1 | E |
| TSBK07 | Computer Graphics | 6* | A1X | 4 | E |
| Period 2 | | | | | |
| TSBB15 | Computer Vision | 12* | A1X | 3 | E |
| TSBK02 | Image and Audio Coding | 6 | A1X | 4 | E |
| TSBK07 | Computer Graphics | 6* | A1X | 1 | E |

Specialisation: Master Profile Strategic Management and Control

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TEIM09 | International Business | 6 | A1X | 2 | E |
| TEIO13 | Leadership and Organizational Change | 6 | A1X | 4 | E |
| Period 2 | | | | | |
| TDEI21 | Strategic Organisational Application of IT - Workflow and Knowledge Management | 6 | A1X | 4 | E |
| TEIM07 | Industrial Market Research | 6 | A1X | 2 | E |
| TETS36 | Sustainable Logistics Systems | 6 | A1X | 4 | E |



Specialisation: Master Profile Telecommunication

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|---------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TSBK08 | Data Compression | 6 | A1X | 2 | E |
| TSKS13 | Wireless Communications | 6 | A1F | 4 | E |
| Period 2 | | | | | |
| TSBK02 | Image and Audio Coding | 6 | A1X | 4 | E |
| TSKS14 | Multiple Antenna Communications | 6 | A1X | 2 | E |

Specialisation: Master Profile Wood Technology

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMKA04 | Wood - Innovation | 6 | A1X | 1 | С |
| Period 2 | | | | | |
| TMKT57 | Product Modelling | 6 | A1X | 3 | E |
| TMPS27 | Production Systems | 6 | A1X | 3 | E |

Specialisation: Specialization Biotechnical Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| NBIC50 | Ecotoxicology and Environmental Monitoring | 6 | G2X | 1 | E |
| TFYA45 | Biotechnology Project | 6* | A1X | - | E |
| TFYA85 | Alternative Energy Sources and their Applications | 6 | G2X | 4 | E |
| TKMJ47 | Environmental Systems Analysis | 6* | A1N | 2 | E |
| Period 2 | | | | | |
| TFYA45 | Biotechnology Project | 6* | A1X | - | Е |
| TKMJ47 | Environmental Systems Analysis | 6* | A1N | 2 | Е |



Specialisation: Specialization Computer Science and Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TDDB68 | Concurrent Programming and Operating Systems | 6 | G2X | 3 | E |
| TDDD17 | Information Security, Second Course | 6* | A1X | 4 | E |
| TDDD20 | Design and Analysis of Algorithms | 6 | A1X | 3 | Е |
| TDDD38 | Advanced Programming in C++ | 6* | A1X | 2 | E |
| TDDD41 | Data Mining - Clustering and Association Analysis | 6 | A1X | 3 | E |
| TDDD75 | Effect-Driven Development and Human- Centered Design of Interactive Systems | 6 | G2X | 3 | E |
| TDTS04 | Computer Networks and Distributed Systems | 8 | G2X | 2 | E |
| Period 2 | | | | | |
| TDDD05 | Component Based Software | 6 | A1X | 1 | E |
| TDDD14 | Formal Languages and Automata Theory | 6 | G2X | 2 | E |
| TDDD17 | Information Security, Second Course | 6* | A1X | 4 | E |
| TDDD27 | Advanced Web Programming | 6 | A1X | 3 | E |
| TDDD38 | Advanced Programming in C++ | 6* | A1X | - | E |



Specialisation: Specialization Electrical Engineering

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|----------------|--------------------------------------|---------|-------|---------------------|-----|
| Course code | Course name | Credits | Level | Timetable module | ECV |
| Period 1 | | | | | |
| TBMI26 | Neural Networks and Learning Systems | 6 | A1X | 2 | Е |
| TSBB15 | Computer Vision | 12* | A1X | 1 | Е |
| TSBK07 | Computer Graphics | 6* | A1X | 4 | Е |
| TSBK08 | Data Compression | 6 | A1X | 2 | Е |
| TSKS13 | Wireless Communications | 6 | A1F | 4 | Е |
| TSRT07 | Industrial Control Systems | 6 | A1X | 2 | Е |
| TSRT09 | Control Theory | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TSBB15 | Computer Vision | 12* | A1X | 3 | Е |
| TSBK02 | Image and Audio Coding | 6 | A1X | 4 | E |
| TSBK07 | Computer Graphics | 6* | A1X | 1 | Е |
| TSFS06 | Diagnosis and Supervision | 6 | A1N | 1 | E |
| TSKS14 | Multiple Antenna Communications | 6 | A1X | 2 | E |
| TSRT14 | Sensor Fusion | 6 | A1X | 2 | E |
| TSTE06 | Digital Filters | 6 | A1X | 3 | E |

Specialisation: Specialization Energy Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TKMJ10 | Industrial Ecology | 6 | A1X | 1 | E |
| TMES17 | Building Energy Systems | 6 | A1N | 3 | E |
| TMES43 | Analysis and Modelling of Industrial Energy Systems | 6 | A1F | 1 | E |
| Period 2 | | | | | |
| TMES21 | Industrial Energy Systems | 6 | A1F | 3 | E |
| TMKT83 | Small Scale Renewable Energy Conversion | 6 | A1X | 4 | E |



| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|------------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMKA04 | Wood - Innovation | 6 | A1X | 1 | E |
| TMKT48 | Design Optimization | 6 | A1X | 3 | E |
| TMMS21 | Mechatronics | 6 | G2X | 1 | E |
| TMPS42 | Production System Automation | 6 | A1X | 1 | E |
| Period 2 | | | | | |
| TMHL61 | Damage Mechanics and Life Analysis | 6 | A1X | 2 | Е |
| TMKT57 | Product Modelling | 6 | A1X | 3 | E |
| TMME11 | Road Vehicle Dynamics | 6 | A1X | 1 | Е |
| TMPS27 | Production Systems | 6 | A1X | 3 | E |

Semester 9 (Autumn 2018)

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TAMS39 | Multivariate Statistical Methods | 6 | A1X | 4 | E |
| TAMS46 | Probability Theory, Second Course | 6 | A1X | 3 | Е |
| TATM38 | Mathematical Models in Biology | 6 | A1X | 3 | E |
| TDDB84 | Design Patterns | 6 | A1X | 4 | Е |
| TDDC34 | Technical, Economic and Societal Evaluation of IT-products | 6 | A1X | 3 | E |
| TDDD04 | Software Testing | 6 | A1X | 2 | E |
| TDEI72 | Strategy and Digitisation - Technology, Standards and Network Effects | 6 | A1X | 4 | E |
| TEAE12 | Strategic Analysis and Methods for Strategic Change | 12* | A1F | 2 | E |
| TEIM04 | Industrial Market and Technology Strategies | 12* | A1X | 2 | E |
| TEIO89 | Innovation and Entrepreneurship - Project Course | 12* | A1F | 4 | E |
| TETS38 | Logistics Project | 12* | A1X | 4 | E |
| TKMJ31 | Biofuels for Transportation | 6 | A1N | 1 | E |
| TMME40 | Vibration Analysis of Structures | 6 | A1X | 3 | E |
| TMMS11 | Models of Mechanics | 6* | A1X | 3 | E |



| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--|---------|-------|---------------------|-----|
| TMMV01 | Aerodynamics | 6 | A1X | 2 | E |
| TMMV12 | Gas Turbine Engines | 6 | A1X | 4 | E |
| TMPE01 | Project Course Advanced - Energy Engineering | 12* | A1X | - | Е |
| ТМРМ05 | Project Course Advanced - Design Engineering and Product Development | 12* | A1X | - | E |
| ТМРМ08 | Project Course Advanced - Manufacturing Engineering | 12* | A1X | - | E |
| TMQU13 | Customer Focused Product and Service Development | 6 | A1X | 4 | E |
| TMQU27 | Quality Management - Project Course | 12* | A1X | 2 | E |
| TPPE53 | Financial Valuation Methodology | 6 | A1X | 2 | E |
| TPPE66 | Investment Valuation | 6* | A1X | 4 | E |
| TPPE73 | Operations Management - Project Course | 12* | A1X | 4 | Е |
| TPPE99 | Simulation in Production and Logistics | 6 | A1X | 3 | E |
| TSIN01 | Information Networks | 6 | A1X | 3 | E |
| TSIT03 | Cryptology | 6 | A1X | 2 | E |
| TSKS12 | Modern Channel Coding, Inference and Learning | 6 | A1X | 1 | E |
| Period 2 | | | | | |
| TAOP18 | Supply Chain Optimization | 6 | A1X | 1 | E |
| TDDB44 | Compiler Construction | 6 | A1X | 1 | E |
| TDDC90 | Software Security | 6 | A1X | 1 | E |
| TDDD30 | Advanced Software Engineering | 6 | A1X | 4 | E |
| TDDD56 | Multicore and GPU Programming | 6 | A1X | 2 | E |
| TDDD89 | Scientific Method | 6 | A1X | 3 | E |
| TEAE12 | Strategic Analysis and Methods for Strategic Change | 12* | A1F | 2 | E |
| TEIM04 | Industrial Market and Technology Strategies | 12* | A1X | 2 | E |
| TEIM10 | Industrial Service Development | 6 | A1X | 2 | E |
| TEIO89 | Innovation and Entrepreneurship - Project Course | 12* | A1F | 4 | E |
| TETS31 | Logistics Strategies | 6 | A1X | 4 | E |
| TETS38 | Logistics Project | 12* | A1X | 2 | E |
| | | | | | |



| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| TFBI17 | Advanced Project Course in Ecosystem Service Valuation | 6 | A1X | - | E |
| TKMJ32 | Integrated Product Service Engineering | 6 | A1N | 3 | E |
| TMES51 | International Energy Markets | 6 | A1N | 1 | E |
| TMKA03 | Industrial Design | 6 | G2X | 1 | E |
| TMMS11 | Models of Mechanics | 6* | A1X | 4 | E |
| TMMS20 | Structural Optimization | 6 | A1X | 1 | E |
| TMPE01 | Project Course Advanced - Energy Engineering | 12* | A1X | - | E |
| TMPM05 | Project Course Advanced - Design Engineering and Product Development | 12* | A1X | - | E |
| TMPM08 | Project Course Advanced - Manufacturing Engineering | 12* | A1X | - | E |
| TMQU12 | Lean Production | 6 | A1X | 2 | E |
| TMQU27 | Quality Management - Project Course | 12* | A1X | 4 | E |
| TPPE61 | Financial Optimization | 6 | A1X | 2 | E |
| TPPE66 | Investment Valuation | 6* | A1X | 4 | E |
| TPPE73 | Operations Management - Project Course | 12* | A1X | 4 | E |
| TSRT08 | Optimal Control | 6 | A1X | 3 | E |

$Specialisation: Master {\it Profile Automatic Control}$

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|-----------------|---------|-------|---------------------|-----|
| Period 2 | | | | | |
| TSRT08 | Optimal Control | 6 | A1X | 3 | E |

Specialisation: Master Profile Computer Science and Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|-------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TDDB84 | Design Patterns | 6 | A1X | 4 | С |
| TDDD04 | Software Testing | 6 | A1X | 2 | С |
| Period 2 | | | | | |
| TDDD89 | Scientific Method | 6 | A1X | 3 | С |
| | | | | | |



Specialisation: Master Profile Economic Information Systems

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TDDC34 | Technical, Economic and Societal Evaluation of IT-products | 6 | A1X | 3 | E |

Specialisation: Master Profile Energy Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TKMJ31 | Biofuels for Transportation | 6 | A1N | 1 | E |
| TMMV12 | Gas Turbine Engines | 6 | A1X | 4 | Е |
| TMPE01 | Project Course Advanced - Energy Engineering | 12* | A1X | - | E |
| Period 2 | | | | | |
| TMPE01 | Project Course Advanced - Energy Engineering | 12* | A1X | - | E |

Specialisation: Master Profile Finance

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---------------------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TPPE53 | Financial Valuation Methodology | 6 | A1X | 2 | E |
| TPPE66 | Investment Valuation | 6* | A1X | 4 | E |
| Period 2 | | | | | |
| TPPE61 | Financial Optimization | 6 | A1X | 2 | E |
| TPPE66 | Investment Valuation | 6* | A1X | 4 | E |

Specialisation: Master Profile Industrial Marketing

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TEIM04 | Industrial Market and Technology Strategies | 12* | A1X | 2 | С |
| Period 2 | | | | | |
| TEIM04 | Industrial Market and Technology Strategies | 12* | A1X | 2 | С |



Specialisation: Master Profile Logistics Management

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TETS38 | Logistics Project | 12* | A1X | 4 | С |
| TPPE99 | Simulation in Production and Logistics | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TETS38 | Logistics Project | 12* | A1X | 2 | С |
| TETS31 | Logistics Strategies | 6 | A1X | 4 | E |

Specialisation: Master Profile Manufacturing

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMPM08 | Project Course Advanced - Manufacturing Engineering | 12* | A1X | - | С |
| Period 2 | | | | | |
| TMPM08 | Project Course Advanced - Manufacturing Engineering | 12* | A1X | - | С |

Specialisation: Master Profile Manufacturing Management

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TPPE73 | Operations Management - Project Course | 12* | A1X | 4 | С |
| TPPE99 | Simulation in Production and Logistics | 6 | A1X | 3 | E |
| Period 2 | | | | | |
| TPPE73 | Operations Management - Project Course | 12* | A1X | 4 | С |

Specialisation: Master Profile Product Development

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMPM05 | Project Course Advanced - Design Engineering and Product Development | 12* | A1X | - | С |
| Period 2 | | | | | |
| TMPM05 | Project Course Advanced - Design Engineering and Product Development | 12* | A1X | - | С |



Specialisation: Master Profile Project, Innovation and Entrepreneurship

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TEIO89 | Innovation and Entrepreneurship - Project Course | 12* | A1F | 4 | С |
| Period 2 | | | | | |
| TEIO89 | Innovation and Entrepreneurship - Project Course | 12* | A1F | 4 | С |

Specialisation: Master Profile Quality Technology and Management

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMQU27 | Quality Management - Project Course | 12* | A1X | 2 | С |
| TMQU13 | Customer Focused Product and Service Development | 6 | A1X | 4 | E |
| Period 2 | | | | | |
| TMQU27 | Quality Management - Project Course | 12* | A1X | 4 | С |

Specialisation: Master Profile Strategic Management and Control

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TEAE12 | Strategic Analysis and Methods for Strategic Change | 12* | A1F | 2 | С |
| TDEI72 | Strategy and Digitisation - Technology, Standards and Network Effects | 6 | A1X | 4 | E |
| Period 2 | | | | | |
| TEAE12 | Strategic Analysis and Methods for Strategic Change | 12* | A1F | 2 | С |
| TEIM10 | Industrial Service Development | 6 | A1X | 2 | E |
| TMQU12 | Lean Production | 6 | A1X | 2 | Е |



Specialisation: Master Profile Telecommunication

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TSIN01 | Information Networks | 6 | A1X | 3 | E |
| TSIT03 | Cryptology | 6 | A1X | 2 | E |
| TSKS12 | Modern Channel Coding, Inference and Learning | 6 | A1X | 1 | E |

Specialisation: Master Profile Wood Technology

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMPM05 | Project Course Advanced - Design Engineering and Product Development | 12* | A1X | - | С |
| Period 2 | | | | | |
| TMPM05 | Project Course Advanced - Design Engineering and Product Development | 12* | A1X | - | С |

Specialisation: Specialization Biotechnical Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|---|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TATM38 | Mathematical Models in Biology | 6 | A1X | 3 | Е |
| Period 2 | | | | | |
| TFBI17 | Advanced Project Course in Ecosystem Service Valuation | 6 | A1X | - | E |

Specialisation: Specialization Computer Science and Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|------------------|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TDDB84 | Design Patterns | 6 | A1X | 4 | E |
| TDDD04 | Software Testing | 6 | A1X | 2 | E |
| TSIT03 | Cryptology | 6 | A1X | 2 | E |



Specialisation: Specialization Electrical Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TSIN01 | Information Networks | 6 | A1X | 3 | E |
| TSIT03 | Cryptology | 6 | A1X | 2 | E |
| TSKS12 | Modern Channel Coding, Inference and Learning | 6 | A1X | 1 | E |
| Period 2 | | | | | |
| TSRT08 | Optimal Control | 6 | A1X | 3 | E |

Specialisation: Specialization Energy Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TKMJ31 | Biofuels for Transportation | 6 | A1N | 1 | E |
| TMMV12 | Gas Turbine Engines | 6 | A1X | 4 | E |
| TMPE01 | Project Course Advanced - Energy Engineering | 12* | A1X | - | E |
| Period 2 | | | | | |
| TKMJ32 | Integrated Product Service Engineering | 6 | A1N | 3 | E |
| TMES51 | International Energy Markets | 6 | A1N | 1 | E |
| TMPE01 | Project Course Advanced - Energy Engineering | 12* | A1X | - | E |



Specialisation: Specialization Mechanical Engineering

| Course code | Course name | Credits | Level | Timetable module | ECV |
|----------------|--|---------|-------|---------------------|-----|
| Period 1 | | | | | |
| TMME40 | Vibration Analysis of Structures | 6 | A1X | 3 | Е |
| TMMS11 | Models of Mechanics | 6* | A1X | 3 | E |
| TMMV01 | Aerodynamics | 6 | A1X | 2 | E |
| TMPM05 | Project Course Advanced - Design Engineering and Product Development | 12* | A1X | - | E |
| TMPM08 | Project Course Advanced - Manufacturing Engineering | 12* | A1X | - | E |
| Period 2 | | | | | |
| TKMJ32 | Integrated Product Service Engineering | 6 | A1N | 3 | E |
| TMKA03 | Industrial Design | 6 | G2X | 1 | E |
| TMMS11 | Models of Mechanics | 6* | A1X | 4 | E |
| TMMS20 | Structural Optimization | 6 | A1X | 1 | E |
| TMPM05 | Project Course Advanced - Design Engineering and Product Development | 12* | A1X | - | E |
| TMPM08 | Project Course Advanced - Manufacturing Engineering | 12* | A1X | - | E |

Semester 10 (Spring 2019)

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

ECV = Elective / Compulsory /Voluntary

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

