

Computer Science, Master's programme

120 credits

Datavetenskap, masterprogram

6MDAV

Valid from:

Determined by

Board of Studies for Computer Science
and Media Technology

Date determined

Entry requirements

Degree in Swedish

Teknologie masterexamen med huvudområde datavetenskap

Curriculum

Semester 2 (Spring 2017)

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|---|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TAOP07 | Introduction to Optimization | 6 | G1X | 3 | E |
| TATA54 | Number Theory | 6 | G2X | 2 | E |
| TATA64 | Graph Theory | 6* | A1X | 2 | 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 |
| TDDD25 | Distributed Systems | 6 | A1X | 2 | E |
| TDDD38 | Advanced Programming in C++ | 6* | A1X | 2 | E |
| TDDD41 | Data Mining - Clustering and Association Analysis | 6 | A1X | 3 | E |
| TDDD97 | Web Programming | 6 | G2X | 3 | E |
| TDDE09 | Natural Language Processing | 6 | A1X | 2 | E |
| TDS07 | System Design and Methodology | 6 | A1X | 1 | E |
| TNM048 | Information Visualisation | 6 | A1X | 3 | E |
| TNM061 | 3-D Computer Graphics | 6* | G2X | 1 | E |
| TSBK35 | Audio and Image Compression | 6 | A1X | 2 | E |
| Period 2 | | | | | |
| TAOP24 | Optimization, Advanced Course | 6 | G2X | 1 | E |
| TATA64 | Graph Theory | 6* | A1X | 2 | E |
| TDDC78 | Programming of Parallel Computers - Methods and Tools | 6 | A1X | 3 | E |
| TDDD05 | Component Based Software | 6 | A1X | 1 | E |
| TDDD17 | Information Security, Second Course | 6* | A1X | 4 | E |
| TDDD27 | Advanced Web Programming | 6 | A1X | 3 | E |
| TDDD29 | IT-Project Management | 6 | A1X | 3 | E |
| TDDD38 | Advanced Programming in C++ | 6* | A1X | - | E |
| TDDD48 | Automated Planning | 6 | A1X | 1 | E |
| TNM061 | 3-D Computer Graphics | 6* | G2X | 4 | E |

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-------------|---|---------|-------|------------------|-----|
| TNM079 | Modelling and Animation | 6 | A1X | 2 | E |
| TNM096 | Artificial Intelligence - Principles and Techniques | 6 | G2X | 1 | E |
| TNM098 | Advanced Visual Data Analysis | 6 | A1X | 4 | E |

Semester 3 (Autumn 2017)

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|--|---------|-------|------------------|-----|
| Period 1 | | | | | |
| TAMS22 | Probability Theory and Bayesian Networks | 6 | A1X | 2 | E |
| TATA55 | Abstract Algebra | 6* | G2X | 3 | E |
| TBMI19 | Medical Information Systems | 6* | A1X | 2 | E |
| Tddb84 | Design Patterns | 6 | A1X | 4 | E |
| TDDC34 | Technical, Economic and Societal Evaluation of IT-products | 6 | A1X | 3 | E |
| TDDC88 | Software Engineering | 12* | A1X | 1 | E |
| TDDD04 | Software Testing | 6 | A1X | 2 | E |
| TDDD08 | Logic Programming | 6 | A1X | 4 | E |
| TDDD23 | Design and Programming of Computer Games | 6 | A1X | 2 | E |
| TDDD38 | Advanced Programming in C++ | 6* | A1X | 2 | E |
| TDDE19 | Advanced Project Course - AI and Machine Learning | 6* | A1X | 4 | E |
| TDDE21 | Advanced Project Course: Secure Distributed and Embedded Systems | 6* | A1X | 4 | E |
| TNCG15 | Advanced Global Illumination and Rendering | 6 | A1X | 4 | E |
| TNM067 | Scientific Visualization | 6 | A1X | 3 | E |
| TNM095 | Artificial Intelligence for Interactive Media | 6 | A1X | 2 | E |
| TSEA26 | Design of Embedded DSP Processor | 6 | A1X | 1 | E |
| TSIN01 | Information Networks | 6 | A1X | 3 | E |
| TSIT03 | Cryptology | 6 | A1X | 2 | E |
| TSKS02 | Telecommunication | 6* | G2X | 1 | E |
| TSKS12 | Modern Channel Coding, Inference and Learning | 6 | A1X | 1 | E |
| TSTE86 | Digital Integrated Circuits | 6 | A1X | 2 | E |

| Course code | Course name | Credits | Level | Timetable module | ECV |
|-----------------|--|---------|-------|------------------|-----|
| Period 2 | | | | | |
| TDDD89 | Scientific Method | 6 | A1X | 3 | C |
| TATA55 | Abstract Algebra | 6* | G2X | 3 | E |
| TBMI19 | Medical Information Systems | 6* | A1X | 3 | E |
| TDDC88 | Software Engineering | 12* | A1X | 1 | E |
| TDDC90 | Software Security | 6 | A1X | 1 | E |
| TDDD38 | Advanced Programming in C++ | 6* | A1X | - | E |
| TDDD56 | Multicore and GPU Programming | 6 | A1X | 2 | E |
| TDDE13 | Multi Agent Systems | 6 | A1X | 1 | E |
| TDDE16 | Text Mining | 6 | A1X | 2 | E |
| TDDE19 | Advanced Project Course - AI and Machine Learning | 6* | A1X | 4 | E |
| TDDE21 | Advanced Project Course: Secure Distributed and Embedded Systems | 6* | A1X | 4 | E |
| TNM084 | Procedural Methods for Images | 6 | A1X | 4 | E |
| TNM086 | Virtual Reality Techniques | 6 | A1X | 2 | E |
| TSIN02 | Internetworking | 6 | A1X | 1 | E |
| TSKS02 | Telecommunication | 6* | G2X | 2 | E |

Semester 4 (Spring 2018)

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

ECV = Elective / Compulsory / Voluntary

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