Tracks for TCSCM/H19

Courses offered during 2020

Version: February 28, 2020

Note: this graphical overview is provided with reservation for changes and possible errors. Please always refer to the official definition of the programme found in the programme syllabus.
Choose at least 7.5 credits

**DD2421 (7.5)**
Machine Learning

**DD2424 (7.5)**
Deep Learning in Data Science

**DD2418 (6.0)**
Language Engineering

**DD2424 (7.5)**
Deep Learning in Data Science

**DD2410 (7.5)**
Introduction to Robotics

**DD2401 (7.5)**
Image Analysis and Computer Vision

**DD2437 (7.5)**
Artificial Neural Networks and Deep Architectures

**DT2112 (7.5)**
Speech technology

**DT2119 (7.5)**
Speech and Speaker Recognition

**DT2150 (7.5)**
Project in Cognitive Systems

**DT2140 (7.5)**
Multimodal Interaction and Interfaces

Choose One

**Figure 1:** CSCS — Cognitive Systems
Choose One

- DD2421 (7.5) Machine Learning
- DD2424 (7.5) Deep Learning in Data Science
- DD2418 (6.0) Language Engineering
- DD2476 (9.0) Search Engines and Information Retrieval Systems
- DD2437 (7.5) Artificial Neural Networks and Deep Architectures
- SF2940 (7.5) Probability Theory
- DD2430 (7.5) Project in Data Science
- DD2404 (7.5) Applied Bioinformatics
- DD2434 (7.5) Machine Learning, Advanced Course
- DD2420 (7.5) Probabilistic Graphical Models

P3  Spring 2020
P4  Spring 2020
P1  Autumn 2020
P2  Autumn 2020

Figure 2: CSDA — Data Science
Choose at least 15.0 credits

- DH2400 (7.5) Physical Interaction Design and Realization
- DH2321 (6.0) Information Visualization
- DH2632 (3.0) Human-Computer Interaction, Research Seminars
- DH2642 (7.5) Interaction Programming and the Dynamic Web
- DH2628 (7.5) Interaction Design Methods
- DH2629 (7.5) Interaction Design as Reflective Practice
- DH2408 (6.0) Evaluation Methods in Human-Computer Interaction
- DH2413 (9.0) Advanced Graphics and Interaction
- DM2630 (9.0) User Experience Design and Evaluation
- DT2140 (7.5) Multimodal Interaction and Interfaces

Figure 3: CSID — Interaction Design
Choose one

DD2365 (7.5) Advanced Computation in Fluid Mechanics
DD2257 (7.5) Visualization

DD2363 (7.5) Methods in Scientific Computing
DD2356 (7.5) Methods in High Performance Computing

Choose two

DD2525 (7.5) Language-based Security
DD2448 (7.5) Foundations of Cryptography

DD2443 (7.5) Parallel and Distributed Computing
DD2496 (7.5) Privacy Enhancing Technologies

DD2520 (7.5) Applied Cryptography

Choose one

DD2437 (7.5) Artificial Neural Networks and Deep Architectures

EP2510 (7.5) Advanced Networked System Security

DD2497 (7.5) Project Course in System Security

Figure 4: CSSC — Scientific Computing

Figure 5: CSSP — Security and Privacy
Figure 6: CSST — Software Technology
Choose at least 7.5 credits

DD2448 (7.5) Foundations of Cryptography
DD2457 (6.0) Program Semantics and Analysis
DD2459 (7.5) Software Reliability
DD2460 (7.5) Software Safety and Security
DD2372 (6.0) Automata and Languages
DD2445 (7.5) Complexity Theory

Alternating
DD2442 (7.5) Seminars on Theoretical Computer Science

DD2443 (7.5) Parallel and Distributed Computing

Not offered 2020
DD2442 (7.5) Seminars on Theoretical Computer Science

DD2452 (7.5) Formal Methods
DD2460 (7.5) Software Safety and Security
DD2372 (6.0) Automata and Languages
DD2459 (7.5) Software Reliability
DD2448 (7.5) Foundations of Cryptography

DD2467 (7.5) Software Safety and Security
DD2457 (6.0) Program Semantics and Analysis
DD2452 (7.5) Formal Methods

DD2467 (7.5) Software Safety and Security
DD2442 (7.5) Seminars on Theoretical Computer Science

DD2459 (7.5) Software Reliability
DD2448 (7.5) Foundations of Cryptography
DD2452 (7.5) Formal Methods
DD2467 (7.5) Software Safety and Security
DD2442 (7.5) Seminars on Theoretical Computer Science

Not offered 2020

Figure 7: CSTC — Theoretical Computer Science
Choose at least 18.0 credits

DH2320 (6.0) Introduction to Visualization and Computer Graphics

DH2321 (6.0) Information Visualization

DH2323 (6.0) Computer Graphics and Interaction

DD2257 (7.5) Visualization

DD2413 (9.0) Advanced Graphics and Interaction

DD2470 (6.0) Advanced Topics in Visualization and Computer Graphics

DD2650 (6.0) Computer Game Design

Figure 8: CSVG — Visualization and Interactive Graphics