CONSTRUCTOR UNIVERSITY

Applied Computer Science (180 CP)

CHOICE / CORE / CAREER

3rd Year CAREER

- **Bachelor Thesis / Seminar** m, 10CP
- **Specialization I ACS** me, 5 CP
- **Specialization II ACS** me, 5 CP
- **Specialization III ACS** me, 5 CP
- **Management** me, 5 CP
- **Agency, Leadership & Accountability** m, 5 CP
- **Collaborative Software Project** m, 5 CP
- **Argumentation, Data Visualization and Communication**** me, 5 CP
- **Summer Internship / Start-Up (after 2nd year)** m, 15 CP

2nd Year CORE

- **Software Engineering** m, 7.5 CP
- **Artificial Intelligence** m, 7.5 CP
- **Machine Learning + Machine Learning Tools** m, 7.5 CP
- **Management** me, 5 CP
- **Causation / Correlation**** m, 2.5 CP
- **Databases and Web Services** m, 7.5 CP
- **Operating Systems** m, 7.5 CP
- **Data Analytics and Modeling** m, 7.5 CP
- **Probability and Random Processes** m, 5 CP
- **Logic**** m, 2.5 CP

1st Year CHOICE

- **Algorithms and Data Structures** m, 7.5 CP
- **Introduction into Cyber Physical Systems** m, 7.5 CP
- **Software Design and Prototyping** m, 7.5 CP
- **Distributed Develop-ment** m, 5 CP
- **Calculus and Linear Algebra II** m, 5 CP
- **Introduction to Computer Science** m, 7.5 CP
- **Programming in C/C++** m, 7.5 CP
- **Introduction to Data Science** m, 7.5 CP
- **Calculus and Linear Algebra I** m, 5 CP

CP: Credit Points

m: mandatory
me: mandatory elective

** Different module perspectives available