



Commercial Software Engineering with Design and Architecture Concentration

First Year

> Term 1

- Logic
- Discrete Math
- Calculus 1
- History of Software Engineering
- Programming 1
- Software Development 1
- Operating Systems 1
- Database 1

> Term 2

- Linear Algebra
- Calculus 2
- Statistics
- Communication I
- Programming 2
- Software Development 2
- Operating Systems 2
- Database 2

Second Year

> Term 3

- Communication 2
- Writing & Composition 1
- Programming 3
- Software Development 3
- Computer Networks 1
- Software Quality Engineering 1
- Software Quality Engineering 2

> Term 4

- Writing & Composition 2
- Programming 4
- Algorithmics 1
- Software Development 4
- Computer Networks 2
- Software Quality Engineering 3
- Development Operations

Third Year

> Term 5

- Programming 5
- Algorithmics 2
- Software Development 5
- Data Science
- Deep Learning
- Software Architecture 1
- Internet of Things

> Term 6

- Programming 6
- Programming Languages
- Software Development 6
- Systems Administration
- Software Architecture 2
- Web Development
- User Interface and User Experience Design

Fourth Year

> Term 7

- Programming 7
- Mobile Application Development
- Research Project 1
- Research Project 2

> Term 8

- Software Architecture 3
- Software Architecture 4
- Research Project 3
- Research Project 4
- Software Projects & Startups

English for Specific Purposes (ESP) for Software Engineers



The program combines training in intercultural communication skills, business English and English for software engineering.

First Year

- > **Term 1**
ESP 1.- Beginning English for software Engineers I
Lab. M2L2 - Lab. M3L1 - Lab. M3L2
- > **Term 2**
ESP 2.- Beginning English for software Engineers II
Lab. M4L1 - Lab. M4L2 -
Lab. M5L2 - Lab. M6

Second Year

- > **Term 3**
ESP 3.- Business English
Lab. M7 - Lab. M9
- > **Term 4**
ESP 4.- English for software Engineering I
ESP 5.- Interview Preparation & written Communication I
Lab. M10

Third Year

- > **Term 5**
ESP 6.- English for software Engineering II
Lab. M13 - Lab. M14
- > **Term 6**
Lab. M16 - Lab. M17 - Lab. M18 - Lab. M19

Fourth Year

- > **Term 7**
ESL 7 - Interview Preparation & Written Communication II
- > **Term 8**

For initial placement in the program, all students must complete a placement test, administered by the Admissions Department, prior to their first semester at the University. Depending on their results, they will be assigned to Level 1 or Level 2 of the program.

*Asynchronous student practice labs.