



Commercial Software Engineering Program

First Year

> Term 1

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

> Term 2

- Linear Algebra
- Programming 2
- Operating Systems 2
- Database 2
- Software Development 2
- Communication 1
- Calculus 2

Second Year

> Term 3

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

Term 4

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

Third Year

Term 5

- Programming 5
- Software Architecture 1
- Algorithmics 2
- Introduction to Data Science and Machine Learning
- Software Development 5
- Internet of Things
- Deep Learning/Generative AI

Term 6

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

Fourth Year

Term 7

- Programming 7
- Software Architecture 3
- Software Architecture 4
- Mobile Application Development
- Software Projects & Startups

Term 8

- Research Project on Software Development 1
- Research Project on Software Development 2
- Research Project on Software Development 3



English for Specific Purposes for Software Engineers Certificate Program (ESP) – Non-Credit

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

> Level 1

- ESP 1 - Beginning English for Software Engineers I
- Lab M3L1
- Lab M4L1
- ESP 2 - Beginning English for Software Engineers II

> Level 2

- Lab M2L2
- Lab M3L2
- Lab M4L2
- Lab M5L2
- Lab M6
- Lab M7
- ESP 3 - Business English
- Lab M9
- Lab M10
- ESP 4 - English for Software Engineering I
- Special Lab M12

> Level 3

- Special Lab M13
- Special Lab M14
- Special Lab M15
- Special Lab M16
- ESP 5 - Interview Preparation & Written Communication I
- ESP 6 - English for Software Engineering II

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.