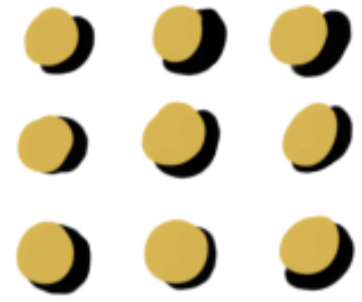


engineering

B.Eng. in Software Engineering



program structure

Years 3 and 4 cover further computer science topics, core and specialised software engineering topics, software projects and elective courses. Each student may choose one of the following specialisations and take any relevant specific courses:

After Year 2, every student is required to undertake an internship in a software company or a research lab for 8 - 10 weeks during the summer semester

The first two years of the program primarily cover mathematics, computer programming, computer science fundamentals, an overview of software eng. & general education courses.

Total 144* / 155 credits**

General Education 31* / 31** credits

Major courses 107* / 118** credits

Free electives 6* / 6** credits

* Track 1: KMITL

**Track 2: KMITL + University of Glasgow



Enterprise Software Engineering



The Internet of Things



Intelligent Systems

Double Degree

Students who finish Year 2 with a



GPA of 3.25 or above



6.5 or higher

have the option to join the KMITL with **University of Glasgow** Double-Degree Program, whereby they would study years 3 and 4 of the software engineering program at University of Glasgow (UK), upon graduation, earn a **B.Sc. (Hon) Software Eng. degree from University Glasgow** in addition to a **B.Eng. in Software Engineering degree from KMITL.**

tuition fee

2,750 USD/semester (21,820 USD for the entire program)

** 90,000 baht/semester (720,000 baht for the entire program)

Software engineering

Study plan



Semester 1

Semester 2

Year 1

Calculus 1
Introduction to Computers & Programming
Basic Electricity and Electronics
Academic English 1
Introduction to Logic
C Programming
C Programming Lab

Calculus 2
Academic English 2
Elective in Humanity
Discrete Mathematics
Digital Circuit and Logic Design
Digital Circuit Laboratory
Object-Oriented Concepts and Programming
Object-Oriented Programming Laboratory

Year 2

Linear Algebra
Technical Writing
Elective in Social Study
Computer Organisation & Assembly Language
Computer Organisation & Assembly Language Laboratory
Data Structures & Algorithms
Data Structures & Algorithms Laboratory
Advanced Object-Oriented Programming

Probability and Statistics
Technical Communication & Presentation
Software Engineering Principles
Software Engineering Principle Laboratory
Information Systems & Databases
Algorithm Design & Analysis
Computer Networks & Communications
Computer Networks & Communications Laboratory
Seminar in Software Engineering

Year 2

Summer - Industrial Training

Year 3

Regular

Object-Oriented Analysis & Design
Object-Oriented Analysis & Design Laboratory
Operating Systems
Artificial Intelligence
Theory of Computation

For Enterprise SE Specialisation:

Web Programming
Database Systems

For Internet of Things Specialisation:

Web Programming
Microprocessors & Interfacing

For Intelligent System Specialisation:

Machine Learning
Big Data

Compiler Construction
Software Design and Architecture
Software Development Process
Team Software Project

For Enterprise SE Specialisation:

Distributed Computing
Enterprise Software Development

For Internet of Things Specialisation:

Embedded System Software
Computer Networking for the Internet of Things

For Intelligent System Specialisation:

Computational Intelligence
Knowledge Representation and Reasoning

Year 4

Regular

Software Verification and Validation
Human-Computer Interaction
Software Project 1
Major Elective 1
Free Elective 1

Computer Ethics and Law
Software Project 2
Major Elective 2
Free Elective 2

Software engineering

Study plan

Semester 1

Semester 2

Year 3 Cooperative Education

Object-Oriented Analysis & Design
Object-Oriented Analysis & Design Laboratory
Operating Systems
Artificial Intelligence
Theory of Computation

For Enterprise SE Specialisation:

Web Programming
Database Systems

For Internet of Things Specialisation:

Web Programming
Microprocessors & Interfacing

For Intelligent System Specialisation:

Machine Learning
Big Data

Pre-Cooperative Education
Compiler Construction
Software Design and Architecture
Software Development Process
Team Software Project

For Enterprise SE Specialisation:

Distributed Computing
Enterprise Software Development

For Internet of Things Specialisation:

Embedded System Software
Computer Networking for the Internet of Things

For Intelligent System Specialisation:

Computational Intelligence
Knowledge Representation and Reasoning

Year 4 Cooperative Education

Cooperative Education

Computer Ethics and Law
Software Project
Major Elective 1
Major Elective 2
Free Elective 1
Free Elective 2

TRACK 2

COURSES HELD
AT UNIVERSITY
GLASGOW

Year 3

Advanced Programming
Algorithmics 1
Interactive Systems
Programming Languages
Professional Software Development

Professional Skills and Issues
Database Systems
Networked Systems
Operating Systems
Team Project

Semester 3

Summer

Software Engineering Summer Placement

Year 4

Major Elective 1
Major Elective 2
Major Elective 3
Major Elective 4
Free Elective 1

Individual Project
Major Elective 1
Major Elective 5
Major Elective 6
Free Elective 2



University
of Glasgow

*The study plan above lists the courses taught at the Faculty of Engineering, KMITL. The study plan in Years 3 and 4 at University of Glasgow for the students in the double-degree program can be found on the program website.

