engineering

B.Eng. in Computer Innovation Engineering

overview

A four-year international engineering program designed to prepare students to create new and advanced computer innovations.

The program offers both fundamental knowledge and understanding of state-of-the-art computing technologies including: Internet of Things, Cloud Computing, and Data Analytics. This program is integrates the study of innovation processes, helping students transform their explored ideas into potential startup businesses.

program structure

One academic credit is given for a course offered in a single semester which:

• Meets for a lecture or discussion 1 hour per week or

• Contains at least in 3 laboratory hours per week.

Minimum Credits Required for graduation 128 credits

A. General Education 30 credits

B. Computer Innovation Engineering 92 credits

C. Free Electives 6 credits

D. Innovation Internship 0 credits

Most courses are given 4 credits. These courses usually contain 3 hours of lecture or discussion per week. The courses are also accompanied by 1 additional hour of revision or 3 hours of laboratory work per week. Students enrolled in this course are also expected to spend at least 8 hours outside the class/lab for studying and completing the coursework.

collaboration

Carnegie Mellon University

CHUBU UNIVERSITY

USF UNIVERSITY OF SOUTH FLORIDA

Kumamoto University

Imperial College London

and more.

tuition fee

4,550 USD/semester

(36,400 USD for the entire program)

** 150,000 baht/semester (1,200,000 baht for the entire program)

Computer Innovation
engineering

Study plan

	Semester 1	Semester 2
Year 1	DISCRETE MATHEMATICS FUNDAMENTALS OF PROGRAMMING INTRODUCTION TO CALCULUS PHYSICS 1 (GENED ELECTIVE) (ESL) ACADEMIC LISTENING &SPEAKING ** AUDITS**	(GENED) INTERPRETATION AND ARGUMENTS INTELLIGENT DEVICES AND DIGITAL SYSTEMS ADVANCED CALCULUS PHYSICS 2 (ESL) ACADEMIC READING AND WRITING * AUDITS*
Year 2	EMERGING TRENDS IN ENGINEERING (GENED ELECTIVE) (GENED) INNOVATIVE COMMUNICATION PRINCIPLES OF COMPUTATION AND APPLICATIONS CYBER-PHYSICAL SYSTEM DESIGN	(GENED) DESIGN METHODS FOR INNOVATIONS (GENED ELECTIVE) (SCIENCE&MATH) PROBABILITY AND STATISTICS COMPUTER SYSTEMS INFORMATION NETWORK AND CYBER SECURITY
Year 3 **Regular**	(SCIENCE & MATHEMATICS ELECTIVE) DATABASE TECHNOLOGY ELEMENTS OF SOFTWARE CONSTRUCTION CLOUD COMPUTING	(GENED) LEAN STARTUP AND AGILE BUSINESS (SCIENCE & MATHEMATICS ELECTIVE) (FREE ELECTIVE) INTERNET OF THINGS AND SMART SYSTEMS DATA ANALYTICS
Year 3 **Study-Abroad**		(GENED) LEAN STARTUP AND AGILE BUSINESS (SCIENCE & MATHEMATICS ELECTIVE) INTERNET OF THINGS AND SMART SYSTEMS DATA ANALYTICS CIE ELECTIVE
Year 4 **Regular**	(FREE ELECTIVE) (CIE ELECTIVE) CAPSTONE DESIGN PREPARATION	(CIE ELECTIVE) COMPUTER INNOVATION ENGINEERING CAPSTONE DESIGN (GENED) INNOVATION MANAGEMENT
Year 4 **Study-Abroad**	COOPERATIVE EDUCATION or STUDY ABROAD	(GENED) INNOVATION MANAGEMENT (FREE ELECTIVE) (FREE ELECTIVE) (CIE ELECTIVE) COMPUTER INNOVATION ENGINEERING CAPSTONE DESIGN