



## Announcement of ISE Summer School AY 2022

### 1. Introduction

ISE Summer School consists of two programs.

a) **Regular program** takes place from June 6 to July 21, 2023

b) **Intensive program** takes place from July 3 to 21, 2023

at the Faculty of Engineering, Chulalongkorn University in Thailand. It will be **fully taught in English** by Lecturers from UK and Sweden.

ISE Summer School provides a great opportunity for students to immerse themselves in the international environment and to learn more about emerging science and engineering topics of the 21<sup>st</sup> century such as Robotics Technologies and Chemistry of Everyday Life & Sustainable Engineering.

### 2. Application for Admission

The summer school is open to Chula students and non-Chula non-degree students. Please refer to the section you are concerned as the procedure to follow will differ from one category of students to another.

#### a) Chula ISE students

Chula ISE students shall register online and do not need to fill in the application of ISE summer school for admission.

#### b) Chula students from other international programs and Thai program

Please fill in the application of ISE summer school for admission.

#### c) Non-Chula students

- Undergraduate students
- Postgraduate students
- High school students
- Others

Please fill in the application of ISE summer school for admission.

#### d) Exchange students from partner universities

Students under exchange program from partner university shall follow the exchange program application process and fill in the application of ISE summer school for admission.

Applications for category (b), (c) and (d) of ISE Summer School for Admission should be completed using our online system, Moodle at <https://moodle.ise.eng.chula.ac.th/>, by **February 28, 2023.**

**To acquire login information, potential applicants should first send an email to [moodle@eng.chula.ac.th](mailto:moodle@eng.chula.ac.th) providing full name and email address.**

ISE will notify the admission results by email and through our Moodle system on **March 31, 2023**

### 3. Grading Systems

There are 3 types of grading. The applicant must specify grading system in your application. Please note that, for all students taking intensive summer school classes, grading type cannot be changed due to the university registration schedule.

a) Standard grading system with A, B, C, D and F

b) Grading with "S" for Satisfactory or "U" for Unsatisfactory (with examination)

c) Grading with "V" for Visitor (without examination)

#### 4. English Proficiency Requirement

Applicants of category (c), and (d) who are non-native speakers who do not enroll in International School in which English is used as a main language, must provide English proficiency test result not more than 2 years old and passing one of minimum requirement as follows.

TOEFL: Internet-based: 79; Computer-based: 213; Paper-based: 550

IELTS: Overall band: 6.0

CU-TEP (Chulalongkorn University Test of English Proficiency): 80

TOEIC: 670

Duolingo: 105

#### 5. Course Schedule and Description

Table 1: Timetable for ISE Summer School **Regular Program from June 6 to July 21, 2023.**

Time	Course	Dept.	Course Description
M-F 10-12	2301107 Calculus I	Math	Limit, continuity, differentiation and integration of real-valued functions of a real variable and their applications; techniques of integration; improper integrals.
M-F 8-10	2301108 Calculus II	Math	Mathematical induction; sequences and series of real numbers; Taylor series expansion and approximation of elementary functions; numerical integration; vectors, lines and planes in three-dimensional space; calculus of vector valued functions of one variable; calculus of real valued functions of two variables; introduction to differential equations and their applications.
M-F 13-15	2304153 Physics for Engineers	Phys	Mechanics of particles and rigid bodies; properties of matter; fluid mechanics; heat; vibrations and waves; elements of electromagnetism; optics; modern physics.
M-F 15-17	2304154 Physics and Electronics for Engineers	Phys	Electricity; DC circuits; AC circuits; basic electronics; solid state devices; electrical actuators.
M-F 8-10	2190101 Computer Programming	CP	Computer concepts, computer system components, hardware and software interaction, electronic information and data processing concepts; programming: data types, operators, statements, control structures; programming tools; programming styles and conventions; debugging; program design and development with applications to engineering problems using a high-level language.
M-F 13-15	2182203 Probability and Statistics for Engineering	EE	Engineering basis in statistics and probability; discrete and continuous probability distribution; joint probability distribution; parameter estimation: estimator, bias, consistency; point estimation; interval estimation; engineering applications in measurement and uncertainty, linear regression, introduction to random process; integration of statistics in engineering applications; case studies.
M-F 15-17	2183101 Engineering Graphics	ME	Lettering; orthographic projections; sketching and drawing; pictorial drawing; dimensioning; tolerancing and geometrical tolerancing; section; working drawing; mechanical parts drawing; introduction to CAD.

Note:

- \*Course is open on a basis of the minimum enrolled students.
- #Time schedule is tentative.

Table 2: Timetable for ISE Summer School Intensive Program from July 3 to 21, 2023.

Time	Course	Dept.	Instructor	Course Description
M-F 9-12	2147316 Engineering skills through robotics technologies	ISE	Dr.Ben Parslew Dr.Nicholas Crisp Dr.Khristopher Kabbabe  The University of Manchester, UK	The course utilizes robotics as a core teaching medium. The course content is designed to be a useful preparatory course for pre-entry University students, while being suitable to complement existing students and alumni. While robotics uses the core technology of focus, the skills developed are intended to complement other technical disciplines. The instructors of the course have extensive experience in delivering intensive, and engaging practical programs to engineers and to audiences from non-technical backgrounds.
M-F 9-12	2143483 Analysis of Technology and Innovation	ISE	Dr. Viroj Jienwatcharamongkhol  Blekinge Institute of Technology, Sweden	In this course, students will develop knowledge of the drivers of innovation and technological change in addition to how new technology and technological change influence the conditions of competition and strategy.
M-F 13-16	2141101 The Chemistry of Everyday Life & Sustainable Engineering	ISE	Prof.Dr.Thomas Gale  The University of Greenwich, UK	Part 1: The first week introduces students to general key areas of chemistry while continually keeping described principles as relevant as possible through references to phenomena encountered in day-to-day life. Part 2: The second week of the course focuses on the applications of chemistry in several key areas likely to be of interest to future Chulalongkorn and ISE engineers. Part 3: Intended to run throughout the two weeks (logistics depending), the associated laboratory experiments are a vital part of this course in developing students' practical skills and confidence.
M-F 16-18	3900115 Sport Activity Muay Thai*	Sport Sci	TBA	Knowledge, culture, and principles of MuayThai; skills and techniques in MuayThai; punching, kicking, thrusting, elbow striking, and knee kicking; applications of skills and techniques in MuayThai through sport science principles.

**Notes:**

- *\*Course is open on a basis of the minimum enrolled students.*
- *Muay Thai class can take up to 30 students and scheduled from 16.00-18.00. This course covers two credits. There will be no extra charge.*
- *Learning outcomes and more details on syllabus will be provided on arrival, or upon request if needed before arrival.*

## 6. Credit transfer and transcript

Those who wish to request credit transfer at the home institution must fill the form 'Request for official transcript'. Official transcripts will be sent via post to students within two months after the end of ISE summer school. Note that the approval of credit transfer is up to the home institution of the students.

## 7. Tuition and Program Fees and Payment

*Table 2: Fees per category of students*

Category	Tuition/Program Fees
a. Chula ISE students	Please refer to Chula's rate of tuition and program fee
b. Chula students from other programs	Please refer to Chula's rate of tuition and program fee
c. Non Chula Thai students*	45,190 THB
c. Non Chula foreign students**	61,880 THB
d. Exchange students	Please refer to MOU

\*Students shall pay the fees by **SWIFT transfer** to Faculty of Engineering, Chulalongkorn University.

\*\*Students shall pay handling fees charged by the bank in addition to the tuition and program fees.

**Account Name:** Educational Fund of Engineering Chula

**Account Number:** 045-2-91244-7

**Name of Bank:** Siam Commercial Bank, Sapha Kachat Thai Branch

**Bank's Address:** 1873 Henry Dunant Rd., Pathumwan, Bangkok 10330 Thailand

**SWIFT CODE:** SICOTHBK A/C

Payment of tuition and program fees must be made **April 7, 2023**. Once students have made the payment, please upload a scan of the wired payment slip to Moodle system at <https://moodle.ise.eng.chula.ac.th/>.

## 8. Accommodation for foreign students

Chulalongkorn University offers an on-campus hall of residence called '**CU i-House**' for foreign students. CU i-House is a 26-storey building with 846 units for international students and visiting international faculty. Rooms are fully furnished with air conditioning, modern conveniences, 24-hour security and safety systems, and free WIFI internet access. The residence provides a shuttle bus service to faculties within Chulalongkorn University.

For further information, please visit [www.chula.ac.th/en/prospective-student/accommodation](http://www.chula.ac.th/en/prospective-student/accommodation).

### Monthly Room Rates

- |                      |                  |             |
|----------------------|------------------|-------------|
| • Studio 25 sq.m.    | Single Bed       | 14,000 THB  |
| • Studio 25 sq.m.    | Twin Single Beds | 14,000 THB* |
| • 1 Bedroom 50 sq.m. | Single Bed       | 22,000 THB* |

*\*Please note that utility bills are not included in these rates.*

*\*\*Two-month room deposit and one-month rental fee must be paid either in advance or before checking in. If applicants specify assistance to find an accommodation, ISE will be in touch with them as soon as they are notified of their admission.*

## 9. Visa for foreign students

Foreign students will need to apply for a student visa, **ED Visa**, in their home country prior their arrival to Thailand. The following process requires about one month.

- Upon request through our Moodle system, ISE issues a letter for a study purpose in Thailand.
- ISE sends a hard copy of this letter to each foreign student.
- Foreign students apply at the Thai Embassy near their homes for ED Visa.

**Note:** Student will have to cover costs for flight tickets and other transportation related costs. ISE will give advice on the transportation from the main airport. There will be no airport pickup service of students.

## 10. Scholarship for students from Cambodia, Laos, Myanmar, and Vietnam + China

Students coming from Cambodia, Laos, Myanmar, Vietnam (CLMV) and China are eligible to apply a scholarship waiving 100% of the fees and on campus accommodation.

To apply to this scholarship, please submit the following:

- The Application of ISE Summer School for Admission
- The Application of ISE Summer School Scholarship for CLMV + Chinese Students with the required documents described in the announcement. All documents must be in English and submitted through our Moodle system at <https://moodle.ise.eng.chula.ac.th/> by **February 28, 2023**. ISE will notify the **scholarship results on March 31, 2023**

## 11. Extracurricular activities

- Industrial visit
- Hands-on authentic Thai Cooking Class with professional chef.
- One day trip to Bangkok old town, visit Wat Pho, Thailand's first university and a center for traditional Thai massage and traditional Thai medicine.

## 12. Important Dates

February 1, 2023	Opening the online application
February 28, 2023	Deadline of application submission
March 31, 2023	Notification of admission
April 7, 2023	Due payment of tuition and program fees
May 15-17, 2023	Course registration
June 6-July 21, 2023	Regular summer program
July 3-21, 2023	Intensive summer program

## 13. Contact information

Summer School Program Coordinator

International School of Engineering, Faculty of Engineering, Chulalongkorn University

Room 107, Engineering 2 Building, 254 Phayathai Road, Pathumwan, Bangkok 10330, Thailand

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