

# **ISE SUMARER SCHOOL AY 2019**

## "Consists of two programs"

## a) Regular program takes place from June 1 to July 17, 2020 and b) Intensive program takes place from June 29 to July 17, 2020



**APPLY NOW** 

#### CHULA INTERNATIONAL SCHOOL OF ENGINEERING

### FIRST CHOICE FOR INTERNATIONAL ENGINEERING EDUCATION IN THAILAND



ISE Summer School consists of two programs.

a) Regular program takes place from June 1 to July 17, 2020
b) Intensive program takes place from June 29 to July 17, 2020

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

ISE Summer School is a great opportunity to evolve into an international environment and to get to know more about engineering and emerging topics such as Big Data and Artificial Intelligence, Automation, Robotics, Game Design and Unmanned Aerial Vehicle (UAV).

### **Important Dates**

**January 20, 2020** 

March 29, 2020

- > Opening of online application
   > Deadline of applicat
- > Deadline of application submission



March 30, 2020 April 26, 2020  Notification of admission
 Due payment of tuition and program fees

June 1-July 17, 2020 > Regular summer program June 29-July 17, 2020 > Intensive summer program

## 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.



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



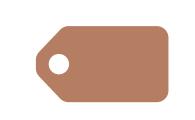
b) Chula students from other international programs and Thai program



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

## c) Non-Chula students

- Undergraduate students
- $\cdot \ {\rm Postgraduate\ students}$
- $\cdot$  High school students
- $\cdot$  Others
- Please fill in the application of ISE summer school for admission.



## d) Exchange students from partner university

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

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/, **from January 20, 2020 to March 29, 2020**. To acquire login information, potential applicants should first send an email to 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 30, 2020**.

## **Grading Systems**

There are 3 types of grading. The applicant <u>must</u> specify grading system in your application. Please note that <u>for intensive</u> <u>summer school program grading type cannot</u> <u>be changed</u> 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)

## **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, <u>must</u> provide English proficiency test result of not more than 2 years and passing one of the minimum requirements 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

## **Credit Transfer and Transcript**

Those who wish to request for a 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 the credit transfer is up to the home institution of the students.

## **Course Schedule and Description**

### Table 1: Timetable for ISE Summer School Regular Program from June 1 to July 17, 2020.

Time	Course	Dept	<b>Course Description</b>
M-F 10.00-12.00	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 08.00-10.00	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.

MWF 13.00-16.00	2301312*# Differential Equation	Math	Existence and uniqueness theorem of solution of first order equations; initial value problem; Laplace transform; Taylor series expansion of elementary functions; numerical methods; general linear equations; solution in series; linear partial differential equations boundary value problems.
MWF 13.00-16.00	2301216*# Linear Algebra & Differential Equation	Math	System of linear algebraic equations; linear spaces; inner products; eigenvalues and eigenvectors; principal axis theorem; higher-order linear differential equations; method of variation of parameters; system of first-order linear differential equations; qualitative analysis and dynamical system.
M-F 13.00-15.00	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 230/15/ Phys Electricity: DC circuits: AC circuits: basic

M-F 15.00-17.00	2304154 Physics and Electronics for Engineers	Phys	Electricity; DC circuits; AC circuits; basic electronics; solid state devices; electrical actuators.
MWF 13.00-16.00	2302105*# Chemistry for Engineers	Chem	Stoichiometry and basis of the atomic theory; properties of the three states of matter and solution; thermodynamics; chemical equilibrium; Oxidation- reduction; chemical kinetics; the electronic structures of atoms and the chemical bond; periodic table; nonmetal and transition metal.

Time	Course	Dept	<b>Course Description</b>
MWF 09.00-12.00	2183211 Engineering Mechanic	ISE	Analysis of force systems and their equilibrium as applied to engineering systems; stresses and strains; mechanical properties of materials; Hooke's law, elastic modulus, stress in beam, shear force, bending moment diagram, torsion, buckling of columns, Mohr'scircl

#### 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 June 29 to July 17, 2020.

Time	Course	Dept	<b>Course Description</b>
M-F 09.00-12.00	2147102 Introduction to Robotics Engineering	ISE	Introduction to various types of robotics and their applications, build a basic robot and write a basic programming for a robot.
M-F 13.00-16.00	2190511 Game Design and Development Process for International Market	ISE	Game player's point of view, game design process, game prototyping, tuning and testing process, puzzle and level design, UI, how to sell games, multi-player games.
M-F 16.00-18.00	3900115* Sport Activity Muay Thai Sport	Sport Sci	Knowledge, culture, and principles of Muay Thai; skills and techniques in Muay Thai; punching, kicking, thrusting, elbow striking, and knee kicking; applications of skills and techniques in Muay Thai 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 Hrs. This course covers two credits. There will be no extra charge.
- Learning outcomes and more details on syllabus will be provided upon arrival or upon request if needed before arrival.

## **Tuition and Program Fees and Payment**

**Table 3:** Fees per category of students

Category	<b>Tuition/Program Fees</b>
----------	-----------------------------

a. Chula ISE students

**b.** Chula students from other programs

- c. Non-Chula Thai students\*
- c. Non-Chula foreign students\*\*
- d. Exchange students

Please refer to Chula's rate of tuition and program fee Please refer to Chula's rate of tuition and program fee 37,625 THB 59,188 THB

Please refer to MOU



Non-Chula including New ISE Student, High School Student, Undergraduate and

Postgraduate student from other Universities, and others.

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

Click: http://www.ise.eng.chula.ac.th/document/pangpr/Payment\_Summer\_School\_2019.pdf

\*\*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 : SICOTHBKA/C



For Non-Chula Thai students

Payment of tuition and program fees must be made by **April 26 ,2020**. 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/.

## 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.

#### **Monthly Room Rates**

- Studio 25 sq. m.
- Studio 25 sq. m.
- 1 Bedroom 50 sq. m. Single Bed 22,000 THB\*

Single Bed

Twin Single Beds

Enter Website

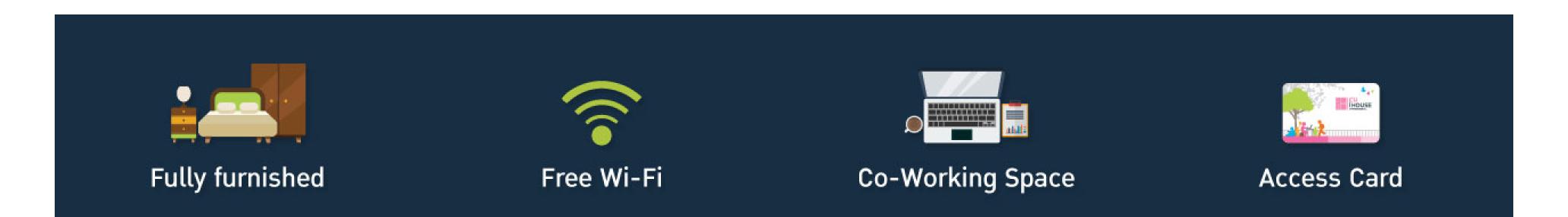
\*Please note that utility bills are not included in these rates.

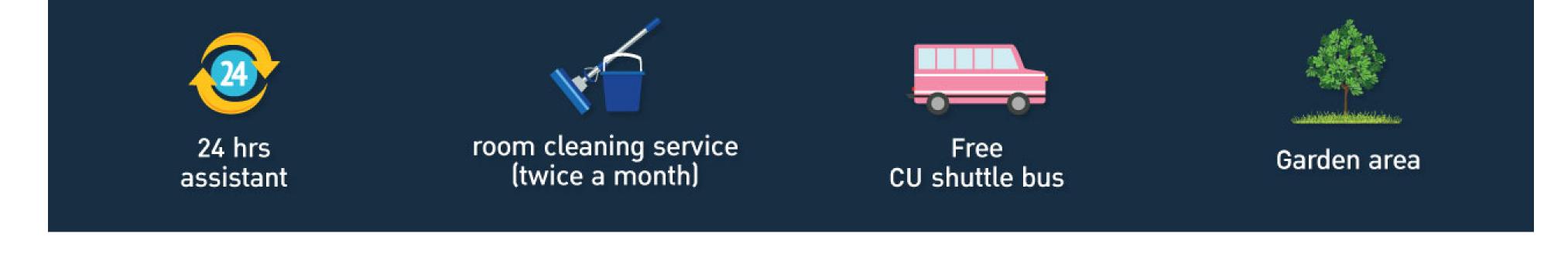
\*\*Two-month room deposit and one-month rental fee must be paid either in advance or before checking in.

14,000 THB\*

14,000 THB\*

If applicants specify assistance to find an accommodation, ISE will be in touch with them as soon as they are notified of their admission.





## Lunch services

During the summer school intensive program from **June 29 – July 17, 2020**, lunch will be provided by ISE. Other meals will not be covered by ISE. Chulalongkorn University has many canteens around the campus where students can take meals with international or local food.

## Visa for foreign students

Foreign students will need to apply for a student visa, **ED Visa**, in their home country prior to their arrival in 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 for students.



### Scholarship for students from Cambodia, Laos, Myanmar, and Vietnam

Students coming from Cambodia, Laos, Myanmar, or Vietnam (CLMV)

are eligible to apply for a scholarship waiving 100% of the fees and on campus accommodation. To apply for this scholarship, please submit the following:

- The Application of ISE Summer School for Admission
- The Application of ISE Summer School Scholarship for CLMV Students with the required documents described in the announcement of summer school scholarship for CLMV students

All documents <u>must be in English</u> and submitted through our Moodle system at https://moodle.ise.eng.chula.ac.th/ by March 1, 2020. ISE will notify the scholarship results on March 30, 2020.

## Cultural activities



After Summer School, there will be an opportunity for students to explore Thai culture by joining a one-week discovery trip from July 20-24, 2020. The cultural trip is tentatively planned to Centre of Learning for the Region (CLNR) in Nan which is a rural province in North Thailand, bordering Laos. The itinerary includes farm activities at Pha Sing and Lai Nan Research Station and study visits at Nan Noble House, King of Nan's House, Nan National Museum, and Buddist temples in Lanna Kingdom.

## Transportation from Bangkok to Nan is by airplane departing from Bangkok International Airport (Donmuang Airport). The trip expense including 4 days of accommodation, meals, transportation, entrance fees, and insurance is approximate 12,000 THB per person. All expenses will be borne by students themselves as it is optional. Payment of trip expense will be made two weeks prior to the trip.

## **Contact information**

#### **Summer School Program Coordinator**

International School of Engineering, Faculty of Engineering, Chulalongkorn University

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



Telephone: +66 2 218 6422-4 | Fax: +66 2 218 6422



Email: ise\_summer@chula.ac.th

 $\mathcal{WWW}$  www.ise.eng.chula.ac.th