

# ENGINEERING & SUSTAINABILITY SUMMER SCHOOL

**(ES3) @BANGI**

**2 WEEKS PROGRAMME**

**FACULTY OF ENGINEERING  
AND BUILT ENVIRONMENT,  
UNIVERSITI KEBANGSAAN MALAYSIA**

**CONTACT US  
FOR MORE  
INFORMATION**

## PROGRAMME OUTLINE

The **Engineering and Sustainability Summer School (ES3-2W)** is a 2-week programme taking place at the Faculty of Engineering and Built Environment, Universiti Kebangsaan Malaysia for the students of Chongqing University of Technology, China. Six courses are offered along with fun activities indoor and outdoor. Several visits to local and historical places around Bangi and Kuala Lumpur are also included. By joining this summer school, the students can learn the courses and more about Malaysian culture, disclosure to heritage as well as interact with local society.



## THE ES3-2W PROGRAMME INCLUDES THE FOLLOWING COURSES:

1. Accommodation at UKM colleges / partner halls
2. Meals during activities
3. Local and historical trips
4. Course materials and programme souvenirs
5. Welcoming event and closing dinner

## PROGRAMME FEE

This 2-week programme costs RM3,500 per person (approximately \$690 USD) for the students of Chongqing University of Technology, China.

## ES3-2W COURSES

COURSE	DESCRIPTION
Food Engineering	The course discusses properties of food relevant to food processing, size reduction, transporting and mixing of solid and liquid food, heating and cooling of food, food freezing and sterilization.
Industrial Safety	This course focuses on methods to identify hazards and analyze and evaluate their adverse effects. Students will also be introduced to various methods of preventive and control against hazards.
Statistics	This course introduces statistics as one of the tools used in decision-making through data gathering and sampling including Bayes' Theorem, random data representation, discrete and continuous random variables.
Computing for Engineers	This course introduces the computer system and its applications in engineering. The concept of programming and its languages are included. MATLAB or Excel VBA is utilized in this course.
Social, Economic, & Environmental Sustainability for the Next Generation	In this course, principles of sustainability will be discussed in regards to economy, society, and the environment. Other topics will be included i.e. the impact of pandemic on economy, sustainability in fashion and transportation.
Research Methodology	This course covers literature review, preparation, and initial research as well as report writing of chosen research topic; related to engineering. Other topics includes methodology, data analysis, discussion and results presentation.

# Tentative - Engineering and Sustainability Summer School

## WEEK 1

### Day 1

Monday 9.00am Registration  
10.00am Welcoming Session  
11.00am Ice Breaking Session/Games  
12.00pm Program Briefing & Get to Know UKM and FKAB

### Day 2

Tuesday 9.00am Lecture 1:  
Food Engineering  
2.00pm Malay Language

### Day 3

Wednesday 9.00am Lecture 2: Industrial Safety  
2.00pm Kayuhan Ceria (Fun Rides)

### Day 4

Thursday 9.00am Lecture 3: Statistics  
2.00pm Must See Putrajaya + Kayaking

### Day 5

Friday 9.00am Breakfast at Pineapple Farm  
2.00pm Chem E Car

### Day 6

Saturday 9.00am FKAB @ parkrun

## WEEK 2

### Day 1

Monday 9.00am Lecture 4:  
Computing for Engineers  
2.00pm Night Market Experience

### Day 2

Tuesday 9.00am Lecture 5:  
Social, Economic, and Environmental Sustainability for the Next Generation  
2.00pm Drone Race

### Day 3

Wednesday 9.00am Lecture 6:  
Research Methodology  
2.00pm Malaysian Traditional Games

### Day 4

Thursday 9.00am Must See Kuala Lumpur  
2.00pm Kayuhan Ceria ES3

### Day 5

Friday 6.00am Broga Hill Sunrise  
2.00pm Postgraduate Talk - Siswazah  
8.00pm Dinner/ Closing Ceremony

### Day 6

Saturday 9.00am Checkout

## CONTACT US

**Pejabat Mobiliti dan Kolaborasi (PMK)**

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