

# Towards a Sustainable Future

## A Summer School 2019

Jointly organised by  
the School of Architecture and Cities, University of Westminster (UK) and  
the Department of Architecture, National Taiwan University of Science and Technology (Taiwan)

Date: 26th June 2019 to 16th July 2019 | Website: <http://sustain.ad.ntust.edu.tw/>  
Venue: The University of Westminster, 35 Marylebone Road, London NW1 5LS



## Programme: Environmental Design Summer School 2019 (Draft)

### WEEK ONE: SENSING THE ENVIRONMENT

Day	Date	Time (BST)	Programme: Lecture/workshop/field trips/other events
Wed	26-Jun-19	10:00-13:00	Introduction, Environmental Design in Architecture, BIM and Green Architecture, Architectural Promenade and Processional Sequence in Architecture
		14:00-16:00	Architecture visualisation, Representation and Realisation
		18:00 - 20:00	Welcome Dinner
Thu	27-Jun-19	10:00-15:00	Field Trip to Beddington Zero Energy Development (BedZED), South London
Fri	28-Jun-19	10:00-13:00	Understanding the Climate and its implication in Architecture, Precedents
		14:00-16:00	Workshop: Site and Micro-Climate Analysis
Sat	29-Jun-19	10:00-15:00	Field Trip in London: Sensing the Environment
Sun	30-Jun-19		Free Activities
Mon	01-Jul-19	10:00-13:00	Site and Micro-Climate Analysis Precedents, Solar design
		14:00-16:00	Workshop: Sun Rose
Tue	02-Jul-19	10:00-11:00	Utilising analog tools and physical models
		11:00-13:00	Workshop: Solar Design
		14:00-16:00	Students' presentations: Sensing the Environment

### WEEK TWO: TRANSFORMATION

Day+Date	Time (BST)	Programme: Lecture/workshop/field trips/other events
Wed 03-Jul-19	10:00-13:00	Delighting Design in Architecture, and Performative Analysis , Thermal Delight in Architecture
	14:00-16:00	Workshop: Manual Calculation and Digital tools
Thu 04-Jul-19	10:00-13:00	Thermal Design Principles
	14:00-16:00	Workshop: Use of Andrew Marsh design tools
Fri 05-Jul-19	10:00-13:00	Properties of Building Materials
	14:00-16:00	Workshop: Properties of Building Materials
Sat 06-Jul-19	09:00-18:00	Field Trip: Cambridge
Sun 07-Jul-19	10:00-15:00	Field Trip: London
Mon 08-Jul-19	10:00-13:00	Natural Cooling
	14:00-16:00	Workshop: Introduction to Optivent
Tue 09-Jul-19	10:00-12:00	Passive Heating and Green Technology
	12:00-13:00	Manual Calculations
	14:00-16:00	Workshop: Passive Design Assisstant (PDA)

### WEEK THREE: APPLICATION

Day	Date	Time (BST)	Programme: Lecture/workshop/field trips/other events
Wed	10-Jul-19	10:00-13:00	Case studies and Applications, Basic Principles of Acoustics in Architecture
		14:00-16:00	Workshop: Data visualisation and thermal comfort
Thu	11-Jul-19	10:00-13:00	Structural Design in Architecture
		14:00-16:00	Workshop: Digital Tools
Fri	12-Jul-19	10:00-13:00	Case Studies: Integrated Environmental design and BIM, Introduction of group design assignments
		14:00-16:00	Workshop: Digital Tools
Sat	13-Jul-19	09:00-19:00	Field Trip: Nottingham
Sun	14-Jul-19		Free Activities
Mon	15-Jul-19	10:00-13:00	Design tutorials
		14:00-16:00	Design tutorials
Tue	16-Jul-19	10:00-13:00	Design tutorials
		14:00-16:00	Group presentations: Application of Environmental Design and BIM
		18:00-20:00	Farewell Dinner and Cetificate Giving Ceremony

#### Legends:

Lectures
Workshops/Tutorials
Field Trips
Other

#### Tutors:

Reader Benson Lau  
 Professor Brian Ford  
 Professor Dean Hawkes  
 Eng. James Engwall  
 Dr Mohataz Hossain  
 Mehrdad Borna