

# PARTNERS ACADEMIC SUMMER SCHOOL 2025 Syllabus for Civil Engineering & Geosciences

## **Subject Area**

This syllabus is for PARTNERS applicants seeking to progress to the degrees of:

- H200 BEng Hons Civil Engineering
- H205 BEng Hons Civil Engineering with Year in Industry
- H206 BEng Hons Civil and Structural Engineering with Year in Industry
- H210 BEng Hons Civil and Structural Engineering
- H242 MEng Hons Civil and Structural Engineering
- H290 MEng Hons Civil Engineering
- H295 MEng Honours Civil Engineering with Year in Industry
- H296 MEng Hons Civil and Structural Engineering with Year in Industry

#### **Aims**

To allow students to demonstrate their potential to succeed in specified degree programmes by showing a grasp of entry-level subject-specific knowledge, understanding, cognitive and subject-specific skills.

## **Learning Outcomes**

A good knowledge and understanding of ...

- · Principles and practice of surveying
- Structural Design
- Decarbonising Transport
- Water and Soil Interactions
- Waste Water Treatment
- Climate Change and Flood Risk

The ability to apply this knowledge and critical understanding to...

- Practical civil engineering tasks set in the context of built and natural environment monitoring and measurement.
- Collect and record accurate, precise geospatial and laboratory data.
- Analyse and present data in a manner commensurable with undergraduate study and, by extension, the workplace.

• Describe and discuss the relevance of the skills and tasks to the civil and structural engineering industry and geomatics industries.

Competence in...

- Experimental design, data collection, interpretation, analysis and display
- Team working

# **Summer School Syllabus**

Please refer to your subject timetable

## **Activities for Personal Study**

Students will be provided with reading and post-Class activities to complete during the Summer School. Reading will be provided via the Library Reading List feature within Canvas; exercise will be posted on Canvas before the Summer School commences.

# **On-Campus Teaching:**

Wednesday 2nd July (PM), Thursday 3rd & Friday 4th July

# **Online Teaching:**

Monday 30th June & Tuesday 1st July

## **Formative Assessment Details**

Water treatment design, short report produced in groups outlining laboratory results and how this guides the design of a water treatment system. It will involve data analysis, scale-up calculations and an assessment of the importance of different design criteria to influence engineering choices.

More details will be given during the event by your Academic Strand Lead.

#### Hand-in Method

Digital

#### Assessment deadline

Friday 11<sup>th</sup> July