UNSW SYDNEY | Australia's Global University

Built Environment

BLDG1021
Industrial and Infrastructure Construction

Course Outline – Term 2, 2020

Disclaimer

Information within this document is subject to change. The full and most accurate course outline will be available in Moodle closer to the start of the term in which the course is offered.

1. COURSE STAFF

Course Contact	Riza Yosia Sunindijo
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2. COURSE DETAILS

Credit Points	6 units of credit (uoc)
Workload	Approx. 150 hours including class contact hours, weekly individual and group online learning activities, readings, class preparation, and assessment activities.
Teaching Times and Location	Find details in timetable http://www.timetable.unsw.edu.au

Description

The course is designed to extend your knowledge on technologies, systems and processes of Industrial and Infrastructure Construction (IIC). It covers fundamental construction methods and processes for a variety of industrial and infrastructure projects such as warehouses, factories, highways, rail work, bridges, and tunnelling. This course also introduces you to construction innovations including new equipment, plant and information technologies, which may be used in industrial and infrastructure projects. In this course, you will study what IIC is, and distinguish the differences between it and non-industrial construction. Particularly, you will become familiar with how to build, which equipment and technology should be used, and why this technology should be utilized in infrastructure construction project.

Aims

This course aims to:

1. Introduce you to a variety of major national and international IIC projects;
2. Introduce you to the systems and processes (i.e. project organisation, construction operation methods,
1. equipment, machinery, technologies and mechanisms) of IIC projects;
2. Investigate and analyse selected IIC case studies and associated systems and processes;
3. Develop leadership and IIC management skills enabling successful project initiation,
4. operating and delivery by utilising collaborative and active learning methods.

Course Learning Outcomes (CLOs)

At the successful completion of this course, you will be able to:

1. Identify and analyse the management requirements, scopes, mechanisms, operational systems, performance and outcomes of a variety of contemporary national and international IIC projects
2. Analyse the construction processes and technologies used in infrastructure Projects
3. Critically analyse the strategic, tactical and operational challenges of IIC projects;
4. Demonstrate a range of professional characteristics required for IIC project personnel.

3. ASSESSMENT

Assessment task	Weight	CLOs Assessed
1. Assessment 1 - Quiz	20%	1, 2
2. Assessment 2 - IIC Project (Group and Individual)	30%	4, 5
3. Assessment 4 - Final Exam	50%	1, 2

4. COURSE IMPROVEMENT AND FEEDBACK

Feedback from students is an integral part of improving courses and teaching approaches. One of the primary mechanisms of feedback is myExperience, which we strongly urge all students to complete at the end of term. Course convenors use the feedback to make ongoing improvements to the course. This is communicated in Moodle in the myFeedback Matters page.