

# **CPM Optional Modules**

## Semester 1, Friday 1600 – 1800:

Full-time students and second year part-time students...

Choose either

ARC 7078 BIM in Practice (10 CATS)

or

ARC7071: Facilities Management / Asset Management (10 CATS)

### Semester 2, Monday 1730 - 1930:

Full-time students and first-year part-time students...

Choose either

ARC 7077 Construction Law 2 (10 CATS)

or

**ARC 7070 Emerging Digital Technology 1** (10 CATS)

## **Brief module descriptions:**

#### ARC 7078 BIM in Practice

This module is designed to develop students' comprehensive understanding of the underlying principles of BIM implementation in practice, particularly in relation to the utilisation of intelligent 3D models. Course content provides participants with an understanding and exposure to aspects such as PAS1192 Standards, Methods, and Procedures, the information delivery cycle, Information requirements, BIM Execution plans and information exchange.

Through the demonstration and articulation of the plethora of issues inhibiting the widespread adoption of BIM with the built environment, this module provides students with a comprehensive insight in to the difficulties presented in addressing the stage 2 BIM compliance.

## ARC7071: Facilities Management / Asset Management

This module aims to provide the concept and principles of total building performance and diagnosis and introduces the methodology for building performance evaluation and rectification. It is concerned with the evaluation and analysis of the physical, environmental, health and safety aspects of building planning and use.

Environmental, design and management factors influencing building use are covered. The module also focuses on the post-occupancy performance of buildings and services, and introduces the tools used to effectively manage and maintain facilities.

#### ARC 7077 Construction Law 2

The module aims to provide knowledge on areas of construction dispute resolution which include arbitration and adjudication. The arbitration aspect covers the arbitration act which include, nature arbitration agreement, notice of arbitration, appointment and parties' contract with arbitrator, arbitrator's jurisdiction and powers, and others aspect of the arbitration procedures and practice. The adjudication would cover the housing grants, construction and regeneration act, scheme for construction contracts regulations, adjudicator's appointment, jurisdiction, enforcement and other aspect of adjudication procedure, process and practice.

#### ARC 7070 Emerging Digital Technology 1

This module is designed to investigate in principle the new technologies which are emerging in the field of BIM and Digital Construction, examining the potential of technology to disrupt the construction industry.

In this module, students will be challenged to investigate technologies such as 3D printing (small scale and building scale); GIS and digital mapping; laser scanning, lidar and drone technology; RFID technology, smart buildings and the Internet of Things. The module will consider the wider issues that are thus generated including legal, ethical and economic issues. Students will be encouraged to investigate the wider potential of these emerging technologies, whilst at the same time assessing barriers to implementation.