



**Course Descriptor**  
**[CNMN3008 Construction Technology 2]**

<b>Proposed Academic Year</b>	2018-2019	<b>Last Reviewed Academic Year</b>	2020-2021
<b>Course Code</b>	CNMN3008	<b>Course Title</b>	Construction Technology 2
<b>Credit hours</b>	4	<b>Level of study</b>	Undergraduate
<b>College / Centre</b>	College of Engineering	<b>Department</b>	Civil & Environmental Engineering
<b>Co-requisites</b>		<b>Pre-requisites</b>	

**1. COURSE OUTLINE**

[This course prepares students with the knowledge and skills of construction technology so that they can be applied efficiently to construction of industrial and commercial buildings.]

**2. AIMS**

[This course is focused on students learning the key principles of construction technology including a description of the site, determination and description of the foundations and substructure, design and description of the structure of industrial and commercial buildings, determination and description of the envelope of industrial and commercial buildings and other structures and a description of the methods used to construct industrial and commercial buildings and other structures]

**3. LEARNING OUTCOMES (*Definitive*) and TEACHING, LEARNING and ASSESSMENT METHODS**

<b>Learning Outcomes (<i>Definitive</i>)</b>	<b>Teaching and Learning methods (<i>Indicative</i>)</b>	<b>Assessment (<i>Indicative</i>)</b>
Upon successful completion of this course, students will be able to:		
1. Describe the necessary preparations for the safe construction and assembly of industrial and commercial buildings	Lecture	Assignments + Exams
2. Appreciate the methods of construction of single story commercial and industrial buildings	Lecture	Assignments + Exams
3. Understand methods of construction for multistory residential, commercial and industrial buildings	Lecture	Assignments + Exams
4. Research and apply technical knowledge of the construction process and	Lecture	Assignments + Exams



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product to building designs and other structures.		
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**4. ASSESSMENT WEIGHTING**

Assessment	Percentage of final mark (%)
Assignment & Participation	20%
Quiz / Case Study	20%
Midterm	20%
Final Exam	40%
<b>TOTAL</b>	<b>100%</b>

**5. ACHIEVING A PASS**

Students will achieve 4 credit hour for this course by passing ALL of the course assessments (Assignments, Quiz, Midterm and Final examinations) and achieving a minimum overall score of 50.0%

***NB \*Ensure that ALL learning outcomes are taken into account***

**6. Course Delivery Plan**

LECTURE TOPIC	TIME (HOURS)
Functions and requirements of industrial and commercial buildings	4
The Building Process: Preparing to Build	4
Building Sub-Structure: Foundations, Walls below Ground and basement construction, Ground floors	4
Building Superstructure: High-rise buildings, Long-Span frames, Fire Engineering design. External Walls and Cladding for Multi-story and large span commercial buildings, .	4
Upper Floors and Internal Access	4
Roof Construction	4
Internal Division of space and Integration of Services	4
Sustainable Building Services	8
Mechanical Engineering Systems	8
Electrical Engineering systems	8
Public Health Engineering	8
<b>TOTAL HOURS</b>	<b>60</b>
Plus <b>RECOMMENDED INDEPENDENT STUDY HOURS</b>	<b>120</b>
<b>TOTAL COURSE HOURS</b>	<b>180</b>



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### 7. RECOMMENDED READING

#### Core text/s:

Mike Riley and Alison Cotgrave (2013) Construction Technology 2: Industrial and Commercial Buildings, 3rd Edition, Basingstoke, UK.

Emmitt S and Gorse C (2014) Advanced Construction of Buildings, 3rd Edition, Wiley Blackwell.

Chudley R and Greeno R (2012) Advanced Construction Technology, 5th Edition, Pearson Education Ltd

#### Library + online resources: