



Subject Description Form

Subject Code	BSE2838/IC238
Subject Title	Construction Drawing and CAD for BSE
Credit Value	1 Training Credit
Level	2
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	This subject aims to equip students with the techniques to present engineering design using manual and Computer-Aided Design (CAD) drawings.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: a. create construction drawings to recognized conventions and standards; and b. interpret construction drawings.
Subject Synopsis/ Indicative Syllabus	<u>Manual Drawings</u> <ul style="list-style-type: none">• Introduction of drawing instruments• Industry recognized drawing conventions and standards such as views, projection, line type, size and scale, grid lines, annotations etc.; and• Techniques for manual drawings. <u>CAD Drawings</u> <ul style="list-style-type: none">• Introduction of CAD software• Command CAD commands such as views, line type, scale, multiline, annotations etc.; and• Techniques for CAD drawings and documentation.
Learning Methodology	The subject will be delivered through the following learning methods: a. Mini-lectures – Lectures and demonstrations are used to introduce and explain key concept, definition and application of construction drawing; b. Drawing practice - Students are arranged to have hands-on workshops to practice construction drawing techniques and CAD drafting; and c. Assignments - Individual assignments are arranged to sharpen students' drawing skills.



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Assessment Methods in Alignment with Intended Learning Outcomes	Assessment Method	Weighting (%)	Intended Subject Learning Outcomes Assessed	
			a	b
	Assignments	70	✓	✓
Tests	30	✓	✓	
<p>Assignments - Students' performance are assessed continuously by assignments in the form of drawings.</p> <p>Tests - Drawing test is used to assess students on their drawing skills.</p>				
Student Study Effort Expected	Class Contact			
	Mini lecture and demonstration	9 Hrs		
	Hands-on practice and test	18 Hrs		
	Other Study Effort			
	Drawing practice	8 Hrs		
	Total Study Effort:			35 Hrs
Reading List and References	<p>References:</p> <ul style="list-style-type: none"> • British Standards Institution Construction Drawing Practice (BS1192: Part 1, 2, 3, 4, 5). • Giesecke, Frederick E. Modern Graphics Communications. Fifth ed. Boston: Prentice Hall, 2018. 			