

## Subject Description Form

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

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 Required	Class Contact			
	Mini lecture and demonstration	9 Hrs		
	Hands-on practice and test	18 Hrs		
	Other Study Effort			
	Drawing practice	8 Hrs		
	<b>Total Study Effort:</b>	<b>35 Hrs</b>		
Reading List and References	<p><b>References:</b></p> <ul style="list-style-type: none"> <li>• British Standards Institution Construction Drawing Practice (BS1192: Part 1, 2, 3, 4, 5).</li> <li>• Giesecke, Frederick E. Modern Graphics Communications. Fifth ed. Boston: Prentice Hall, 2018.</li> </ul>			