

## Learning Plan – Unit W5939

### Building Design & Construction Technology

W268 Diploma of Building and Construction (Building)  
This qualification is nationally recognised (BCG50206)

#### SEMESTER 1 - 2010

Unit titles and national codes (SIN)	Apply site surveys and set out procedures to medium-rise building projects (W5939), (National Code BCGBC5006A)
Lecturer	Karl Boeing
Email	<a href="mailto:karl.boeing@central.wa.edu.au">karl.boeing@central.wa.edu.au</a>
Phone	9202 4398
Consultation details	Wednesday 9:00-12:00 (082020)
Venue	L1302

Resources	Building Site Surveying and Setout 1 – <i>Learner's Guide</i> , Project notes and hand outs Dumpy level, staff, measuring tape (30 m), Steel profiles, mallet, strings
Elements or Learning Outcomes	<ol style="list-style-type: none"> <li>1. Set out a T-shaped or L-shaped building on a selected site with minimal profiles.</li> <li>2. Prepare and test levelling devices.</li> <li>3. Operate levelling devices.</li> <li>4. Identify specialised levelling and surveying equipment available on large building projects for various set out and checking procedures.</li> <li>5. Compute coordinates, and bearings, and distances related to grids and general set out work on large building sites.</li> </ol>
Critical aspects of evidence	<p>A person who demonstrates competency in this unit must be able to provide evidence of:</p> <ul style="list-style-type: none"> <li>• accurate application of survey and levelling principles relating to performance of site set out</li> <li>• compliance with OHS and organisational quality procedures and processes</li> <li>• application and interpretation of relevant documentation, codes and legislation</li> <li>• application of principles relating to performance of survey and site set out procedures and principles of selection</li> </ul>

Critical aspects of evidence (cont.)	<ul style="list-style-type: none"> <li>• use of levelling devices to survey and set out building projects</li> <li>• identification of typical faults and problems and necessary action taken to rectify</li> <li>• identification of hazard categories according to Australian standards, BCA and specifications.</li> </ul>
--------------------------------------	---

### ASSESSMENT SUMMARY

DUE	ASSESSMENT	ELEMENTS
<b>Week 9</b> <b>14 April</b>	<b>Theory Assessment</b> Rise & Fall, Profiles (boundaries), Cut & Fill, Contour lines	<b>All</b>
<b>Week 12</b> <b>5 May</b>	<b>Assignment 1</b> <b>Levelling devices</b>	<b>2 &amp; 3</b>
<b>Week 15</b> <b>26 May</b>	<b>Assignment 2</b> Rectangular coordinates	<b>2, 3 &amp; 5</b>
<b>Week 17</b> <b>9 June</b>	<b>Assignment 3</b> <b>Polar coordinates</b>	<b>2, 3 &amp; 5</b>

#### Individual learning and assessment needs

Central Institute of Technology recognises that students have different learning styles and needs. Please let your lecturer know if there is anything that may have an effect on your learning.

#### Results and appeals.

Please refer to the Central Institute of Technology website for information about the assessment process. The information can be found at [www.centraltafe.wa.edu.au](http://www.centraltafe.wa.edu.au). The path is; home – current students- your studies – assessment.

#### LEARNING PLAN

Session	Elements addressed	Topic	Resources
1		Introduction to subject. Discussion how to run the unit to accommodate students need. Theory: Trigonometry, Areas & Volumes	
2		Continue Trigonometry, Areas & Volumes	
3		Height of collimation , Rise & Fall Method,	

Session	Elements addressed	Topic	Resources
4		Calculation - Rise & Fall, Profile sections, ( Labelling, H&V scale)	
5		Contour lines, (Ridge, Valley, Saddle, Draw & Spur, depression, cliff)	
6		Grid point levelling, (interpolation between grid points (similar triangles) Lot 63 & Lot71	
7		Volume calculation of rectangular prisms (single prisms & grid calculation method)	
8	1, 2 & 3	Practical Projects: Close level run, grid point levelling & Volume calculation Revision of previous subject matter. (Q&A)	
<b>Easter Term Break</b>			
9		<b>Theory Assessment</b> Rise & Fall, Profiles sections, Cut & Fill, Contour lines	
10	2 & 3	Theory and Practice of levelling devices Preparation, testing and operation	
11	5	Angular relationship (bearings & polar coordinates)	
12		Theory: Set Out Procedures Chainline & offsets; polar coordinates <b>Submission of Assianment 1</b>	
13	3, 4 & 5	Theory & practice (horizontal & vertical angles using level, inclinometer & theodolite,	
14	1, 3 & 5	Practical project Setting out L-shaped building using chainline & offsets	
15	1, 3 & 5	Practical project Setting out L-shaped building using polar coordinates <b>Submission of Assianment 2</b>	
16	4	Practical project Checking vertical height Revision & feedback on assignments	
17		Profiles set-up for I-shaped building Group 1 <b>Submission Assignment 3</b>	
18		Profiles set-up for I-shaped building Group2	
19		Marking - Results on Board	
20		Results entry in ASRI	

Program is subject to change without further notice