



# Learning Plan – Unit W5904

# **Building Design & Construction Technology**

W605 Certificate IV Building & Construction (Building)

## **SEMESTER 1 - 2010**

| Unit titles and national codes (SIN )  | Apply site surveys and set out procedures to building and construction projects (W5904), (National Code CPCCBC4018A) |
|--|--|
| Lecturer   | Karl Boeing  |
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| Phone  | 9202 4398  |
| Consultation details Tuesday 16:00-18:00 (082308) Wednesday 13:00-15:00 (082002) |  |
| Venue  | L1313 (Tuesday ► 082308) & L1301 (Wed ► 082002)  |

|                               | <u> </u>   |  |  |
|-------------------------------|--|--|--|
| 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> <li>Perform setting out, measuring techniques and associated calculations</li> <li>Set up and use levelling devices.</li> <li>Construct longitudinal sections and determine associated grades and levels in typical drainage and pipeline situations.</li> <li>Construct longitudinal sections and determine associated grades and levels in typical drainage and pipeline situations</li> </ol>  |  |  |
| Critical aspects of evidence  | <ul> <li>A person who demonstrates competency in this unit must be able to provide evidence of:</li> <li>compliance with OHS and organisational quality procedures and process within the context of this unit of competency</li> <li>application and interpretation of relevant documentation/codes</li> <li>accurate application of survey/levelling principles relating to performance of site set out including contouring, volume and grade calculations</li> <li>identification of typical faults and problems and necessary action taken to rectify such faults.</li> </ul> |  |  |

#### **ASSESSMENT SUMMARY**

| DUE                                     | ASSESSMENT   | ELEMENTS |
|---|--|----------|
| Week 11<br>27 Apr 82308<br>28 Apr 82002 | Theory Assessment Rise & Fall, Profiles (section through Lot and boundaries), Cut & Fill, Contour lines          | All      |
| Week 13                                 | Project 1 Submission 13 May (Time 13:00) Close level transverse (around C & D Block miscolsure less than 12·√km) | All      |
| Week 15                                 | Project 2 Submission 27 May (Time 13:00)  Grid levelling – Volumes from spot heights                             | All      |
| Week 17                                 | Project 3 Submission 10 June (Time 13:00 Setting out a building (profiles at set RL)                             | All      |

# 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. The path is; home – current students- your studies – assessment.

#### **LEARNING PLAN**

| Session | Elements addressed | Торіс   | Resources                          |
|---------|--------------------|---|------------------------------------|
| 1       | 1                  | Introduction to subject. Theory: Trigonometry, Areas & Volumes                                | Text Unit 1 pages 3 to 13; Notes"  |
| 2       | 1                  | Solve right triangle problems using geometry and trigonometry, Calculate squares, rectangle & | Text Unit 1 pages 13 to 29; Notes" |
| 3       | 1                  | Properties of figures/Review exercises.   | Text Unit 1 pages 13 to 29; Notes  |
| 4       | 2                  | Equipment for residential levelling and set out   | Text Units 3, 4 Notes              |
| 5       | 2                  | Booking of levels/Sections through sites using collimation & rise & fall method               | Text Units 5, 7 Notes              |
| 6       | 2,3,4              | Sections through sites / Measurement from grid spots  | Text Units 6, 7 Notes              |
| 7       | 3                  | Contours & site plans   | Text Units 6, Notes                |

| Session | Elements addressed | Topic  | Resources                              |  |  |
|---------|--------------------|--|--|--|--|
| 8       | 3,4                | Establish contours lines on site plans   | Text Units 6, Notes                    |  |  |
|         | Easter Term Break  |  |  |  |  |
| 9       | 3,4                | Calculate cut and fill   | Text Units 6, Notes                    |  |  |
| 10      | 3,4                | More cut and fill calculations Revision of all topics  | Text Units 6, Notes                    |  |  |
| 11      | All                | Theory Assessment Rise & Fall, Profiles sections, Cut & Fill, Contour  | Text Units 1 to 6, Notes               |  |  |
| 12      | All                | Project 1 field work   | Project Notes<br>Text Units 5,6, 7     |  |  |
| 13      | All                | Project 1 Submission 13 May (Time 13:00) Close level transverse (around C & D Block miscolsure less than 12·√km) | All Project Notes<br>Text Units 5,6, 7 |  |  |
| 14      | AII                | Project 2 field work   | All Project Notes<br>Text Units 5,6, 7 |  |  |
| 15      | All                | Project 2 Submission 27 May (Time 13:00) Grid levelling – Volumes from spot heights                              | All Project Notes<br>Text Units 5,6, 7 |  |  |
| 16      | All                | Project 3 field work   | All Project Notes<br>Text Units 5,6, 7 |  |  |
| 17      | All                | Project 3 field work   | All Project Notes<br>Text Units 5,6, 7 |  |  |
| 18      | All                | Project 3 Submission 10 June (Time 13:00 Setting out a building (profiles at set RL)                             | All Project Notes<br>Text Units 5,6, 7 |  |  |
| 19      |                    | Marking, Practical Project - Results entry in ASRI<br>Results displayed on 'Results' board                       |  |  |  |
| 20      |                    | Results entry in ASRI  |  |  |  |

Program is subject to change without further notice