

## DETAIL ARCHITECTURAL PROJECTS

**UNIT CODE:**CON/OS/ARC/CR/01/5/A

### UNIT DESCRIPTION

This unit describes the competencies required to conduct literature review, carry out case study, produce schematic drawings, prepare presentation drawings, prepare working drawings, prepare details drawings, revise working drawings and apply CADD in architectural work

<b>ELEMENTS</b> These describe the key outcomes which make up workplace function.	<b>PERFORMANCE CRITERIA</b> These are assessable statements which specify the required level of performance for each of the elements. <i>Bold and italicized terms are elaborated in the Range.</i>
1. Conduct literature review	1.1 Research on design parameters is done as per spatial requirements 1.2 Research on material use is conducted as per spatial requirement 1.3 Research on historical backgrounds of similar projects is conducted
2. Carry out case study	4.1 An identical existing project is identified 4.2 The identified project is visited 4.3 Observations are recorded as per workplace procedures 4.4 Analysis of the observations is done 4.5 Conclusions and recommendations are made as per the existing project. 4.6 Sound findings are adopted in the proposed project
3. Produce schematic drawings	3.1 Bubble diagram is prepared as per the spatial requirement 3.2 A scaled sketch is formulated based on the bubble diagram and client's proposed budget. 3.3 A sketch model is prepared as per the sketch 3.4 Drawing is presented for approval or adjustments
4. Prepare presentation drawings	4.1 Sketches are adopted or adjusted based on the client's approval 4.2 <b>Fittings</b> and <b>Furniture</b> layout and human elements incorporated in the drawing as per spatial requirement 4.3 Major dimensions are indicated as per the spatial design 4.4 Artistic impressions are incorporated in the drawing 4.5 Drawing is presented for approval or adjustments

<p>5. Prepare working drawings</p>	<p>5.1 Presentation drawings are adopted or adjusted based on approval</p> <p>5.2 Artistic impressions removed from the working drawings</p> <p>5.3 Drawing is fully dimensioned and labelled</p> <p>5.4 Door and window schedules are prepared as per working drawing</p> <p>5.5 Finishing materials and codes are indicated on the working drawing</p> <p>5.6 <b>Detailed site plan</b> is prepared observing local government regulations</p> <p>5.7 Drawing is plotted on a tracing paper</p> <p>5.8 Drawing is produced on blueprint</p> <p>5.9 Working drawing is submitted to the local government authorities for approval</p>
<p>6. Prepare drawing details</p>	<p>6.1 Required details are identified based on the working drawings</p> <p>6.2 Scaled details are produced</p> <p>6.3 Details drawings are presented to the architect.</p>
<p>7. Revise working drawings</p>	<p>7.1 <b>Design changes</b> are received from architect in the design team</p> <p>7.2 Additions and alterations are incorporated in the working drawings</p> <p>7.3 Revised working drawings presented to the architect for approval</p>
<p>8. Draw architectural landscapes</p>	<p>8.1 Landscape drawings are presented to the architect</p> <p>8.2 Detailed landscape drawings are presented to the architect.</p>
<p>9. Apply CADD in architectural work</p>	<p>9.1 Sketch is drafted using design software</p> <p>9.2 Sketch is detailed to produce presentation drawing</p> <p>9.3 Presentation drawing is detailed to produce working drawing</p> <p>9.4 Detail drawing is produced using design software</p> <p>9.5 Detail drawing is plotted on a tracing paper</p> <p>9.6 Detail drawing is produced on blueprint</p> <p>9.7 Building Information Management Systems are applied as per workplace procedures</p>

## RANGE

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

Variable	Range
1. Fittings may include but is not limited to:	<ul style="list-style-type: none"><li>• Wash hand basins</li><li>• Bathtubs</li><li>• Water closet</li><li>• Sinks</li></ul>
2. Furniture may include but is not limited to:	<ul style="list-style-type: none"><li>• Chairs</li><li>• Tables</li><li>• Wardrobes</li></ul>
3. Design changes may include but is not limited to:	<ul style="list-style-type: none"><li>• Alterations</li><li>• Additions</li></ul>
4. Detailed site plan may include but is not limited to:	<ul style="list-style-type: none"><li>• Building location</li><li>• Sewer and storm water drainage</li><li>• Plot coverage</li></ul>

## REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

### Required Skills

The individual needs to demonstrate the following skills:

- Designing
- Scheduling
- Sketching
- Drafting
- Modelling
- Creativity
- Estimation skills
- Observation skills
- Planning and organizing
- Analytical skills

### Required knowledge

The individual needs to demonstrate knowledge of:

- Design software

- Design scales
- Anthropometrics and ergonomics
- Environmental regulations
- Architect's data
- Building standards and regulations
- Building codes
- Statutory regulations
- Safety precautions and regulations
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- Research
- Photography
- Thermal insulation
- Mathematics
- Acoustics

### EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

1. Critical aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Produced schematic drawings</p> <p>1.2 Prepared presentation drawings</p> <p>1.3 Prepared working drawings</p> <p>1.4 Prepared details drawings</p> <p>1.5 Applied CADD in architectural drawings</p>
2. Resource Implications	<p>The following resources should be provided:</p> <p>2.1 Access to relevant workplace or appropriately simulated environment where assessment can take place</p> <p>2.2 Materials relevant to the proposed activity or tasks</p>
3. Methods of Assessment	<p>Competency in this unit may be assessed through:</p> <p>3.1 Direct Observation</p> <p>3.2 Oral Questioning</p> <p>3.3 Portfolios</p> <p>3.4 Projects</p> <p>3.5 Written tests</p>
4. Context of Assessment	<p>Competency may be assessed</p> <p>4.1 On job</p> <p>4.2 Off job</p> <p>4.3 During Industrial Attachment</p>
5. Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.</p>