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COURSE BOOK

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# **CPC10111 Certificate I in Construction**

## **Teacher: Mr Blencowe**



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## Version Control

Version Number	Author	Notes	Reason for Change	Date Released	Review Date	VETIS Approved by
2017-01	Bronwyn Blencowe	Original Contents	New training package	22/4/2017	22/4/2018	Bronwyn Blencowe



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<b>Assessment Plan and Summary</b>			
<b>Student Information</b>			
<b>Student Name</b>		<b>USI</b>	
<b>Assessor Name</b>	Alan Blencowe		
<b>Date Course Commences</b>	20 July 2017		
<b>Course Name:</b>	CPC10111 Certificate I in Construction		
<b>Units of Competency:</b>	CPCCWHS1001 Work safely in the construction industry		
	CPCCOHS2001A Apply OHS requirements, policies and procedures in the construction industry		
	CPCCCM2001A Read and interpret plans and specifications		
	CPCCCM1013A Plan and organise work		
	CPCCCM1015A Carry out measurements and calculations		
	CPCCCM2006B Apply basic levelling procedures		
	CPCCCM2005B Use construction tools and equipment		
	CPCCVE1011A Undertake a basic construction project		
	CPCCCM2004A Handle construction materials		
	CPCCCM1014A Conduct workplace communication		
CPCCCM1012A Work effectively and sustainably in the construction industry			
<b>Employability/Foundation Skills</b>			
Numeracy Skills		Problem solving skills	
Oral Communication Skills		Reading Skills	
Written Communication Skills		Teamwork Skills	
Initiative and Enterprise Skills		Planning and Organising Skills	
Self-management Skills		Technology skills	
Learning Skills			
<b>ASSESSMENT TASKS</b>			
<b>Ass No.</b>	<b>Task Name</b>	<b>Satis</b>	<b>NYS</b>
Assessment Task 1 -3	White Card Assessment (Supervised)		
Assessment Task 4	Creation of Drawings for project		
Assessment Task 5	Conducting a tool box meeting		
Assessment Task 6	Demonstration of Handling Construction Materials		
Assessment Task 7	Demonstration of Using Tools and Equipment		



<b>Assessment Plan and Summary</b>			
Assessment Task 8	Demonstration of Safety Skills		
Assessment Task 9	Research assignment on careers, sustainability and construction industry		
Assessment Task 10	Two JSA for the projects		
Assessment Task 11	Two hazard checklists and risk assessments		
Assessment Task 12	Two peg- test		
Assessment Task 13	Theory Questions for all units except safety units		
<b>ASSESSMENT DECISION</b>			
Notes:			
Feedback to student:			
Candidate is assessed as: <input type="checkbox"/> Competent <input type="checkbox"/> Not Yet			
Competent			
<b>Signed Candidate</b>			
<b>Date</b>			
<b>Signed Assessor</b>			
<b>Date</b>			



<b>Assessment Details</b>	
<b>Purpose of Assessment</b>	Assess competence against the Units in the CPC10111 Certificate I in Construction
<b>Location of Assessment</b>	Classroom / School grounds
<b>Assessment conditions</b>	<p>The assessment of performance evidence must be done by direct observation of the learner by an assessor, either by an assessor observing the learner physically and/or by an assessor observing the learner via audio and visual media in real time for the unit CPCCWHS1001.</p> <p>Assessor must have</p>
<b>Assessor requirements</b>	<ul style="list-style-type: none"> <li>▪ As a minimum, assessors must satisfy the assessor requirements in the Standards for Registered Training Organisations (RTOs) current at the time of assessment – i.e. TAE40110 Certificate IV in Training and Assessment; and</li> <li>▪ Assessors must hold the unit <i>CPCCOHS2001A Apply OHS requirements, policies and procedures in the construction industry</i>, or its successor</li> </ul>
<b>Resources Required</b>	<ul style="list-style-type: none"> <li>▪ an induction procedure and requirement</li> <li>▪ realistic tasks or simulated tasks covering the mandatory task requirements</li> <li>▪ relevant specifications and work instructions</li> <li>▪ tools and equipment appropriate to applying safe work practices</li> <li>▪ support materials appropriate to activity</li> <li>▪ workplace instructions relating to safe work practices and addressing hazards and emergencies</li> <li>▪ material safety data sheets</li> <li>▪ research resources, including industry related systems information.</li> <li>• equipment</li> <li>• PPE listed in the performance evidence</li> <li>• specifications</li> <li>• state or territory Act relevant to the location of the learner, as specified in the range of conditions.</li> </ul>
<b>Duration</b>	20 weeks in Term 3 and 4, 2017
<b>WHS Considerations</b>	<ul style="list-style-type: none"> <li>▪ Students are required to wear PPE always</li> <li>▪ Students to ensure safety awareness of construction hazards</li> <li>▪ Students to complete successfully white card prior to access to any construction site including school grounds where construction is taking place.</li> </ul>
<b>Evidence Submission</b>	This completed Assessment Booklet with all the activities and supporting documentation as detailed in the specific assessment tasks are to be submitted to the Teacher at the end of the course for marking.
<b>Appeals</b>	As per student handbook



<b>Student Name:</b>		
<b>Candidate Agreement</b>		
<b>Candidate is required to answer the following:</b>	YES	NO
As the candidate are you ready for assessment?	<input type="checkbox"/>	<input type="checkbox"/>
Has the assessment process been explained to you and that to achieve a successful outcome for these Units of Competency you must be deemed Satisfactory in all assessment tasks?	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand The Recognition of Prior Learning (RPL) process?	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand which evidence is to be collected and how?	<input type="checkbox"/>	<input type="checkbox"/>
Do you understand your rights and the appeal system?	<input type="checkbox"/>	<input type="checkbox"/>
Have you discussed any special needs that should be considered during the assessment process?	<input type="checkbox"/>	<input type="checkbox"/>
Do you require an adjustment to the conduct of the assessment to respond to a specific or a special need? E.g. Cultural, Language, Disability, Literacy or Numeracy purposes.	<input type="checkbox"/>	<input type="checkbox"/>
I understand the purpose of the Assessment Tasks	<input type="checkbox"/>	<input type="checkbox"/>
All work I have submitted is my own	<input type="checkbox"/>	<input type="checkbox"/>
I know that I must follow all safety instructions when completing my assessments	<input type="checkbox"/>	<input type="checkbox"/>
I agree to undertake this assessment in the knowledge that the information gathered will only be used to determine my skills as Satisfactory or Not Satisfactory for each assessment method. Additionally, the information gathered is for the determination of my Competency by the collection of all assessment evidence for this unit of competency and can only be accessed by my workplace supervisor, my RTO and nominated regulatory authorities.	<input type="checkbox"/>	<input type="checkbox"/>
<b>Candidate Signature:</b>		<b>Date:</b>



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## Introduction

This qualification introduces the construction industry, its culture, occupations, job roles and workplace expectations. The units of competency cover essential work health and safety requirements, the industrial and work organisation structure, communication skills, work planning, and basic use of tools and materials. The qualification is built around a basic construction project unit that integrates the skills and embeds the facets of employability skills in context.

The qualification is suited to VET in Schools programs or learners with no previous connection to the construction industry or relevant employment history.

There are no specific job outcomes to this qualification, but the skills achieved will assist in successfully undertaking a Certificate II pre-vocational program or job outcome qualification, or will facilitate entry into an Australian Apprenticeship.

The unit CPCWHS1001 Work safely in the construction industry is designed to meet WHS regulatory authority requirements for WHS induction and must be achieved before access to any building and construction work site.

## Entry Requirements

Nil but must have some level of physical fitness and capable of reading and writing in English.

## Personal Protective Equipment (PPE)

Students are required to wear PPE always, when working on the construction projects. This includes safety glasses, boots, hard hat, gloves, long sleeve shirts, work pants.

The school or the student is required to provide these.

## Resources students will require

Students are provided with the following resources:

Pen, Eraser, Sharpener, Ruler, 2x Pencils 2B, notepaper for taking notes, White plastic file for storage of evidence.

## Projects and Exercises

This qualification, Certificate I in Construction CPC10111 requires students to construct playground for the local community to use and will consist of a climbing wall, brick fence, a cubby house for the local community groups to use.

## Rationale of Projects:

Through completion of the projects, it is intended that students will develop the skills required to read and interpret plans and specifications, plan allotted tasks to maximise personal productivity and carry out basic levelling procedures, constructing a timber framed object. Students will continue to develop skills to carry





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out measurements and perform simple calculations; handle construction materials and components; safely select and use construction tools and equipment; and undertake construction processes for basic projects as outlined above.

## Theory

The theory components will be delivered each morning through a tool box meeting by the trainer. Students are expected to take notes and record these in their notebook provided. All assessments must be completed for students to be assessed in this course.

Activity sheets will be provided for each unit to assess the theory components of this course.

## Licensing/Regulatory Information

Students must have achieved their white card prior to entry to a construction site. This will be delivered and assessed on the first day.

## Packaging Rules

To achieve this qualification, the candidate must demonstrate competency in 11 units of competency which are listed in the assessment plan on page1 of this booklet:

- 8 core units
- 3 elective units chosen for you from the CPC training package.

## Pathways Information

This course leads onto the CPC20211 Certificate II in Construction Pathways which leads to several Certificate III qualifications in building and construction industry. Refer to the image on the next page.



# Construction, Plumbing & Services Qualifications

## Construction

### Certificate I in ...

Construction

CPC10111

### Certificate II in ...

Construction

CPC20112

Construction Pathways

CPC20211

### Certificate III in ...

Bricklaying/  
Blocklaying

CPC30111

Carpentry

CPC30211

Concreting

CPC30313

Demolition

CPC30413

Dogging

CPC30511

Painting and  
Decorating

CPC30611

Post-  
Tensioning

CPC31712

Floor Tiling

CPC30812

Scarfolding

CPC30911

Solid  
Plastering

CPC31011

Steel Fixing

CPC31111

Wall and  
Ceiling Lining

CPC31211

Wall and  
Floor Tiling

CPC31311

Construction  
Crane  
Operations

CPC32912

Stonemasonry  
(Monumental/  
Installation)

CPC32313

Rigging

CPC30711

Construction  
Waterproofing

CPC31411

Formwork/  
Falsework

CPC31511

Low Rise  
Structural  
Framing

CPC31711

Paving

CPC31611

### Certificate IV in ...

Building and  
Construction  
(Building)

CPC40110

Building and  
Construction  
(Contract  
Administration)

CPC40208

Building and  
Construction  
(Estimating)

CPC40308

Building and  
Construction  
(Sales)

CPC40408

Building and  
Construction  
(Site  
Management)

CPC40508

Building and  
Construction  
(Specialist  
Trades)

CPC40611

Building and  
Construction  
(Trade  
Contracting)

CPC40708

Demolition

CPC41013

Swimming  
Pool & Spa  
Building

CPC40808

Entry level is usually at Certificate II or III or at any level with Recognition of Prior Learning assessed on existing industry experience and/or qualifications.

## For further information contact:

Training Package Manager: **Construction and Property Industry Skills Council**

Training Package Code: **CPC (Release 1) & CPC08 (Version 9.1)** Phone: ACT (02) 6230 2907

Fax: (02) 6230 2849

Phone: Brisbane (07) 3899 4311

Email: [info@cpsisc.com.au](mailto:info@cpsisc.com.au)

Training Package Endorsed: **August 2015**

Fax: (07) 3899 4249

Website: [www.cpsisc.com.au](http://www.cpsisc.com.au)

Job Pathway charts highlighting relevant job titles can be accessed online at [www.aatfinfo.com.au](http://www.aatfinfo.com.au). Chart current at September 2015. CPC-R1 & CPC08.V9.1



Committee & Agency Services  
Industry Skills Council  
**A U S T R A L I A N  
APPRENTICESHIPS**  
THEY LIVE THE CAREER THAT THEY WANT.



## Employability Skills

These are the skills that employers are seeking for students who graduate with this qualification. Your teacher will ensure you meet these skills during the course.

Employability Skill	Industry requirements for this qualification include:
Communication	<ul style="list-style-type: none"> <li>▪ Communicates with clients, colleagues and others using effective and appropriate communication techniques, including:               <ul style="list-style-type: none"> <li>○ Clear and direct communication</li> <li>○ Active listening</li> <li>○ Verbal and non-verbal language</li> <li>○ Questioning to identify and confirm requirements</li> <li>○ Language and concepts appropriate to cultural differences</li> </ul> </li> <li>▪ Understands, interprets and applies information as required from relevant:               <ul style="list-style-type: none"> <li>○ Environmental and OHS requirements</li> <li>○ Codes and standards</li> <li>○ Plans and drawings</li> <li>○ Specifications</li> <li>○ Safety signs and symbols</li> <li>○ Organisational policies and procedures</li> <li>○ Designs</li> </ul> </li> <li>▪ Understands relevant definitions, terminology, symbols, abbreviations and language</li> <li>▪ Records relevant information using standard workplace documentation</li> <li>▪ Applies measurements and calculations using appropriate equipment, formulas and records as required</li> <li>▪ Reports and records hazards and risks</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>▪ Works as part of a team to prioritise and action tasks</li> <li>▪ Provides assistance and encouragement to other team members</li> <li>▪ Initiates and encourages improvements in team performance</li> <li>▪ Identifies and utilises the strengths of other team members</li> <li>▪ Relates to people from diverse social, cultural and ethnic backgrounds and with varying physical and mental abilities</li> <li>▪ Participates in on-site meetings</li> </ul>
Problem Solving	<ul style="list-style-type: none"> <li>▪ Examines tools and equipment prior to use for damage, missing components or other defects</li> <li>▪ Identifies typical faults and problems and takes necessary remedial action</li> <li>▪ Rectifies simple faults with tools and equipment</li> </ul>
Initiative and Enterprise	<ul style="list-style-type: none"> <li>▪ Identifies opportunities to improve resource efficiency and makes suggestions as appropriate</li> <li>▪ Responds to change and workplace challenges</li> <li>▪ Puts ideas into action</li> </ul>



<b>Employability Skill</b>	<b>Industry requirements for this qualification include:</b>
	<ul style="list-style-type: none"><li>▪ Maximises use of resources by recycling, re-using or using appropriate disposal methods</li></ul>
Planning and Organising	<ul style="list-style-type: none"><li>▪ Identifies hazards and implements appropriate hazard control measures</li><li>▪ Selects and uses appropriate materials, tools and equipment</li><li>▪ Identifies requirements, applies relevant resources and sequences tasks using time management technique</li></ul>
Self-management	<ul style="list-style-type: none"><li>▪ Completes daily work activities</li><li>▪ Identifies own roles and responsibilities</li><li>▪ Contributes to workplace responsibilities, such as current work site environmental/sustainability frameworks or management systems</li><li>▪ Manages own performance to meet workplace standards</li><li>▪ Seeks support to improve work performance</li><li>▪ Cleans up work area</li></ul>
Learning	<ul style="list-style-type: none"><li>▪ Identifies own learning needs and seeks skill development as required</li><li>▪ Is open to learning new ideas and techniques</li></ul>
Technology	<ul style="list-style-type: none"><li>▪ Uses calculators</li><li>▪ Uses computers and relevant software</li><li>▪ Uses and operates a range of tools and equipment correctly and safely</li></ul>



## Weekly Schedule of Work to be completed

Week No	Tasks and learning activities	Unit of Competency	Tasks to complete
1-4	<p>Introduction to the course; the projects; the units and assessment requirements;</p> <p>Requirement to accept responsibility for own workload, work effectively in a team environment, ask for help if they need to; manage conflict immediately and seek assistance as required. Students are assessed on this throughout the semester.</p> <p>Handout booklets to students</p> <p>White Card and safety units:</p> <p>Topics to cover:</p> <ol style="list-style-type: none"> <li>1. Wearing PPE</li> <li>2. Duty of Care and duty holders</li> <li>3. Safety signs, symbols, hand signals, barricades and signage</li> <li>4. Asbestos and tools that must not be used               <ol style="list-style-type: none"> <li>a. Types of SCM possible location and risks (Asbestos containing materials = ACM)</li> <li>b. Serpentine and amphibole groups</li> <li>c. Use in common building materials</li> </ol> </li> <li>5. Tagging out faulty tools and using Equipment Guards</li> <li>6. Treating injuries using first aid principles</li> <li>7. Construction hazards – identification and orally report               <ol style="list-style-type: none"> <li>a. Dust</li> <li>b. Electrical: power lines, cords, equipment</li> <li>c. Excavations and underground services</li> </ol> </li> </ol>	<p>CPCCWHS1001 Work safely in the construction industry</p> <p>and</p> <p>CPCCOHS2001A Apply OHS requirements, policies and procedures in the construction industry; and</p> <p>CPCCCM1012A Work effectively and sustainably in the construction industry</p>	<p>Legislation <a href="https://www.youtube.com/watch?v=-AD7sazeEO8">https://www.youtube.com/watch?v=-AD7sazeEO8</a></p> <p>Consultation <a href="https://www.youtube.com/watch?v=Ge_CPI09IOw">https://www.youtube.com/watch?v=Ge_CPI09IOw</a></p> <p>Workplace injuries <a href="https://www.youtube.com/watch?v=C4S0rAZypzY">https://www.youtube.com/watch?v=C4S0rAZypzY</a></p> <p>New Worker Induction <a href="https://www.youtube.com/watch?v=jQwX7IUAH1w">https://www.youtube.com/watch?v=jQwX7IUAH1w</a></p> <p>Safe Work Method Statement <a href="https://www.youtube.com/watch?v=oIohy-Ogc3o">https://www.youtube.com/watch?v=oIohy-Ogc3o</a></p> <p>Asbestos <a href="https://www.youtube.com/watch?v=jifoNSXvTuQ">https://www.youtube.com/watch?v=jifoNSXvTuQ</a></p> <p>Electricity <a href="https://www.youtube.com/watch?v=6P3XX5c9LLA">https://www.youtube.com/watch?v=6P3XX5c9LLA</a></p> <p>Ladder Safety <a href="https://www.youtube.com/watch?v=3O1rKk2F9Kk">https://www.youtube.com/watch?v=3O1rKk2F9Kk</a></p> <p>Confined Spaces <a href="https://www.youtube.com/watch?v=HA6yh0TB5ag">https://www.youtube.com/watch?v=HA6yh0TB5ag</a></p> <p>Nail Gun Safety <a href="https://www.youtube.com/watch?v=qY0-5oU4POE">https://www.youtube.com/watch?v=qY0-5oU4POE</a></p> <p>Manual Handling</p>



Week No	Tasks and learning activities	Unit of Competency	Tasks to complete
	<ul style="list-style-type: none"> <li>d. Sun</li> <li>e. Noise</li> <li>f. Unplanned collapse</li> <li>g. Manual handling</li> <li>h. Asbestos</li> <li>i. Confined spaces</li> <li>j. Excavations and Trenches</li> <li>k. Falling objects</li> <li>l. Hazardous substances</li> <li>m. Hot and cold work environments</li> <li>8. Hazardous substances, SDS</li> <li>9. Risk assessment and controlling risks – hierarchy of control</li> <li>10. JSA and SWMS</li> <li>11. Accident and Incident reporting orally and in writing</li> <li>12. Meeting environmental requirements</li> <li>13. Emergency procedures – accidents, fire (use of blankets, extinguishers and hose reels and mains, evacuation, chemical spill, structural collapse, toxic or flammable vapour emission, vehicle or plant accident, near misses</li> <li>14. Cleaning up work area</li> <li>15. Safe work practices in construction – site amenities – drinking water, hand washing and toilets; JSA's, Take 5's, not using drugs or alcohol, bullying and</li> </ul>		<p><a href="https://www.youtube.com/watch?v=gbW8IOFw78">https://www.youtube.com/watch?v=gbW8IOFw78</a></p> <p>Excavations</p> <p><a href="https://www.youtube.com/watch?time_continue=1&amp;v=EItR6akGtw">https://www.youtube.com/watch?time_continue=1&amp;v=EItR6akGtw</a></p> <p>Bullying and harassment</p> <p><a href="https://www.youtube.com/watch?v=3KdXNTs5uCs">https://www.youtube.com/watch?v=3KdXNTs5uCs</a></p> <p>Emergencies</p> <p><a href="https://www.youtube.com/watch?v=YvltDKg9DcM">https://www.youtube.com/watch?v=YvltDKg9DcM</a></p> <p>Near Miss Reporting</p> <p><a href="https://www.youtube.com/watch?v=3OAA5QOMj_4">https://www.youtube.com/watch?v=3OAA5QOMj_4</a></p> <p>Demonstrate fitting of PPE to themselves for eye protection, hearing protection, hard hat, high vis reflective vest</p> <p>Install barricade and signage</p> <p>Orally explain how to use fire extinguishers, blankets and hose and reels</p> <p>Orally report two construction hazards and how these can be reduced or removed</p> <p>Orally report on how to respond to incidents and emergencies</p>



Week No	Tasks and learning activities	Unit of Competency	Tasks to complete
	<p>harassment, non-smoking, storing waste in designated areas</p> <p>16. OSH WA Legislation and regulations – main sections Duty of Care; OSH Rep and committees; Employer and employee responsibilities; contractor’s responsibilities; your responsibilities as an employee</p> <p>17. Workers compensation and injury management processes</p> <p>18. Teamwork</p> <p>19. Communication</p> <p>20. Take part in an emergency drill for a simulated mechanical fire</p>		<p>Orally report on purpose of JSA,SWMS and SDS</p> <p>Orally explain role of first aid officers, safety reps, safety committee, supervisor.</p> <p>Take part in an emergency evacuation drill mechanical fire</p> <p>Assist someone who is injured using first aid principles</p> <p>White Card Assessment at end of training.</p> <p>Students will be observed during the semester using safe work practices and will be assessed using the Assessor’s Observation Check list for these two units.</p>
1-4	<p><b>Deliver to the students the following topics:</b></p> <p>1. How to draw and read a plan of a construction project using Australian Standards ensuring all students are aware of how to draw these and what should be included. Use a sample of Australian Standards drawing.</p> <p>2. How to calculate the heights, areas, volumes and grades in the project</p>	<p>CPCCCM1013A Plan and organise work; and</p> <p>CPCCCM2001A Read and interpret plans and specifications; and</p> <p>CPCCCM2006B Apply basic levelling procedures; and</p>	<p>1. Draw up the plans of the project showing all requirement information as per the Australian Standards (Sample provided)</p> <p>2. Calculate all measurements and record calculations in notebook (can use a calculator); formulae sheet to be provided</p> <p>3. Create a JSA (see PowerPoint)</p> <p>Complete any unfinished theory questions for homework as directed by the teacher</p>



Week No	Tasks and learning activities	Unit of Competency	Tasks to complete
	<ol style="list-style-type: none"> <li>3. Describe direction, scale, key, contours, symbols and abbreviations in plans</li> <li>4. How to apply a scale in the plan preparation</li> <li>5. Discuss quality requirements (e.g. the Australian Standards for creating playgrounds and how this should apply to their project); and tolerances in works both primary and ancillary</li> <li>6. How to orient a plan to the ground</li> <li>7. Drawing conventions (give students a handout on this and sample drawing)</li> <li>8. Environmental controls that may affect the construction and use by children</li> <li>9. Discuss with students the JSA and SWMS and differences and get them to create one for the playground creation (use one part of the project for this).</li> <li>10. How to do the calculations for the measurements specified</li> </ol>	<p>CPCCCM1015A Carry out measurements and calculations; and</p> <p>CPCCCVE1011A Undertake a basic construction project</p>	
5	<p><b>From the specifications provided by the Principal students will:</b></p> <ol style="list-style-type: none"> <li>1. Draw a plan of the playground using Australian Standards on drawing paper</li> <li>2. Items to be show on drawing include:             <ol style="list-style-type: none"> <li>a. Legend</li> <li>b. Environmental requirements</li> <li>c. Title panel</li> <li>d. Amendment number</li> </ol> </li> </ol>	<p>CPCCCM2001A Read and interpret plans and specifications;</p>	<p>Draw up a plan as specified for two different projects or sub projects.</p>





Week No	Tasks and learning activities	Unit of Competency	Tasks to complete
	<ul style="list-style-type: none"> <li>e. Constructions symbols and abbreviations as required</li> <li>f. Orientation of the site plan</li> <li>g. Contours and datum</li> <li>h. Dimensions</li> <li>i. Construction types</li> <li>j. Job specifications eg heights, volumes, areas, perimeter, circumference, length, dimensions, scale, golden triangle calculation</li> <li>k. Finishes, tolerances and standards of work required</li> <li>l. Materials required and amount (record calculations)</li> </ul> <p>1. Complete a construction project that has several components and identify for two different projects the following from the plans they have drawn up:</p> <ul style="list-style-type: none"> <li>a. Amendment status confirmation</li> <li>b. Orientation of plans to ground</li> <li>c. 6 key features of both the plan and the site</li> <li>d. 6 items of information from the title block of the plans</li> <li>e. 6 construction dimensions, levels and locations from the project</li> <li>f. 6 ancillary works dimensions, levels and locations from the project plans</li> </ul>		



Week No	Tasks and learning activities	Unit of Competency	Tasks to complete
	<p>m. Identify dimensions, material requirements and processes to be followed for a minimum of 2 formal specifications</p>		
6	<p><b>Using the Laser Level</b>            Deliver information about:</p> <ol style="list-style-type: none"> <li>1. Safety requirements using basic levelling procedures</li> <li>2. Description and how to use Laser Level including tolerance checks</li> <li>3. How to transfer shot and heights to required location and marked and recorded on job specifications/plans using:               <ol style="list-style-type: none"> <li>a. A spirit level and straight edge</li> <li>b. Levelling with water technique</li> <li>c. Laser Level</li> <li>d. Optical level</li> </ol> </li> <li>4. How to clean, maintain and store Laser Level</li> <li>5. Setting up signage and barricade for safety</li> <li>6. Apply measurements and make calculations for various situations</li> <li>7. Different levelling device types, characteristics, technical capabilities and limitations</li> <li>8. Process for setting out</li> <li>9. Process for interpreting engineering drawings and sketches</li> <li>10. Plumb line and level</li> </ol>	<p>CPCCCM2006B            Apply basic levelling procedures; and            CPCCCM1015A            Carry out measurements and calculations; and</p>	<ol style="list-style-type: none"> <li>1. Students must confirm accuracy of readings in two locations</li> <li>2. Students must conduct a two-peg test with an automatic level and record results of each</li> <li>3. Continue with the construction project</li> <li>4. Complete any unfinished theory questions for homework as directed by the teacher</li> </ol>



Week No	Tasks and learning activities	Unit of Competency	Tasks to complete
4-6	<p><b>Handling construction materials</b></p> <p>Various materials will arrive on site for the construction project and students are required to complete the following tasks. Ensure that the teacher has delivered how to manually handle these materials safely, how to stretch to ensure the students don't tear any muscles or sustain any injuries.</p> <p>All students must assist in:</p> <ul style="list-style-type: none"> <li>• Manually handling, sorting, stacking and storing construction materials to a specified location applying manual handling techniques they have learned.</li> <li>• Sort construction materials and components against physical and water damage and store clear of access ways, for ease of identification, retrieval and distribution.</li> <li>• Separate hazardous materials</li> <li>• Use dust suppression procedures to minimise health risk</li> <li>• Check tools and equipment, maintain and store</li> <li>• Clean work area and recycle or dispose of unwanted materials.</li> </ul> <p>Discuss with students, standard material sizes, how to store materials, how to remove waste in environmentally friendly way, types, characteristics, uses and limitations of tools and equipment; and workplace safety requirements when handling materials.</p>	<p>CPCCCM2004A Handle construction materials;</p> <p>And</p> <p>CPCCVE1011A Undertake a basic construction project</p>	<p>Students to complete JSA for unloading materials; handling materials; and equipment in the project.</p> <p>Students to unload, stack, sort materials and move to store as required under direction of supervisor.</p> <p>Students to complete JSA/Hazard identification each week to discuss at the tool box meeting each week.</p> <p>Continue with the construction project</p> <p>Complete any unfinished theory questions for homework as directed by the teacher</p>
5-20	<p><b>Construction Tools and Equipment</b></p> <p>1. Discuss with students all plant and equipment they will be using and provide SOP's for each piece of equipment.</p>	<p>CPCCCM2005B Use construction tools and equipment;</p>	<p>Continue with the construction project</p>



Week No	Tasks and learning activities	Unit of Competency	Tasks to complete
	<p>Put these around the equipment so students can easily read these prior to use.</p> <ol style="list-style-type: none"><li>2. Go through the function, operation and limitations of each of the hand tools and power and pneumatic tools as well as safety precautions.</li><li>3. Show students how to sharpen and maintain tools and equipment and storage of these</li><li>4. Show students how to conduct pre-operational check on each piece of equipment so they can do this each lesson. Check lubricants, hydraulic fluid and water.</li><li>5. Clear work area and dispose of unwanted materials as required and in accordance with environmental legislation.</li><li>6. Show students how to report faults and tag out equipment.</li><li>7. Students must be able to safely use and maintain the following tools for a given task:<ol style="list-style-type: none"><li>a. Rule</li><li>b. Tape</li><li>c. Square</li><li>d. Hammer</li><li>e. Handsaw</li><li>f. Hand plane</li><li>g. Chisel</li><li>h. Shovel</li><li>i. Wheelbarrow</li><li>j. Sledge hammer</li><li>k. Pick</li></ol></li></ol>	<p>and CPCCV1011A Undertake a basic construction project</p>	<p>Complete any unfinished theory questions for homework as directed by the teacher</p>



Week No	Tasks and learning activities	Unit of Competency	Tasks to complete
	l. Mattock m. Crow bar n. Pinch bar  Students must be able to identify power and pneumatic tools including electrical and compressed air safety for a given task. Go through construction techniques with students for each component of the project		
12	<b>Conduct workplace communication</b> 1. Students are required to participate in a toolbox meeting each day. The first one will be conducted by the teacher as a role model and then each student must conduct at least one meeting. 2. Discuss the process of these meetings and how they should be run. Identify the goals or outcomes of each meeting and record these in their notebooks. 3. Discuss the communication process (refer to learning guide) 4. Conduct a communication activity where students cannot ask questions and they have to build something (e.g. the lego house) and then they can ask questions (same lego house) and see the difference. 5. Using two way radios effectively 6. Discuss how to work effectively with team members and communicate with them	CPCCCM1014A Conduct workplace communication	Communication activity – construct a lego house with instructions and talk and without instructions and being able to talk to each other– what is the difference?  Complete any unfinished theory questions for homework as directed by the teacher  Continue with the construction project
13	<b>Sustainability in construction</b> Discuss with students the following items: <b>Part A: The construction industry</b> a. Industry structure	CPCCCM1012A Work effectively and sustainably in the construction industry	Industry sectors: <a href="http://www.constructmycareer.com.au/career-planning/Industry-sectors">http://www.constructmycareer.com.au/career-planning/Industry-sectors</a> <a href="http://www.cpsisc.com.au/">http://www.cpsisc.com.au/</a>



Week No	Tasks and learning activities	Unit of Competency	Tasks to complete
	<ul style="list-style-type: none"> <li>b. Occupations in construction</li> <li>c. Job roles and work conditions</li> <li>d. National economic importance of construction industry</li> <li>e. Employment opportunities</li> <li>f. Trends in technology, work processes and environmental issues which may impact on construction industry and how this affects student's employment options</li> </ul> <p><b>Part B: Conditions of employment and careers</b></p> <ul style="list-style-type: none"> <li>a. Research Fairwork Australia Website and show construction employment conditions</li> <li>b. My career website – research responsibilities and duties of various jobs in construction</li> <li>c. Students are to identify their own development needs with the Teacher or the careers advisor at school. They can fill in the career logbook as evidence</li> </ul> <p><b>Part C: Environmental and sustainability requirements</b></p> <ul style="list-style-type: none"> <li>a. From the project the students are working on discuss how they can improve resource efficiency and whether there are any environmental hazards relating to the use of resources.</li> <li>b. Discuss with the students how they can improve environmental practices and resource efficiencies.</li> </ul>		<p>Show pathways chart to students; and show link below and explore  <a href="http://www.aatinfo.com.au/Career-Resources/Job-Pathway-Charts-Link/Job-Pathways-Charts-PDF">http://www.aatinfo.com.au/Career-Resources/Job-Pathway-Charts-Link/Job-Pathways-Charts-PDF</a></p> <p>Show video on careers  <a href="http://www.aatinfo.com.au/Career-Resources/Occupational-Videos?ind=13301">http://www.aatinfo.com.au/Career-Resources/Occupational-Videos?ind=13301</a></p> <p>Career information  <a href="http://www.aatinfo.com.au/Career-Resources/Industry-Career-Information---Quizzes">http://www.aatinfo.com.au/Career-Resources/Industry-Career-Information---Quizzes</a></p> <p>Show video on apprentice carpenter  <a href="https://www.youtube.com/watch?v=GMJQS90AJhQ&amp;feature=youtu.be">https://www.youtube.com/watch?v=GMJQS90AJhQ&amp;feature=youtu.be</a></p> <p>Career Plan  <a href="http://www.profilehost.com.au/CMC/?cl=CMC:18">http://www.profilehost.com.au/CMC/?cl=CMC:18</a></p> <p>Waste Management: Watch the video  <a href="https://www.youtube.com/watch?v=myKo2GhstbA">https://www.youtube.com/watch?v=myKo2GhstbA</a></p> <p>Other videos  <a href="http://www.constructmycareer.com.au/videos">http://www.constructmycareer.com.au/videos</a></p> <p>Sustainability  <a href="http://www.sustainabilitymatters.net.au/content/sustainability/news/sustainability-principles-for-building-construction-sector-established-1379337569">http://www.sustainabilitymatters.net.au/content/sustainability/news/sustainability-principles-for-building-construction-sector-established-1379337569</a>  <a href="http://www.build.com.au/sustainability-construction-industries">http://www.build.com.au/sustainability-construction-industries</a></p> <p>Complete any unfinished theory questions for homework as directed by the teacher</p>



Week No	Tasks and learning activities	Unit of Competency	Tasks to complete
	c. Discuss environmental regulations as they relate to construction industry and whether the students are meeting these.		
2-19	Continue with practical project; Tool box meetings by students	CPCCCM2005B Use construction tools and equipment; and CPCCVE1011A Undertake a basic construction project	Continue with construction project as directed by the teacher. Students to submit all theory questions for each unit on a weekly basis as directed by the teacher
20	Submit all final assessment work and evidence as specified in each activity sheet one week prior to end of term. Evaluation of project Opening of project to community		