



Stage 6 Syllabus

CONSTRUCTION

Curriculum Framework

Part B

Units of Competency and HSC Requirements

for implementation from 2010

Construction (120 indicative hours)

Construction (240 indicative hours)

2009

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Published by Board of Studies NSW

GPO Box 5300
Sydney 2001
Australia

Tel: (02) 9367 8111

Fax: (02) 9367 8484

Internet: www.boardofstudies.nsw.edu.au

September 2009

2009528

ISBN 978 174147 9683

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The Construction Curriculum Framework

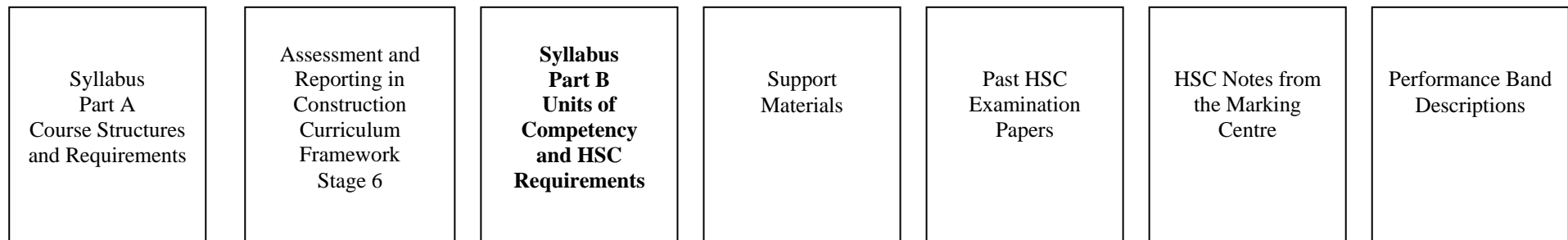
The Construction Curriculum Framework has been developed to provide students with the opportunity to gain credit towards the NSW Higher School Certificate and credit towards national vocational qualifications in the Construction industry under the Australian Qualifications Framework. The Framework is based on the national *Construction, Plumbing and Services Integrated Framework Training Package (CPC08)*.

This industry curriculum framework incorporates all Higher School Certificate Construction VET courses including:

- courses delivered by schools
- courses delivered by TAFE colleges
- courses delivered by other Registered Training Organisations on behalf of schools or TAFE colleges.

This document, Part B of the *Construction Curriculum Framework Stage 6 Syllabus*, contains the text of the units of competency from the *Construction, Plumbing and Services Integrated Framework Training Package (CPC08)*. Each examinable unit of competency is accompanied by HSC requirements and advice. The HSC requirements and advice column indicates the depth of study required for the purposes of the HSC. The terms, concepts and content contained in that column must be included in programming and delivery for the HSC.

Construction Curriculum Framework Stage 6 Syllabus Documentation



Construction Curriculum Framework – units of competency contained in Part B

This document contains the following units of competency together with HSC requirements and advice for each examinable unit. The HSC requirements and advice column indicates the depth of study required for the purposes of the HSC. The terms, concepts and content contained in that column must be included in programming and delivery for the HSC.

Unit code	Unit title	HSC indicative hours of credit	Page numbers
CPCCCM1002A	Work effectively and sustainably in the construction industry	25	9–27
CPCCCM1003A	Plan and organise work	10	28–34
CPCCCM1004A	Conduct workplace communication	10	35–46
CPCCCM1005A	Carry out measurements and calculations	20	47–53
CPCCCM2001A	Read and interpret plans and specifications	20	54–62
CPCCCM2005A	Use construction tools and equipment	20	63–75
CPCCOHS1001A	Work safely in the construction industry	10	76–88
CPCCOHS2001A	Apply OHS requirements, policies and procedures in the construction industry	15	89–107

All other units of competency from the Construction Curriculum Framework are available from the *Construction, Plumbing and Services Integrated Framework Training Package (CPC08)* at www.ntis.gov.au.

Examinable outcomes and content

The HSC examination in Construction is based on a set of examinable units of competency from the Construction (240 indicative hours) course or the Construction School-based apprenticeship (240 indicative hours) course and the associated employability skills for Certificate II in Construction (refer to Section 15).

The HSC examination is based on the following components of each examinable unit of competency:

- elements of competency
- performance criteria
- range statement*
- required skills and knowledge
- evidence guide, including:
 - overview of assessment
 - critical aspects for assessment and evidence required to demonstrate competency in this unit
 - context of and specific resources for assessment
 - method of assessment
- minimum prescribed learning contained in HSC requirements and advice, described as:
 - key terms and concepts, and
 - learning experiences that must be addressed for the HSC.

* The range statement frequently uses the term 'may include'. This has been clarified in the HSC Requirements and Advice column to specify the learning experiences that must be included for the examinable units of competency. Only the learning that is compulsory according to the Training Package and/or HSC Requirements and Advice can be examined.

The following **Key to Units** explains the purpose of each part of the layout of the units.

Training Package	Construction, Plumbing and Services Integrated Framework (CPC08)			HSC Requirements and Advice
Unit title	Read and interpret plans and specifications			
Unit code	Competency field	Unit sector	HSC Indicative Hours	
CPCCCM2001A	Common	Construction	20	
Unit descriptor	This unit of competency identifies the features and specifications relevant to construction operations. It includes the identification of commonly used symbols and specifications and the recognition of commonly used symbols and specifications relevant to construction operations. It includes the identification of commonly used symbols and specifications and the recognition of commonly used symbols and specifications relevant to construction operations.			
Prerequisite units	Nil			
Co-requisite units	Nil			
Application of the unit	This unit of competency supports achievement of basic reading and interpretation of plans and specifications commonly used in the construction industry.			
Employability skills	This unit contains employability skills.			
Evidence Guide	The evidence guide provides information about the unit of competency with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines.			
Overview of assessment	Critical aspects for assessment and evidence required to demonstrate competency in this unit	Context of and specific resources for assessment	Method of assessment	
	<p>Illustrates competency in the unit to provide evidence of the ability to interpret and apply standards and specifications, including safety plan, state and territory legislation applicable to work operations</p> <ul style="list-style-type: none"> comply with organisational procedures, including quality 	This competency is to be assessed using	<p>Assessment methods <u>must</u>:</p> <ul style="list-style-type: none"> the endorsed Assessment Guidelines for the Construction, Plumbing and Services Integrated Framework range of assessment methods including direct observation of tasks in related work conditions, with confirmation of the ability to identify and correctly interpret underpinning knowledge 	

Indicates the Training Package to which the unit of competency belongs.

Hours recognised for HSC credit.

Groupings of units of competency to assist in the organisation of the units and help users select relevant units.

The unit descriptor broadly communicates the content of the unit of competency and the skill area it addresses.

Any unit(s) of competency that underpins others are listed as prerequisites. They must be achieved prior to undertaking the unit.

The application of the unit of competency describes its scope, purpose and operation in different contexts.

Employability Skills are essential features of each of the qualifications available in the Framework and therefore consideration must be given to the ways in which they can be addressed when designing learning activities and assessment instruments.

The evidence guide is critical in assessment as it provides information to the RTO and assessor about how the unit of competency may be demonstrated. Guidelines include critical aspects for assessment and evidence required, context of and resources for assessment, suitable ways of assessing and resource requirements.

Required Skills and Knowledge This section describes the skills and knowledge required for this unit.		HSC Requirements and Advice
Required skills Required skills for this unit are: <ul style="list-style-type: none"> • communication skills to: <ul style="list-style-type: none"> – enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand – read and interpret: <ul style="list-style-type: none"> ▪ documentation from a variety of sources ▪ drawings and specifications • use language and concepts appropriately • use and interpret non-verbal communication • identifying and accurately representing faults in tools, equipment or machinery • numeracy skills to apply measurements including heights, areas, volumes and weights • organisational skills, including time management • teamwork skills to work with people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities • technological skills to: <ul style="list-style-type: none"> – use a range of mobile technology, such as two-way radio and mobile phones – voice and hand signals to access and understand site-specific instructions. 	Required knowledge Required knowledge for this unit is: <ul style="list-style-type: none"> • basic calculations of heights, areas, volumes and grades • commonly used construction symbols and abbreviations • construction terminology • drawing conventions • features of plans and elevations, including direction, scale, key lines, contours, symbols and abbreviations • work method statements • specifications • plan preparation and interpretation • requirements • the orientation of a plan. 	HSC Requirements and Advice Key Terms and Concepts <ul style="list-style-type: none"> • amendments • dimensions • drawing conventions • environmental requirements • orientation • symbols and abbreviations • tolerances.

This section describes the essential skills and knowledge and their level required for this unit.
Knowledge identifies what a person needs to know to perform the work in an informed and effective manner.
Skills describe the application of knowledge to situations where understanding is converted into a workplace outcome.

Key terms and concepts to be addressed when undertaking this unit of competency for the purposes of the HSC.

Indicates the industry curriculum framework to which the unit of competency belongs.

Date of release for the HSC.

Element	Performance Criteria	Range Statement	HSC Requirements and Advice
<p>1 Identify types of drawings and their functions.</p>	<p>1.1 Main types of <i>plans and drawings</i> used in the construction sector of the industry are identified.</p>	<p>The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. <i>Bold italicised</i> wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p> <p><i>Plans and drawings include:</i></p> <ul style="list-style-type: none"> • construction plans 	<p>Learning experiences for the HSC must address:</p> <p>An awareness of the use of a range of technical drawings/plans.</p> <p>An understanding of the purpose of project documentation.</p>
	<p>1.2 <i>Key features</i> and functions of each type of drawing are identified.</p>	<p><i>Key features</i> of plans and specifications include:</p> <ul style="list-style-type: none"> characteristics compatibility construction location pattern dimension quantities sizes type of product or service. 	<p>Learning experiences for the HSC must address:</p> <p>The function and key features of a range of drawings including:</p> <ul style="list-style-type: none"> • orientation • position of structures and ancillary works • boundary dimensions • setback from boundaries • contour lines • construction plans <ul style="list-style-type: none"> - overall dimensions - position of doors and windows

Elements of competency are the basic building blocks of the unit of competency. They describe, in terms of outcome, the significant functions and tasks that make up the competency.

The range statement provides a context for the unit of competency, describing: essential operating conditions that may be present with training and assessment, depending on the work situation; needs of the candidate; accessibility of the item; and local industry and regional contexts.

The performance criteria indicate the level of performance that is required for each element. These are used as the tools for assessment. Critical terms or phrases may be written in *bold italics* and then defined in the range statement.

Indicates the depth of study required for purposes of the HSC for the corresponding performance criteria.