

**Modification history**

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 6.0.

FWPTMM4XXX	Calculate production costs
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to estimate resource requirements for production of a range of timber products. It includes calculating overarching production costs and determining general supply costs.</p> <p>The unit does not cover the preparation of individual quotations for customers.</p> <p>Work is completed in a forest products factory setting.</p> <p>The unit applies to timber manufacturing and production supervisors who determine production and supply costs for the provision of products, including all overheads, in a forest and wood products factory setting.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
<b>Prerequisite Unit</b>	Nil
<b>Unit Sector</b>	Timber Manufacturing Products (TMM)

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Gather and analyse information	1.1 Obtain details of the product and competitors' products 1.2 Obtain and analyse details of proposed production operation 1.3 Access information on labour unit cost projections 1.4 Source and analyse details of logistic support contracts and supply agreements 1.5 Access details of proposed warehousing, physical distribution systems and related cost factors 1.6 Identify all production cost factors for establishing supply cost
2. Estimate materials and labour	2.1 Estimate and record types and quantities of material required for production 2.2 Estimate and record lead times and time requirements for production activities 2.3 Estimate and record labour requirements for direct production and handling operations
3. Calculate and document production cost	3.1 Determine production components contributing to overhead costs 3.2 Determine type and percentage of overhead costs to be attributed to production in line with commercial and organisational procedures 3.3 Calculate material, labour and overhead costs to determine total production costs 3.4 Apply mark-up in accordance with organisational procedures, and determine supply cost in conjunction with marketing and sales personnel 3.5 Document details of calculations and supply cost in accordance with organisational formats
4. Check and document details of production and supply costs.	4.1 Check costs and calculations against production requirements 4.2 Report calculation processes and organise checking by relevant personnel for final authorisation 4.3 Complete accurate records of production and supply costs in accordance with organisational procedures

<b>Foundation Skills</b>	
<i>This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.</i>	
<b>Skill</b>	<b>Description</b>
Reading	<ul style="list-style-type: none"> <li>Identify implicit and explicit production information for a variety of organisational documentation</li> <li>Extract and utilise vital information contributing to production costs</li> <li>Analyse validity of competitor product against organisations information data</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Integrate compiled production costs into a clear financial document</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Use financial terminology and production language when seeking production information</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Use mathematical processes such as ratios, rates, percentages to calculate quantities and overall costs</li> </ul>

<b>Unit Mapping Information</b>			
<b>Code and title current version</b>	<b>Code and title previous version</b>	<b>Comments</b>	<b>Equivalence status</b>
FWPTMM4XXX Calculate production costs	FWPTMM4202 Diagnose and calculate production costs	Re-titled Minor Application – grammar changes Performance Criteria – added electronically save Foundation Skills – maintained and updated Reading, Writing, Oral Communication and Numeracy and deleted Planning and Organising, Problem Solving and Teamwork Assessment Requirements – updated and reformatted	Equivalent unit

<b>Links</b>
Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47</a>

TITLE	Assessment requirements for FWPTMM4XXX Calculate production costs
<b>Performance Evidence</b>	
<p>An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has calculated production costs for three product ranges as specified below:</p> <ul style="list-style-type: none"> <li>• two products from the list below: <ul style="list-style-type: none"> <li>• pallets</li> <li>• crates</li> <li>• trellises</li> <li>• stairs</li> <li>• doors</li> <li>• windows</li> <li>• frames</li> <li>• beams</li> </ul> </li> <li>• one of the following: <ul style="list-style-type: none"> <li>• roof truss</li> <li>• floor truss</li> <li>• wall frame.</li> </ul> </li> </ul>	
<b>Knowledge Evidence</b>	
<p>An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:</p> <ul style="list-style-type: none"> <li>• competitors' current products and services and price structure</li> <li>• sources of negotiated cost of supply, contractual arrangements and preferred supplier arrangements</li> <li>• sources of organisational costs for: <ul style="list-style-type: none"> <li>• materials specific to production operations</li> <li>• labour unit costs specific to production operations</li> <li>• methods of construction and production</li> <li>• complying with environmental protection practices</li> <li>• warehousing and distribution</li> </ul> </li> <li>• business overheads and how overheads are applied to individual production operations</li> <li>• desired profit margins and appropriate commercial mark-ups to suit market acceptance</li> <li>• organisational procedures for documenting calculations, communicating costs to relevant personnel and maintaining records</li> <li>• industry regulations, standards and codes of practice</li> <li>• digital technology devices and software to create and save costing documentation.</li> </ul>	
<b>Assessment Conditions</b>	
<p>Assessment of the skills in this unit of competency must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions: <ul style="list-style-type: none"> <li>• skills must be demonstrated in the workplace or an environment that accurately represents workplace conditions</li> </ul> </li> <li>• resources, equipment and materials: <ul style="list-style-type: none"> <li>• documentation and records containing material and product costing and labour costs</li> <li>• digital equipment and software to produce and save costing documentation</li> </ul> </li> <li>• specifications: <ul style="list-style-type: none"> <li>• industry regulations, standards and codes of practice</li> </ul> </li> <li>• relationships: <ul style="list-style-type: none"> <li>• person to discuss marketing and sales.</li> </ul> </li> </ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	

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