



Australian Government

Department of Education, Employment and Workplace Relations

CUESET10B Construct mechanical sets

Revision Number: 1

CUESET10B Construct mechanical sets

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the skills and knowledge required to construct mechanical and flown sets for any type of production/event. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.
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Application of the Unit

Application of the unit	People assisting with the construction of sets in the screen, media and entertainment industries apply the skills and knowledge outlined in this unit. In this role they construct mechanical set items, that is, any set element that requires the use of a mechanical device for operation.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Assess requirements for mechanical sets	1.1. Liaise with relevant colleagues to confirm requirements for mechanical sets 1.2. Correctly interpret production schedule, specifications, lists and drawings when available 1.3. Assess information to determine construction and safety issues associated with mechanical sets, including safety requirements
2. Select equipment and materials for mechanical sets	2.1. Select appropriate equipment and materials for mechanical set construction based on the way in which the set piece is to be used and the advantages and disadvantages of different options 2.2. Identify relevant budgetary or other constraints when making construction decisions 2.3. Calculate correct quantities of materials avoiding wastage where possible
3. Construct mechanical sets	3.1. Use techniques, tools and materials correctly and safely to create mechanical set pieces 3.2. Check items produced in terms of durability, quality of finish and suitability for production requirements 3.3. Check and test operation of completed set pieces to ensure safety in accordance with relevant organisational and legislative standards 3.4. Identify the need for adjustments and action accordingly

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- literacy skills sufficient to interpret production documentation
- numeracy skills sufficient to calculate measurements and quantities and to interpret construction plans

Required knowledge

- typical ways in which mechanical sets are used to meet varying production needs, including the ways in which devices can achieve different effects on stage
- properties and applications of devices used in mechanical sets, including an understanding of cables, levers, fulcrums and issues associated with electrically-controlled sets
- safety issues associated with mechanical sets and with the tools, equipment and materials used for construction

Evidence Guide

EVIDENCE GUIDE	
The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The following evidence is critical to the judgement of competence in this unit: • safe and correct use of techniques to integrate the use of mechanical devices into set construction • knowledge of specific mechanical devices used within set construction, their uses and associated safety issues.
Context of and specific resources for assessment	The assessment context must provide for: • practical demonstration of skills through the construction of more than one mechanical set • use of industry-current technology and materials for the construction process.
Method of assessment	Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include: • direct observation of the candidate using equipment, tools and materials to construct mechanical sets • evaluation of mechanical sets constructed by the candidate in relation to quality of finish and safe operation • case studies to assess ability to adapt construction methods for different production requirements • oral or written questioning to assess knowledge of safety issues, materials, techniques and equipment • review of portfolios of evidence or third party workplace reports of on-the-job performance by the candidate.
Guidance information for assessment	Assessment of this unit requires access to: • materials, equipment and tools required to construct a range of set elements • venue/location in which sets can be constructed • set specifications and drawings.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised 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.

<i>Relevant colleagues</i> may include:	• designers • director • director of photography • floor manager • performers • producer • production designer • technical director • other set construction personnel • other technical staff
<i>Mechanical sets</i> may include:	• lift traps • revolves • stage trucks • travelator • treadmill
<i>Construction and safety issues</i> for mechanical sets may relate to:	• availability of power • need for specialised materials • specific safety requirements for flown scenery • stage or venue capacity, e.g. level of stage mechanisation available
<i>Equipment and materials</i> specific to mechanical set construction may include:	• chains • cradles • motors • pulleys • weights • winches • wiring/cabling

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Visual communication - sets
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Co-requisite units

Co-requisite units	It is strongly recommended that this unit be assessed with or after other set construction units such as:	
	CUESET05C	Apply set construction techniques
	CUESET09B	Construct soft scenery
	CUESET302A	Make sets