



Australian Government

Department of Education, Employment and Workplace Relations

CUELGT07C Record and operate lighting using advanced techniques

Revision Number: 1

CUELGT07C Record and operate lighting using advanced techniques

Modification History

Not applicable.

Unit Descriptor

<p>Unit descriptor</p>	<p>This unit describes the skills and knowledge required to connect lighting systems to advanced fixtures, and program the console accordingly. It builds on the units CUFLGT302A Record and operate standard lighting cues and CUFLGT402A Set up, record and operate lighting cues and effects.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.</p>
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Application of the Unit

<p>Application of the unit</p>	<p>Experienced lighting technicians or operators in the screen, media and entertainment industries apply the skills and knowledge outlined in this unit.</p> <p>At this level, they are expected to be reasonably creative and innovative in experimenting with the possibilities presented by advanced features of lighting systems. They must be able to exploit the full capabilities of contemporary lighting systems in ways that are consistent with the aesthetics envisaged for productions.</p> <p>Even though people at this level work autonomously, they are members of a production team and need to work collaboratively with lighting designers and directors to achieve creative outcomes. They are often responsible for supervising junior lighting technicians.</p>
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	<p>This unit must be assessed with or after the following units which cover skills and knowledge essential to this unit:</p> <ul style="list-style-type: none"> • CUFLGT302A Record and operate standard lighting cues • CUFLGT402A Set up, record and operate lighting cues and effects.

Employability Skills Information

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

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>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.</p>
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Determine production requirements	1.1. Evaluate production documentation to establish creative and technical parameters 1.2. Liaise with <i>relevant colleagues</i> to determine scope of lighting requirement 1.3. Assess the capabilities of equipment to deliver required effects and liaise accordingly
2. Connect and format advanced fixtures to control system	2.1. Check console fixture library to ensure correct inventory exists and is operational 2.2. Connect console to <i>advanced fixtures</i> through appropriate control protocol and check to ensure designer's control requirements can be achieved 2.3. Use experimentation to test the capabilities of advanced fixtures 2.4. Set up softpatch required for production to ensure advanced fixtures are connected to appropriate control surfaces 2.5. Format presets for advanced fixtures in accordance with requirements of designer 2.6. Accurately maintain electronic and paper plots in accordance with changes to original setup
3. Program console to receive pre-recorded material from an external source	3.1. Assess protocol, program type and connectivity of external source <i>material</i> for compatibility with main console 3.2. Complete appropriate back-ups of external source material prior to transfer to main console 3.3. Make appropriate assessment of the need for any changes to source material to address venue system and correctly determine whether changes can be made on external device of main console 3.4. Correctly set up main console and external device and use appropriate techniques to transfer material 3.5. Make appropriate checks to ensure successful transfer and take action accordingly

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- communication and negotiation skills particularly in relation to liaisons with designers and directors
- logical programming and sequencing for automated lighting
- literacy skills sufficient to interpret production documentation
- numeracy skills sufficient to complete simple mathematical calculations and memorise numbers for channel selection

Required knowledge

- the expressive qualities of lighting as it relates to the nature of the work, the style of the production and the qualities of the performance
- design interpretation and issues associated with maintaining design integrity in the context of lighting
- visualising the effects of lighting on the stage
- techniques for translating concepts into creative and workable solutions
- lighting control concepts used and advanced fixtures used in a wide range of lighting systems
- a wide range of lanterns and accessories, their uses and operations (optical and mechanical)
- the elements of lighting design and their impact on the lighting technician
- problem solving techniques
- colour recognition and the various colour media used in lighting
- control protocols for a range of automated lighting fixtures
- documentation and back-up systems used in conjunction with lighting control
- relevant organisational and legislative occupational health and safety requirements, including working with electricity
- basic electronics (just 'electronics' is too broad to be in this unit)

Evidence Guide

EVIDENCE GUIDE	
<p>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.</p>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>The following evidence is critical to the judgement of competence in this unit:</p> <ul style="list-style-type: none"> • ability to accurately record and reproduce lighting cues to instruction in a given timeframe • support for the lighting design process through creative use of the advanced fixtures by skilful and efficient operation of the console.
Context of and specific resources for assessment	<p>The assessment context must provide for:</p> <ul style="list-style-type: none"> • practical demonstration of skills to produce lighting effects for three different productions, which require experimentation with different effects • involvement of and interaction with a production and design team to reflect the collaborative nature of the process.
Method of assessment	<p>Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:</p> <ul style="list-style-type: none"> • evaluation of the lighting effects produced by the candidate • evaluation of reports produced by the candidate detailing the experimentation process to produce required effects • evaluation of a presentation by the candidate detailing processes used to produce various effects • oral or written questioning to assess technical knowledge • review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate. <p>Assessment methods should closely reflect workplace demands and the needs of particular groups (e.g. people with disabilities, and people who may have literacy or numeracy difficulties such as speakers of languages other</p>

EVIDENCE GUIDE	
	than English, remote communities and those with interrupted schooling).
Guidance information for assessment	Assessment of this unit requires access to: <ul style="list-style-type: none">• a range of lighting equipment as identified in the Range Statement, including automated lighting• a production venue.

Range Statement

RANGE STATEMENT	
<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. 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.</p>	
<p><i>Relevant colleagues</i> may include:</p>	<ul style="list-style-type: none"> • designer • director • programmers for advanced fixtures • stage manager • other specialist staff
<p><i>Advanced fixtures</i> must include:</p>	<ul style="list-style-type: none"> • automated lighting fixtures both motorised yoke and moving mirror • colour scrollers
<p><i>Advanced fixtures</i> may include:</p>	<ul style="list-style-type: none"> • digitally controlled projection equipment • LED colour change equipment • robotic and automated stage equipment • WYSIWYG and computer programming rendering programs
<p><i>Material</i> to be read and interpreted may include:</p>	<ul style="list-style-type: none"> • colour lists • cue sheets • equipment lists • focus notes • instructions for advanced fixtures • instructions for computerised lighting boards • lighting plan • manuals • patch sheets • running sheets • script
<p>All work is carried out in accordance with:</p>	<ul style="list-style-type: none"> • lighting plan and other documentation as appropriate • organisation standards • organisational and legislative occupational health and safety requirements • other resource constraints • production and/or venue requirements • production schedule • relevant Australian standards, including

RANGE STATEMENT	
	electrical standards in accordance with State/Territory regulations <ul style="list-style-type: none"> • technical constraints

Unit Sector(s)

Unit sector	
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Competency field

Competency field	Media and entertainment production - lighting
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Co-requisite units

Co-requisite units		