22221VIC

Diploma of Product Design

1 January 2013 – 31 December 2017

Version 1

This course has been accredited under *Parts 4.4 and 4.6 of the Education and Training Reform Act 2006*.

Accredited for the period: 1 January 2013 to 31 December 2017

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Section A: General Information

1. Copyright owner of the course	Copyright of this document is held by the Department of Education and Early Childhood Development, Victoria © State of Victoria. Day to day contact : Curriculum Maintenance Manager - Arts/Entertainment and Recreation CMM ID. 5131 Swinburne University PO Box 218 Hawthorn, Vic 3122 Email : *cmmhs@swin.edu.au* Telephone : 03 9214 8501 Facsimile : 03 9214 5026
2. Address	Department of Education and Early Childhood Development Higher Education and Skills Group Executive Director Pathway, Participation and Youth PO Box 266 Melbourne, Vic. 3001 Email : *vocationaltraining@edumail.vic.gov.au* Ph : (03) 9651 9999
3. Type of submission	The 22221VIC Diploma of Product Design is being submitted for re-accreditation replacing 21869VIC Diploma of Product Design.
4. Copyright acknowledgement	Copyright of this document is held by the Victorian Department of Education and Early Childhood Development. No part of the course document may be reproduced by any process except with express written permission. The following units of competency : BSBCMM401A Make a presentation BSBDES302A Explore and apply the creative design process to 2D forms BSBDES303A Explore and apply the creative design process to 3D forms BSBINN502A Build and sustain an innovative work environment BSBMKG402B Analyse consumer behaviour for specific markets

	BSBMKG413A Promote products and services BSBPMG510A Manage projects BSBSMB401A Establish legal and risk management requirements of small business BSBSMB404A Undertake small business planning BSBWOR501B Manage personal work priorities and professional development are from **BSB07 Business Services Training Package** administered by the Commonwealth of Australia © Commonwealth of Australia. The following units of competency : CUVACD301A Produce drawings to communicate ideas CUVACD302A Produce computer-aided drawings CUVACD303A Produce technical drawings CUVACD304A Make scale models CUVACD508A Refine model making skills CUVDES404A Research and apply techniques in product design CUVDIG401A Experiment with techniques to enhance digital images CUVGRD606A Develop graphic designs for packaging CUVPRP404A Develop self as artist CUVRES502A Analyse cultural history and theory are from **CUV11Visual Arts, Crafts And Design Training Package** administered by the Commonwealth of Australia © Commonwealth of Australia. The following unit of competency : CUSOHS301A Follow occupational health and safety procedures is from **CUS09 Music Training Package** administered by the Commonwealth of Australia © Commonwealth of Australia. The following unit of competency : CUEFIN01C Develop a budget is from **CUE03 Entertainment Training Package** administered by the Commonwealth of Australia © Commonwealth of Australia.

	The following unit of competency : CULEVP504A Develop exhibition concepts is from **CUL11 Library, Information and Cultural Services Training Package** administered by the Commonwealth of Australia © Commonwealth of Australia. The following units of competency : LMFDN5001B Generate and transfer complex computer aided drawings and specifications LMFFDT4004A Assess environmental impact of design LMFFDT4007A Establish the design brief LMFFDT5010A Research and recommend alternative manufacturing process are from **LMF02 Furnishing Training Package** administered by the Commonwealth of Australia © Commonwealth of Australia. The following units of competency : MEM09010C Create 3D models using computer aided design system MEM19030A Research and Design sustainable objects MEM234020A Coordinate small lot manufacture using rapid manufacture processes. are from **MEM05 Metal and Engineering Training Package** administered by the Commonwealth of Australia © Commonwealth of Australia. The following units of competency : MSS015004A Design sustainable product or process MSS405030A Optimise cost of a product or service are from **MSS 11 Sustainability Training Package** administered by the Commonwealth of Australia © Commonwealth of Australia. The following unit of competency : PMBTECH505B Choose polymer materials for an application is from **PMB07 Plastics, Rubber and Cablemaking Training Package** administered by the Commonwealth of Australia © Commonwealth of Australia.

	Training Package Units are within the public domain and are used by permission of the Commonwealth Government. The following are Victorian State Accredited units: VU21024 Design and produce a commercial product from a brief VU21025 Design and produce a range of commercial products from a brief to meet market opportunities VU21026 Design and produce a product incorporating mechanical/electrical features.
5. Licensing and franchise	Registered Training Organisations wishing to obtain a license to deliver this course (or part of) should contact: Department of Education and Early Childhood Development Higher Education and Skills Group Executive Director Pathway, Participation and Youth PO Box 266 Melbourne, Vic. 3001
6. Course accrediting body	Victorian Registration and Qualifications Authority Level 6, 35 Spring Street Melbourne VIC 3000 ph: (03) 9637 2806 fax: (03) 9651 3266 email: *vrqa@edumail.vic.gov.au*
7. AVETMISS information	*Provide AVETMISS classification codes that best describe the industry, occupation group and field of education for which the course is intended.*

ANZSCO (Australian and	232312 Industrial designer

	New Zealand Standard Classification of Occupations)	
	ASCED code (Field of Education)	1005 Graphic and Design Studies
	National course code	22221VIC
8. Period of accreditation	1 January 2013 to 31 December 2017	

Section B: Course Information

1. Nomenclature	
1.1 Name of the qualification	22221VIC Diploma of Product Design
1.2 Nominal duration of the course	1610-1767 hours
2. Vocational or educational outcomes of the course	On successful completion of this course students will be able to undertake employment as product designers with existing companies or to set up an independent practice as a product designer Product designers discuss designs with colleagues and clients, as well as working closely with engineers, model makers, sales and marketing staff and other skilled people. They use drawings, 3-D models and computer designs to express their ideas. They should understand technology, production methods and materials, and be able to meet deadlines and work within budgets.
3. Development of the course	
3.1 Industry/enterprise/ community needs	Product designers design most things we use in our day-to-day lives, from chairs and cutlery to clocks and computers, as well as specialist products like medical, electronics or telecommunications equipment. They aim to improve the way that existing products work and look and/or produce them at a lower cost. They may also be involved in designing entirely new products. The course is intended for persons wishing to enter the design field as commercial product designers. The job outlook for product designers in Australia is steady with graduates finding employment with small to large-scale enterprises. The Mid Cycle Review indicated that

approximately 30% of graduates enter the workforce as Product Designers in a self-employed or salaried employment capacity or articulate into Higher Education in the first year of graduation. The qualification also provides a grounding in skills for graduates to become Designers in Furniture, Jewellery and Architecture.

Enrolment figures from RMIT (currently the sole provider) show a steady increase.

2010	2011	2012
32	49	52

This course:

- does not duplicate, by title or coverage, the outcomes of an endorsed training package qualification
- is not a sub-set of a single training package qualification that could be recognised through one or more statements of attainment or a skill set
- does not include units of competency additional to those in a training package qualification that could be recognised through statements of attainment in addition to the qualification
- does not comprise modules that duplicate the units of competency of a training package qualification.

The course was reviewed for re-accreditation under the overview and advice of an industry steering committee comprising :

Haldun Olguner (Chair)	Product Design Manager, Norden Conversion
Leyla Acaroglu	Industrial and product designer, Eco Innovators
Kevin Lewis	Product Design trainer and assessor, RMIT University
Nicholas McColl	Industrial and product designer, Plus Create
Michael Chiijoff	Industrial and product designer, Jones Chiijoff

	In Attendance Rosetta Di Giangregorio — Programs Director Building Design, Furniture and Product, RMIT University John Dunton — Curriculum Maintenance Manager (CMM) - Human Services, Arts, Design and Entertainment, Sport and Recreation, Museum, Library and Information Services Theresa Nicolussi & Autumn Shea — CMM Administrator (Minutes) David Trembath — Course writer and accreditation advisor The committee undertook to consult with colleagues and industry stakeholders to ensure all advice was accurate and current. The committee developed a list of desirable graduate outcomes which were then matched to the existing course profile. A scan was made of current training package units to ensure best matching. Advice was also taken from teachers of the course and a skills-knowledge profile matched to units of competency was documented. Following this a draft course structure was circulated to the committee for comment and amendment and following feedback a full draft course document with full details of enterprise units was similarly circulated. The steering committee signed off on the draft course document on 13/08/2012 recommending it for accreditation for a period of five years.
3.2 Review for re-accreditation	This course (22221VIC) replaces and is equivalent to 21869VIC Diploma of Product Design. The course is a Crown Copyright course and was approved for re-development in 2012 by the (then) Skills Victoria now Higher Education and Skills Group, Department of Education and Early Childhood Development

	A transition table showing the equivalence of old course units to new course units has been drawn up and is given in Appendix 2.
4. Course outcomes	
4.1 Qualification levels	The 22221VIC Diploma of Product Design meets the Diploma Qualification type descriptor, level 5 of the AQF as outlined in the AQF July 2011. **Knowledge** Graduates of a Diploma will have technical and theoretical knowledge and concepts, with depth in some areas within a field of work and learning, such as: **Skills** Graduates of a Diploma will have: • cognitive and communication skills to identify, analyse, synthesise and act on information from a range of sources. For example, by interpreting a project brief • cognitive, technical and communication skills to analyse, plan, design and evaluate approaches to unpredictable problems and/or management requirements. For example, by designing a range of possible approaches to design problems or by determining the production feasibility of designs • specialist technical and creative skills to express ideas and perspectives. For example, by exploring and applying the creative design process to 3D forms. • communication skills to transfer knowledge and specialised skills to others and demonstrate understanding of knowledge. For example by producing drawings to communicate ideas or through discussing ideas with clients. **Application of knowledge and skills** Depending on electives chosen, graduates of the 22221VIC Diploma of Product design will demonstrate the application of knowledge and skills in a variety of employment contexts. The graduates will demonstrate application:

	• with depth in some areas of specialisation, in known or changing contexts. For example, by producing designs to meet changing market contexts • with the ability to transfer and apply creative skills in a range of situations. For example, by designing sustainable products in a changing environment. • with personal responsibility and autonomy in performing complex technical operations with responsibility for own outputs in relation to broad parameters for quantity and quality. For example, by researching and applying new techniques in design and production. • with initiative and judgement to organise the work of self and others and plan, coordinate and evaluate the work of teams within broad but generally well-defined parameters. For example, working with fellow designers and technicians to realise a design • The **Volume of Learning** of the 22221VIC Diploma of Product Design is 2 years which falls within the 1-2 years typical for a qualification at this level.
4.2 Employability skills	A full matrix of employability skills contained within this qualification is appended. See Appendix 1.
4.3 Recognition given to the course	Not applicable
4.4 Licensing/regulatory requirements	Not applicable
5. Course Rules	
5.1 Course structure	To be awarded the 22221VIC Diploma of Product Design participants must successfully complete all 18 core units and 8 elective units. For those students who do not complete the full qualification a Statement of Attainment will be issued listing any units of competency successfully completed.

Unit of competency code	Field of Education code (6-digit)	Unit of competency title	Pre-requisite	Nominal hours
Core units				
MSS015004A		Design sustainable product or process	Nil	100
CUSOHS301A		Follow occupational health and safety procedures	Nil	10
CUVRES502A		Analyse cultural history and theory	Nil	70
CUVACD301A		Produce drawings to communicate ideas	Nil	80
CUVDES404A		Research and apply techniques in product design	Nil	50
BSBSMB404A		Undertake small business planning	Nil	50
BSBMKG413A		Promote products and services	Nil	40
BSBDES303A		Explore and apply the creative design process to 3D forms	Nil	50
BSBCMM401A		Make a presentation	Nil	30
LMFDN5001B		Generate and transfer complex computer aided drawings and specifications	Nil	72
MEM09002B		Interpret technical drawing	Nil	40
MEM09009C		Create 2D drawings using computer aided design system	MEM09002B MEM16008A	80
MEM09010C		Create 3D models using computer aided design system	MEM09002B MEM09009C MEM16008A	40
MEM16008A		Interact with computing technology		20
LMFFDT4007A		Establish the design brief	Nil	36
VU21024		Design and produce a commercial product from a brief	Nil	195
VU21025		Design and produce a range of commercial products from a brief to meet market opportunities	Nil	144
VU21026		Design and produce a product incorporating mechanical/electrical features	Nil	180
			Total Core Hours	**1287**

Elective units

Choose eight (8) units from the list below. Units may also be selected from any appropriate training package or accredited course. The training package units must be at the appropriate qualification level and must be consistent with the overall intention of this qualification.

Unit of competency code	Field of Education code (6-digit)	Unit of competency title	Pre-requisite	Nominal hours
CUVDIG401A		Experiment with techniques to enhance digital images	Nil	50
BSBDES302A		Explore and apply the creative design process to 2D forms	Nil	50
BSBINN502A		Build and sustain an innovative work environment	Nil	50
BSBPMG510A		Manage projects	Nil	60
CUVACD508A		Refine model making skills	Nil	65
BSBWOR501B		Manage personal work priorities and professional development	Nil	60
CUEFIN01C		Develop a budget	Nil	30
BSBMKG402B		Analyse consumer behaviour for specific markets	Nil	60
MEM19030A		Research and design sustainable objects	Nil	40
CULEVP504A		Develop exhibition concepts	Nil	50
CUVGRD606A		Develop graphic designs for packaging	Nil	55
CUVACD302A		Produce computer-aided drawings	Nil	50
CUVACD303A		Produce technical drawings	Nil	50
CUVACD304A		Make scale models	Nil	50
MEM234020A		Coordinate small lot manufacture using rapid manufacture processes.	Nil	40
CUVPRP404A		Develop self as artist	Nil	60
PMBTECH401B		Predict polymer properties and characteristics	Nil	60
PMBTECH505B		Choose polymer materials for an application	PMBTECH401B	50
MSS405030A		Optimise cost of a product or service	Nil	60
BSBSMB401A		Establish legal and risk management requirements of small business	Nil	60
LMFFDT5010A		Research and recommend alternative manufacturing process	Nil	27
LMFFDT4004A		Assess environmental impact of design	Nil	36
		Elective hours		**323-480**
		Total nominal hours		**1610--1767**

5.2 Entry requirements	Entry into the 22221VIC Diploma of Product Design is predicated on the applicant having proficiency in the English language to Level 4 of the Australian Core Skills Framework (ACSF) and basic computer skills. Persons seeking entry to the course are expected to show an aptitude for visual design which is normally evidenced by presentation of a portfolio. A portfolio may comprise but is not limited to : • Sketches, drawings or designs • Photographs of completed work • References or third party reports of work completed in education or employment • Audio-visual presentations • Journals • Computer aided designs
6. Assessment	
6.1 Assessment strategy	Assessment of the course will be consistent with the *Standards for NVR Registered Training Organisations* SNR15 /AQTF *Essential Conditions and Standards for Continuing Registration* Standard 1.5. This standard ensures assessment strategies meet requirements of the course and have been developed in consultation with industry stakeholders. Assessment strategies must therefore ensure that: • all assessments are valid, reliable and flexible and fair • learners are informed of the context and purpose of the assessment and the assessment process • feedback is provided to learners about the outcomes of the assessment process and guidance given for future options • time allowance to complete a task is reasonable and specified to reflect the industry context in which the task takes place Assessment strategies should be designed to: • cover a range of skills and knowledge required to demonstrate achievement of the course aim • collect evidence on a number of occasions to suit a variety of contexts and situations

	• be appropriate to the knowledge, skills, methods of delivery and needs and characteristics of learners • assist assessors to interpret evidence consistently • recognise prior learning • be equitable to all groups of learners Recognition of Prior Learning will be used in determining credit. Assessment methods are included in each unit and include : • Observation • Written work • Presentations • Third party report • Progress records • Self-evaluation Any individual or combination of the suggested methods may be used. Assessment of units imported from training packages must reflect the requirements of the Assessment Guidelines for that training package.
6.2 Assessor competencies	The *Standards for NVR Registered Training Organisations* SNR15 /*AQTF Essential Conditions and Standards for Continuing Registration* – Element 1.4, states the requirements for the competence of persons assessing the course. RTOs must ensure assessments are conducted by a person who has the competencies set out in this document or its equivalent as specified by the National Skills Standards Council. If a person does not have the assessment competencies and vocational competencies described in the SNR/AQTF standards, a person who does have the assessment competencies and one or more people with the relevant vocational competencies may work together to conduct assessments.
7. Delivery	
7.1 Delivery modes	There are no restrictions on offering the program on either a full-time or part-time basis. Providers may contextualise units to suit particular learners by using material relevant to the students' experience or traditions and by

	extending the required knowledge of units. In contextualising units nothing may be subtracted from the unit. Any contextualisation of units from training packages must comply with the relevant training package guidelines.
7.2 Resources	General facilities, equipment and other resources required to deliver the ***22221VIC Diploma of Product Design*** include: • Training facilities and equipment • Access to computers and internet • Relevant texts and references • Appropriate environmental safeguards and occupational health and safety facilities and equipment. • Model making fabrication workshop to suit plastics, metal, clay, hard foam and finishing materials • Access to 3D printing and cutting technologies • CAD studio with access to colour and large format outputs • Design studio with digital presentation equipment and presentation space • Drawing studio • Access to companies with modern manufacturing technologies. • Teachers/trainers who meet the *Standards for NVR Registered Training Organisations* SNR15 /*AQTF 2010 Essential Conditions and Standards for Continuing Registration* – Element 1.4 Specific requirements for assessment are given in the unit descriptors.
8. Pathways and articulation	Entry to the 22221VIC Diploma of Product Design may be via secondary studies, transfer from vocational studies in cognate fields such as visual arts or from experience working in the design field. The course contains a number of endorsed units from training packages and successful completion of them provides credit transfer to qualifications containing them. Relevant qualifications include but are not limited to: • Certificate IV in Design • Diploma of Furniture Design and Technology • Diploma of Interior Design and Decoration

	Persons entering the 22221VIC Diploma of Product Design who have successfully completed units contained within the course will be given credit for those units. Successful completion of the qualification provides credit transfer, by individual negotiation between the graduate and the institution, to the Bachelor of Industrial Design at RMIT University and similar qualifications at Swinburne and Monash Universities.
9. Ongoing monitoring and evaluation	Curriculum Maintenance Manager (CMM) - Arts, Design and Entertainment will be responsible for monitoring and evaluation of the ***22221VIC Diploma of Product Design.*** This course will be reviewed annually. Evaluations will involve consultation with: • Past or present students • Industry representatives eg the Design Institute of Australia • Enterprise representatives including small and large scale design businesses. • Representatives of VET teaching and learning staff Feedback will be sought from the broader industry as part of the review process. Data will be gathered using student satisfaction surveys, teacher critique and industry consultation. The group will: • Review the implementation of the course • Provide advice on changing tertiary educational requirements • Monitor and evaluate course standards, delivery and assessment • Recommend minor changes to the program. All changes will be documented and any significant changes will be reported to the VRQA.

Section C: Units of Competency

Training Package Units of Competency
can be accessed from http://training.gov.au

VU21024 Design and produce a commercial product from a brief

Unit Descriptor

This unit describes the skills and knowledge required to design and produce a commercial product from a brief through the exploration and application of a range of advanced techniques and materials. It is a specialisation unit and refers to a specific art form.

This unit is informed by and goes beyond the scope of the following nationally endorsed unit/s of competency *CUVDES05A Interpret and respond to a brief* in terms of complexity of skill requirement, use of techniques and sophistication of representation.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Employability Skills

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The qualification's Employability Skills Summary in which this unit is included will assist in identifying employability skill requirements.

Application of the Unit

Product Designers create a range of ideas from which a solution may be selected to meet the needs of the consumer. Product design work may include fields such as table and kitchenware, stationary, special effects and props for film work, furniture, electronic items, switches, appliances.

The application of this unit in the workplace sees an individual designer designing and producing a commercial product from a brief and liaising and working with individuals and teams to meet the needs of the brief. The designer would use a wide range of tools, equipment and materials and the concepts developed would convey strong conceptual and theoretical development. This work would usually be carried out independently although guidance would be available if required.

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes of a unit of competency.	**Performance criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.**
1 Analyse the product design brief	1.1 Interpret the ***specifications*** of the ***brief*** correctly 1.2 Establish and clarify the user or client for the proposed product to inform decisions 1.3 Identify and clarify specifications, ***parameters or constraints*** of the brief in consultation with relevant colleagues 1.4 Establish criteria for selecting appropriate design solutions for the design problem
2 Research relevant technology and background information	2.1 Source and evaluate ***information pertinent to the brief*** 2.2 Discuss research with relevant colleagues to develop an understanding of the brief 2.3 Use research information to assist with initiating ideas
3 Develop a range of innovative solutions to design problem	3.1 Use ***idea generation techniques*** to create a number of possible design options to meet design brief requirements 3.2 Refine design options based upon criteria developed to meet the parameters of the brief 3.3 Determine a range of innovative solutions consistent with the parameters of the brief addressing commercial needs and market opportunities
4 Develop design proposal	4.1 Prepare a ***design proposal*** representing the design vision 4.2 Select approach to work which meets established criteria 4.3 Produce visual interpretations of design 4.4 Prepare a range of written and visual support materials to contribute to final presentation

5	**Plan design process**	5.1 Identify all components required to produce design solution
		5.2 Assess technical requirements associated with production using specified guidelines
		5.3 Assess specific resource requirements which arise from the use of techniques and experimental approaches
		5.4 Identify and consult with any support services required for the production of the work
		5.5 Develop and document ***design project plan*** consistent with the design solution
		5.6 ***Organise and maintain workspace*** and resource requirements in accordance with safety and other workplace requirements
		5.7 Research and evaluate costs and potential sources of supply of resources and ***other constraints*** which may impact on work
6	**Communicate with others to produce visuals**	6.1 Agree on the communication process and the frequency of communication with the client and relevant other people and groups
		6.2 Explore and discuss with client and relevant other people and groups a variety of forms for visual interpretation
		6.3 Produce visual interpretations of design
		6.3 Prepare a range of written and visual support materials to contribute to final presentation
7	**Provide visual concepts to client**	7.1 Present product design and explain concepts for work to client including rationale for any changes
		7.2 Respond to feedback and make changes as required
		7.3 ***Agree on concept*** for work which complies with the brief

8	**Realise product design**	8.1 Develop the design solution using devices, tools, techniques and materials selected from own research and experience to meet conceptual vision
		8.2 Evaluate and respond to the potential for changes of methodologies and techniques to meet the design solution
		8.3 ***Refine the design solution*** to address commercial constraints identified while developing the design
		8.4 Use safe working practices throughout the realisation of the design solution
		8.5 Prepare final presentation and documentation to accompany final design
		8.6 Develop specifications to ensure that the quality of work meets requirements

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Essential knowledge includes:

- elements and principles of design including contemporary design
- current trends in technology and design
- 3D drawing
- Packaging and branding commercial products
- design process, design analysis and evaluation and use of appropriate terminology and language
- format and terminology typically used in a brief
- properties and characteristics of production materials, equipment and other resources required to meet need
- design and manufacturing processes as related to commercially manufactured articles
- manufacturing and production techniques
- manufacturing and market forces and considerations
- ergonomics and aesthetics
- current industry practice related to commercially produced items, marketing and manufacturing of products and the role of product designers in the product development process

- model and prototype making
- computer file management and conversion
- range, uses, function, operation and structure of electrical, mechanical and energy conversion devices
- copyright, moral rights and intellectual property issues and legislation and their relevance to the design industry
- organisational and legislative health and safety procedures and environmental and sustainability issues

Essential skills include:

- literacy skills sufficient to interpret and analyse a brief and to source, evaluate and collate information pertinent to the brief
- communication skills sufficient to present design solution rationales in discussions and presentations
- technological skills using industry standard hardware and drawing and modelling software
- research skills and ability to source, analyse and synthesise information
- experimentation and assessment skills to enable developing and refining solutions to meet requirements of brief
- drawing and design skills including sketching, rendering, technical drawings and form mock ups
- model making skills
- design problem solving skills including use of solution generation techniques
- project planning skills
- presentation skills
- negotiation skills sufficient to negotiate briefs

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 in the Performance Criteria is detailed below. Add any 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.

Specifications may include**:**

- scope of work
- media
- size
- site
- location
- cost
- target group
- quantity
- timeframes

The product design ***brief*** may include **:**

- describes and specifies the work to be completed is usually prepared by a commissioning body or
- organisation, e.g. supervisor, client, community organization in discussion with a designer.
- may be written, diagrammatic, visual, verbal

Parameters or constraints may include:

- cost of production
- packaging and display of product
- outlets
- number of units
- time frames
- budgeting and financing arrangements

Information pertinent to the brief may include:

- industry standards
- design standards
- material characteristics and capabilities
- stylistic considerations
- legal, contractual, ethical and copyright considerations
- health and safety

	□ current trends in the application of materials, techniques, tools and equipment □ new technology and innovation □ environmental considerations
Idea generation techniques may include:	□ word association □ brainstorming □ form manipulation □ situational relocation
Design proposal may include:	□ rationale for action □ clear statements of intention
Design project plan may include:	□ stages and features of each product development phase □ key tasks □ milestones □ priorities □ lock off dates □ monitoring and evaluation points □ contingency plans □ skills and responsibilities of team members
Organise and maintain work space may include:	□ wet and dry areas, □ Light □ Ventilation □ bench space □ easels

Other constraints may include:	budgeting sponsorship timeframe availability of materials and tools
Agree on concept may include:	negotiation formal contract for the work development of an artist's statement discussion with client
Refine the design solution may include:	no change adjustment to utilise the extended capabilities of the technique adjustment to subject matter or theme adjustment to consideration of elements and principles of design

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment section in Section B of the accreditation submission.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	The ability to design a commercial product from a brief and which demonstrates: a command of selected advanced methodologies, techniques, tools and materials and which are consistent with the conceptual vision a sound knowledge of the design process effective communication and presentation skills project planning skills project management skills

- an understanding of and knowledge of the requirements of a brief

The essential knowledge and skills must be assessed as part of the unit.

Context of and specific resources for assessment

- Assessment of performance requirements in this unit should be undertaken in a workplace/studio or a suitably equipped studio/classroom.
- Assessment should allow for the evaluation of visual language and technical execution of the product designed and produced by the candidate
- Assessment should allow for practical demonstration of skills using required tools, equipment and materials to design and produce a product

Method of assessment

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge and skills and might include:

- Direct observation of work in progress, including exploration of and experimentation with techniques
- Written and/or oral questioning and discussion to assess knowledge and understanding and candidate's intentions and work outcome
- Third-party reports from experienced practitioners.
- Completion of journal and/or portfolio including personal reflection and feedback from relevant others.

Guidance information for assessment

Evidence should be collected over a set period of time and be sufficient so as to test ability to design and produce a commercial product from a brief.

It is recommended that assessors look to assessing this unit in conjunction with other Diploma of Product Design core and specialisation units where applicable.

VU21025 Design and produce a range of commercial products from a brief to meet market opportunities

Unit Descriptor

This unit describes the skills and knowledge required to design and produce a range of commercial products from a given brief to meet market opportunities.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Employability Skills

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The qualification's Employability Skills Summary in which this unit is included will assist in identifying employability skill requirements.

Application of the Unit

The skills and knowledge contained in this unit would be applied by a product designer working to a brief derived from market research. It involves analysis of trends and demand in association with sophisticated design skills.

This work could be carried out independently, under supervision or in association with colleagues depending on workplace practices.

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes of a unit of competency.	**Performance criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.**
1 Undertake research to establish demand and design requirements	1.1 Identify primary ***market segmentations***
	1.2 Establish basic elements of product range.
	1.3 Liaise with relevant colleagues in relation to related research activities
	1.4 Assess potential for additional related products.

2	**Interpret the design brief**	2.1 Identify key elements of the ***design brief***
		2.2 Produce check list of key requirements to enable the designer to develop criteria against which possible design solutions evaluated.
		2.3 Consider financial cost and environmental impact of design
		2.4 Research ***intellectual property, moral rights and copyright requirements*** with relation to the design brief's requirements
		2.5 Clarify with the client the designer understanding of the requirements for the product's range and refine details which may have been misinterpreted.
3	**Develop a number of innovative solutions to design brief requirements**	3.1 Create a number of possible design solutions to meet design brief requirements.
		3.2 Establish ***criteria for selecting devices, techniques, tools and materials*** required to produce a feasible design solution
		3.3 ***Refine design solutions*** based on developed criteria and ongoing experimentation and discussion with colleagues and client
4	**Develop a number of product range solutions**	4.1 Investigate different product parameters to cater for varying market segments within the same product group
		4.2 Establish parameters to select range options to meet varying market segment's requirements.
		4.3 Develop a range of products from the proposed design solution
5	**Prepare design proposal**	5.1 Prepare a ***design proposal*** representing the design vision
		5.2 Produce visual interpretations of design(s)
		5.3 Prepare a range of written and visual support materials to contribute to final presentation
6	**Plan design process**	6.1 Identify all components and technical requirements required to produce design solutions
		6.2 Assess specific resource requirements

		6.3 Identify and consult with any ancillary services required for the production of the range.
		6.4 Develop documented ***design project plan*** consistent with the design solutions
7	**Present visual concepts to client**	7.1 Present product designs and explain project plan and concepts to client
		7.2 Respond to feedback and make changes as required
		7.3 Confirm adjusted concept and project plan with client
8	**Realise product design to meet specified need**	8.1 Undertake the design solution using devices, tools, techniques and materials identified in project plan
		8.2 Maintain ongoing improvement techniques to respond to necessary changes in technical production
		8.3 Refine the design solution based on ongoing experiences with the production of work
		8.4 Use safe working practices throughout the production of the design solutions
		8.5 Prepare final designs and accompanying documentation
		8.6 Develop specifications to ensure that the quality of work meets requirements

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Essential knowledge includes:

- elements and principles of design including contemporary design
- current trends in technology and design
- 3D drawing
- design process, design analysis and evaluation
- format and terminology typically used in a brief
- properties and characteristics of production materials, equipment and other resources required to meet need
- design processes as related to commercially manufactured articles
- manufacturing and production techniques as related to production volumes
- manufacturing and market forces
- ergonomics and aesthetic fashions
- current industry practice related to commercially produced items, marketing and manufacturing of products and the role of product designers in the product development process
- model and prototype making
- documentation related to a product development project e.g. specifications, tendering, reports
- computer file management and conversion
- range, uses, function, operation and structure of electrical, mechanical and energy conversion devices
- copyright, moral rights and intellectual property issues and legislation and their relevance to the design industry
- organisational and legislative health and safety procedures and environmental issues and sustainability issues

Essential skills include:

- literacy skills sufficient to contribute to the development of a brief and to source, evaluate and collate information pertinent to the brief
- communication skills sufficient to present design solution rationales in discussions and presentations
- technological skills using industry standard hardware and drawing and modelling software
- research skills and ability to source, analyse and synthesise information
- experimentation and assessment skills to enable developing and refining solutions to meet requirements of brief
- drawing and design skills including sketching, rendering, technical drawings and form mock ups
- model making skills
- design problem solving skills including use of solution generation techniques
- project planning skills
- negotiation skills sufficient to negotiate briefs including budget and timelines
- presentation skills

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 in the Performance Criteria is detailed below. Add any 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.

Market segmentations may include but is not restricted to :

- application of product type
- function and application of the product
- age
- consumer spending profile
- education
- ethnicity
- gender
- hobbies
- interests
- anthropometrics

A ***design brief*** is :

- a written or verbal specification of the desired outcomes of the design project. It may contain specific requirements that must be addressed and it may also allow room for the designer to exercise their own creativity and vision. Design briefs are commonly used in consulting engagements, when it is crucial to ensure all parties are aware of their responsibilities and requirements.

Intellectual property, moral rights and copyright requirements may include:

- protocols for the adaptation of work by others
- extent to which the work may be used
- procedures for seeking permission to use the work of others, including systems for the administration of copyright

Criteria for selecting devices, techniques, tools and materials may include but are not restricted to :

- adaptability
- availability
- cost
- durability
- efficiency

- environmental or sustainable concerns
- multi-functional capacity
- skills of production team
- manufacturing capabilities

Refine design solutions may involve :

- adapting machinery
- changing materials
- changing production parameters
- incorporating new elements
- reducing or changing weight, mass, size, shape, appearance or colour
- referral to outside specialists
- meeting industry and government standards and legislation
- costing modelling

Design proposal may include but is not limited to:

- computer aided simulations
- drawings
- models
- multimedia
- prototypes
- video

A ***design project plan*** may include but is not limited to:

- constraints
- final budget
- insurance
- materials
- proposed sub-contractors
- risk analysis and contingency plans
- schedules for production

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment section in Section B of the accreditation submission.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The ability to design and produce a range of commercial products from a brief and which:

- demonstrates a command of selected advanced methodologies, techniques, tools and materials and which are consistent with the conceptual vision
- demonstrates a sound knowledge of the design process
- demonstrates effective communication and presentation skills
- demonstrates project planning skills
- demonstrates project management skills
- demonstrates an understanding of and knowledge of the requirements of a brief
- demonstrates an ability to conduct market segmentation research
- The essential knowledge and skills must be assessed as part of the unit.

Context of and specific resources for assessment

- Assessment of Performance requirements in this unit should be undertaken in an actual workplace/studio or a suitably equipped studio/classroom.
- Assessment should allow for the evaluation of visual language and technical execution of the product designed and produced by the candidate
- Assessment should allow for practical demonstration of skills using required tools, equipment and materials to design and produce a product

Method of assessment	Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge and skills and might include: • Direct observation of work in progress, including exploration of and experimentation with techniques • Written and/or oral questioning and discussion to assess knowledge and understanding and candidate's intentions and work outcome • Third-party reports from experienced practitioners. Completion of journal and/or portfolio including personal reflection and feedback from relevant others.
Guidance information for assessment	Evidence should be collected over a set period of time and be sufficient so as to test ability to design and produce a range of commercial products to meet market opportunities. It is recommended that assessors look to assessing this unit in conjunction with other Diploma of Product Design core and specialisation units where applicable

VU21026 Design and produce a product incorporating mechanical/electrical features

Unit Descriptor

This unit describes the skills and knowledge required to design and produce a mechanical/electrical product from a brief applying a range of advanced techniques and materials.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Employability Skills

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The qualification's Employability Skills Summary in which this unit is included will assist in identifying employability skill requirements.

Application of the Unit

The skills and knowledge contained within this unit are applied by a designer responding to a brief for a product that incorporates mechanical/electrical features. The designer would use a wide range of tools, equipment and material. This work could be carried out independently or in association with colleagues

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes of a unit of competency.	**Performance criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.**
1 Contribute to the development of the product design brief	1.1 Evaluate the potential for a range of approaches
	1.2 Use ***idea generation techniques*** to refine parameters of the ***design brief***
	1.3 Consider financial cost and environmental impact of design for impact on design brief.
	1.4 Research ***intellectual property, moral rights and copyright requirements*** for inclusion in design brief
	1.5 Provide verbal and written input into drafting of design brief

2	**Research relevant technological information**	2.1	Source and access ***information pertinent to the brief***
		2.2	Assess information for relevance and applicability
		2.3	Liaise with relevant specialists in relation to technological options
		2.4	Access information on available electrical or mechanical devices to requirements of brief
3	**Develop a range of technologically innovative solutions to the design problem**	3.1	Determine a range of innovative solutions to meet the parameters of the brief
		3.2	Establish ***criteria for selecting mechanical or electrical features*** required to develop the design solution
		3.3	***Refine design solution*** based on ongoing experimentation and analysis of technological options
4	**Plan design process**	4.1	Identify all components required to produce the design solution
		4.2	Assess technical, resource and workspace requirements associated with production
		4.3	Consult with any ***specialist services*** required for the production of the work
		4.4	Develop a documented ***project plan***
5	**Provide visual concepts to client**	5.1	Present product design and proposed timelines for production to client including rationale for any changes
		5.2	Respond to feedback and make changes to design as required
		5.3	Confirm production plan and timelines with client
6	**Realise working prototype**	6.1	Develop the design solution using appropriate facilities, tools, techniques and materials
		6.2	Refine the design solution based on ongoing experiences with the production of work

6.3 Use safe working practices throughout the production of the design solution

6.4 Prepare final design and documentation to accompany final design

6.5 Develop specifications to ensure that the quality of work meets requirements

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Essential knowledge includes:

- elements and principles of design including contemporary design
- format and terminology typically used in a brief
- range, uses and function of commercial electrical and mechanical devices in relation to product design
- operation and structure of mechanical devices e.g. levers, gears, cranks, pulleys, pistons, cams
- operation and structure of electrical devices e.g. motors, magnets, solenoids, lights, switches
- energy conversion e.g. mechanical, electrical, chemical, thermal, optical
- copyright, moral rights and intellectual property issues and legislation and their relevance to the design industry
- organisational and legislative health and safety procedures and environmental issues and sustainability issues

Essential skills include:

- literacy skills sufficient to interpret a brief and to source and evaluate information pertinent to the brief
- communication skills in relation to the presentations
- technological skills
- research skills and ability to source information
- experimentation skills to enable developing and refining solutions to meet requirements of brief
- drawing and design skills
- problem solving skills

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 in the Performance Criteria is detailed below. Add any 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.

Idea generation techniques may include but are not restricted to :

- Conceptualisation
- discussion
- focus groups
- modelling
- sketching
- workshops

A ***design brief*** is :

- a written or verbal specification of the desired outcomes of the design project. It may contain specific requirements that must be addressed and it may also allow room for the designer to exercise their own creativity and vision. Design briefs are commonly used in consulting engagements, when it is crucial to ensure all parties are aware of their responsibilities and requirements.

Intellectual property, moral rights and copyright requirements may include:

- protocols for the adaptation of work by others
- extent to which the work may be used
- procedures for seeking permission to use the work of others, including systems for the administration of copyright

Information pertinent to the brief may include:

- industry standards
- design standards
- material characteristics and capabilities
- stylistic considerations
- legal, contractual, ethical and copyright considerations
- health and safety

- current trends in the application of materials, techniques, tools and equipment
- new technology and innovation

Criteria for selecting mechanical or electrical features may involve considerations of

- availability
- capacity
- complexity
- cost
- ease of adjustment
- ease of installation
- necessity for maintenance
- power source
- size
- weight

Refine design solution may involve :

- adapting machinery
- changing materials
- changing production parameters
- incorporating new elements
- reducing or changing weight, mass, size, shape, appearance or colour
- referral to outside specialists
- meeting industry and government standards and legislation
- costing modelling

Specialist services may include but are not limited to :

- casting foundries
- electrical inspectors
- electricians
- engineers
- pattern makers
- toolmakers
- welders/metal fabricators

A ***project plan*** may include but is not limited to considering :

- copyright
- costs
- development schedule
- environmental and sustainability considerations e.g. waste disposal
- insurance
- legal and ethical responsibilities
- materials
- outsourcing
- production run
- prototyping
- risk management
- timelines

Refine design solutions may involve :

- adapting machinery
- changing materials
- changing production parameters
- incorporating new elements
- reducing or changing weight, mass, size, shape, appearance or colour
- referral to outside specialists
- meeting industry and government standards and legislation
- costing modelling

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment section in Section B of the accreditation submission.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	The ability to design and produce a mechanical/electrical product from a given brief which: • demonstrates a command of selected advanced techniques which are consistent with the design • demonstrates knowledge of tools, techniques and materials and advanced knowledge of how they are used and extended • demonstrates a sound knowledge of the design process • demonstrates effective communication and presentation skills • demonstrates project planning skills • demonstrates project management skills • demonstrates an understanding of and knowledge of the requirements of a brief
Context of and specific resources for assessment	The essential knowledge and skills must be assessed as part of the unit. • Assessment of Performance requirements in this unit should be undertaken in an actual workplace/studio or a suitably equipped studio/classroom. • Assessment should allow for the evaluation of visual language and technical execution of the product designed and produced by the candidate • Assessment should allow for practical demonstration of skills using required tools, equipment and materials to design and produce a product

Method of assessment

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge and skills and might include:

- Direct observation of work in progress, including exploration of and experimentation with design development
- Written and/or oral questioning and discussion to assess knowledge and understanding and candidate's intentions and work outcome
- Third-party reports from experienced practitioners
- Completion of journal and/or portfolio including personal reflection and feedback from relevant others.

Guidance information for assessment

Evidence should be collected over a set period of time and be sufficient so as to test ability to design and produce a mechanical/electrical product from a given brief.

It is recommended that assessors look to assessing this unit in conjunction with other Diploma of Product Design core and specialisation units where applicable.

Appendices

Appendix 1: Employability Skills Summary

22221VIC Diploma of Product Design: Employability Skills Qualification Summary

The following table contains a summary of the Employability Skills required by a product designer for this qualification. The Employability Skills facets described here are broad industry requirements that may vary depending on qualification packaging options.

Employability Skills	Industry/enterprise requirements for this qualification includes ability to:
Communication	Visually represent and communicate concepts. Verbally communicate concepts and ideas. Request and receive feedback from others. Access, read, interpret and complete business documentation requirements. Communicate business and legal requirements including OHS responsibilities. Negotiate appropriate production processes, costs and commercial issues. Liaising with engineers and other departments, including marketing, to discuss and negotiate. Making presentations to senior design management or clients.
Teamwork	Work within arts industry and with other product designers including clients. Meeting with clients. Taking part in specialist or multidisciplinary team meetings. Support, respect and understand views of others. Provide feedback to others. Work collaboratively with others. Build and maintain networks and relationships.
Problem solving	Analyse brief or commission requirements. Consider options for action. Develop a creative concept. Evaluate a creative concept.

Problem solving ~continued~	Apply a wide range of strategies and techniques identify and solve creative, innovative and practical solutions. Finding solutions to sometimes complex problems. Researching materials, processes or market requirements.
Initiative and enterprise	Create a continuous improvement environment for self. Accept challenges. Research business and marketing opportunities. Regularly encourage self and others to evaluate and review designs. Incorporate feedback from others into own work. Evaluate the feasibility of production. Be creative.
Planning and organising	Manage time and prioritise work tasks. Arrange meetings. Plan and manage activity. Plan and organise resources. Adapt resource allocation to cope with contingencies and to fit budget. Make timely decisions. Ensure business and legal requirements are understood, established and met including OHS and sustainability requirements. Establish process and gather information when researching to inform work.
Self-management	Develop personal and artistic vision. Act on feedback. Show confidence in and articulate own ideas and vision. Evaluate and monitor own artistic work performance. Act as a role model and display professionalism, proficiency, integrity, industry knowledge and commitment to industry. Network to increase industry knowledge and understanding. Identify and access learning and development opportunities.
Learning	Identify personal strengths and weaknesses as an illustrator. Maintain and manage own knowledge and skill and undertake professional development.

Learning ~continued~	Share and exchange new knowledge and ideas. Assist others with creative and technical learning. Show enthusiasm for ongoing learning. Be open to new ideas and techniques.
Technology	Use technology to complete workplace and business requirements.

Appendix 2: Transition Table

The 22221VIC Diploma of Product Design replaces and is equivalent to 21869VIC Diploma of Product Design. The table below shows the equivalence of units from the previous course to the new course.

Students currently enrolled in the existing course will be able to complete the existing qualification under its course rules provide they are able to complete within twelve months or may choose to transfer to the new qualification using credit transfer.

Old Unit | (21869VIC)	Equivalence	New Unit (22221VIC)
BSBSBM403A Promote the business	Equivalent	BSBMKG413A Promote products and services
BSBSBM404A Undertake business planning	Equivalent	BSBSMB404A Undertake small business planning
CUEFIN01B Develop a budget	Equivalent	CUEFIN01C Develop a budget
CUEFIN02B Manage a budget	Nil	-
CUFSAF01B Follow health safety and security procedures	Equivalent	CUSOHS301A Follow occupational health and safety procedures
CULMS008B Conceive, develop and realise exhibition designs	Equivalent	CULEVP504A Develop exhibition concepts
CULMS603A Co-ordinate exhibitions and/or public programs	Equivalent	
CUSADM03A Manage a project	Equivalent	BSBPMG510A Manage projects
CUSADM07A Establish and maintain work and contractual relationships	Equivalent	BSBSMB401A Establish legal and risk management requirements of small business
CUSADM09A Address legal and administrative requirements	Equivalent	
CUSFIN01A Finance a project	Equivalent	-
CUSGEN05A Make presentations	Equivalent	BSBCMM401A Make a presentation
CUVADM11A Work within an arts organisation context	Nil	-

Old Unit | (21869VIC)	Equivalence	New Unit (22221VIC)
CUVCRS03A Produce computer-aided drawings	Equivalent	CUVACD302A Produce computer-aided drawings
CUVCRS04A Produce technical drawings	Equivalent	CUVACD303A Produce technical drawings
CUVCRS06A Make scale models	Equivalent	CUVACD304A Make scale models
CUVDES02A Apply the design process to 2 -dimensional work in response to a brief	Equivalent	BSBDES302A Explore and apply the creative design process to 2D forms
CUVDES05A Interpret and respond to a brief	Nil	-
CUVICS06A Create an innovative work environment	Equivalent	BSBINN502A Build and sustain an innovative work environment
LMFDN5001A Generate and transfer complex computer-aided drawings and specifications	Equivalent	LMFDN5001B Generate and transfer complex computer aided drawings and specifications
PSPPM402B Manage simple projects	Equivalent	BSBPMG510A Manage projects
VPAU010 Analyse and implement sustainable work practices	Nil	-
VPAU011 Apply research and critical analysis to inform artistic and design practice	Equivalent	CUVDES404A Research and apply techniques in product design CUVRES502A Analyse cultural history and theory
VPAU012 Use advanced drawing techniques to represent and communicate concepts	Equivalent	CUVACD301A Produce drawings to communicate ideas
VPAU013 Apply the elements and principles of design	Nil	LMFFDT4007A Establish a design brief

Old Unit | (21869VIC)	Equivalence	New Unit (22221VIC)
VPAU014 Manage creative and professional self	Equivalent	CUVPRP404A Develop self as artist BSBWOR501B Manage personal work priorities and professional development
VPAU044 Design a product(s) from a brief	Nil	-
VPAU045 Design and produce a commercial product from a brief	Equivalent	VU21024 Design and produce a commercial product from a brief
VPAU046 Design and produce a range of commercial products from a brief to meet market opportunities	Equivalent	VU21025 Design and produce a range of commercial products from a brief to meet market opportunities
VPAU047 Design and produce a product incorporating mechanical/electrical devices	Equivalent	VU21026 Design and produce a product incorporating mechanical/electrical features
VPAU048 Design and construct 3-dimensional object(s)	Equivalent	BSBDES303A Explore and apply the creative design process to 3D forms
VPAU049 Design and make jewellery	Nil	-
VPAU052 Create 3D surface models using computer aided design systems	Equivalent	CUVACD508A Refine model making skills MEM09010C Create 3D models using computer aided design system
VPAU053 Produce and scan complex digital images for reproduction	Equivalent	CUVDIG401A Experiment with techniques to enhance digital images
VPAU250 Design and produce plastic product(s)	Nil	-
-	Nil	BSBMKG402B Analyse consumer behaviour for specific markets

Old Unit | (21869VIC)	Equivalence	New Unit (22221VIC)
-	Nil	CUVGRD606A Develop graphic designs for packaging
-	Nil	MSS405030A Optimise cost of a product or service
-	Nil	PMBTECH505B Choose polymer materials for an application
-	Nil	MEM234020A Coordinate small lot manufacture using rapid manufacture processes.
-	Nil	LMFFDT5010A Research and recommend alternative manufacturing process