

SSAPP1 3D Garment Visualisation Specialist

1. Job role

TCF sub-sector	Apparel
Functional area	Product Design and Development
Job role	SSAPP1 3D Garment Visualisation Specialist
Job role description	Creates digital 3D representations of garments to support apparel product design and development. The 3D Garment Visualisation Specialist uses specialised software to simulate garments, fabrics and fit, enabling designers and product developers to evaluate products virtually before physical samples are produced. The role supports digital product development workflows, reducing sampling costs and accelerating development timelines.
Performance expectations	• Develop realistic 3D garment simulations from design specifications • Create digital prototypes for design review and product evaluation • Simulate garment fit, drape and fabric behaviour • Collaborate with designers and product developers during development • Prepare visual assets for design presentations and merchandising • Support digital product development workflows • Maintain digital garment libraries and design files • Contribute to reducing physical sampling requirements
Specialisation	Digital apparel prototyping and garment simulation using 3D design platforms.
Application in other TCF sectors	• Footwear product visualisation and digital prototyping • Technical textile product simulation • Uniform and workwear product development • Outdoor and performance apparel design • Digital product development across consumer goods industries

2. Key tasks and critical work functions

Key tasks	• Create 3D garment models from design specifications • Simulate fabric behaviour and garment drape
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	• Apply digital patterns to 3D avatars • Support virtual fit reviews and product evaluation • Collaborate with designers and technical teams • Produce visual renderings for product presentations • Maintain digital asset libraries • Integrate digital prototypes into product development systems
Critical work functions	• Supporting digital product development workflows • Reducing the need for physical prototypes • Providing accurate garment visualisation for design evaluation • Improving collaboration between design and technical teams • Accelerating product development timelines • Supporting innovation in apparel product design

3. Technical skills

3D garment design software	Use platforms such as CLO3D, Browzwear or similar.
Digital pattern integration	Apply digital patterns to 3D garment simulations.
Fabric simulation	Model fabric behaviour, drape and movement.
Garment construction knowledge	Understand how garments are assembled.
Visual rendering	Produce realistic garment images and animations.
Avatar fitting	Evaluate garment fit on digital body models.
Digital asset management	Maintain organised digital garment libraries.
Integration with PLM systems	Connect digital assets to product development systems.

4. Generic Skills

Creativity	Translate design concepts into realistic digital garments.
Attention to detail	Ensure visual and technical accuracy in simulations.
Communication	Present digital garment prototypes to development teams.
Collaboration	Work with designers, patternmakers and developers.
Problem solving	Resolve digital simulation issues.
Time management	Deliver digital prototypes within development timelines.
Creativity	Translate design concepts into realistic digital garments.
Attention to detail	Ensure visual and technical accuracy in simulations.

5. Emerging skills

Emerging skills	• Digital twin garment development • AI-assisted garment simulation • Integration with automated manufacturing systems • Advanced digital fabric physics modelling • Virtual product merchandising environments
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6. VET Qualifications and Skill Sets

Entry-level preparation	MST50122 Diploma of Apparel, Fashion and Textiles or equivalent
Advanced development	MST60122 Advanced Diploma of Apparel, Fashion and Textiles or equivalent and specialised training in digital garment visualisation and 3D fashion design technologies.

7. Job progression

Possible job progression	Digital Design Assistant → 3D Garment Visualisation Specialist → Senior Digital Product Developer → Head of Digital Product Development
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8. Classification

Australian Qualifications Framework	AQF Level 5-6
Australian Bureau of Statistics (ABS) Skill Levels	2
Open Source Classification of Occupations for Australia (OSCA)	3D Garment Visualisation Specialist – Apparel



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