

SSFOT14 Prototype Maker

1. Job role

TCF sub-sector	Footwear Production
Functional area	Product Design and Technical
Job role	SSFOT14 Prototype Maker
Job role description	Constructs initial footwear samples and prototypes based on technical specifications and design documentation. Validates fit, construction methods, materials and finishing prior to bulk production, and collaborates with designers and technical developers to refine manufacturability and product performance.
Performance expectations	- Produce accurate and functional footwear prototypes - Interpret technical packs and patterns precisely - Identify and resolve construction issues during sampling - Ensure prototypes reflect intended fit and design details - Meet development timelines for sample completion - Support efficient transition from prototype to production
Specialisation	- Athletic and performance footwear sampling - Fashion and lifestyle footwear prototyping - Safety and compliance-focused footwear prototypes
Application in other Textile, Clothing and Footwear (TCF) sectors	Transferable to sample making and prototype development roles in leather goods, apparel and related manufacturing sectors.

2. Key tasks and critical work functions

Key tasks	- Construct footwear prototypes from patterns and technical packs - Select and prepare materials and components for sampling - Operate sewing, lasting and assembly equipment - Adjust patterns and construction methods during trials - Conduct fit and wear testing in collaboration with development teams - Document prototype changes and feedback - Support refinement of production-ready specifications
Critical work functions	- Accurate interpretation of technical documentation - Precision in assembly and finishing techniques - Identification of potential production challenges - Maintaining consistency in sample construction standards - Balancing speed and quality during development cycles - Effective communication of technical adjustments - Supporting innovation through hands-on testing

3. Technical skills

Footwear construction skills	Skilled in upper assembly, lasting, sole attachment and finishing.
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Pattern interpretation	Accurately interpret 2D and 3D patterns for prototype construction.
Material preparation	Prepare and handle leathers, synthetics and components.
Sampling equipment operation	Operate sewing machines, skiving machines and prototype tools.
Fit and performance evaluation	Assess prototype fit, comfort and durability.
Technical modification techniques	Adjust patterns and construction methods based on feedback.
Quality control awareness	Apply inspection criteria during sample construction.
Documentation and revision tracking*	Record prototype changes and version updates.

*Technical skills identified as emerging skills in TCF industry.

4. Generic Skills

Generic Skill	Brief description
Attention to detail	Ensure high precision in sample construction.
Problem solving	Identify and address technical construction issues.
Communication	Provide feedback to designers and developers.
Teamwork	Collaborate within cross-functional development teams.
Time management	Meet sample development deadlines.
Learning	Adapt to evolving materials and construction techniques.

5. Emerging skills

Emerging skills	• Integration of digital and physical prototyping workflows • Use of 3D printed components in sampling • Sustainable material substitution during development • Rapid prototyping technologies • Collaboration within PLM digital environments • Virtual fit validation systems
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6. VET Qualifications and Skill Sets

Entry-level preparation	MST40316 Certificate IV in Custom-Made Footwear or equivalent.
Advanced development	MST50122 Diploma of Apparel, Fashion and Textiles or bachelor's program in product design or industrial design or equivalent.

7. Job progression

Possible job progression	Possible job progression: Sample Machinist → Prototype Maker → Senior Prototype Maker → Product Development Specialist
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8. Classification

Australian Qualifications Framework	AQF Level 3–5 (enterprise dependent)
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Australian Bureau of Statistics (ABS) Skill Levels	Skill Level 3-4 (Trades / Skilled Technicians)
Open Source Classification of Occupations for Australia (OSCA)	Prototype Maker – Footwear Manufacturing context



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