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POSITION DESCRIPTION

3D Technology Integration Specialist

Faculty/Division	Engineering
Classification Level	Professional 7
Hours & Span (Category)	E - Technical Officer, Senior Technical Officer
Position number	00200033
Shiftwork status	NOT SHIFTWORKER
Allowances	NIL
On call arrangements	NIL
Original document creation	2 July 2024

Position Summary

The **3D Technology Integration Specialist (Level 7)** will work across multiple Engineering Schools and the Makerspace Network to provide 3D services, including 3D printing, scanning and modelling. It will explore upcoming additive manufacturing technologies for both UNSW students and UNSW academics.

This role will review and provide specialist advice to UNSW students and UNSW academics on the appropriate 3D technology needed to achieve comprehensive learning and research outcomes, as well as the optimal way to design and create physical prototypes from virtual designs.

This role will consult with stakeholders across UNSW to develop a campus wide strategy for the future of 3D printing services.

The role of **3D Technology Integration Specialist** reports to the Makerspace Manager, supporting the Faculty of Engineering.

Accountabilities

Specific accountabilities for this role include:

- Expand the current 3D Printing online service to include training and upskilling in the most relevant CAD programs, and integrate with the needs of undergraduate courses, student projects, societies, VIP's and researchers.

- Manage the procurement of equipment and consumables, as well as budget management, to ensure a high level of service for Engineering course requirements.
- In consultation with other UNSW stakeholders, develop a 3-5 year strategy for the future of additive services for ALL UNSW to help drive the implementation of a comprehensive 3D printing service.
- Provide technical advice to academics that are delivering content that is concerned with rapid prototyping, and any other relevant manufacturing needs. Provide guidelines to course convenors on best practice when working with undergraduates.
- Provide advice and expertise to the design and manufacturing needs on assigned projects that require knowledge and standard application of theoretical principles and technical knowledge of additive manufacturing.
- Support the manufacturing and training needs of the Engineering Makerspace Network, this includes training students to safely and independently use standard equipment in the Makerspaces.
- Set priorities, monitor workflows and provide consistent and regular updates on the progress of assigned activities to ensure the successful delivery of project objectives.
- Provide effective specialist advice relating to administrative guidelines, processes and activities.
- Assist with day-to-day management of resources.
- If requested, research, analyse and identify, in collaboration with other stakeholders, the need for new equipment/processes and propose solutions for improvements to existing systems, methodologies and procedures.
- Ensure that all operational and project tasks are undertaken and executed within the requested timeframes, to the highest quality standards and in adherence to relevant protocols.
- Align with and actively demonstrate the [UNSW Values in Action: Our Behaviours](#) and the [UNSW Code of Conduct](#)
- Cooperate with all health & safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the psychosocial or physical health and safety of yourself or others.

Skills and Experience

- A degree in engineering or equivalent competence gained through any combination of education, training and experience, or similar relevant skills and work experience.
- Sound knowledge, skills and expertise in CAD, 3D printer operation, reverse engineering using 3D scanners and typical Makerspace equipment.
- Demonstrated time management, organisational and problem-solving skills, including the ability to meet deadlines.
- Ability to make sound judgements and work both independently and as part of a team.

- An understanding of and commitment to UNSW's aims, objectives and values in action, together with relevant policies and guidelines.
- Knowledge of health & safety (psychosocial and physical) responsibilities and commitment to attending relevant health and safety training.

About this document

This Position Description outlines the objectives, desired outcomes, key responsibilities, accountabilities, required skills, experience and desired behaviours required to successfully perform the role.

This template is not intended to limit the scope or accountabilities of the position. Characteristics of the position may be altered in accordance with the changing requirements of the role.