POSITION DESCRIPTION

Technical Officer

Position Level 7
Faculty/Division Division of Research & Enterprise
Position Number 00041912
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Position Summary
The UNSW Materials & Manufacturing Futures Institute (MMFI) aims to transform the future of materials and manufacturing research from manipulation of atomic arrangements to device fabrication and high throughput industry scale manufacturing. MMFI serves as a hub between UNSW researchers and industries to facilitate dynamic collaboration and interdisciplinary engagement by providing solutions to important global challenges and to design systems and products that will generate economic benefit and social prosperity.

The Technical Officer supports the effective operation and maintenance of a complex and wide-ranging sphere of specialised research laboratories and workshops for innovative oriented research in the areas of additive manufacturing, roll-to-roll printing and 3D printing.

The Technical Officer reports to the Director, Materials and Manufacturing Futures Institute and has no direct reports.

Accountabilities
Specific accountabilities for this role include:

- Develop and provide an effective system-based schedule to ensure an efficient operation usage for the day-to-day activities of various instruments within MMFI, including (but not limited to) UV Nanoimprint, 3D metal/ceramic printer, roll to roll printer, and thermal nanoimprint.
- Provide induction, instrument training and troubleshooting for staff, students and external users including providing subject matter expertise and guidance.
- Coordinate the use and supervise the operation of specialised equipment and facilities by students and staff including providing appropriate training.
• Deliver specialist technical advice to both internal and external users, such as demonstration of techniques and the operation of equipment and respond efficiently and courteously to requests.

• Provide high end user support and problem-solving during measurement and data analysis.

• Initiate and manage relevant lab purchasing, asset management, stock control and safe disposal of equipment and laboratory consumables.

• Conduct all required monitoring, maintenance, and calibration to ensure functioning of equipment and infrastructure.

• Effectively communicate with a wide range of stakeholders and technical staff in a team environment to provide operational expertise in the efficient day-to-day management and scheduling of research activities to facilitate the delivery of research needs.

• Conduct training, maintain training records and equipment time allocation for staff and students.

• Work with technical teams of other laboratories to implement university-wide policies, procedures and audits for the effective management of the responsible laboratories.

• Monitor contractors engaged in laboratory upgrade, modification or maintenance work.

• Align with and actively demonstrate the UNSW Values in Action: Our Behaviours and the UNSW Code of Conduct.

• Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health and safety of yourself or others.

Skills and Experience

• A relevant tertiary degree in Materials Science and Engineering or related areas with hands-on experience in providing technical management of research facilities.

• Demonstrated experience in investigating and developing appropriate system-based proposals based on strategic and operational objectives. Track record of converting these into implementable project plans and technical specifications.

• Extensive experience with advanced materials characterisation equipment and techniques, including, but not necessarily limited to, equipment such as UV Nanoimprint, 3D metal/ceramic printer, roll to roll printer, and thermal nanoimprint.

• Ability to work independently with minimum supervision and contribute positively to the effective working of the team.

• Excellent written and verbal communication and liaison skills with a focus on understanding business requirements, communicating technical concepts, writing technical documentation and the ability to liaise with a diverse group of people from varying backgrounds.

• Demonstrated experience working with, training and supervising others within an inter/multidisciplinary research environment, supporting and advising researchers and students on the technical aspects of the laboratory and the design, development and conduct of experiments.

• Highly developed organisational skills, including demonstrated experience effectively managing multiple competing priorities to ensure deadlines are met while developing project plans, schedules, and sizing tasks.

• An understanding of and commitment to UNSW's aims, objectives and values in action, together with relevant policies and guidelines.
Knowledge of health and safety 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.