

Position Description

Technical Officer – Makerspace Network

Position No: 67171
Position Title: Technical Officer – Makerspace Network
Date Written: 20/09/2018

Faculty / Division: Engineering
School / Unit: Various Schools
Position Level: Level 6/7

ORGANISATIONAL ENVIRONMENT

UNSW is currently implementing a ten-year strategy to 2025 and our ambition for the next decade is nothing less than to establish UNSW as Australia's global university. We aspire to this in the belief that a great university, which is a global leader in discovery, innovation, impact, education and thought leadership, can make an enormous difference to the lives of people in Australia and around the world.

Following extensive consultation in 2015, we identified three strategic priority areas. Firstly, a drive for academic excellence in research and education. Universities are often classified as 'research intensive' or 'teaching intensive'. UNSW is proud to be an exemplar of both. We are amongst a limited group of universities worldwide capable of delivering research excellence alongside the highest quality education on a large scale. Secondly, a passion for social engagement, which improves lives through advancing equality, diversity, open debate and economic progress. Thirdly, a commitment to achieving global impact through sharing our capability in research and education in the highest quality partnerships with institutions in both developed and emerging societies. We regard the interplay of academic excellence, social engagement and global impact as the hallmarks of a great forward-looking 21st century university.

To achieve this ambition, we are attracting the very best academic and professional staff to play leadership roles in our organisation.

Values in Action: Our UNSW Behaviours

UNSW recognises the role of employees in driving a high performance culture. The behavioural expectations for UNSW are below.

Please refer to the UNSW Behavioural Indicators for the expectations of your career level (Level 6/7).



Values in Action
Our UNSW Behaviours



Builds
Collaboration



Embraces
Diversity



Displays
Respect



Demonstrates
Excellence



Drives
Innovation

OVERVIEW OF RELEVANT AREA AND POSITION SUMMARY

The Faculty of Engineering is a national and international leader in engineering research and education. As Australia's leading engineering university, UNSW undertakes a large number of major research projects. Opportunities exist to mainstream and strengthen this innovative culture and integrate this research into learning and teaching experiences. The Faculty has a strong focus on transforming student experiences to incorporate new teaching pedagogies whilst maximizing modern learning technologies, developing graduates with strong entrepreneurial and design thinking skills in line with industry demand.

The Makerspace Network is the largest network of connected makerspaces and workshops in Australia. A network of genuine collaboration and shared values. These values are centred on the principle of barrier free access to tools and tech for all students and staff. The Makerspace Network provides access and training for all staff and students to the latest tools and technologies, and supports UNSW's strategic goals of cross faculty collaboration, project-based learning, course integration of Student-led Projects and industry engagement.

The Technical Officer – Makerspace Network contributes to the Makerspace Network through the development, maintenance and efficient day-to-day management of the Makerspaces within the Faculty of Engineering.

The role of Technical Officer – Makerspace Network reports to the School Laboratory Manager with a dotted line to the Makerspace Network Manager.

RESPONSIBILITIES

Level 6

Provide technical support for users within the Makerspace Network:

- Manage day-to-day operations of Makerspaces including authorising access to space and equipment, overseeing users and coordinating, conducting and evaluating user training, scheduling casual staff and maintaining a clean facilities.
- Coordinate the installation, maintenance, repairs, calibration, troubleshooting, training, access, and operation of Makerspace Network equipment and infrastructure;
- Provide advice in concept design and integration into CAD drawings for student projects;
- Organise the purchase, asset management, stock control and safe disposal of equipment and consumables;
- Liaise with all academic and professional staff to help achieve desired Student-led Projects and course-work outcomes;
- Work collaboratively with the technical teams within Schools and across the Makerspace Network to contribute to a culture of continuous improvement, evaluating existing equipment, infrastructure, service delivery and training, as well as systems, procedures and protocols, to identify opportunities for improvement and implement change as approved by the Makerspace Network Manager and relevant Laboratory Managers;
- Work closely with the School and Faculty's designated HSE Advisors and Coordinator to ensure the Makerspace Network fully implements the University's Health and Safety management system and comply with University and statutory policies, guidelines and procedures.
- In liaison the Faculty's HSE Coordinator, Laboratory Managers and Makerspace Network Manager, undertake ongoing risk identification, assessment and control across the Makerspace Network.
- Work to build a collaborative community with students and staff with an emphasis on greater student engagement.
- Manage allocated budget for general consumables and advise on costs for any relevant spending out of project funds.
- 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

Level 7 (in addition to the above)

- Work collaboratively and creatively with staff and students to analyse and identify requirements for the design and construction of apparatus, models or rigs required for various student-led projects.
- Provide high level technical expertise in support of student-led projects across the Makerspace Network.
- Maintain an up-to-date knowledge of current and emerging practices, processes and equipment.
- Consult with the Laboratory Manager and Makerspace Network Manager to establish priorities and develop business cases for the requisition and renewal of equipment.

SELECTION CRITERIA

Level 6

- A degree with subsequent experience in fitting and machining, electrical engineering or renewable technologies and/or an equivalent level of knowledge gained through any other combination of education, training or experience.
- Experience in CAD drawings using software such as Solidworks or equivalent and proficient computing skills including word processing, spreadsheets and databases.
- Demonstrated skills in the safe operation of tools and machinery.
- Excellent communication and customer service skills, with the ability to translate these skills into technical concepts and written technical documentation.
- Demonstrated understanding of the Makerspace initiative or similar student workshop spaces and the demonstrated ability to work and support such initiatives.
- Demonstrated ability to work both independently and as part of a wider technical team for the benefit of the Makerspace Network or similar.
- Demonstrated skills and ability to train students and/or staff in relation to relevant equipment and safety procedures.
- Capability to manage budgets for the purchasing of equipment and other materials in compliance with statutory and University requirements for the Makerspace Network.
- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

Level 7 (in addition to the above)

- Extensive experience managing complex laboratory or workshop equipment.
- Experience driving a culture of continuous improvement, providing recommendations for new methodologies and solutions to improve workshop systems, procedures and practices.
- High level analytical and problem-solving skills, with a demonstrated ability to investigate and make informed decisions regarding complex issues.

It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.