

POSITION DESCRIPTION



Faculty of Architecture, Building & Planning

Technician, Digital Fabrication Lab

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| POSITION NO | 0058344 |
| CLASSIFICATION | UOM 4 |
| SALARY | \$71,099 - \$75,458 per annum. (pro-rata for Part-time) |
| SUPERANNUATION | Employer contribution of 17% |
| WORKING HOURS | Part Time 0.6 FTE |
| BASIS OF EMPLOYMENT | Continuing Employment |
| OTHER BENEFITS | http://about.unimelb.edu.au/careers/working/benefits |
| HOW TO APPLY | Online applications are preferred. Go to http://about.unimelb.edu.au/careers , select the relevant option ('Current Opportunities' or 'Jobs available to current staff'), then find the position by title or number. |
| CONTACT FOR ENQUIRIES ONLY | Jack Halls Tel +61 3 8344 7838 Email jack.halls@unimelb.edu.au <i>Please do not send your application to this contact</i> |

For information about working for the University of Melbourne, visit our website:
about.unimelb.edu.au/careers

Position Summary

The Faculty of Architecture, Building and Planning (ABP) Maker Spaces comprise a range of facilities providing state-of-the-art interdisciplinary spaces for making with technology aiming to create a hands-on and inspiring environment encouraging experimentation with technology, materials, and processes of making.

A key Maker Space facility is the Digital Fabrication Lab (Fab Lab), which operates a range of digital fabrication equipment that is accessible via a bureau service, where staff operate machinery and process fabrication jobs on behalf of students.

The Digital Fabrication Lab is led by the Digital Fabrication Lab Coordinator who is assisted by the Lead Technician, Technicians, and casual Student Intern Technicians. The Technician, under the guidance of Digital Fabrication Coordinator and Lead Technician, will primarily be responsible for the daily operation and maintenance of advanced fabrication equipment such as CNC routers, metal laser cutters and 3d printers. The Technician will also contribute to the daily operation of the facility assisting students with fabrication queries, conducting consultations and assisting the Maker Spaces Management Team with the delivery of core services as part of the FabLab bureau service and open access.

1. Key Responsibilities

1.1 OPERATIONAL PROCESSES AND PROCEDURES

- Efficiently and effectively operate advanced fabrication equipment, problem solving complex fabrication problems and processing jobs as part of the bureau fabrication service, ensuring all jobs adhere to quality standards.
- In collaboration with Digital Fabrication Lab Coordinator and Lead Technician develop and update of equipment operation procedures as required.
- Complete tasks requested from Digital Fabrication Lab Coordinator and Lead Tech.
- Contribute to effective supervision of students in the Model Making Space and the open access equipment and the enforcement of Maker Spaces rules.

1.2 OHS AND SAFETY COMPLIANCE

- Ensure practice of established OHS and safety protocols. Report to the Digital Fabrication Lab Coordinator any issues or changes required to processes and protocols to continually improve safety practices.
- Assist Digital Fabrication Lab Coordinator with the development and updating of safety procedures that specifically relate to the advanced fabrication equipment the role operates.
- On occasions it may be necessary for the incumbent to supervise students to adhere to health and safety levels.

1.3 MACHINE MAINTENANCE

- Liaise with the Digital Fabrication Coordinator and Lead Technician to implement and maintain a maintenance plan.
- Complete routine cleaning, checking, and calibration of tools, equipment and machines to the standards defined by established processes in procedures.

- Complete fault investigation and rectification of advanced fabrication equipment in consultation with the Digital Fabrication Coordinator and Lead Technician.

1.4 TRAINING

- Provide input and feedback to the Digital Fabrication Lab Coordinator regarding staff training processes in the use of complex fabrication equipment to ensure equipment is operated safely and efficiently.

1.5 STOCK LEVEL MONITORING

- Monitor consumables and advise the Digital Fabrication Lab Coordinator and Lead Technician regarding consumable ordering, organization and storage.
- Help to compile and check delivery of orders. Assist delivery personnel to safely move materials in storage area and into the Digital Fabrication Lab.

1.6 QUALITY CONTROL AND CUSTOMER SERVICE

- Contribute to an open, inclusive, and welcoming University environment, whilst managing the delivery of Core Services to achieve optimal outcomes for all users of the Maker Spaces.
- Ensure fabrication jobs returned to customers meet the completion time goals and quality standards.
- Review and approve submitted files for processing.

1.7 CONSULTATIONS

- Provide support to students regarding complex digital fabrication problems or projects requiring the use of advanced digital fabrication equipment.
- Provide specialised knowledge and / or experience to Digital Fabrication Lab staff regarding advanced digital fabrication equipment who will then provide consultations to students.

1.8 ADDITIONAL DUTIES

- As required by the Digital Fabrication Lab Coordinator and Maker Spaces Management team.

2. Selection Criteria

2.1 ESSENTIAL

- High level interpersonal/communication skills and effective customer service abilities, with a demonstrated capability to communicate information effectively to diverse groups.
- Demonstrated self-motivation with the ability to work under general direction as an effective member of a team.
- Demonstrated creative problem-solving skills and a logical approach to troubleshooting in a workshop environment.
- Demonstrated experience with computer aided design software.

- A relevant qualification with experience in digital and analogue fabrication, or an equivalent combination of experience and/or education/training.

2.2 DESIRABLE

- Demonstrated interest and/or experience with digital prototyping tools, for example: CNC routers, laser cutters, 3D printers etc
- Knowledge of OHS systems and procedures and experience with incident management procedures in a workshop environment.
- Experience in conducting training seminars with students and staff.
- Experience in first aid

3. Special Requirements

- The incumbent will be required to maintain current OHS training including First Aid (level 2) certification, OHS Roles & Responsibilities, Hazard Identification and Incident Management amongst others, with training to be provided by the Faculty.

4. Job Complexity, Skills, Knowledge

4.1 LEVEL OF SUPERVISION / INDEPENDENCE

- The Technician works under general supervision from the Digital Fabrication Lab Coordinator and Lead Technician.
- Responsible for operating advanced machines and equipment within established processes and procedures and at times required to update and improve processes and procedures.
- At times required to supervise students and junior staff members in the use of advanced equipment.

4.2 PROBLEM SOLVING AND JUDGEMENT

- The Technician will need to be able to manage tasks according to their priority in terms of relative importance and urgency.
- The incumbent will be expected to exercise his/her own judgment within a given task, applying appropriate level of technical expertise to solve problems.
- The incumbent will be the technical expert in the operation and maintenance of core, advanced fabrication equipment within the Digital Fabrication Lab. This requiring the application of existing, well-defined methods and techniques, work procedures and processes to a diverse range of applications that occasionally require creative problems solving. This knowledge is typically acquired through specialised training in combination with significant work experience.
- In completing tasks, the Technician will be expected to help refine and improve procedures and systems within the scope of the role.

4.3 PROFESSIONAL AND ORGANISATIONAL KNOWLEDGE

- The Technician will have a good working knowledge of Digital Fabrication Lab and Maker Spaces practices relating to the scope of the role's responsibilities.
- They are expected to possess or rapidly develop a working understanding of the Digital Fabrication Lab and equipment operational procedures.

4.4 RESOURCE MANAGEMENT

- The incumbent contributes to the day to day operation of the Digital Fabrication Lab equipment with significant value, and the maintenance of associate support equipment within the Maker Spaces.

4.5 BREADTH OF THE POSITION

- The Technician works in collaboration with the Digital Fabrication Lab team members of varied levels and at times other staff from Maker Spaces Team.
- The incumbent requires effective communication and established customer service skills to deal with a broad range of stakeholders including ABP Academic and Professional Staff and students.

5. Other Information

5.1 BUDGET DIVISION

The Faculty of Architecture, Building and Planning is the leading educational and research institution in the Asia-Pacific region addressing the design and realisation of inhabited environments. It actively seeks to extend the linkages between education, research and practice in the built environment, and maintains excellent and extensive relationships with members of the built environment professions, government, professional associations and the wider community.

The Faculty has nearly 170 staff and approximately 3000 students, one third of whom are international. It is responsible for the undergraduate Bachelor of Environments degree, and offers majors in architecture, landscape architecture, property, construction, and urban design and planning.

The Faculty's graduate school, the Melbourne School of Design teaches accredited masters courses across the professional disciplines of Architecture, Construction Management, Landscape Architecture, Property, Urban Design and Urban Planning.

The MSD is distinctive from its competitors in its aim to inspire learning through interdisciplinary reflection, and its integration of research, teaching, and practice around the environmental implications of all forms of urbanisation. With opportunities to engage in advanced studio and seminar-based learning and research, MSD students develop new perspectives, critical reflection, and modes of action to address the environmental, social and aesthetic challenges in producing sustainable centres of habitation, locally and internationally. Students can take part in field trips which examine the global context of habitable environments.

The Faculty has an international reputation for excellence in research and research training and is a leader in built environment and urban research. Faculty staff are actively engaged in collaborations and partnerships both locally and globally, to produce research that responds to major social, economic and environmental challenges, as well as fundamental research into the built environment in Australia and the Asian region. Our researchers address key issues, such as mitigation of natural disasters, climate change,

sustainability, the future of cities, population growth and urban density. We lead debate in many of these areas. We also contribute definitive knowledge and understanding of the history, conservation and heritage of the built and natural environment, built environment practice and management, urban morphology and design research. The Faculty draws its research strength in part from its capacity to work in the multidisciplinary frame of its various built environment disciplines, as well as with colleagues in health, engineering, education, history and social sciences.

Through the MSD, we provide the highest quality research training environment, attracting the best and brightest future researchers in our disciplines from around the world. PhD and MPhil students have access to innovative professional development programs and generous funding support, along with excellent facilities and resources. Our PhD and MPhil graduates are well-rounded professionals, critical thinkers and future research leaders.

We have built strong research foundations by valuing and developing our people, rewarding excellence, and fostering a culture of enquiry, creativity and outstanding scholarship.

More information about ABP / MSD can be found at: <http://abp.unimelb.edu.au/>

5.2 THE UNIVERSITY OF MELBOURNE

The University of Melbourne is a leading international university with a tradition of excellence in teaching and research. With outstanding performance in international rankings, Melbourne is at the forefront of higher education in the Asia-Pacific region and the world. The University of Melbourne is consistently ranked among the world's top universities. Further information about our reputation and global ranking is available at www.futurestudents.unimelb.edu.au/explore/about/reputation-rankings

Established in 1853, shortly after the founding of Melbourne, the University is located just a few minutes from the centre of this global city. The main Parkville campus is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide range of knowledge-based industries.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded. Further information about working at The University of Melbourne is available at hr.unimelb.edu.au/careers.

5.3 GROWING ESTEEM, THE MELBOURNE CURRICULUM AND RESEARCH AT MELBOURNE: ENSURING EXCELLENCE AND IMPACT TO 2025

- Growing Esteem describes Melbourne's strategy to achieve its aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and engagement. www.growingesteem.unimelb.edu.au
- The University is at the forefront of Australia's changing higher education system and offers a distinctive model of education known collectively as the Melbourne Curriculum. The new educational model, designed for an outstanding experience for all students, is based on six broad undergraduate programs followed by a graduate professional degree, research higher degree or entry directly into employment. The emphasis on academic breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new

model, the University is also aligning itself with the best of emerging European and Asian practice and well-established North American traditions.

- The University's global aspirations seek to make significant contributions to major social, economic and environmental challenges. Accordingly, the University's research strategy *Research at Melbourne: Ensuring Excellence and Impact to 2025* aspires to a significant advancement in the excellence and impact of its research outputs.
<http://www.unimelb.edu.au/research/research-strategy.html>

The strategy recognises that as a public-spirited, research-intensive institution of the future, the University must strive to make a tangible impact in Australia and the world, working across disciplinary and sectoral boundaries and building deeper and more substantive engagement with industry, collaborators and partners. While cultivating the fundamental enabling disciplines through investigator-driven research, the University has adopted three grand challenges aspiring to solve some of the most difficult problems facing our world in the next century. These Grand Challenges include:

Understanding our place and purpose – The place and purpose grand challenge centres on understanding all aspects of our national identity, with a focus on Australia's 'place' in the Asia-Pacific region and the world, and on our 'purpose' or mission to improve all dimensions of the human condition through our research.

Fostering health and wellbeing – The health and wellbeing grand challenge focuses on building the scale and breadth of our capabilities in population and global health; on harnessing our contribution to the 'convergence revolution' of biomedical and health research, bringing together the life sciences, engineering and the physical sciences; and on addressing the physical, mental and social aspects of wellbeing by looking beyond the traditional boundaries of biomedicine.

Supporting sustainability and resilience – The sustainability and resilience grand challenge addresses the critical issues of climate change, water and food security, sustainable energy and designing resilient cities and regions. In addition to the technical aspects, this grand challenge considers the physical and social functioning of cities, connecting physical phenomena with lessons from our past, and the implications of the technical solutions for economies, living patterns and behaviours.

Essential to tackling these challenges, an outstanding faculty, high performing students, wide collaboration including internationally and deep partnerships with external parties form central components of *Research at Melbourne: Ensuring Excellence and Impact to 2025*.

5.4 EQUITY AND DIVERSITY

Another key priority for the University is access and equity. The University of Melbourne is strongly committed to an admissions policy that takes the best students, regardless of financial and other disadvantage. An Access, Equity and Diversity Policy Statement, included in the University Plan, reflects this priority.

The University is committed to equal opportunity in education, employment and welfare for staff and students. Students are selected on merit and staff are selected and promoted on merit.

5.5 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at www.unimelb.edu.au.

6. Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

<http://safety.unimelb.edu.au/topics/responsibilities/>

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.