Faculty of Architecture, Building & Planning

MSD Robotics Lab Technician (casual)

POSITION NO  n/a
CLASSIFICATION  Casual UOM 3
SALARY  Appropriate casual rates
SUPERANNUATION  Employer contribution of 9.5%
EMPLOYMENT TYPE  Casual position available for 12 months. Approximately 21.75 hours per week during peak periods. Rostered shifts will increase during peak periods, usually at the end of semester and decrease during holiday periods.
OTHER BENEFITS  http://hr.unimelb.edu.au/careers/working/benefits
CURRENT OCCUPANT  New
HOW TO APPLY  Email resume and portfolio to Ryan Pennings
CONTACT FOR ENQUIRIES ONLY  Ryan Pennings
  Tel +61 3 8344 1056
  Email: ryan.pennings@unimelb.edu.au

For information about working for the University of Melbourne, visit our websites:
hr.unimelb.edu.au/careers
joining.unimelb.edu.au
**Position Summary**

The Melbourne School of Design (MSD) Maker Spaces are state-of-the-art interdisciplinary spaces for making with technology that aim to create hands-on and inspiring environments encouraging experimentation with technology, materials and processes of making.

As part of the Maker Spaces, the MSD Robotics Lab is an advanced experimental fabrication facility, which operates a range of robotic equipment, including 5 industrial robot arms that are accessible to students and staff. The MSD Robotics Lab drives a research agenda surrounding architectural construction and fabrication tasks. Robotics Lab Technicians will support student and staff use of the equipment, as well as participate in projects led by the Robotics Lab team.

The MSD Robotics Lab is led by the Robotics Lab Coordinator who is assisted by a team of rostered casual staff. The Robotics Lab Technician under the guidance of the Robotics Lab Coordinator will be contributing to fulfilment of the daily processes and procedures including the operation of robotic equipment, assisting students with robotic projects and queries and supervising student use of the Robotics Lab Equipment.

**1. Selection Criteria**

1.1 **ESSENTIAL**

- A tertiary qualification in architecture, industrial design, engineering, computer science or other discipline of relevance with subsequent relevant experience or equivalent mix of education/training and experience.
- Demonstrated experience working with robotics and digital fabrication equipment, in particular ‘ABB’ and ‘Universal Robots’ industrial robot arms.
- High level interpersonal/communication skills and a strong customer service focus, with a demonstrated ability to communicate technical information effectively to a range of staff and students.
- Demonstrated ability to work as an effective member of a team.
- Familiarity with 3D modelling software Rhinoceros 3D and Grasshopper.

1.2 **DESIRABLE**

- Knowledge of the University’s OHS systems and procedures and experience with Incident Management procedures in a technical role.
- Familiarity with specific design and modelling software including, AutoCAD, Solid Works, Autodesk Inventor, Autodesk Fusion 360, and other design software suites.
- Knowledge with programming languages such as Python, C# or C++.

**2. Special Requirements**

- N/A
3. **Key Responsibilities**

Under the guidance and management of the Robotics Lab Coordinator the role will be expected to:

3.1 **OPERATIONAL PROCESSES AND PROCEDURES**
   - Assist in the supervision of students in the Robotics Lab (G23) and student usage of robotic equipment within the space.
   - Ensure all operational processes and procedures are adhered to and completed.
   - Assist in the supervision of students in the Model Making Space and the open access equipment and the enforcement of Maker Spaces rules.
   - Ensure compliance with Maker Spaces Rules where necessary.

3.2 **OHS AND SAFETY COMPLIANCE**
   - Ensure practice of established OHS and safety protocols. Report to the Maker Spaces Management team any action required in this regard.
   - Exercise diligence and provide additional oversight to ensure that students maintain appropriate health and safety levels.
   - Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 6.

3.3 **MACHINE MAINTENANCE**
   - Assist the Robotics Lab team to ensure completion of routine checking, maintenance, calibration, cleaning, fault investigation and rectification of tools, equipment, machines to the standards defined.

3.4 **TRAINING**
   - Liaise with the Maker Spaces Management group and advise on training needs, shared health and safety practice, etc.
   - Provide routine IT file set-up support and Bureau Service processing instructions to groups of staff and students, and one-on-one as required.

3.5 **MACHINE OPERATION**
   - Operate machines and equipment effectively and efficiently, following all operation and OHS procedures.

3.6 **STOCK LEVEL MONITORING**
   - Replenish stock levels if needed or instructed to do so by Maker Spaces Management team.

3.7 **QUALITY CONTROL AND CUSTOMER SERVICE**
3.8 CONSULTATIONS

- Ensure the Robotics Lab procedures are maintained and completed correctly.
- Ensure a high level of customer service is continuously delivered to students and staff accessing the Robotics Lab.

3.9 ADDITIONAL DUTIES

- As required by the Maker Spaces Management team.

4. Job Complexity, Skills, Knowledge

4.1 LEVEL OF SUPERVISION / INDEPENDENCE

The Robotics Lab Technician works under routine to general supervision from the Robotics Lab Lead Technician, Robotics Lab Coordinator and the Fabrication, Innovation, Technology Manager.

4.2 PROBLEM SOLVING AND JUDGEMENT

The Robotics Lab Technician will need to be able to manage tasks according to their priority in terms of relative importance and urgency. They will be expected to exercise his/her own judgment within a given task within specified timelines and standard practices and procedures, applying appropriate technical proficiency.

4.3 PROFESSIONAL AND ORGANISATIONAL KNOWLEDGE

The Robotics Lab Technician will have a good working knowledge of Robotics practices relating to the scope of the role’s responsibilities. He/she is expected to possess or rapidly develop a working understanding of the Robotics Lab and equipment operational procedures. In completing tasks, the Robotics Lab Technician will be expected to support the Maker Spaces Management Team help refine and improve procedures and systems within the scope of the role.

4.4 RESOURCE MANAGEMENT

N/A

4.5 BREADTH OF THE POSITION

This position involves working in collaboration with the Maker Spaces Management Team and also staff from the Maker Spaces. It requires effective communication and established customer service skills to deal effectively with a broad range of stakeholders including Strategic Operations (Infrastructure), ABP Academic 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/
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.

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.