THE UNIVERSITY OF MELBOURNE

Faculty of Engineering & Information Technology

Laboratory Technician – Mechatronics, Electronics and Digital Cluster

POSITION NO	0063990
CLASSIFICATION	UOM 6
SALARY	$96,459 - $ 104,413 p.a. (pro rata for part-time)
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Full-time (1.0 FTE)
BASIS OF EMPLOYMENT	Continuing
LOCATION DETAILS	The Faculty of Engineering and information Technology (FEIT) is primarily located on the Parkville Campus. However in the future as we move to a multi precinct model there may be a requirement to relocate either permanently or flexibly elsewhere including, but not limited to, Melbourne Connect, Heidelberg, Aitkenhead Centre for Medical Discoveries (ACMD), Fishermans Bend. This position may be required to travel and work across multiple locations.
OTHER BENEFITS	https://about.unimelb.edu.au/careers/staff-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	Hari Gomatam Email hari.gomatam@unimelb.edu.au *Please do not send your application to this contact*

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

Date Created: 01/04/2023

Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of the unceded land on which we work, learn and live: the Wurundjeri Woi Wurrung and Bunurong peoples (Burnley, Fishermans Bend, Parkville, Southbank and Werribee campuses), the Yorta Yorta Nation (Dookie and Shepparton campuses), and the Dja Dja Wurrung people (Creswick campus).

The University also acknowledges and is grateful to the Traditional Owners, Elders and Knowledge Holders of all Indigenous nations and clans who have been instrumental in our reconciliation journey.

We recognise the unique place held by Aboriginal and Torres Strait Islander peoples as the original owners and custodians of the lands and waterways across the Australian continent, with histories of continuous connection dating back more than 60,000 years. We also acknowledge their enduring cultural practices of caring for Country.

We pay respect to Elders past, present and future, and acknowledge the importance of Indigenous knowledge in the Academy. As a community of researchers, teachers, professional staff and students we are privileged to work and learn every day with Indigenous colleagues and partners.

Position Summary

1.1 ABOUT LABORATORY AND TECHNICAL SERVICES

The laboratory and technical function delivers a range of services across research, teaching and other technical spaces. The function's key objective is the smooth facilitation and support of academic and research activities within the FEIT. The Laboratory and Technical Services team sits within this function, and involves five laboratory clusters:

- Mechatronics, electronics and digital,
- Fluid dynamics, energy & propulsion,
- Structural, geotechnical & environmental,
- Chemical, materials and manufacturing and
- Biomedical & Bioengineering.

The Laboratory Technician may be required to work across all clusters within the Laboratory and Technical Services team.

1.2 ROLE OVERVIEW

The Laboratory Technician will support the cluster lead with the day-to-day operations of all laboratories within the cluster. They will be responsible for maintaining and operating laboratory equipment and assisting academic staff to ensure effective use of the laboratory equipment.

The Mechatronics, Electronics and Digital Cluster is comprised of a broad range of laboratories (motion capture, user experience, electronics, sensors and networks, communication, power systems, geospatial, photonics, cyber security, computational) that support research and teaching requirements across multiple topics and fields of research, including (human computing interaction, AI, cybersecurity, Cloud Computing, IoT, robotics, communications and networks, geomatics, autonomous systems).

This role reports directly to the Cluster Lead.

2. Key Responsibilities

- Be the go to resource in the field of speciality to deliver technical and expert services and support to teaching and research activities

- Instruct, advise and support staff and students on the use of laboratory equipment, including providing demonstrations, to ensure the equipment is used effectively.

- Facilitate purchases and installation of new plant, equipment and software, including ensuring operational, spatial and OHS requirements are met and maintained.

- Maintenance of laboratory equipment and software, including, but not limited to scheduled services, break fix, calibration and safety compliance.

- Support laboratory inventory and procurement of general laboratory consumables to support teaching and research activities.

- Maintain laboratory documentation to keep accurate records of teaching and research activities.

- Complete laboratory Quality and OHS requirements to meet compliance and safety obligations including but not limited to undertaking inspections and self-audits, and reviewing and/or developing risk assessments, SOPs, chemical manifests, local area inductions.

- Provide technical support and expertise to speciality areas (i.e. controllers, analogue to digital data acquisition, electronics/electrical/mechatronics circuits prototyping work, printed circuit board (PCB) fabrication, testing and diagnostic processes, software and application development, motion tracking platforms, Matlab, Simulink, Arduino and Raspberry Pi, robotic systems including R.O.S, lidar, geospatial technologies, RGBD camera)

- Prepare for practical classes and fieldtrips including preparation of long lead time items to support teaching and research activities.

- Manufacture/prototype of equipment to support experiments, manage the booking and access of labs and equipment and undertake lab and equipment inductions.

3. Selection Criteria

3.1 ESSENTIAL

- A relevant degree and/or trade, or an equivalent combination of relevant experience and educational training supporting teaching and research facilities in higher education and/or industry R&D sector specific to the discipline of focus (Mechatronics, Electronics and Digital Cluster).

- Strong interpersonal, written and verbal communication skills with the ability to work as part of a team, and independently.

- Demonstrated ability to prioritise, meet deadlines and work efficiently in a busy environment with large volumes of activity.

- A customer service mindset with experience maintaining high quality service to a range of customers.

- Initiative and motivation, with a capacity to contribute to short and long-term planning in the timely delivery of services.

- Familiarity of Australian occupational health and safety (OHS) legislation and laboratory regulatory and statutory requirements.

- Commitment and adherence to the highest standards of scientific and ethical integrity.

- Experience with controllers, analogue to digital data acquisition, electronics/electrical/mechatronics circuits prototyping work, including experience in printed circuit board (PCB) fabrication, testing and diagnostic processes AND/OR software and application development AND/OR motion tracking platforms, Arduino and Raspberry Pi, robotic systems including R.O.S. AND/OR lidar and geospatial technologies software, technology surveillance

3.2 DESIRABLE

- Experience maintaining and operating relevant equipment.
- Experience working with a scientific or medical laboratory environment.
- Experience with using online laboratory management systems.
- Experience in a tertiary education environment.

3.3 OTHER JOB RELATED INFORMATION

- This position require the incumbent to hold a current and valid Working with Children Check.
- Occasional work out of ordinary hours, travel, etc.

4. Job Complexity, Skills, Knowledge

4.1 LEVEL OF SUPERVISION / INDEPENDENCE

Operates under broad general direction of the Cluster Lead, but is the technical expert in a given specific sub-discipline and provides advice to others as such.

4.2 PROBLEM SOLVING AND JUDGEMENT

Required to exercise own technical judgment and discretion to provide highly specialised technical services, set up complex experiments within laboratories and assist honours and postgraduate students with their laboratory requirements.

4.3 PROFESSIONAL AND ORGANISATIONAL KNOWLEDGE

Role is required to perform tasks/assignments that require proficiency in the laboratory's existing policies, procedures, systems, processes and techniques and to adapt those procedures and techniques as required to achieve objectives.

4.4 RESOURCE MANAGEMENT

Does not have budgetary or supervisory responsibilities.

4.5 BREADTH OF THE POSITION

Operates within a specialist technical sub-discipline providing services across Schools.

5. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion, and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the Advancing Melbourne strategy that addresses diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Advancing Melbourne.

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:
https://safety.unimelb.edu.au/people/community/responsibilities-of-personnel

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

7. Other Information

FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY

The Faculty of Engineering and Information Technology (FEIT) has been the leading Australian provider of engineering and IT education and research for over 150 years. We are a multidisciplinary Faculty organised into three key Schools; Computing and Information Systems (CIS), Chemical and Biomedical Engineering (CBE) and Electrical, Mechanical and Infrastructure Engineering (EMI). FEIT continues to attract top staff and students with a global reputation and has a commitment to knowledge for the betterment of society.

7.1 ORGANISATION UNIT

The role sits within the Infrastructure Team, who provide a range of services to the broader Faculty made up of the following functional areas:

- Laboratory and Technical Services
- Infrastructure Operations Services
- Health Safety Wellbeing and Business Improvement
- Workspace Services
- Cultural Collection and Assets

  https://unimelbcloud.sharepoint.com/teams/feit-infrastructure-team

7.2 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville 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. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

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 http://about.unimelb.edu.au/careers

7.3 ADVANCING MELBOURNE

The University's strategic direction is grounded in its purpose. While its expression may change, our purpose is enduring: to benefit society through the transformative impact of education and research. Together, the vision and purpose inform the focus and scale of our aspirations for the coming decade.

Advancing Melbourne reflects the University's commitment to its people, its place, and its partners. Our aspiration for 2030 is to be known as a world-leading and globally connected Australian university, with our students at the heart of everything we do.

- We will offer students a distinctive and outstanding education and experience, preparing them for success as leaders, change agents and global citizens.
- We will be recognised locally and globally for our leadership on matters of national and global importance, through outstanding research and scholarship and a commitment to collaboration.
- We will be empowered by our sense of place and connections with communities. We will take opportunities to advance both the University and the City of Melbourne in close collaboration and synergy.
- We will deliver this through building a brilliant, diverse and vibrant University community, with strong connections to those we serve.

The means for achieving these goals include the development of the University of Melbourne's academic and professional staff and the capabilities needed to support a modern, world-class university. Those means require a commitment to ongoing financial sustainability and an ambitious infrastructure program which will reshape the campus and our contribution to the communities we engage with. This strategy, and the priorities proposed, is centred around five intersecting themes; place, community, education, discovery and global.

7.4 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 https://about.unimelb.edu.au/strategy/governance