



POSITION TITLE	Robotics and Digital Fabrication Officer
JOB PROFILE ID	TES_HEO6_01_SJP
JOB CATEGORY	Professional
JOB FAMILY	Technical Support
COMPENSATION GRADE	HEO6
MANAGEMENT LEVEL	19 Individual Contributor

POSITION DESCRIPTION SUMMARY

PRIMARY FUNCTION

The Robotics Lab and Digital Fabrication Technical Officer coordinates the operations of the robotics laboratory within the Design Modelling and Fabrication Lab. They provide specialist technical support in the laboratory and in the field. They provide instruction and training to students, technical support and advice to researchers, conduct experiments, and develop tooling, workflows, systems and instructional content. They are responsible for ensuring work, health and safety standards are met in their work area.

DECISION MAKING AND DELEGATIONS OF AUTHORITY

The Robotics Lab and Digital Fabrication Technical Officer works under broad supervision, performing tasks as directed and in accordance to defined responsibilities. They choose appropriate methods of work and plan and prioritise tasks. They also resolve routine matters related to responsibilities and collaborate with others to resolve complex matters.

KEY RELATIONSHIPS

Relationships	Position Title
Supervisor	12210 Manager, Design Modelling & Fabrication Lab - Mr Dylan Wozniak-O'Connor
Direct Reports	
Peer Relationships	Refer to the organisational charts in Workday to view peer relationships relevant to your role. Please Note- This option is only available to University staff.



RESPONSIBILITY DESCRIPTION

1. Provide expert technical support in the Robotics Lab and Digital Fabrication Laboratory.
Provides timely, sound and effective expert technical support to staff, students, researchers and users of the fabrication laboratory.
Provide advice on technical equipment, materials and use of fabrication and prototyping technologies.
Develop and deliver lab-specific inductions, demonstrations and training for safe operation and access to the lab for staff, students and visitors.
Supervise and demonstrate machinery, equipment and software training and usage to ensure laboratory is accessible and functional for students, researchers and staff.
Prepare and deliver robotics and parametric modelling software instruction, workshops and resources.
Where required, supervise other technical staff, demonstrators, research assistants, project officers or student assistants to undertake work and delivery training across the functional area.
Maintain a positive and productive laboratory environment to support effective and efficient delivery of services to stakeholder needs.
2. Ensure that the learning, teaching and research requirements of the work area are met.
Consult with course coordinators to develop robotics resources, instruction, procedures, technical demonstrations and safety documentation to meet the learning needs of units of study.
Ensure laboratory meets requirements of practical classes, including maintaining supplies, preparing the laboratory for practical classes, demonstrations and tutorials as required and in accordance with safe work practices.
Perform risk assessments and prepare safe work procedures for activities in the lab for units of study, practical classes and technical demonstrations.
Delivers effective lab support for School event, exhibitions and other School requirements, including tours and live demonstrations.
Maintains required record keeping systems in relation to lab specific scheduling, booking and information systems.
Manage and develop learning resources for robotics laboratory, including digital teaching and induction resources on platforms such as Canvas, lesson plans and associated documentation.
Provision support and assistance to all spaces within the DMaF Labs as required by the work area.
Develop tooling, workflows and systems for robotic control, as well as supporting instructional content to train users and communicate capabilities.
3. Ensure that the research-education requirements of the work area are met.
Develop and deliver individualised training and induction programs for researchers and research teams utilising the robotics lab facilities and aligned technologies and software, to support their research agendas.
Monitor the progress of projects, proactively organising appointments with users and ensuring work is undertaken to meet project timelines.
Provide ongoing support and training to users to develop independence in equipment operation.
Coordinate and/or prepare reports and documentation in support of School research, including the collection of and some analysis of data.
Collaborate with other work areas in the School and University as required to achieve these responsibilities.
4. Develop and enhance the technology and provision of services in the lab.
Research and develop the hardware and software technology available in the lab, to ensure work area is staying relevant to contemporary practice and meets the research, education, and technical capability requirements of the area.
Undertake procurement of complex technical equipment and software, including the research of new equipment and the preparation of procurement proposals.
Organise and oversee equipment integration and development work undertaken by specialist contractors.
Ensure feedback is obtained to proactively improve lab services – including creating opportunities for feedback such as surveys and debriefs with users.
Prepare and implement instructional content and procedures to support hands-on use of equipment.
Ensure tooling is accessible and available to end users and works to optimize workflows and processes for the robotics lab.
5. Ensures laboratory is compliant with Workplace Health and Safety requirements.
Ensure compliance with health and safety requirements, including that safety performance standards are met for the work area.
Perform risk assessments and prepare safe work and maintenance procedures for equipment and fabrication laboratory processes.
Perform maintenance of specialist equipment, ensuring compliance with workplace and University requirements, safe operation, and that work is complete to a safe and high-quality standard.
Procure and oversee specialist maintenance or integration contractors as required.
Maintain workplace health and safety records, including lab-specific records and records as required by University policies.
Maintain laboratory areas, ensuring clean and safe conditions, hazardous chemicals are stored and disposed of appropriately that ancillary services such as cleaning and building maintenance issues relevant to the work area are attended to.



RESPONSIBILITY DESCRIPTION

Pro-actively engage in the development of a safe workplace environment for staff and students using the Laboratory, including maintaining an awareness of WHS requirements.

Ensures that WHS matters requiring attention are addressed appropriately and promptly.

6. Undertakes fabrication and prototyping tasks for the work area, including required reporting and documentation.

Design, construct and complete documentation for research models, new equipment, tools and prototypes where appropriate.

Produces records and reports related to work area projects in appropriate formats, maintains accurate records as required.

Support lab communications through creating and making available documentation and visual content for projects and capabilities.

7. Undertakes ad-hoc projects and other activities.

Performs work activities relevant to the role's key accountabilities as approved by the supervisor and commensurate to the role's classification level.

EDUCATION

Education

Other - An equivalent combination of training and experience.

Tertiary qualifications - In a relevant field

Only one Field of Study needs to apply. The Education requirements should be considered in conjunction with the Work Experience requirements.

CERTIFICATIONS

Certifications

SKILLS

Skills

Ability to Communicate Effectively

Attention to detail

High level of computer and digital technology literacy, including specialist design, 3D modelling, CAD and CAM software relevant to the work area, as well as the ability to self-educate and instruct others in new software. Proficiency with standard business software is essential.

Planning and Organisation

Programming and parametric / computational design software relevant to the work area.

Teamwork and Collaboration.

Working knowledge of supporting skills relevant to the work area including electronics, industrial control / communication protocols, 3D visualization / digitization etc.

WORK EXPERIENCE

Work Experience

Demonstrated experience in a similar role in a fabrication laboratory or education environment.

Demonstrated practical knowledge of and experience in specialist robotics and digital technology relevant to the work area

Experience developing and implementing safety procedures in the context of education.

Experience in practical instruction, including developing new teaching material.

CAPABILITIES

Priority Core Capability	Behavioural Indicators *FOU – Foundational, *INT – Intermediate, *ADV – Advanced, *EXP – Expert	Level
Collaborates with others	Builds networks, models collaboration and works effectively with others to encourage inclusivity and impact.	INT
Excels in discipline, field or profession	Strives to develop and improve own proficiency and profile in areas of focus, creating a positive impact for the University.	INT
Thinks and solves problems	Makes informed and considered decisions by thinking critically and comprehensively to progress and enhance outcomes for the University.	INT
Priority Professional Capability	Behavioural Indicators *FOU – Foundational, *INT – Intermediate, *ADV – Advanced, *EXP – Expert	Level
Delivers service excellence	Understands customer needs and wants, both now and in the future, to agree, meet and manage service expectations and deliver an excellent service experience for University staff, students and the community.	INT



Priority Professional Capability	Behavioural Indicators *FOU – Foundational, *INT – Intermediate, *ADV – Advanced, *EXP – Expert	Level
Enables compliance and integrity	Cultivates an environment in which students and staff act with integrity and comply with relevant laws, regulations and policies applicable to the University.	FOU
Financial accountability	Applies prudent financial management practices when undertaking tasks and makes decisions with a consideration of the short and longer term financial implications on organisational effectiveness, and the impacts on University staff, students and community.	FOU
Negotiates effectively	Understands own and others needs to communicate professionally and openly, making appropriate trade-offs to reach optimal outcomes for the University	INT
Presents with credibility	Presents and facilitates discussion by making information understandable and engaging students, staff and/or the community to generate action and create an impact.	INT
Thinks creatively	Thinks creatively about current challenges and opportunities to develop solutions, encouraging creative capacity in others to optimise outcomes for students, staff and the community.	INT
Core Capability	Behavioural Indicators *FOU – Foundational, *INT – Intermediate, *ADV – Advanced, *EXP – Expert	Level
Acts with courage, respect and integrity	Acts with honesty, demonstrating ethical and professional behaviour, with the courage to speak up for respect and integrity.	FOU
Communicates with impact	Interacts with others clearly and effectively, using respectful verbal and non-verbal communication for the benefit of our students, staff and the communities we serve	FOU
Displays adaptability	Remains committed and persistent in the pursuit of goals, maintaining composure and professionalism, regardless of changing circumstances.	FOU
Displays cross-cultural understanding	Collaborates in an inclusive way demonstrating an understanding of cultural differences and how our views can shape the way we operate.	FOU
Responds to changing contexts	Anticipates and monitors demand and develops considered responses to continually improve student, staff and community outcomes	FOU
Strives to learn	Exhibits a commitment to continuously learn, having the courage to embrace new practices, behaviours and mindsets and be open to new ideas and perspective.	FOU
Takes accountability	Takes accountability for own actions and contributes to an inclusive, psychologically safe and high performance culture where people are inspired to thrive and realise their potential.	FOU
Takes action	Takes initiative, achieving results through a commitment to excellence and quality outcomes for the University, Australia and the wider world.	FOU