POSITION DESCRIPTION

Position Title: Technical Officer/Senior Technical Officer
Organisation Unit: Office of the Executive Dean, Faculty of Science
Position Number: 1327279
Type of Employment: Full Time, Continuing
Classification: Broadband Hew Level 5/6

THE UNIVERSITY OF QUEENSLAND

The University of Queensland (UQ) contributes positively to society by engaging in the creation, preservation, transfer and application of knowledge. UQ helps shape the future by bringing together and developing leaders in their fields to inspire the next generation and to advance ideas that benefit the world. UQ strives for the personal and professional success of its students, staff and alumni. For more than a century, we have educated and worked with outstanding people to deliver knowledge leadership for a better world.

UQ ranks in the world’s top universities, as measured by several key independent ranking, including the Performance Ranking of Scientific Papers for World Universities (43), the US News Best Global Universities Rankings (52), QS World University Rankings (47), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (65). UQ again topped the nation in the prestigious Nature Index and our Life Sciences subject field ranking in the Academic Ranking of World Universities was the highest in Australia at 20.

UQ has an outstanding reputation for the quality of its teachers, its educational programs and employment outcomes for its students. Our students remain at the heart of what we do. The UQ experience – the UQ Advantage – is distinguished by a research enriched curriculum, international collaborations, industry engagement and opportunities that nurture and develop future leaders. UQ has a strong focus on teaching excellence, winning more national teaching excellence awards than any other in the country and attracting the majority of Queensland’s highest academic achievers, as well as top interstate and overseas students.

UQ is one of Australia’s Group of Eight, a charter member of edX and a founding member of Universitas 21, an international consortium of leading research-intensive universities.

Our 50,000-plus strong student community includes more than 13,000 postgraduate scholars and more than 12,000 international students from 144 countries, adding to its proud 240,000-plus alumni. The University has about 7,000 academic and professional staff and a $1.8 billion annual operating budget. Its major campuses are at St Lucia, Gatton and Herston, in addition to teaching and research sites around Queensland and Brisbane city. The University has six Faculties and four University-level Institutes. The Institutes, funded by government and industry grants, philanthropy and commercialisation activities, have built scale and focus in research areas in neuroscience, biomolecular and biomedical sciences, sustainable minerals, bioengineering and nanotechnology, as well as social science research.
UQ has an outstanding track-record in commercialisation of our innovation with major technologies employed across the globe and integral to gross product sales of $11billion+ (see http://uniquest.com.au/our-track-record).

UQ has a rapidly growing record of attracting philanthropic support for its activities and this will be a strategic focus going forward.

Organisational Environment

The Faculty of Science is recognised as a powerhouse for some of the world’s leading scientists, teachers, science programs and commercial outcomes. The Faculty is one of the largest Science groupings in Australia, with approximately 1100 (equivalent full-time) staff, and about 7500 (equivalent full-time) students.

Throughout its Schools and Centres, the Faculty unites the disciplines of agriculture and animals, biomedical and biological sciences, chemistry, earth sciences, food sciences, geography, marine science, maths and physics, the environment and veterinary science.

With strong links between the enabling and applied sciences, UQ researchers and graduates are working on a wide range of groundbreaking projects from the molecular characterisation of drug resistant bacteria that affect piglets through to finding better treatments for illness and rehabilitation of the environment.

Information about the Faculty may be accessed on the Faculty’s web site: http://www.science.uq.edu.au/

Diversity and Inclusion

The Faculty recognizes and values equity and diversity, and encourages applications from any individual who meets the requirements of this position irrespective of gender, sexuality, race, ethnicity, religion, disability, age or other protected attributes. The Faculty strives to provide an inclusive working environment, and along with the University is committed to supporting staff with family and caring responsibilities by providing policies, programs and initiatives to help balance work and family responsibilities.

Information for Prospective Staff

Information about life at UQ including staff benefits, relocation and UQ campuses is available at - http://www.uq.edu.au/current-staff/working-at-uq

DUTY STATEMENT

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<tr>
<th>HEW5</th>
<th>HEW6</th>
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<tr>
<td><strong>Primary Purpose of Position</strong></td>
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<td>The primary purpose of this position is to provide technically-orientated support to workshop clients. This will involve undertaking complex R&amp;D projects, and providing consultative and design support.</td>
<td>The primary purpose of this position is to provide technically-orientated support to workshop clients and other technicians. This will involve undertaking workshop operational support duties as/when required, undertaking complex R&amp;D projects, and providing consultative and design support.</td>
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<td><strong>Duties</strong></td>
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workshops CNC/HPM machinery.

- Manufacture, install and commission a wide range of equipment and teaching aids, ranging from highly complex to very simple, for undergraduate and research programs; constructed from either drawings (detailed or otherwise) and/or verbal instructions.
- Assist project leaders in an advisory capacity in conceptual stages of projects. Personally manage numerous projects with minimal supervision. Duties include providing technical and design support, receiving jobs directly from clients and sourcing relevant materials for projects.
- Consult with UG’s, PG’s, academics, research staff and commercial clients. Design, devise and implement efficient and cost-effective construction methods for a wide range of R&D equipment using an accumulation of advanced skills and knowledge. This may include working from limited information supplied verbally and/or by means of drawings (detailed or otherwise) or other documents.

**Customer Service and Quality Assurance**

- Liaise with clients (teachers, academics, researchers and education coordinators) to ensure client objectives are met.
- Ensure a high level of client focus (internally and externally) with due care and attention to client priorities, demonstrating a high level of client services and communications.

**Other**

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including but not exclusive to:

- the [University’s Code of Conduct](#)
- requirements of the Queensland occupational health and safety (OH&S) legislation and related [OH&S responsibilities and procedures](#) developed by the University or Institute/School

| Workshop operational support duties as/when required. Duties include providing technical and design support across a wide range of T&R projects, receiving jobs from clients, replenishing workshop consumables, sourcing new technology and implementing a maintenance regime for workshop machinery.
- Machine a wide variety of extremely complex and/or repetitive components in workshops CNC/HPM machinery.
- Manufacture, install and commission a wide range of equipment and teaching aids, ranging from highly complex to very simple, for undergraduate and research programs; constructed from either drawings (detailed or otherwise) and/or verbal instructions.
- Assist project leaders in an advisory capacity in conceptual stages of projects. Personally manage numerous projects with no supervision. Duties include providing technical and design support, receiving jobs directly from clients and sourcing relevant materials for projects.
- Consult with UG’s, PG’s, academics, research staff and commercial clients. Design, devise and implement efficient and cost-effective construction methods for a wide range of R&D equipment using an accumulation of advanced skills and knowledge. This may include working from limited information supplied verbally and/or by means of drawings (detailed or otherwise) or other documents.
- Provide technical leadership and advice to both clients and fellow technicians in areas concerning CNC (Computer Numerical Control) and CAD (Computer Aided Drawing) operations.

**Customer Service and Quality Assurance**

- Liaise with clients (teachers, academics, researchers and education coordinators) to ensure client objectives are met

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**Training Program and competency based assessment**

Training and development will be provided and will include continuous professional development through attendance at technical training programs and workshops provided by universities or qualified technical training providers.

Progress to HEW Level 6 will be dependent upon successful demonstration of those competencies identified as the difference between the two levels and measured against performance criteria specified during the annual appraisal. Specifically HEW Level 5 appointees will be mentored into the higher level over time through working with senior staff. They will need to:

- Demonstrate an expert understanding of technical abilities and application to fabrication and interaction with staff and students, both undergraduate and research higher degree. Applicants will be expected to be familiar with all aspects of work within the workshops, before working independently.
- Successfully manage and finish tasks with a high proficiency level as allocated to them by Workshop Co-ordinators within time and budget allocation estimates.
- Provide independent thinking and exercise judgement when working on projects for Chief Investigators and other staff on research grants. Applicants will be expected to be familiar with all aspects of the tasks and requirements and be able to advise on design issues, before working independently.
- Demonstrate a sound knowledge of working within a technical workshop including all aspects of health, safety and wellness. All training, including all skill and operational requirements will be required including understanding of all SOPs and annual OHS inductions.

Organisational Relationships

The position will report to Workshops Manager but will be coordinated operationally by the relevant Workshop Coordinator.
## SELECTION CRITERIA

### HEW 5

**Essential**
- A degree, diploma or relevant trade qualification with at least 4-5 years subsequent relevant experience, or an equivalent combination of relevant experience and/or education/training.
- Extensive CAD/CAM CNC and/or High-level Precision Machining (HPM) knowledge and experience essential
- Aptitude for creativity in the design of new equipment for teaching laboratories or research projects
- Ability to design, construct and install fluid and gas handling systems utilising Swagelok components or similar technologies
- Specialist skills in the maintenance and repair of precision equipment
- High level communication and consulting skills when interacting with clients from diverse backgrounds
- Sound knowledge of occupational health and safety requirements

**Desirable**
- Relevant work experience in a research laboratory/workshop environment using a diverse range of machinery

### HEW 6

**Essential**
- A degree, diploma or relevant trade qualification with at least 4-5 years subsequent relevant experience, or an equivalent combination of relevant experience and/or education/training.
- Extensive CAD/CAM CNC and/or High-level Precision Machining (HPM) knowledge and experience.
- Ability to perform workshop operational support duties as/when required.
- Aptitude for creativity in the design of new equipment for teaching laboratories or research projects
- Ability to design, construct and install fluid and gas handling systems utilising Swagelok components or similar technologies
- Specialist skills in the maintenance and repair of precision equipment
- High level communication and consulting skills when interacting with clients from diverse backgrounds
- Sound knowledge of occupational health and safety requirements

**Desirable**
- Relevant work experience in a research laboratory/workshop environment using a diverse range of machinery
- Ability to provide technical leadership and advice to both clients and fellow technicians

The University of Queensland values diversity and inclusion and actively encourages applications from those who bring diversity to the University. Please refer to the University's Diversity and Inclusion webpage (http://www.uq.edu.au/equity) for further information and points of contact if you require additional support.

This role is a full-time position; however flexible working arrangements may be negotiated.

Accessibility requirements and/or adjustments can be directed to science.hr@uq.eduau.