MONASH University

A BIGGER CALLING

SENIOR TECHNICAL OFFICER

DEPARTMENT/UNIT: School of Engineering

FACULTY/DIVISION: Electrical and Computer Systems Engineering

CLASSIFICATION: HEW 5A

WORK LOCATION: Bandar Sunway, Malaysia

ORGANISATIONAL CONTEXT

Monash University is Australia’s largest university, and member of the prestigious Group of Eight research intensive universities. Monash consistently rates in the top 100 universities in the world. In the 2018 QS Top Universities ranking, Monash ranked 29 in the world in Business and Management Studies.

Monash University Malaysia is Monash’s third largest campus, with over 8000 students and 900 staff. We are a comprehensive campus offering degrees in business, engineering, medicine, science, information technology, pharmacy, social science and humanities. We are rated among the very best of universities in Malaysia, and the quality of our research output positions us among the very best universities in Southeast Asia.

Monash University Malaysia provides Monash University with a platform for scholarly engagement with the dynamic Southeast Asia region. We are located in greater Kuala Lumpur, in the Klang Valley, one of the region’s industrial hotspots. We sit in the heart of the rapidly developing economic corridor linking Singapore, Kuala Lumpur, Bangkok and beyond. Our education and research is oriented towards deep engagement with this dynamic social and industrial landscape.

In 2018 we celebrated our twentieth anniversary in Malaysia. During this time we have produced more than 16,000 graduates from more than 70 different countries. We provide a diverse and inclusive scholarly environment.

In 2017 Monash Malaysia was awarded a Six Star SETARA rating by the Malaysian Ministry of Education. This places us in the very top “outstanding” cohort of Malaysian Universities.

Monash University Malaysia is jointly owned by Monash University and the Jeffrey Cheah Foundation.

For further information see: www.monash.edu.my.

SCHOOL OF ENGINEERING

The School of Engineering continues to grow rapidly, particularly in the delivery of undergraduate programs, and through the expansion of its facilities and infrastructure. In addressing global engineering challenges of the 21st century, the expansion of research activities in our Malaysian campus is of high priority for the University, reflected by the significant increase of school collaborative partnership with the industry sector, and through the offering of the Higher Degrees by Research, the Master of Engineering Science (Research) and the Doctor of
Philosophy (PhD). The School currently has close to 1,500 undergraduate students, and approximately 70 academic staff, and 42 professional and technical support staff.

The School offers the 4-year Bachelor degree in 6 disciplines: Chemical Engineering, Civil Engineering, Electrical and Computer Systems Engineering, Mechanical Engineering, Mechatronics Engineering and Software Engineering. These are the 6 core disciplines of Engineering, driven by the strong and growing demand for capable graduates in Malaysia, the Asian region and beyond.

In line with the School Development Plan and to meet the thriving market demand, the school has recently started to offer the Master of Advanced Engineering (Energy and Sustainability), a 1-year Master by coursework program.

For further information: www.eng.monash.edu.my.

**POSITION PURPOSE**

The Senior Technical Officer will be team member of the ECSE engineering discipline technical staff and will be reporting to the Principal Technical Officer (PTO). The incumbent will also play the role of providing direct support to laboratory colleagues, academic staff, and students, under the supervision and direction of the PTO and Laboratory Manager (refer to organisational chart).

The major objective of the position is to manage matters related to ECSE engineering discipline teaching and the research laboratory. The position will take responsibility for key roles within the purview of the PTO and Laboratory Manager including improvement plans for laboratory operation, OHSE, 5S, research and teaching.

**Reporting line:** The position reports to the Laboratory Manager

**Supervisory responsibilities:** Not Applicable

**Financial Delegation:** Not applicable

**Budget Responsibilities:** Not Applicable
KEY RESPONSIBILITIES

1. Manage the engineering discipline laboratories
   - Implementing and monitoring operational excellence in respective engineering discipline laboratory
   - Assist in planning and identifying appropriate materials and equipment in discipline lab
   - Implement laboratory procedures in discipline laboratory accordingly

2. Provide technical support for laboratory colleagues, academic staff and students
   - Develop new equipment to general specifications
   - Under general direction, assist in the conduct of major experiments and research programs and/or in setting up complex or unusual equipment for a range of experiments and demonstrations
   - Under broad direction, setup, monitor and demonstrate standard experiments and equipment use
   - Assess, priorities and coordinate the requirements of undergraduate and postgraduate students, in collaboration with their academic supervisors and researchers, for laboratory project assignments and research, including provision of appropriate technical support
   - Advise on the need to employ external contractors when appropriate

3. Manage the day-to day operations of the assigned labs and its facilities
   - Assist Principal Technical officer in the operation of the engineering laboratories and their facilities, manage and plan their utilisation, and determine future needs
   - Manage maintaining the discipline laboratory equipment and instruments inventory list and reconcile appropriate assets whilst reporting to the Laboratory Manager for any required disposals
   - Identify OHSE related issues and to make recommendations to the Laboratory Manager concerning the implementation of a solution
   - Coordinate discipline sourcing of quotations, prepare purchase requisitions, and order suitable materials and equipment
   - Performing periodic audits on discipline lab apparatus and equipment including trials and test runs
   - Plan and advise on the upgrading of equipment and lab facilities at discipline level
   - Audit periodically maintenance records of equipment and ensuring log books and record sheets are completed as required
   - Analyse cost efficiencies and advise Principal Technical Officer action options at discipline level

4. Participate in the conduct of student laboratory activities
   - In collaboration with the Laboratory Manager and relevant academic staff, plan, advise and conduct demonstrations of facilities and techniques, and support the other laboratory technical officers in the conduct of laboratory sessions as required

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
   - Completion of a degree with minimum relevant work experience; or
   - Completion of an Advanced Diploma in Engineering or related area, together with at least 2-3 years relevant work experience in an engineering laboratory environment or, completion of a post-trades certificate and extensive relevant experience in an engineering laboratory environment; or
   - Completion of a diploma qualification and at least two years’ subsequent relevant work experience
Knowledge and Skills

2. Basic theoretical and practical knowledge of relevant Engineering Discipline science
3. Strong personal skills to build relationship with students and staff and mentor junior laboratory technicians
4. Proven ability to work independently under broad supervision
5. Resourceful and possess strong organization and time management skills to coordinate multiple projects and allocate resources accordingly
6. Able to work under pressure and in a team environment
7. Ability to communicate in English
8. Manual dexterity to perform job responsibilities i.e. moving or re-locating equipment etc
9. Possess basic computer skills
10. General understanding of laboratory and OH&S requirements
11. The ability to apply effective work practices, use initiative, work without close supervision and apply attention to detail

OTHER JOB RELATED INFORMATION

- Willing to work flexible hours when required (eg. when student laboratory sessions extend beyond regular business hours)
- May be required to work on weekends during Open Days/Information Days or other activities organised by the University
- Willingness to undertake further training as required (eg. First Aid, specialized equipment, OH&S, etc)

LEGAL COMPLIANCE

Ensure you are aware of and adhere to legislation and University policy relevant to the duties undertaken, including: Ethics, Equal Opportunity, Occupational Health and Safety, Conflict of Interest (including Conflict of Interest in Research), Paid Outside Work, Personal Data Protection, Conduct of Research, and Staff/Student Relationships.