

Position Description - Associate Professor in Mechanical Engineering

Updated 4 April 2024

POSITION DETAILS	
College	College of Science and Engineering
Organisational Unit	Engineering
Supervisor	Dean, People and Resource (or Delegate)
Classification	Academic Teaching & Research (Balanced) Level D
Employment Type	Continuing, Full-time

POSITION SUMMARY

Mechanical Engineering at Flinders University is based at the new state of the art Campus at Tonsley and new City Campus, it has been identified as an area of growth. The appointee will lead the research and teaching related activities in this area. While candidates from any branch of mechanical engineering will be considered, those working in Advanced manufacturing are particularly encouraged to apply, given Flinders investment in the Factory of the Future, a world-class advanced manufacturing facility that is the first of its kind in Australia. The Professor, under broad supervision, will provide academic leadership in research, teaching and community engagement in the discipline of engineering. They will have a strong track record of winning research grants, , industry collaboration, teaching excellence and be willing and able to take significant leadership roles within the College of Science and Engineering.

They will be able and willing to take a strong leadership role with early career researchers and middle career researchers. The Professor will promote the College as a centre of excellence in engineering education and research, both nationally and internationally, and with a particular focus in mechanical engineering.

UNIVERSITY EXPECTATIONS AND VALUES

All staff at Flinders are responsible for understanding their obligations and responsibilities as set out in the University's code of conduct and are expected to:

- 1. demonstrate commitment to the University's values of Integrity, Courage, Innovation, Excellence and the underlying ethos of being Student Centred;
- contribute to the efficient and effective functioning of the team or work unit in order to meet the University's objectives. This includes demonstrating appropriate and professional workplace behaviours, providing assistance to team members if required and undertaking other key responsibilities or activities as directed by one's supervisor;
- 3. promote and support an inclusive workplace culture which values diversity and embraces the principles of equal opportunity;
- 4. perform their responsibilities in a manner which reflects and responds to continuous improvement; and familiarise themselves and comply with the University's Work Health and Safety, Injury Management and Equal Opportunity policies.

A National Police Certificate which is satisfactory to the University will be required by Flinders University before the successful applicant can commence in this position.

An up-to-date COVID-19 vaccination may be required as a condition of employment, in accordance with the Flinders University COVID-19 Vaccination Policy (2022). If required, any offer of employment will be subject to the successful candidate presenting their COVID-19 Digital Certificate as evidence of vaccination or showing evidence of a valid medical exemption, where relevant.



KEY POSITION RESPONSIBILITIES

The Associate Professor in Mechanical Engineering is accountable for:

- 1. Providing sustained leadership in teaching programs, primarily within the broad area of mechanical engineering.
- 2. Providing leadership in inspiring and innovative teaching informed by approaches that enhance the student experience.
- 3. Providing leadership to the integration and management of aspects of the academic and administrative life of the College.
- 4. Providing leadership in college internal and external quality assurance and accreditation processes.
- 5. Playing a significant leadership role in the College/University and make a significant contribution to leadership at the national and/or international level within Engineering.
- 6. Making an outstanding high-quality personal contribution to research and community service through original and innovative contributions, obtaining competitive research grants from outside the University and sustained publications within high quality journals.
- 7. Undertake active leadership in ethical, high quality and innovative research through activities such as scholarship, quality publication, external grant acquisition, mentoring and developing early career researchers, supervision of students undertaking complex Work Integrated Learning, Honours and/or Research Higher Degrees and deliver high quality presentations that aligns with the College areas of research strength and focus.
- 8. Leading, supervising and participate in high performing multi-disciplinary teams with an education and research focus and contribute to the development of a respectful, trusting, and collaborative working environment.
- 9. Developing, establishing, and maintaining strategic relationships and networks with a range of stakeholders including industry and professional associations and organisations, nationally and/or internationally.
- 10. Some out of hours work (including weekends) as well as rural SA, interstate, and overseas travel, may be required.
- 11. Any other responsibilities in line with the level of the position as assigned by the Supervisor and/or the University.

KEY POSITION CAPABILITIES

- 1. Completion of a PhD in an area related to mechanical engineering, or equivalent qualification.
- A strong and active track record of teaching expertise in an area of mechanical engineering including evidence of the ability to lead the development and delivery of a contemporary mechanical engineering teaching programs.
- 3. Evidence of innovation in teaching to support students in order to maximise their learning.
- 4. Evidence of educational leadership relevant to teaching and learning in higher education and experience leading innovation and inspiring excellence amongst colleagues.
- 5. Experience in curriculum development and teaching methodology for topics and programs of study, ideally including reviews, e-learning and internal and external accreditation activities.
- 6. A growing international reputation for research in an area of mechanical engineering that complements existing College research strengths together with a compelling vision for how their research will evolve in the short, medium, and long terms.
- 7. A record of high-quality research publications and of successfully winning external research grants.
- 8. A record of establishing effective research collaborations with external academic and industry partners, the ability to play a significant role within the Flinders Factory of the Future, and the capacity to develop new linkages within the Tonsley Innovation District.



- 9. Demonstrated excellence in the supervision of honours and higher degree research students with the clear ability to build and sustain a group of research students within the College.
- 10. Evidence of contribution to the discipline and/or profession within a relevant external professional domain and within a wider community context at local, national, and international level.
- 11. Demonstrated excellent oral and written communication skills and interpersonal skills, including the demonstrated evidence of the ability to develop, establish and maintain effective relationships with staff, students, and industry.
- 12. (Desirable) Demonstrated experience in advanced manufacturing