

Position Description - Associate Professor in Mechanical Engineering

Updated 24 March 2023

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, see https://www.flinders.edu.au/campus/tonsley.html, and 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 one or more of the following fields are particularly encouraged to apply:

- Advanced manufacturing
- Sustainable Energy

The Associate Professor will be a senior member of the academic staff in the area of Engineering and will promote the College as a centre of excellence in engineering education and research, both nationally, and internationally, and with a particular focus on mechanical engineering. They will have a strong track record of winning research grants, either Category 1 or others, industry collaboration, teaching excellence and be willing and able to take some leadership roles within the College of Science and Engineering.

The incumbent may also be involved in teaching across other courses in the College, where appropriate. The incumbent will prioritise, coordinate, monitor workflow and provide informal day-to-day feedback to research support staff and casual academic teaching staff according to the University's policies, practices and standards.

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 areas of electronic and electrical 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.
- 2. Demonstrated evidence of a distinguished and active track record of teaching expertise in an area of mechanical engineering at tertiary level, including evidence of the ability to lead the development and delivery of a contemporary mechanical engineering teaching programs.
- 3. Demonstrated 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. Significant 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. Existing industry links and the ability to develop new links within the Tonsley Innovation District or elsewhere.
- 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. A demonstrated strong track record of establishing effective research collaborations with external national and international partners.
- 12. 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.
- 13. Demonstrated experience in one of the following (Desirable):
 - Advanced manufacturing
 - Sustainable energy