LA TROBE
UNIVERSITY

College of Science, Health and Engineering

EXECUTIVE POSITIONS

Information for Candidates

latrobe.edu.au

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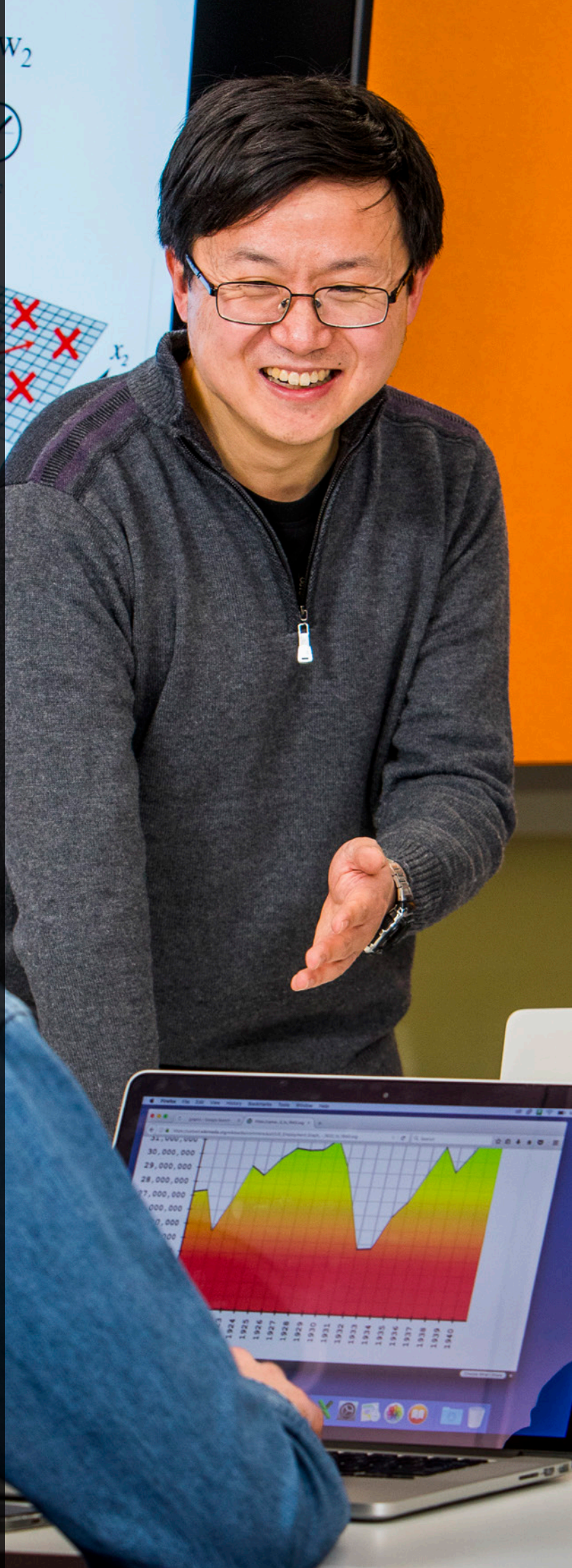


Welcome from the Pro Vice-Chancellor, College of Science, Health and Engineering

On behalf of the University, I warmly welcome your interest in the following positions within the School of Engineering and Mathematical Sciences:

- **Professor in Artificial Intelligence**
- **Professor in Engineering**

We believe these positions represent an exciting opportunity for outstanding and transformational academic leaders to join a dynamic and growing School.

The Chair positions are key leadership roles within the University and contribute to the strategic management and performance of the School's teaching, research and engagement activities.

These positions will lead the continuing growth in student revenue and research income, building on the School's international reputation for the quality of its scholarship and its graduates.

The School's breadth of research focus areas includes data science, computational intelligence, software engineering, civil engineering, manufacturing engineering, mathematics and statistics, cybersecurity, mobile and wireless networks, and electrical, electronic and communication engineering.

The successful candidate should bring an outstanding record of international achievement in academia, a breadth of academic vision, strategic thinking, and evidence of an international reputation in the appointee's professional field as well as demonstrable experience in fostering and supporting a research culture.

La Trobe is a participant in the Athena SWAN Charter to enhance gender equality in Science, Technology, Engineering, and Mathematics disciplines. As such, I especially encourage female applicants to apply.

I would be pleased to discuss this opportunity with you.

Professor Robert Pike
Pro Vice-Chancellor

About La Trobe University

Our Mission

Advancing knowledge and learning to shape the future of our students and communities.

Our Vision

To promote positive change and address the major issues of our time through being connected, inclusive and excellent.

Our Values

Our early reputation as a radical and challenging institution continues to influence the way we enrich the experience of our students and engage with our partners and communities.

We were founded half a century ago to broaden participation in higher education in Melbourne's north and, later, in regional Victoria. We have succeeded for many thousands of students who would otherwise have been excluded from the opportunities provided by a university education.

We continue to support access, diversity and inclusivity while undertaking world-class research that aims to address the global forces shaping our world and make a difference to some of the world's most pressing problems, including climate change, securing food, water and the environment, building healthy communities, and creating a more just and sustainable future. This approach is based on our values of:

- inclusiveness, diversity, equity and social justice
- pursuing excellence and sustainability in everything we do
- championing our local communities in Melbourne's north and regional Victoria
- being willing to innovate and disrupt the traditional way of doing things.

Of all Australian universities, we are the most successful at combining accessibility and excellence, and have become a place where social inclusion and globally recognised excellence come together for the benefit of our students, our staff and our communities.

Our academics and researchers achieve national and international recognition, our public intellectuals demonstrate an enduring social conscience and influence, and our alumni achieve extraordinary success and impact in government, industry and not for profit organisations.

We strive to be exemplars for the sector in our commitment to gender equity and to inclusivity for marginalised groups; and we work with Indigenous peoples and organisations to support their social, cultural and economic aspirations.

We embrace sustainable practices across all our campuses because we are committed to improving environmental, social and economic outcomes for our communities.

We contribute to economic development for our local communities, and our future activity will increasingly be international as we become a globally connected university in everything we do.

Our Culture

La Trobe Cultural Qualities

Our cultural qualities underpin everything we do. As we work towards realising the strategic goals of the University we strive to work in a way which is aligned to our four cultural qualities:

Connected

- We are Connected: Connecting the students and communities we serve to the world outside

Innovative

- We are Innovative: Tackling the big issues of our time to transform the lives of our students and society

Accountable

- We are Accountable: Striving for excellence in everything we do. Holding each other to account, and working the highest standards

Care

- We Care: We care about what we do and why we do it, because we believe in the power of education and research to transform lives and global society.

About the College of Science, Health and Engineering

The College of Science, Health and Engineering contains 9 schools and 19 departments working across La Trobe's multi-campus operations, offering general and specialist undergraduate, postgraduate and research higher degree courses.

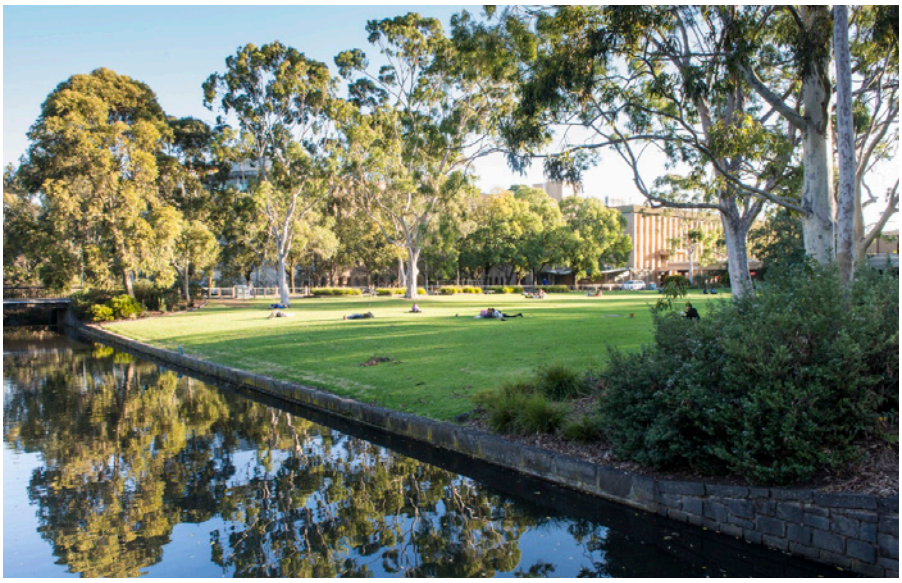
Our world-leading staff are dedicated to achieving significant educational and research outcomes in their fields. Our degrees are linked to emerging trends and are designed to prepare students for work in changing environments. We deliver a wide range of general and specialist courses that challenge students to expand their life and learning experiences.

We are engaged in both regional and metropolitan communities, with our courses offered across the Albury-Wodonga, Bendigo, Bundoora, Melbourne City, Mildura, Shepparton and Sydney campuses.

Our students have access to world-renowned research facilities including the A$100 million La Trobe Institute for Molecular Science (LIMS) and the A$288 million Centre for AgriBioscience.

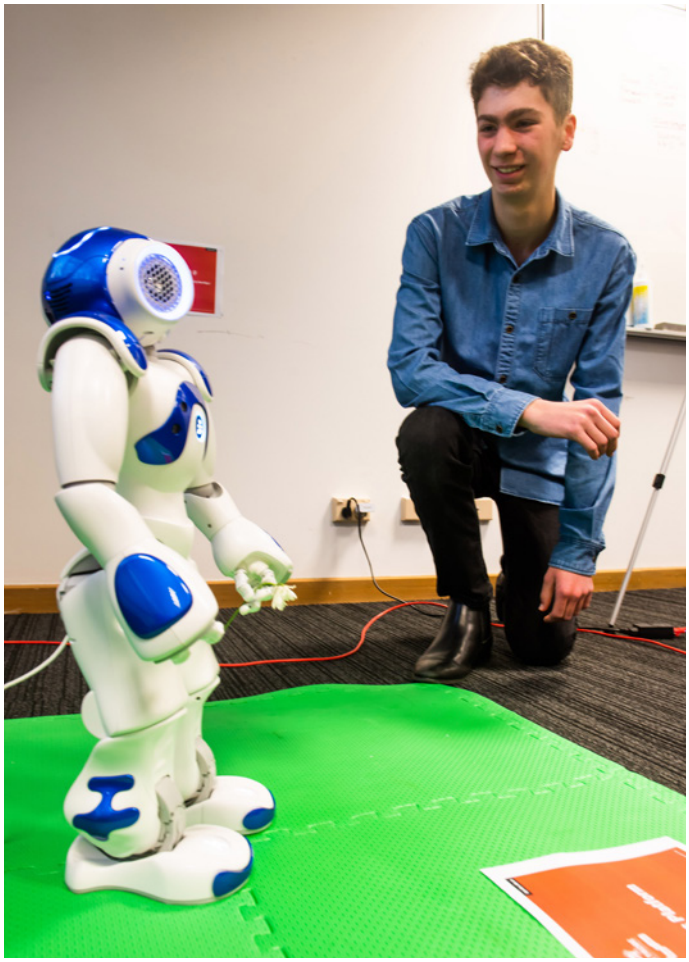
Our world-class researchers work in collaboration with industry partners and multiple disciplines across the university to deliver significant research outcomes across five thematic areas:

- Building healthy communities
- Securing food, water and the environment
- Sport, exercise and rehabilitation
- Transforming human societies
- Understanding disease.



Our researchers work in an environment which encourages innovative solutions and opportunities for research breakthroughs across important scientific and social issues. They hold significant strength and expertise in:

- Environment
- Rehabilitation and Exercise
- Brain, Mind and Behaviour
- Food and Agriculture
- Infection, Immunity and Cancer Research.



School	Department
La Trobe Rural Health School	Rural Department of Allied Health Rural Department of Community Health Rural Department of Nursing and Midwifery Department of Dentistry and Oral Health
School of Allied Health, Human Services and Sport	Department of Physiotherapy, Podiatry and Prosthetics and Orthotics Department of Dietetics, Human Nutrition and Sport Department of Occupational Therapy, Social Work and Social Policy Department of Speech Pathology, Orthoptics and Audiology
School of Applied Systems Biology	Nil
School of Cancer Medicine	Nil
School of Engineering and Mathematical Sciences	Department of Computer Science and Information Technology Department of Engineering Department of Mathematics and Statistics
School of Life Sciences	Department of Animal, Plant and Soil Sciences Department of Ecology, Environment and Evolution Department of Physiology, Anatomy and Microbiology
School of Molecular Sciences	Department of Biochemistry and Genetics Department of Chemistry and Physics Department of Pharmacy and Biomedical Science
School of Nursing and Midwifery	Nil
School of Psychology and Public Health	Department of Public Health Department of Psychology and Counselling

About the School of Engineering and Mathematical Sciences

School Vision

To be a leader of expertise in Technology, Engineering and Mathematics for innovative education and research that challenges the status quo and transforms our communities.

Strategic Intent

To be a leader in STEM education and research by:

- enabling our students to flourish in a rapidly evolving digital world;
- positioning our workforce and creating a work environment in which staff willingly bring their best and strive for excellence;
- building strong partnerships with regional, national and international communities and industry;
- producing ground-breaking research that changes current practice; and
- nurturing cross-disciplinary collaborations that enhance teaching and research outcomes.

The School of Engineering and Mathematical Sciences brings together interconnected discipline areas located within three departments: *Department of Computer Science and Information Technology, Department of Engineering, and Department of Mathematics and Statistics*. The School also hosts two Research Centres: Centre for Technology Infusion (CTI) which aims to deliver technology translation and industry impact in Engineering and Technology, and the Optus La Trobe Cybersecurity Research Hub which focusses on research and training in cutting-edge cybersecurity technologies and innovation.

In the last five years, the School has undergone a major strategic repositioning with the development of new programs and the strengthening of the School's research focus areas. Over this period, the School introduced a number of new programs in the areas of Cybersecurity (Computer Science, Law, and Business Operations) and Data Science. Another two new programs will be introduced in 2020: Master of Internet of Things (IoT) and Innovation (Bendigo campus), and Master of Artificial Intelligence (AI). These new programs will form a coherent focus and direction for the School in producing graduates who are ready to tackle new technological challenges of this century.

The School research continues to flourish in the areas of smart sensor applications, artificial intelligence and data science, cybersecurity, network engineering, and intelligent transport systems amongst a diverse range of other research expertise and endeavours.

We are also focusing on building and strengthening our partnerships with industry, both locally and internationally.

In the recent 2018 ERA (Excellence in Research for Australia) assessment, approximately 80% of the submitted fields within the School achieved a rating of "4" (above world standard) or "5" (well above world standard). None of the areas within the School received a rating of less than "3" (world standard). This has been a significant achievement which the School aims to continue to foster and cultivate.

About the Positions

A Professor (Level E) teaching and research academic is expected to be an internationally acknowledged leader in their discipline or professional field. They will provide discipline leadership and foster excellence in teaching and research. They will design and lead curriculum development, teaching and conduct and publish, or otherwise disseminate, the highest quality and/or impact research/scholarship. They will also foster excellence in teaching and research/scholarship in that discipline or professional field at La Trobe, and through relevant national and international external bodies. All Professors are members of the University's Academic Board and are expected to contribute to the leadership not only of their School and College, but also of the University as a whole.

Professor in Artificial Intelligence

Full-time, Continuing

This new role of Professor in Artificial Intelligence (AI) will be a prominent academic appointment within the Department of Computer Science and Information Technology at the Melbourne (Bundoora) campus.

The Department of Computer Science and Information Technology undertakes a wide range of research and teaching programs in the area of data science, computational intelligence, software engineering, cybersecurity and mobile and wireless networks. The Department is committed to the development and exploration of new and innovative teaching and research programs which drives opportunities for multidisciplinary collaboration across the School/College and the University. The Department also has a strong reputation in multidisciplinary applied research, particularly through close collaborations with industry partners such as OPTUS and CISCO, and the establishment of some joint academic appointments in areas that are relevant to the industry.

It is envisaged that this Professor in Artificial Intelligence appointment will provide strong leadership to the Department's research, curriculum development, national and international collaborations, and industry engagement in artificial intelligence and surrounding interdisciplinary areas. The Department already has a strong reputation in artificial intelligence and information systems areas, both being assessed as 'above world standard' in the recent outcomes of 2018 ERA (Excellence in Research for Australia).

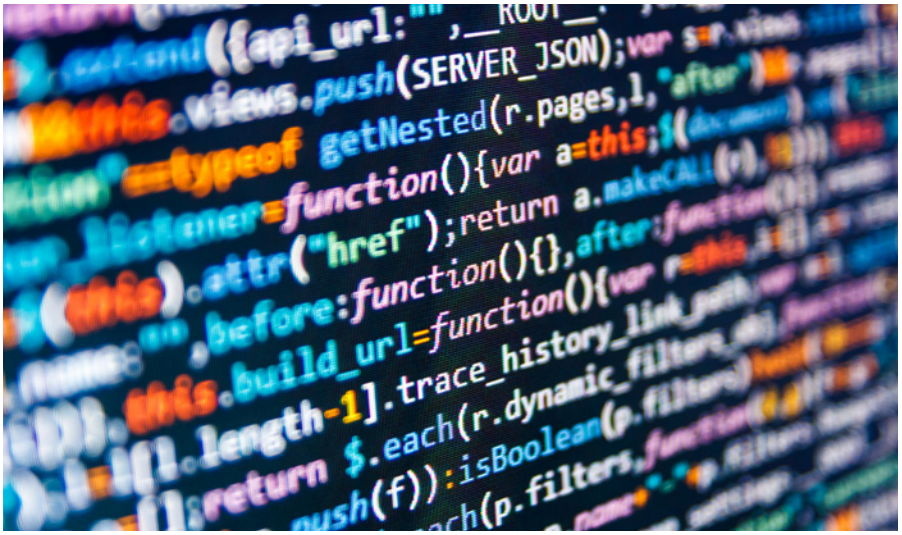
Duties at this level may include:

Research

- Conduct innovative and high impact research and produce high quality publications resulting from that research.
- Obtain research funding from grants, contracts and consultancies, individually or as part of a team.
- Publish, or otherwise disseminate, in leading international journals and/or give invited presentations at leading international conferences.
- Provide academic leadership to ensure the development and maintenance of a robust research culture in the discipline/ professional field at La Trobe.
- Take a leading role in the professional field, nationally and internationally.
- Supervise Higher Degree by Research (HDR) students
- Engage with industry and developing technologies and systems that have an impact on industry.

Teaching and Learning

- Design, coordinate, participate and teach subjects and courses which provide a high-quality learning experience that engages undergraduate, honours and postgraduate students.
- Strengthen the existing capability of La Trobe University and further enhance its reputation as a leader in teaching and research, especially in artificial intelligence.
- Contribute to La Trobe's Scholarship of Teaching (SoLT) and disciplinary teaching pedagogy and research.
- Travel internationally for periods to deliver teaching at our international partnership institutions.
- Contribute to knowledge and knowledge transfer at a local and/or internationally significant level.



Service

- Represent the discipline/program/department or school at external events.
- Perform allocated administrative functions effectively and efficiently.
- Engage with local, national and international academic and industry partners.
- Promote the University and discipline by participating in appropriate local, national and/or international organisations and events.
- Have a significant influence on practice in a clinical/professional field nationally or internationally, as a result of teaching, research, scholarship and innovation.
- Serve on committees at the School or program level and contribute to committees at the Department/School or College level as required.
- Undertake other duties commensurate with the classification and scope of the position as required by the Head of Department or Head of School.

Selection Criteria

Essential

- A PhD or equivalent accreditation recognised by the University/profession.
- Evidence of effective leadership and management at Department/School/College and/or University level.
- Excellent interpersonal skills with a proven ability to build robust working relationships with academic and professional staff across the University.
- Commitment to the University's vision, strategic plan, core commitments and values.

Research

- Distinguished record of nationally and internationally recognised research, with evidence of the highest quality and/or impact. Where relevant, evidence of citations and journal rankings should be given.
- Evidence of an international reputation in the appointee's professional field, and of significant national and international influence on their profession.
- Evidence of achievement in fostering and supporting research teams and a research culture and in mentoring early career staff.
- Strong record of external research funding through competitive grants, industry grants or consultancies.
- Strong record of engaging with industry and developing technologies and systems that have an impact on industry.
- Demonstrated ability to attract Higher Degree by Research (HDR) students and supervise them to successful completion.

Teaching and Learning

- Proven commitment to the highest quality teaching in related disciplines or professional fields, including evidence of leadership in teaching and curriculum development at postgraduate levels.
- Proven track record in designing, coordinating and teaching subjects and courses which provide a high quality and innovative learning experience that engages undergraduate, honours and postgraduate students.
- Evidence of contributing to knowledge and knowledge transfer at a local and/or internationally significant level.

Service

- Perform allocated administrative functions effectively and efficiently.
- Evidence of engaging with local, national and international academic and industry partners.
- Demonstrated ability to lead teams and promote a collaborative and collegial environment.

Desirable

- Graduate Certificate in Higher Education or equivalent.

Professor in Engineering

Full-time, Continuing

This new role of Professor in Engineering will be a prominent academic appointment within the Department of Engineering at the Melbourne (Bundoora) campus.

The Department of Engineering is committed to the development and exploration of new and innovative teaching and research programs which drives opportunities for multidisciplinary collaboration across the School, College, and the University. The Engineering discipline was assessed 'above world standard' in the recent outcomes of 2018 ERA (Excellence in Research for Australia). In particular, the Department has a strong reputation in space and satellite research, through close partnership with the German Aerospace Centre and the construction of a high-resolution camera that was launched at NASA's Kennedy Space Centre Florida in 2018 (https://www.premier.vic.gov.au/la-trobe-university-launched-into-outer-space). Engineering La Trobe is also a core partner in the recently successful $110M smart satellites (SmartSat) CRC that was announced in April 2019.

It is envisaged that this Professor in Engineering appointment will provide strong leadership to the Department's research, curriculum development, national and international collaborations, and industry engagement in electrical, electronics, and communications engineering and particularly in areas related to space and remote sensing.

Duties at this level may include:

- Provide research and academic leadership in Electrical, Electronic and Communication Engineering.
- Provide leadership in the development and teaching of Electrical, Electronic and Communication Engineering at undergraduate and postgraduate levels.
- Lead course-level curriculum design and develop and coordinate courses.
- Take a leading role in the professional field, nationally and internationally.
- Strengthen the existing capability of La Trobe University and further enhance its reputation as a leader in teaching and research.
- Conduct research of the highest quality and/or impact.
- Publish, or otherwise disseminate, in leading international journals and/or invited presentations at international conferences.
- Supervise Higher Degree by Research (HDR), honours and/or postgraduate research students.
- Provide academic leadership to ensure the development and maintenance of a robust research culture in the discipline/professional field at La Trobe.
- Obtain necessary research funding from contracts/grants/consultancies.
- Play a leading role in discipline-based mentoring and supporting the development of more junior research and teaching staff within the Department/School/University.
- Provide leadership to the university/school/department/program by undertaking major management and planning responsibilities, and chairing school, faculty, university committees/working parties.
- Promote the University and discipline by participating in appropriate local, national and/or international organisations and events.
- Have a significant influence on practice in a clinical/professional field nationally or internationally as a result of teaching, research, scholarship and innovation.
- Undertake other duties commensurate with the classification and scope of the position as required by the Head of School.

Selection Criteria

Essential

- PhD or equivalent accreditation recognised by the University/profession in Electrical/Electronics/Communication Engineering.
- Distinguished record of nationally and internationally recognised research, with evidence of the highest quality and impact. Where relevant, evidence of citations and journal rankings should be given.
- Proven commitment to the highest quality teaching in related disciplines or professional fields, including evidence of leadership in teaching and curriculum development at postgraduate levels.
- Demonstrated ability to attract honours/postgraduate research students and supervise to successful completion.
- Evidence of an international reputation in the appointee's professional field and of significant national and international influence on their profession.
- Evidence of achievement in fostering and supporting research teams, a research culture and in mentoring early career staff.
- Strong record of external research funding through competitive grants, industry grants or consultancies.
- Excellent interpersonal skills with a proven ability to build robust working relationships with academic and professional staff across the University.
- Evidence of effective leadership and management at department/school/college and/or university level.
- Demonstrated ability to lead teams and promote a collaborative and collegial manner.
- Experience in the Space or Defence Industry and/or research collaboration with Space, Defence or a related industry, producing effective outcomes.

Desirable

- Experience in research, industry collaboration, and academic leadership in areas related to space and remote sensing. Such as, but not limited to:
  - Space-borne instrument design and deployment
  - Satellite systems
  - Harsh environment electronic instrument design and deployment
  - Space situational awareness
  - Terrestrial instrumentation for observation of space
  - Active or passive radar design for space or defence monitoring
  - Radio communication (RF) transmission/reception design and application
  - Implementation of high-performance software defined radio designs in field programmable gate arrays (FPGAs)

How to Apply

All Applications should be submitted via **www.latrobe.edu.au/jobs**

When submitting your application, the following information is required:

Curriculum Vitae

Please include the following:

- Details of your education, professional training and qualifications with year of completion.
- A full list of publications and research grants.
- Positions you have held, including relevant dates, titles, responsibilities and key achievements.
- Other relevant information such as your contributions to professional associations and learned societies, and community activities.

Vision Statement

Taking the Selection Criteria into consideration, provide a brief summary of what you will bring to this position (no more than four pages), taking into account your experience and achievements, your vision for the role and for the portfolio, and the processes you would use to implement this.

Referees

- Provide full contact details for at least three referees who have agreed to supply confidential references if requested by the University.
- State your relationship to the referees and why they have been nominated to speak on your behalf.
- Referees will only be contacted after prior consultation with you.
- It is your responsibility to ensure referees are willing to provide reports when contacted.

Indicative Commencement Date

Candidates are asked to provide an indication of the earliest date on which they would be available to commence in the position.

As part of the application and appointment process, candidates may be requested to provide proof of their identity, undergo psychometric testing and give permission for verification of their tertiary qualifications and an Australian Federal Police check.

All La Trobe University employees are bound by the Working with Children Act 2005. If you are successful, you will be required to hold a valid Victorian Employee Working with Children Check prior to commencement.

La Trobe University is a proud member of the Science in Australia Gender Equity (SAGE) Athena SWAN program to increase the number of women in science.

www.science.org.au/supporting-science/gender-equity

About Victoria and Melbourne

Experience Melbourne

Melbourne is the capital of the state of Victoria, and Australia's second largest city. It's a multicultural hub with 4.5 million people from more than 153 countries, it's one of the best sporting cities in the world, and Australia's art and culture capital.

Melbourne is a safe, well-serviced city in which to live and the main campus of the University at Bundoora is close to many world class hospitals, schools, research centres, shopping centres, bike paths and parklands. People living in Melbourne enjoy, affordable healthcare, world-class education, reliable infrastructure, business opportunities and a healthy environment – all of which are unrivalled anywhere else in the world. You'll find the world's masterpieces on the walls of the city's 100-plus galleries and some of the world's best examples of street art along its famous laneways. Melbourne's theatres and live venues stage blockbuster productions, international and local opera, ballet, comedy and live music by some of the world's most popular artists. Melbourne is also a UNESCO City of Literature.

When it comes to sport, Melbourne is a city like no other. Each year the city hosts major international sporting events like the Australian Open Grand Slam tennis tournament, the Formula One Grand Prix, the Rip Curl Pro surfing championship, the Australian Masters golf tournament and the Melbourne Cup (horse racing). Plus the city hosts the Grand Final of Australian Rules Football every year, which includes a parade in the city.

Melburnians love their food. Many of the world's top chefs have set up in Melbourne and you'll find just about every cuisine on the planet here: French, Italian, Spanish, Greek, Chinese, Malaysian, Indian, Thai, Japanese, Moroccan and lots more.

More than 2500 festivals and events are held in Victoria throughout the year. Major events in the city include the Melbourne International Arts Festival, Melbourne International Film Festival, Melbourne International Comedy Festival and the Melbourne Spring Racing Carnival.

Find out more: liveinmelbourne.vic.gov.au/discover

Victoria: The Garden State

Victoria is Australia's smallest mainland state – at 227 416 square km, it is about the same size as the United Kingdom. Once known as 'the garden state', it has many notable gardens and 36 national parks covering two and a half million hectares. Among the State's many attractions are the Great Ocean Road, where you'll see stunning coastal views and the world-famous Twelve Apostles, the Grampians and the High Country.

Find out more: visitvictoria.com