NURTURING THE YOUNG
ENGINEERING THE FUTURE
JOIN OUR FACULTY
Tenured/Tenure-Track
Assistant/Associate/Full Professor in
Mechanical and Aerospace Engineering

BE THE SOURCE
OF INSPIRATION

Our 2,500 undergraduates and over 400 research students look to faculty members for guidance and mentorship. As a member of the faculty, you’ll lead them at the forefront of the future.

MAE is one of the largest mechanical and aerospace engineering schools in the world, with well-established partnerships with other universities and industry. We provide an active and vibrant research environment with excellent R&D infrastructure and ample opportunities for research funding.

To apply, submit your detailed CV and completed Personal Particulars Form to maefacultysearch@ntu.edu.sg, clearly stating the position and area that you’re keen on. It would be helpful if you could provide your Research ID or ORCID.

Application remains open until the available positions are filled. Only shortlisted candidates will be notified.

Learn more about our faculty positions @ www.mae.edu.sg today

THE ROLE
• Teach at both the undergraduate and graduate levels
• Supervise graduate and undergraduate student projects
• Acquire research funding and conduct research

YOUR PROFILE
• Possess relevant Bachelor and PhD degrees from reputable universities
• A good research track record and postdoctoral experience would be advantageous

We’re looking for well qualified candidates to join us.
At MAE, we bridge the gap between aspiration and ability. We cultivate the potential of our students by encouraging creative thinking and developing their scientific, practical and soft skills, giving them the tools they need to engineer the future.

We use technology as an enabler and innovation as a means to make a lasting difference to academia, business, society and people.

MEET THE WOODEN WONDER
Nanyang Venture VI is a diesel-powered car handcrafted from wood by a team of MAE students at the Innovation@MAE Laboratory. Envisioning a future less reliant on fuel, the team designed the vehicle to address the world’s energy challenges. Nanyang Venture VI clocked an impressive 338km per litre of diesel at the Shell Eco-Marathon Asia 2014 and raced past over 100 international entries to take home the awards for Vehicle Design and Safety.

STARTUP SUCCESS
TECHSISTED MICROMED
First hand-held robotic-assisted system for microsurgery and super-microsurgery
Product scheduled for market launch in 2020

TRANSFORMA ROBOTICS
2 autonomous service robots for the construction industry
50% reduction in time and manpower

SYNPHNE
First dynamic relaxation device in the world that trains the brain and muscle as one system to rehabilitate stroke patients
US$2.9 million funding as at July 2017

ENDOMASTER
First robotic-assisted system that can effectively remove gastrointestinal tumours endoscopically without the need for surgical incisions
US$15 million further funding secured

SOARING HIGHER WITH CIVIL AVIATION AUTHORITY OF SINGAPORE
US$51 million partnership between NTU and CAAS
Established the Air Traffic Management Research Institute
Developing innovative solutions to air traffic management

ACCELERATING WITH ROLLS-ROYCE
US$55 million partnership among NTU, Rolls-Royce and the National Research Foundation, Singapore
Creating more efficient and reliable aero engine delivery systems

SHAPING THE FUTURE AT SINGAPORE CENTRE FOR 3D PRINTING
US$110 million research centre supported by the National Research Foundation, Economic Development Board, SPRING Singapore, Agency for Science, Technology and Innovation, Ministry of Education and NTU, as well as a host of industry partners
4 major areas: The Future of Manufacturing, Aerospace & Defence, Building & Construction and Marine & Offshore
Established National Additive Manufacturing Innovation Cluster to translate research into commercial applications

At MAE, enduring ideas take off and take shape as business innovation. Our spin-off companies, engineered by our faculty and students and supported by the industry, continue to make waves in their business-savvy applications of robotics, artificial intelligence, automation and more.

Our capabilities in innovation, research and development have attracted many corporations, local and multinational, to collaborate with us.

Our faculty and students are working on a number of cutting-edge projects.

One example is our collaborative research project with Rolls-Royce in creating more efficient and reliable aero engine delivery systems. Another is our partnership with the Civil Aviation Authority of Singapore to develop innovative solutions to air traffic management.

We also have a strong focus on 3D printing, with a research centre supported by multiple government agencies and industry partners. This centre is focused on four major areas: manufacturing, aerospace and defence, building and construction, and marine and offshore. We’ve established an innovation cluster to translate research into commercial applications.

One of our projects is the Nanyang Venture VI, a diesel-powered car designed and built by MAE students. It achieved an impressive 338km per litre of diesel at the Shell Eco-Marathon Asia 2014 and won several awards for vehicle design and safety.

Our startup TECHSISTED MICROMED has developed the first hand-held robotic-assisted system for microsurgery and super-microsurgery, with plans for market launch in 2020.

TRANSFORMA ROBOTICS is another startup that has developed autonomous service robots for the construction industry, resulting in a 50% reduction in time and manpower.

SYNPHNE is a dynamic relaxation device that trains the brain and muscle as one system for stroke rehabilitation. It has received US$2.9 million in funding.

ENDOMASTER is a robotic-assisted system for gastrointestinal tumour removal, with plans for further funding.

We are also collaborating with the Civil Aviation Authority of Singapore and the National Research Foundation to develop innovative air traffic management solutions.

Innovation is key to our success, and we are committed to ensuring that our students have the skills and tools they need to engineer the future.
From sparking inspiration and nurturing ideas, to enabling innovation and making an impact, we believe in the power of experiential learning. Our students are given a myriad of opportunities to put theory to the test, ensuring that they are industry-ready even before they graduate.

**FLEXIBLE CURRICULUM**

(Aerospace Engineering

- Aerodynamics
- Flight mechanics and control
- Aerospace materials and structures
- Aircraft propulsion

Mechanical Engineering

- Mainstream
  - Astronautical Engineering
  - Energy and Environment
  - Manufacturing Engineering
  - Systems Engineering
- Naval Architecture and Ocean Engineering

**DIVERSE POSSIBILITIES**

(Aerospace Engineering

- Design
  - Computer-aided Engineering
  - Concept Design and Development
  - Mechanical Design
- Human Factors Engineering
- Industrial Design
- Product Presentation

Mechanical Engineering

- Robotics & Mechatronics
  - Product Development Management
  - Product Design Engineering
- Human Factors Engineering
- Industrial Design
- Machine Intelligence
- Real-time Software
- Microprocessor Systems
- Mechatronics System Design
- Product Development Management
- Robotics & Mechatronics
- Mechatronic System Design
- Mechatronic System Design
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- Mechatronic System Design

**DEVELOP PROJECT PLAN AND DETAILED REPORTS**

Over 800 research projects to choose from for top undergraduates. University-wide research experience on campus and off-ground.

**EXPLORE CUTTING-EDGE TECHNOLOGIES**

- Aerospace materials and structures
- Aircraft propulsion
- Design
- Robotics & Mechatronics
- Product Development Management
- Product Design Engineering
- Human Factors Engineering
- Industrial Design
- Machine Intelligence
- Real-time Software
- Microprocessor Systems
- Mechatronics System Design
- Product Development Management
- Robotics & Mechatronics
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**DISCOVER MORE**

www.mae.ntu.edu.sg

discover more at www.mae.ntu.edu.sg or email us at submail@ntu.edu.sg today

**THE BEST WAY TO LEARN IS TO EXPERIENCE**

Asynchronous learning environments allow students to engage with content at their own pace, providing flexibility and personalization. However, the true value of learning often lies in the social interactions and hands-on experiences that take place in collaborative settings.

**MAE BACHELOR OF ENGINEERING (MECH) PROGRAMME**

The Bachelor of Engineering (MECH) programme at MAE is designed to prepare students for success in the fast-paced and ever-changing world of engineering.

**MAE STUDENTS**

- SANGEETHA
  - B.Eng./Class of 2016
  - Mechanical Engineering
  - Shell Eastern Petroleum Pte Ltd
  - B.Eng./Class of 2016
  - Mechanical Engineering
  - Shell Eastern Petroleum Pte Ltd

- CHEN
  - B.Eng./Class of 2008
  - Mechanical Engineering
  - Aurecon Singapore (SEA) Pte Ltd

- BACHELOR OF ENGINEERING (AEROSPACE) PROGRAMME**

The Bachelor of Engineering (AEROSPACE) programme at MAE provides a comprehensive education in the fields of aerodynamics, flight mechanics, and aerospace materials and structures.

**MAE ENGINEERINGвалюта**

- BACHELOR OF ENGINEERING (MECH) PROGRAMME**

The Bachelor of Engineering (MECH) programme at MAE is designed to prepare students for success in the fast-paced and ever-changing world of engineering.

**MAE STUDENTS**

- SANGITHA
  - B.Eng./Class of 2016
  - Mechanical Engineering
  - Shell Eastern Petroleum Pte Ltd
  - B.Eng./Class of 2016
  - Mechanical Engineering
  - Shell Eastern Petroleum Pte Ltd

- CHEN
  - B.Eng./Class of 2008
  - Mechanical Engineering
  - Aurecon Singapore (SEA) Pte Ltd