About the School

School of Mechanical & Aerospace Engineering

- A school of the College of Engineering with 126 faculty, ~131 research staff, ~2664 undergraduate, ~349 MSc, ~23 MEng and ~391 PhD students
- ☐ Six divisions in Engineering Mechanics, Thermal & Fluids Engineering, Mechatronics & Design, Manufacturing Engineering, Systems & Engineering Management and Aerospace Engineering

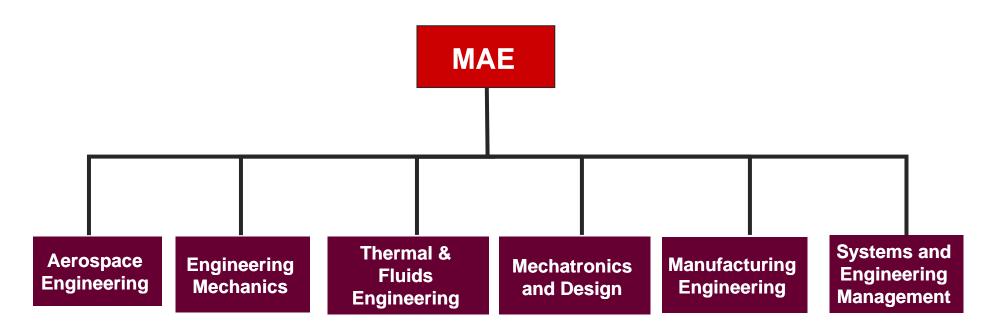


2012 QS World University Ranking – Mechanical, Aeronautic and Manufacturing



Rank	Title	Country	Score
1	Massachusetts Institute of Technology (MIT)	United States	94
2	Stanford University	United States	91.8
3	University of Cambridge	United Kingdom	91.7
4	Harvard University	United States	89
5	National University of Singapore	Singapore	88.8
8	The University of Tokyo	Japan	85.5
11	Georgia Institute of Technology	United states	84.1
14	Kyoto University	Japan	81.9
16	Nanyang Technological University	Singapore	81
18	Tsinghua University	China	80
22	Yale University	United States	79.7
26	The University of Manchester	United Kingdom	79.1

MAE Organization Structure





Research

Aerospace **Engineering** Aerodynamics •Flight dynamics & control Micro/Nano-Propulsion & UAV **Robotics** Smart materials fabrication & Intelligent Sys and Micro Systems •Surgical robots & remote •Thin films & coatings diagnosis Rehabilitation robots •MEMS & BioMEMS Virtual reality Data storage Intelligent systems Sensors & actuators Research **Areas Biomedical Clean Energy Engineering** •Fuel cells •Bio-design and bio-•Wind &Tidal energy manufacturing of •Clean tech & environment Systems & tools/devices Other alternative energy Biomechanics Engineering systems Medical simulation Management Human factors •Logistics & Operations •Systems engineering & Mngt Design studies

NANYANG TECHNOLOGICAL UNIVERSITY

New Strategic Initiatives

- a. Naval Architecture and Marine Engineering (NAME)
 Professorships funded by EDB over 5 years
 - Creation of new NAME postgraduate courses, training postgraduates in these fields and to carry out joint-industry research projects in Singapore.
- b. Institute for Sports Research (ISR) funded by EDB
 - National institute involving multidisciplinary research
- c. Centre for Optical & Laser Engineering (COLE) funded by EDB
- d. Joint Research Laboratories on Manufacturing (Precision Machining, Additive Manufacturing, and Reliability) with A*STAR Singapore Institute of Manufacturing Technology (SIMTech) funded by SIMTech



NTU PhD Scholarship

Ph.D. scholarship

Up to 4 years Ph.D. scholarship.

> Covers tuition fees, computing facilities & amenities fees, and a monthly stipend.

Teaching opportunities

Upon confirmation of Ph.D. candidature.

> Valuable experience for those who wish to pursue an academic career.

Conference support

Leave & financial support to attend 1 local & 1 overseas conferences

Subject to good performance

Overseas Attachments

Attachments at reputable overseas universities/institutions available

> For selected students.



NTU PhD Scholarship

Eligibility Criteria

Local or international student

Maximum Award

Maximum period of award is up to 4 years, subject to good performance & progress

Monthly stipend :-

- S\$2,200 for Singapore Permanent Residents
- S\$2,000 for International students

Students who pass the PhD qualifying examination, the stipend may be increased by S\$500, subject to achieving good performance in research and the required standards for courses taken



SINGA Scholarship (The Singapore International Graduate Award)

NTU SINGA

- Scholarship is from the supervisor, NTU

A*Star SINGA

- Scholarship is from A*Star

Eligibility Criteria

Open to all international students

Terms of Award

Maximum period of award is up to 4 years, subject to good performance & progress You will receive:

- tuition fees, computing facilities & amenities fees
- Monthly stipend of \$2000

Students who pass the PhD qualifying examination, the stipend may be increased by S\$500, subject to achieving good performance in research and the required standards for courses taken

- One-time \$1000 settling-in allowance
- One-time airfare grant of \$1500



General Admission requirements

- Bachelor's degree with minimum 2nd class honours (upper)/ Master's degree from a reputable university
- Demonstrated potential for research in proposed field of advanced study.
- TOEFL ≥ 570 (paper-based) /230 (computer-based)/88 (internet-based) or IELTS ≥ 6
- <u>GRE</u> \geq 1200/3.5 (old scores) / 310/3.5 (#revised scores) or G<u>ATE</u> \geq 90% #Minimum total score for verbal and quantitative sections is 310, with analytical writing score of at least 3.5. In addition, score for verbal section must be at least 146 and score for quantitative section must be at least 155.
- Technical Proficiency Test (can replace GRE/GATE if you have not taken the tests)
- English Proficiency Test (can replace TOEFL/IELTS if you have not taken the tests)



Application procedure

- Assess your eligibility for admission and scholarship
- Apply on-line via NTU graduate research admission system

http://admissions.ntu.edu.sg/graduate/R-Programs/Pages/default.aspx

Admission Intake	Apply & submit soft copies of your supporting documents on-line via GRAS	
January	End June	
August	End January	



Format of TPT and EPT

TPT

- Written technical paper (similar to GRE-type of qns)
- Contains 2 sections
- All are multiple choice questions
- Duration: 1.5 hour

EPT

- Written essay
- Duration: 0.5 hour

Note:

TPT test similar to GRE and/or undergraduate maths. EPT to write an essay for a given topic.



Graduate Housing

International students are advised to make arrangements for housing before departing for Singapore. Besides on-campus housing, NTU students live off-campus in student hostels or rent rooms in private homes near by.

On-campus housing: No guarantees as demand far exceeds supply. Apply online

http://www.ntu.edu.sg/isc/LivinginSingapore/Housing/On-campusgraduatehousing/Pages/applyforon-campusgraduate.aspx

Location	Room type	Bathroom	Rental per month
Graduate Hall	Single room	Attached	\$400
	Double room	Attached	\$290 per person
Nanyang Valley	Single room	Shared	\$450
	Double room	Shared	\$320 per person

Items	Estimated Cost of Living (in SGD\$)		
Accommodation:	\$300 - \$550 per person, per month (without meal)		
Food / Meals	\$300 - \$400 per month		
Transport for travel within Singapore	\$100 per month		
Personal Expenses	\$200 – \$400 per month		
Other Administrative Fees	Other compulsory payments: Matriculation card fee: \$\$10.50 (applicable for graduate students) Student health service fee: \$\$32.10 (per semester) Group Hospitalisation & Surgical Insurance (GHSI): \$\$39.50 (per semester) Others where applicable		

Student Affairs Office (SAO) will assist you in your search for accommodation.





