SINGAPORE-MIT ALLIANCE
Programme and Graduate Fellowship Briefing
Established: November 1998

**Alliance Universities:**
- National University of Singapore (NUS)
- Massachusetts Institute of Technology (MIT)
- Nanyang Technological University (NTU)

**Vision:**
To be a premier and unparalleled interactive distance educational and research enterprise that is internationally recognised and that attracts the very best engineering and life sciences graduate students and researchers from Singapore and all over Asia.
Why SMA?

1. A first rate full-time education
   - interaction with MIT
   - modern, innovative, specialised and relevant degrees
   - experience of entrepreneurship culture at MIT

2. Latest technology in interactive distance education
   - application sharing
   - real-time and archived lectures
   - web-based experiments

3. Top talent in the region
   - network of alumni comprising the very best talent

4. Fast growing economy in Singapore
   - well placed for jobs, business opportunities & careers in R&D
5. The two degrees are **complementary**; they strengthen the in-depth knowledge in a specific discipline.

6. The course is more rigorous. Fundamental and application-based, the education and training received better **equip** you to work with the industry.

7. SMA awards **Graduate Fellowships** to all who are admitted
Interaction with MIT
World-Class Facilities
The following programmes are offered:

- Advanced Materials for Micro- and Nano-Systems (AMM&NS)
- Computational Engineering (CE)
- Manufacturing Systems and Technology (MST)
- Computation and Systems Biology (CSB)
- Chemical and Pharmaceutical Engineering (CPE)
<table>
<thead>
<tr>
<th>Degree Award</th>
<th>Dual Degrees</th>
<th>Single Degree</th>
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</thead>
<tbody>
<tr>
<td>Advanced Materials for Micro- and Nano-Systems</td>
<td>MIT Masters + NUS/NTU Masters (1½yrs)</td>
<td>MIT Masters + NUS/NTU PhD (Up to 5yrs)</td>
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<tr>
<td>(AMM&amp;NS)</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Computational Engineering (CE)</td>
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Benefits

- Stipend of S$1,500/S$2,000 per month
- Fully-subsidised tuition fee
- Bond-free SMA Graduate Fellowship
- Internship with industry
- Residency at MIT
- Additional allowance of up to US$6,000 during residency at MIT
- Graduate Student Tutor/Teaching Assistant appointments for Ph.D. students

- Top-up grant of S$500 per month for Ph.D. students
- SMA certificate for direct PhD degree
- Invitation for Permanent Residence
- Individual cubicle with PC each
- Interaction and activities
- Job placement
Student Atheneum
Students at bowling and BBQ event

Students on a Night Cycling Trip

Students celebrating Mid Autumn Festival in Singapore

Halloween in Boston
Amazing Heritage Race
Students in front of Killian Court, MIT
Amazing Friendly Race @ Sentosa
Career Talk cum Farewell Lunch
The Grand Finale

Commencement • Convocation
• High-level professional and research positions
• World-renowned and technologically advanced companies and Research Institutes & Centres
Programme Co-Chairs

AMM&NS
Prof W K Choi  Prof C Thompson

CE
Prof B C Khoo  Prof J Peraire
Programme Co-Chairs

MST
Prof C Y Yue
Prof D Hardt

CPE
Prof R Rajagopalan
Prof Bernhardt Trout
Programme Co-Chairs

CSB

Prof C L Hew
Prof P Matsudaira
1st semester : July – Aug
2nd semester  : September – December
3rd semester : January – June
Admission into SMA

• 1st or 2nd Class (Upper) Honours Degree or its equivalent
• Good GRE* score
• Good TOEFL^ score
• Strong recommendations
• Publications
• Participation in conferences
• Leadership qualities
• Co-curricular activities

*GRE requirement is waived for the MST intake of 2008/2009. It will be replaced by personal interviews.

^Applicants with first degree from NUS or NTU are generally waived; however applicants may be required by MIT host departments to submit scores on a case-by-case basis.

Guidelines
GRE – 1200 for Verbal & Quantitative; 4.5 for Analytical
TOEFL – 580-600 (paper-based)/ 237-250 (computer-based)/ minimum of 85 (internet-based)

GRE & TOEFL fees will be reimbursed if you are offered admission and register with SMA. Reimbursement is based on proof of payment submitted to SMA.
<table>
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<tr>
<th>Programmes</th>
<th>Eligibility</th>
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<tr>
<td><strong>Advanced Materials for Micro- and Nano-Systems (AMM&amp;NS)</strong></td>
<td>Bachelor’s degree in:</td>
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<tr>
<td></td>
<td>- Electrical Engineering</td>
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<td></td>
<td>- Materials Science</td>
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<td>- Mechanical Engineering</td>
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<td>- Materials</td>
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<td>- Aeronautical Engineering</td>
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<td>- Electronics</td>
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<td>- Civil Engineering</td>
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Registration for GRE or TOEFL tests in Singapore

To register directly for the GRE or TOEFL tests in Singapore, you can contact the following centre:

**Asia-Pacific Headquarter**
Prometric B.V
Suite 21A-15-1
Faber Imperial Court
Jalan Sultan Ismail
20250 Kuala Lumpur
Tel: +603 7628 3333

**Website:** [http://www.prometric.com/](http://www.prometric.com/)

* **GRE Computer-based test** is available everyday except on weekends and public holidays. The test is scheduled two times a day at 9am and 1pm and takes 4 hours.

* **TOEFL Internet-based test** is usually done on a Friday in line with the US centre. Timing of the test is not fixed.

* Please note that the information is provided by Prometric and may be subject to changes. You may wish to call the centre for enquiries.
Admission into SMA

Timelines

Intake : Every July
Submit Application : Between January and March
Offer Made : March
Accept Offer : April
Admission into MIT

- Applicable ONLY to the Masters degrees awarded by MIT.
- Admission criteria and timelines follow that of the MIT department hosting the programme.
- Use MIT department’s application materials to apply.
- Information is linked to the SMA website.
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<tr>
<th>Programme</th>
<th>Singapore*</th>
<th>MIT</th>
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<tr>
<td>AMM&amp;NS</td>
<td>NUS</td>
<td>Department of Materials Science and Engineering</td>
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<tr>
<td>CE</td>
<td>NUS</td>
<td>Department for Computation Design and Optimization</td>
</tr>
<tr>
<td>MST</td>
<td>NTU</td>
<td>Department of Mechanical Engineering</td>
</tr>
<tr>
<td>CPE</td>
<td>NUS</td>
<td>Department of Chemical Engineering</td>
</tr>
<tr>
<td>CSB</td>
<td>NUS</td>
<td>Computational and Systems Biology Initiative</td>
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* Apply using SMA application materials
<table>
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<tr>
<th>Programme</th>
<th>Term at MIT (for Dual Degree Students)</th>
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<tbody>
<tr>
<td>AMM&amp;NS</td>
<td>Sep 08 - Dec 08</td>
</tr>
<tr>
<td>CE</td>
<td>Sep 08 - Aug 09</td>
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<td>MST</td>
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Residency at MIT for Ph.D. students is generally after passing the Ph.D. Qualifying Examinations

For AMM&NS, direct Ph.D. students are resident at MIT together with the dual degree students.
Application Fee for MIT Admissions Package
The application fee is currently US$70.

Acceptance Fee for SMA
The acceptance fee is S$50 (excluding GST)

The above fees are payable by candidates and will be reimbursed if candidate is admitted and subsequently enrolled in one of the programmes.
Achievements & Awards

1. Materials Research Society Graduate Award – Silver Award, Materials Research Society Spring Meeting, 2003, San Francisco, USA


Presented to: Gan Chee Lip, AMM&NS Ph.D., 1999/2000 intake

Materials Research Society Graduate Student Award
Presented to: Meng Ying, AMM&NS Ph.D., 2000/2001 intake
Achievements & Awards

2nd runner-up, first Young Persons’ World Lecture Competition, Institute of Materials, Minerals and Mining (IOM3), 2005, London

Presented to: Eric Kan Wing Hong, AMM&NS Ph.D., 2001/2002 intake

Best Poster Award, Symposium J of International Conference on Materials for Advanced Technology, 2005

Presented to: Zang Keyan, AMM&NS Ph.D., 2001/2002 intake
Honourable Mention, George E. Nicholson Student Paper Competition, INFORMS Annual Meeting, 2003, Atlanta, USA
First time in 30 years a student from an Asian school was among the prize winners.
Presented to: Karthik Natarajan, HPCES Ph.D., 1999/2000 intake

2nd place twice in the George E. Nicholson Student Paper Competition, INFORMS, 2002 and 2004, USA
Only individual to have ever won the top awards (first or second place) more than once
Presented to: Melvyn Sim Soon Suan, HPCES S.M., 1999/2000 intake
Best Paper Award at the Annual Institute of Microelectronics (IME) Symposium on Microelectronics (SOM), 2005, Singapore
Presented to: Chang Choon Wai, AMM&NS Ph.D., 2001/2002 intake

Best Paper Award at the International Conference on Parallel and Distributed Computing Systems 2004, Cambridge
Presented to: He Yuxiong, CS Ph.D., 2003/2004 intake
Achievements & Awards

Elsevier Outstanding Graduate Student Prize, 2007, Boston
Presented to: Soo Haw Yun, AMM&NS D.M., 2006/2007 intake
Detailed information on application will be available on the SMA website:

http://www.sma.nus.edu.sg
or
http://web.sma.nus.edu.sg

For enquiries, please e-mail to:
smart@nus.edu.sg

Tel: (65) 6516 4787
Fax: (65) 6775 2920

Thank you