



# MIT-SUTD Dual Masters' Programme

Explore exciting research possibilities



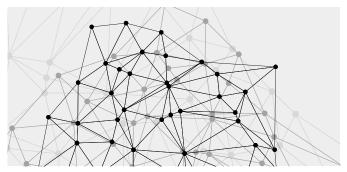


















### A NOTE FROM THE ASSOCIATE PROVOST FOR RESEARCH



The Dual Masters' Programme was established in collaboration with the Massachusetts Institute of Technology to provide a global educational experience with a unique cross-fertilisation across architectural and engineering design, technology and innovation.

Since November 2010, we have enrolled three intakes of students in this programme. They have studied cutting-edge technological topics in the classroom and applied their knowledge to important, real-world problems through their research. They are prepared to be 21st century technological leaders, equipped to address society's challenges in innovative ways through technology and design. Our graduates have been hired by outstanding companies and are well on their way to contributing to make the world a better place!

We sincerely hope you will join us in this exciting programme as we collaborate to impact the world through technology and design!

PROFESSOR MARTIN L. DUNN



The programme helped me to advance my academic training and combine that with a practical research opportunity to position me to achieve my career goals. The research which takes place in Singapore allowed me to take a step back from my accelerated academic career and reflect on the development of my professional interests during the past couple of years. It provided me with the time, resources and mentorship to bring together what I have learnt in the classroom in a research project.



LEE JUN BUM, Research in "Bearing Selection in Engineering Design: Criteria for Knowledge-Based Decision Support Systems" Class of 2013 Management Consultant, Mckinsey & Company





SUTD's multi-disciplinary environment manifests in my research, where I find myself exploring new things every day. As I'm not allowed to pigeonhole my learning, and have to keep an open mind as to where my research may lead me, I find myself exploring exciting, contemporary topics where I expect to make impactful contribution.

CHONG WANLING, Research in "Evaluating the Design of an Elevated Pedestrian Network using Space-Centric Human Sensing" Class of 2014



I joined the MIT-SUTD Dual Masters' Programme because I saw it as a great opportunity to learn at world-class academic institutions while developing a global perspective. This is particularly useful and relevant in today's interconnected world.







The 2-year full time MIT-SUTD Dual Masters' Programme, a joint collaboration between the Massachusetts Institute of Technology (MIT) and SUTD, aims to support tomorrow's leaders in technology and design.

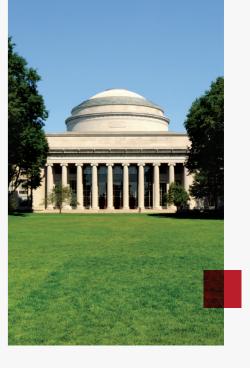
Students acquire knowledge through their coursework at MIT in the first year, followed by intensive research at SUTD in the second year. With the dual experience of East and West, students graduate with a master's degree from each institution.



### **COURSEWORK** AT MIT

Students will spend 10 to 13 months learning from MIT faculty who possess a wealth of teaching experience and research expertise.

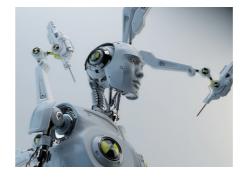
- ▶ Civil and Environmental Engineering's Master of Engineering Program specialising in one of the four tracks:
  - Environmental and Water Quality Engineering
- Geotechnology
- High-Performance Structures
- Transportation
- Master of Engineering in Manufacturing Program
- > System Design and Management Program, leading to a Master of Science in Engineering and Management
- ▶ Supply Chain Management Program, leading to a Master of Engineering in Logistics



### RESEARCH AT SUTD

Students will work on research with experts in their fields. After completing a second thesis by research, they will obtain one of these three master's degrees, depending on their focus areas.

- Master of Engineering (Research)
- Engineering Product Development
- Engineering Systems and Design
- Information Systems Technology and Design





## ENGINEERING PRODUCT DEVELOPMENT

- Automation & Control
- Medical Healthcare Engineering
- Design Science
- Electronics Engineering
- Embedded Systems
- IC Design
- Imaging, Infocomm & Digital Media
- Photonics
- Precision Engineering
- Rapid Prototyping
- Rapid Tooling
- Test & Measurement
- Marine Engineering

### ENGINEERING SYSTEMS AND DESIGN

- Airport Systems & Operations
- Critical Infrastructure
- Energy & Environment
- Electricity Markets - Optimisation
- Financial Engineering
- Medical Healthcare Engineering
- Operations Management
- Renewable Energy
- Security
- Stochastic Models
- Supply Chains
- Telecommunications
- Transportation & Logistics

# INFORMATION SYSTEMS TECHNOLOGY AND DESIGN

- Audio Analysis
- Computer Vision
- Graphics & Visualisation
- Human Computer Interface
- Information Security
- Machine Learning & Artificial Intelligence
- Multimedia
- Information Retrieval
- Nature Language Processing
- Networking
- Signal Processing
- Software Engineering
- Medical Healthcare Engineering

### SUTD RESEARCH CENTRES

These vibrant centres offer students many rewarding research opportunities in their second year at SUTD.

#### iTrust

The iTrust is a centre for interdisciplinary research in trustworthy infocomm systems. It conducts fundamental and applied research in the broad areas of information and system security, including large and complex cyber physical systems.

#### **PROJECT GREaT**

Project GREaT conducts cutting-edge research in the area of games and their development, for entertainment and beyond. In addition, the lab provides educational and training opportunities to students and engineers in Singapore and the broader region.

# SUTD-MIT INTERNATIONAL DESIGN CENTRE (IDC)

The IDC is engaged to become the world's premier scholarly hub for technologicallyintensive design. It is a multi-million dollar centre based both in Singapore at SUTD, and in Cambridge, MA, USA at MIT, with academic and industrial partners from around the world. IDC faculty, researchers and students work together to design devices, products, systems, services and the built environment that address strategic needs of Singapore, the greater Asian region, the US, and the global community. At the same time, the IDC studies and advances the design process and design science, seeking to develop new tools and methods for design practice and education.

The IDC has more than 100 projects that involve approximately 270 faculty, researchers, and students.

### O-LAB

Opportunity Lab or "O-Lab" is an interdisciplinary lab which intends to understand and enhance the role that design and designers play in social change. Through its broad portfolio of research and education programmes, O-Lab seeks to:

- Develop networks of communities and designers who work collaboratively to overcome Asia's most pressing challenges
- Develop and validate effective approaches to collaborative design between designers and communities across Asia
- Build SUTD student experiences of designing with diverse communities across Asia

### LEE KUAN YEW CENTRE FOR INNOVATIVE CITIES (LKY CIC)

The LKY CIC is established to stimulate thinking and research on the critical issues of cities and urbanisation and to provide breakthrough urban solutions. It is one of the first university centres to focus on the integrated use of technology and design to derive solutions for urban planning and urban design, development and management. The Centre will study the confluence of governance, social management frameworks, and technology and design innovations.

### **TEMASEK LABORATORIES**

Temasek Laboratories is a centre for excellence in defence-related research. It specialises in systems design and integration - such as unmanned systems, information systems, soldier systems and engineering systems.



### INDUSTRY COLLABORATIONS

Students have the opportunity to embark on real-life industry projects in their second year at SUTD. The attachment to an organisation allows students to obtain industry experience in a corporate environment while conducting research, leading to the writing of the Master thesis.

SUTD's strong ties with local and international organisations provide internship opportunities, bringing together campus learning and practical experiences. A successful internship could also lead to potential employment.



### **HOW TO APPLY**

Candidates must submit applications to both MIT and SUTD at:

- MIT: http://web.mit.edu/admissions/graduate
- > SUTD: https://admissions.sutd.edu.sg/graduate

A holistic selection process will be adopted. Shortlisted candidates are interviewed in person, over Skype or telephone.

### **ADMISSIONS REQUIREMENTS**

We require

- A bachelor's degree in engineering, science or equivalent
- An appropriate GMAT or GRE score
- A proficiency in English. IELTS is required if English is not your medium of instruction in your undergraduate studies.
- A Statement of Interest

Please visit the MIT programme websites for specific admission requirements.

### **SCHOLARSHIP BENEFITS**

Successful candidates to the programme may be provided with a full scholarship, which covers:

- Full tuition fees at MIT and SUTD
- Monthly stipend at MIT and SUTD
- Medical insurance in USA and Singapore
- ▶ Return economy-class airfare between MIT and SUTD

All candidates who accept the offer of admission must undertake to complete the programme in the prescribed time period and manner in which it is offered.



### **IMPORTANT DATES**

PROGRAMMES	APPLICATION DEADLINE	INTAKE
Civil and Environmental Engineering's Master of Engineering	December	Next September
Master of Engineering in Manufacturing	January	September
Supply Chain Management Program, leading to a Master of Engineering in Logistics		August
System Design and Management Program, leading to a Master of Science in Engineering and Management		

Please visit the MIT programme websites for specific application deadlines.



For more details, scan this QR code 📮

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