SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

EMPOWERING OUR STUDENTS TO BE FUTURE INNOVATORS, DESIGNERS AND LEADERS OF THE WORLD

A BETTER WORLD BY DESIGN.

Email us at:

Master Programmes: gradoffice@sutd.edu.sg
PhD Programmes: phd@sutd.edu.sg

DISCOVER SUTD & OUR ARRAY OF MULTI-DISCIPLINARY GRADUATE PROGRAMMES TODAY

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SUTDGSA

SUTD

OUR GRADUATE PROGRAMMES

SUTD Graduate Programmes seek to nurture graduates through research that addresses real-world challenges, with the aim of creating a better world by design.

MASTERS BY RESEARCH

- DUAL MASTERS IN NANO ELECTRONIC ENGINEERING & DESIGN
- MASTER OF ENGINEERING (RESEARCH)
- MASTER OF ENGINEERING IN INNOVATION BY DESIGN

MASTERS BY COURSEWORK

- MASTER OF ARCHITECTURE
- MASTER OF SCIENCE IN SECURITY BY DESIGN
- MASTER OF SCIENCE IN URBAN SCIENCE, POLICY AND PLANNING

PHD PROGRAMMES

- SUTD PhD PROGRAMME
- SUTD – NUS JOINT PhD (JDP) PROGRAMME
- SUTD ENGINEERING DOCTORATE (ENGD) PROGRAMME

INDUSTRIAL PROGRAMME

- ECONOMIC DEVELOPMENT BOARD (EDB) INDUSTRIAL POSTGRADUATE PROGRAMME (IPP)

"Being the first EDB-IPP student with NVIDIA has also exposed me to a great deal of experiences, from involvement in annual conferences, to exposure to the latest AI trends from my colleagues worldwide."

Lai Zhangsheng
PhD Student
Engineering Systems and Design (ESD)

"What I enjoyed the most about SUTD's PhD Programme is the collaborative approach between the different pillars, where individual research becomes part of a more extensive multi-disciplinary study which allowed me to understand and explore new perspectives for analysis and find new overlaps in urban studies."

Srilalitha Gopalakrishnan
PhD Student
Architecture and Sustainable Design (ASD)

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

NANO

MNED

SUTD-CGU DUAL MASTERS PROGRAMME IN NANO-ELECTRONIC ENGINEERING AND DESIGN

SUTD GRADUATE PROGRAMMES

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

SUTD-CGU Dual Masters Programme
in Nano-Electronic Engineering and Design (Full-Time)

Programme Overview

The SUTD-CGU Dual Masters Programme in Nano-Electronic Engineering and Design is a unique, multi-disciplinary learning experience encompassing the full value chain of the **semiconductor industry**.

This programme covers research and coursework in integrated circuit (IC) design, production, packaging, testing, reliability and failure analysis, chip assembly and packaging, particularly in the emerging areas of nano-electronic **design**, **production** and **testing**.

Industry Coursework at CGU

At CGU, students will gain real-life immersion with Taiwan's leading IC design and semiconductor foundries while undergoing CGU's **industry-oriented curriculum**.

Master Research at SUTD

At SUTD, students will complete their **Master thesis** and research project (design implementation, fabrication, testing and assembly). They will also be equipped with **industry- relevant knowledge** via SUTD's Professional Short Development Courses.

About Singapore University of Technology and Design (SUTD)

SUTD is Singapore's fourth autonomous university and one of the first universities in the world to incorporate the art and science of design and technology into a **multi-disciplinary curriculum**. SUTD's core academic pillars are:

- Architecture and Sustainable Design (ASD)
- Engineering Product Development (EPD)
- Engineering Systems and Design (ESD)
- Information Systems Technology and Design (ISTD)

About Chang Gung University (CGU)

Chang Gung University (CGU) is located in Taoyuan, Taiwan. It was ranked as the **top private university** in Taiwan by the Academic Ranking of World Universities 2016 and is well-established in semiconductor, integrated circuit design, assembly and failure analysis research.

CGU is part of the Formosa Plastics Group conglomerate and maintains strong industry links with the Taiwan electronics sector.

Upon successful completion, students will graduate with two Master degrees:

- **Master of Science - Nano-Electronic Engineering and Design from CGU**
- **Master of Engineering (Research) from SUTD**

Admission Schedule / Deadlines

There is one intake each year in **September.**
The application deadline for each intake is **end of March.**

Please apply at **https://admission.sutd.edu.sg**

Candidature Period (minimum of 18 months)

	Period 1 (at CGU)	Period 2 (at SUTD)
Candidature Period	9 months (September to June)	9 months (June to March)

Maximum candidacy of the programme is **36 months**.

Curriculum Overview

The SUTD-CGU Dual Masters Programme starts in September at CGU and ends in March at SUTD.

Example:

Begin Period 1 in September 2018 at CGU → **Continue Period 2 in June 2019 at SUTD** → **Finish Programme in March 2020**

To fulfill coursework requirements at CGU, students must specialise under either of the following academic tracks:

• Integrated Circuit (IC) Design Track

Under this Track, students will learn more about the tools, software and processes required to conduct analysis, design and development of a wide variety of ICs (analog, digital, radio frequency, mixed-signal).

• Advanced Manufacturing Track

Under this Track, students will learn more about the integral aspects of IC production quality and reliabilty management. This includes reliability and failure analysis, failure mechanisms and packaging reliability.

Period 1 (9 months) at CGU

Compulsory Modules

- Reliability Engineering
- Introduction to VLSI: Technology and Design
- Test and Measurement for VLSI
- Advanced Transistor Modeling for VLSI Design

Elective Modules

(students must complete at least 4):

IC Design Track

- Digital Electronics
- Analog Electronics
- RF IC Design
- Mixed Signal Design
- Bio-Medical Electronics*
- Nano-Materials and Devices*

Advanced Manufacturing Track

- Failure Analysis for VLSI
- Failure Mechanisms in VLSI
- IC Packaging Reliability
- Quality Engineering
- Bio-Medical Electronics*
- Nano-Materials and Devices*

**Students can choose either Bio-Medical Electronics or Nano-Materials and Devices, but not both.*

Period 2 (9 months) at SUTD

Master Thesis and Oral Defense

Students will complete their research thesis and project (design implementation, fabrication, testing, assembly via close co-operation with IC foundries) while at SUTD.

This Master thesis will be subject to an Oral Defense, where students will defend their research against professional critique by a board consisting of SUTD faculty and external faculty/industry experts.

Professional Development Short Courses

Students are required to complete at least 4 Professional Short Development Courses. Topics covered include:

- Intellectual Property Clinic
- Scientific and Grant Writing
- Entrepreneurship
- Private Equity & Fund Raising for Businesses
- Corporate Grooming & Personal Branding
- Leadership & Teamwork

View a full list of courses and course overviews at

https://sutd.edu.sg/Admissions/Graduate/Professional-Development-Short-Courses

Admission Requirements

Applicants should possess the following:

•At least a **Bachelor's degree** or above with excellent academic standing in mathematics, physics, engineering, computer science or related fields.

•Proficiency in English (**IELTS** or **TOEFL** is required if English is not your medium of instruction in your studies)

Contact Us

For admission and programme enquiries:

SUTD Office of Graduate Studies: **MNEED@sutd.edu.sg**

View SUTD Faculty's Research Here:

EPD **https://epd.sutd.edu.sg/people/faculty/**
ESD **https://esd.sutd.edu.sg/people/faculty/**
ISTD **https://istd.sutd.edu.sg/people/faculty/**
Sci & Math **https://academics.sutd.edu.sg/science-math/science-faculty/**

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

MEng

MASTER OF ENGINEERING (RESEARCH)

SUTD GRADUATE PROGRAMMES

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

Master of Engineering (Research)

(Full-Time/Part-Time)

Programme Overview

The Master of Engineering (Research), or MEng, offers working professionals and fresh graduates the opportunity to explore independent, research-oriented solutions to existing engineering challenges and create A Better World by Design.

MEng students will conduct their research under a SUTD faculty member, who will guide, mentor and provide supervision where necessary. This research will culminate in the creation of a Master thesis, which must be evaluated and passed by a Thesis Examination Committee.

Students will also be required to complete at least two:
(refer to overleaf for more details)

- Technical Courses
- Professional Development Short Courses

Admission Schedule / Deadlines

There are two MEng intakes a year, in September and January. The deadline for each intake is:

September Intake: End of March
January Intake: End of September

Please apply at https://admission.sutd.edu.sg

Admission Requirements

Applicants should possess the following:

- At least a Bachelor's degree or above with excellent academic standing
- Proficiency in English (IELTS or TOEFL is required if English is not your medium of instruction in your studies)

Contact Us

Application, Admission & Scholarships:

Office of Graduate Studies: meng@sutd.edu.sg

View Faculty's Research Here:

EPD	https://epd.sutd.edu.sg/people/faculty/
ESD	https://esd.sutd.edu.sg/people/faculty/
ISTD	https://istd.sutd.edu.sg/people/faculty/
Sci & Math	https://academics.sutd.edu.sg/science-math/science-faculty/

View SUTD Research Centres Here:

https://sutd.edu.sg/Research/Research-Centres

View Selected Research Projects:

https://sutd.edu.sg/Admissions/Graduate/Graduate-Research/Projects-and-opening

Candidature Period (Full-Time / Part-Time)

	Full-Time	Part-Time
Candidature Period	1 to 3 years (Maximum candidacy of 3 years)	2 to 3 years (Maximum candidacy of 3 years)

Technical Courses

These technical modules will provide MEng students with the core skills necessary for robust research. Some examples include (but are not limited to):

Engineering Product Development (EPD)

- Applied Mathematics for Engineering
- Design Science
- Computational Science and Engineering
- Optimization and Control
- Research Methods

Engineering Systems and Design (ESD)

- Linear Optimization
- Operations Management
- Probability Theory
- Statistics
- Stochastic Modeling

Information Systems Technology and Design (ISTD)

- Analysis of Algorithms
- Computer Networks
- Machine Learning
- Software Engineering
- Wireless Communications and Networking

Professional Development Short Courses

These short courses will provide MEng students with a well-rounded and holistic education. Topics covered include:

- Intellectual Property (IP) Clinic
  Learn more about the fundamentals of IP and why it is an essential part of a business growth strategy.

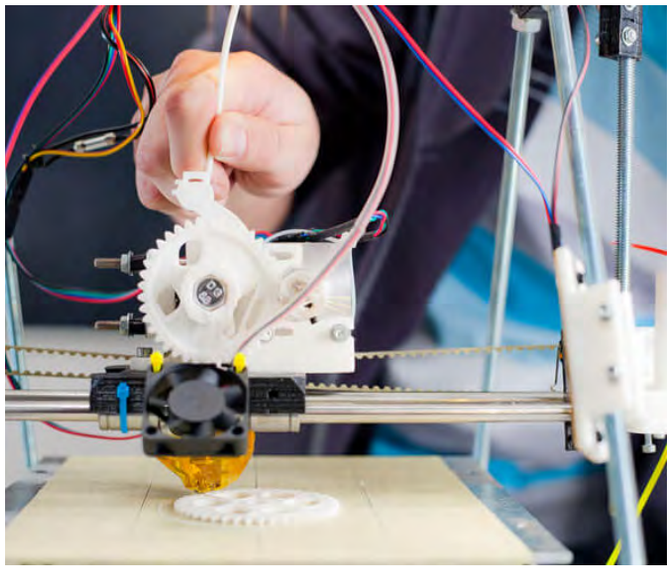
- Scientific and Grant Writing
  Develop your scientific writing and grant proposal writing skills.

- Entrepreneurship
  A practical-oriented course that teaches you how to turn business or product ideas into a successful commercial venture.

- Private Equity (PE) & Fund Raising for Businesses
  Acquire practical knowledge, competencies and key insights regarding the PE industry.

- Corporate Grooming & Personal Branding
  Groom your professional image and build up your business etiquette for better work relationships.

- Leadership & Teamwork
  Learn how emotional intelligence can positively impact team dynamics and professional engagements.



Attractive Scholarship Funding

SUTD MEng (Research) Fellowship

- Open to all nationalities
- Full tuition fees (for up to 18 months)
- Monthly stipend (for up to 18 months) of:
  - S$2,800 (Singapore Citizens)
  - S$2,000 (Singapore Permanent Residents)
  - S$1,900 (International Students)
- CPF contribution (Singapore Citizens only)

Economic Development Board (EDB)
Industrial Postgraduate Programme (IPP)

The EDB-IPP offers you the opportunity to pursue a company-related research project as your MEng thesis while continuing as a full-time company employee.

EDB-IPP Partnering Companies should possess the following to be eligible:

- Must be based in Singapore
- Have an established corporate R&D presence in Singapore (i.e. Doctorate-level researchers, good track record of research activities, etc.)
- Committed to supporting IPP trainees toward attaining MEng or Doctoral qualifications

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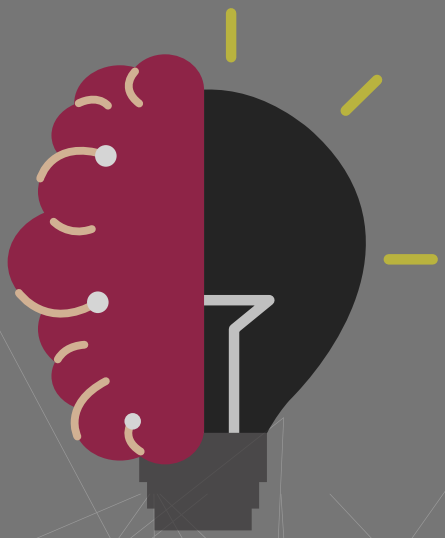


MIBD

MASTER OF SCIENCE IN INNOVATION BY DESIGN

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

Master of Innovation by Design (IbD)

Programme Overview

Master of Innovation by Design assumes a designation that is novel, even internationally. It is a horizontal program, attracting students to a paradigm in which products, systems and services are developed concurrently with a design-centric mindset and across every discipline, domain and sector.

Although the programme is directed at technology intensive product-service-systems, the entire value chain of products, services, and systems must be taken into account from the early stages of development, in the true nature of a design thinking mindset.

Unique Features

- Three tailored, specialized, rich experiences to foster capacity to innovate.
- Continuous hands-on approach encompassing the discover-define-develop-deliver design cycle.
- Embedding into SUTD Research Centres.
- Only graduate programme in Singapore that aims to promote design thinking and innovation across several fields of knowledge.

Innovation by Design Sprints

Innovative Soft Robot Technologies

The Future of Us Pavilion

Programme Duration (Full-Time / Part-Time)

Full-Time	1 to 2 years (3 to 6 consecutive terms)
Part-Time	2 to 3 years (Maximum of 9 terms)

Admission Requirements

Applicants should possess the following:

- At least a Bachelor's degree with Second-Upper Class Honors majoring in Engineering, Industrial Design, Material Science and other related areas.
- English language proficiency (TOEFL or IELTS may be required if English is not your medium of instruction).

Admission Assessments

- Face-to-Face OR Video Conference Interview.
- Credit exemption for academic modules will be evaluated on a case-by-case basis.

Admission Schedule

There is one intake each year in **September**. The application deadline is **end of March.**

Please apply at:
https://admission.sutd.edu.sg

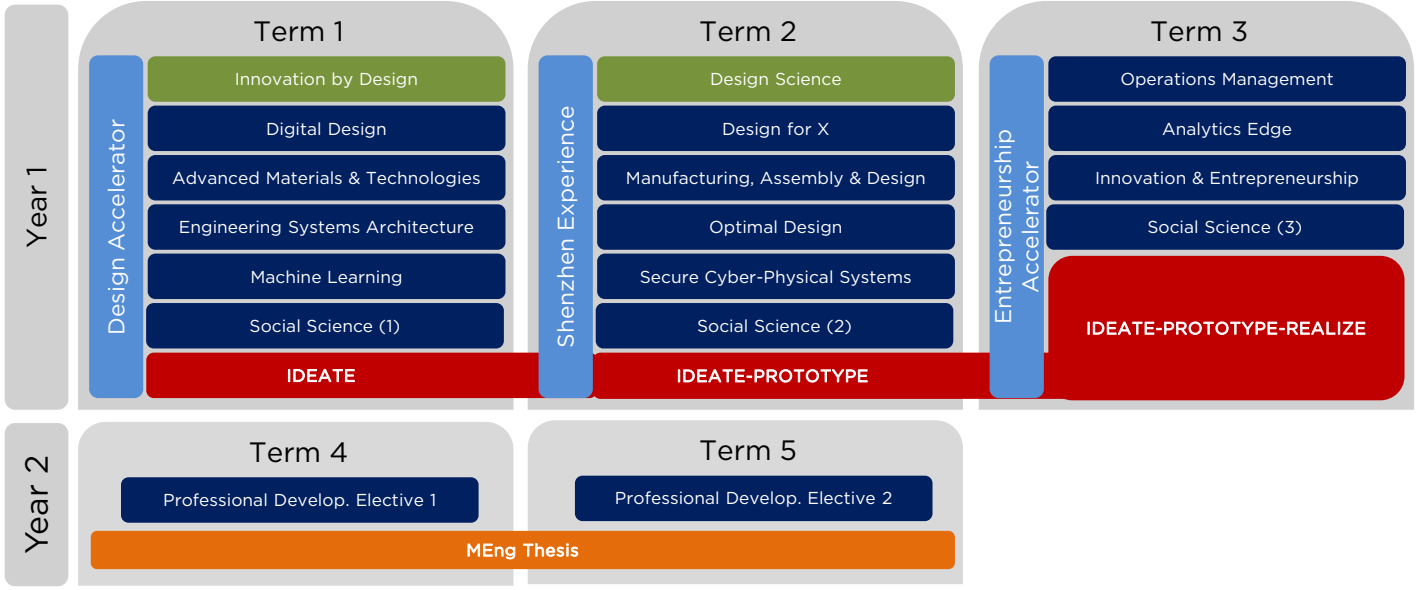
Curriculum Overview

Students who elect to join the full-time MEng programme will complete two to three terms of coursework followed by an additional two terms of thesis. Students will be required to take two core courses (Innovation by Design and Design Science), along with a series of optional electives.

Compulsory courses/project – all students must take these (minimum credit requirement)

Compulsory week-long experiences – all students must take these

Elective courses



Career Opportunities

Graduates will be able to enter the international and local employment market enterprises dealing with:

- Technological products and services.
- Consultants conducting technology assessment and innovation and change management.
- Governmental institutes dealing with innovation and policy strategy and research institutions.

These line up with Singapore's long term vision of becoming a design and innovation hub for the APAC region, as well as globally.

Pathways to Complete the Programme

- Full-time accelerated MEng for SUTD students
- Full-time accelerated MEng for Industry Professionals
- Full-time MEng for non-SUTD students
- Part-time MEng for working professionals

Contact Us

For admission and programme enquiries:
Email: ibd@sutd.edu.sg

For full details, please visit our website at:
https://ibd.sutd.edu.sg

Research Centres

SUTD hosts several world-class research Centres, where students can fulfill the research component of the programme. These Centres include:

- Digital Manufacturing and Design Centre (DmanD)
- Game Research, Education and Training (GREAT)
- International Design Centre (IDC)
- iTrust Centre for Research in Cyber Security
- Lee Kuan Yew Centre for Innovative Cities (LKYCIC)
- Research in Security Innovation Lab for Internet of Things (RESILIOT)
- Temasek Laboratories

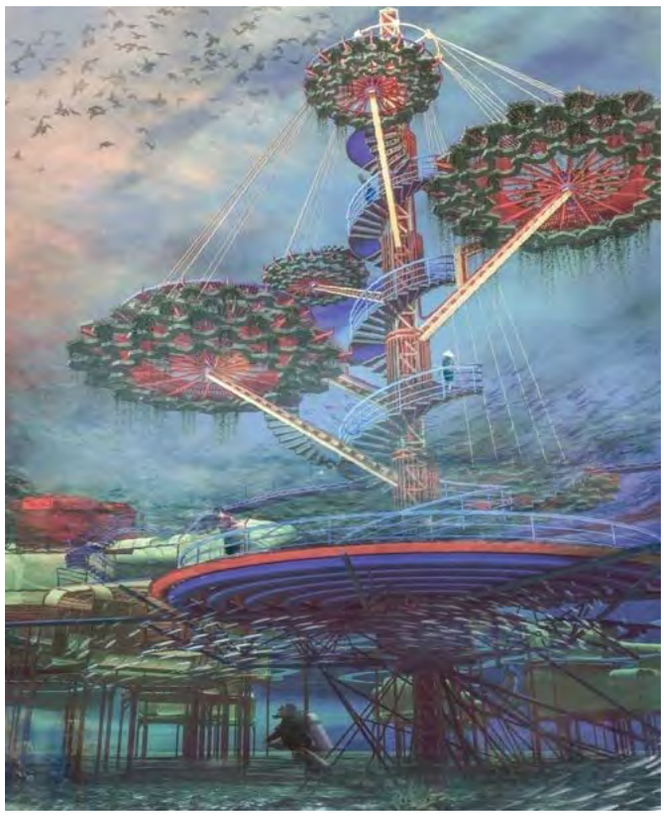
SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

M.ARCH

MASTER OF ARCHITECTURE

SUTD GRADUATE PROGRAMMES

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN



Master of Architecture [M.Arch]

Architecture for a Digital Age

The M.Arch programme includes the following research options:

- Data-driven Urban and Architectural Design
- Urban Automation and Urban Air Mobility
- Architectural Conservation
- Landscape Urbanism
- Digital Fabrication
- Parametric and Generative Design
- Artificial Intelligence for Architecture

Programme Overview

The Master of Architecture (M.Arch) programme at the Architecture and Sustainable Design (ASD) pillar represents the deep investigation into the technology and research infused design perused by SUTD. This is an accelerated course held over 4 terms, principally comprising practice, studio, and thesis elements. It is designed to orientate and focus students through a longer-term thesis based design methodology and project; and to critically consider and realise new visons of creative and social design futures.

An Accredited Programme

The M.Arch is a professional degree programme accredited by the Singapore Board of Architects. The intent is to equip graduates with the best foundation for practicing architecture nationally and internationally, providing a high level of technical competency and scientific knowledge while being attuned to the business opportunities and cultural contexts that will make their design projects meaningful and sustainable.

Unique Features

- Mentorship by world-class faculty with deep design, technical and computational expertise
- Research focus on industry and societal needs and with a global outlook and local impact
- Wide use of state-of-the-art digital tools to augment hands-on & collaborative learning
- Exciting local and overseas internship opportunities

Admissions Requirements

- At least a bachelor's degree in architecture from an accredited university
- Demonstrated relevant work experience and its duration, to fulfil the Board of Architects' requirements of undertaking an accredited master's course

Applicants should also possess the following:

- English language proficiency (TOEFL or IELTS may be required if English is not your medium of instruction)
- Some experience in programming with modern languages such as: Python, JavaScript, C++, C#
- Some knowledge in Rhino 3D, Grasshopper & Digital fabrication

Curriculum Overview

The M.Arch programme starts in September and ends in the following December.

Terms 1-2

- Structured Internship

Term 3

- Thesis Preparation
- Sustainable Design Option Studio
- Professional Practice I
- Elective Module

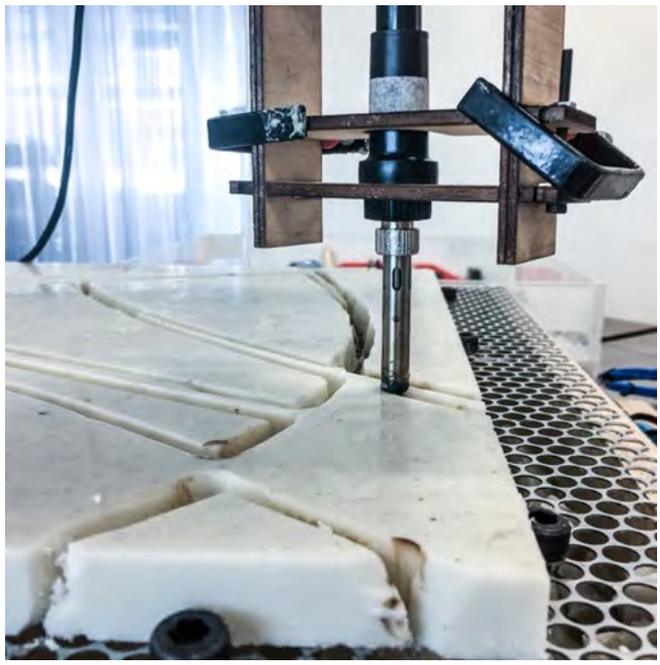
Term 4

- Thesis
- Professional Practice II

Featured Elective Modules

- Material Computation: Advanced Topics
- in Geometry and Matter
- Toward Carbon-Neutral Architecture and Urban Design
- Social Architecture: Theory and Practice
- Advanced Topics in Performative Design: Urban Sustainability

For more details, please visit
https://asd.sutd.edu.sg/programme/master-of-architecture/



Admissions Assessment

- Portfolio evaluation
- Face-to-face or video conference Interview

Career Opportunities

ASD graduates will be prepared for positions in:

- Architecture
- Urban design
- City planning
- Digital fabrication and design
- Computational architecture and design
- Environmental design
- Architecture research and design
- Future cities research and design
- Post-professional masters
- PhD programmes

Company Partnerships + Internships

ASD works with more than 100 industry partners, providing diverse career opportunities.

- AGA Architects
- ARUP
- Sembcorp Architects & Engineers
- Soilbuild Construction Group
- Broadway Malyan
- CPG Consultants
- DP Architects
- Freight Architects
- Kajima Overseas Asia
- RSP Architects Planners & Engineers
- WOW Architects
- WY-TO

Contact Us

For admissions and programme enquiries:
Email: march@sutd.edu.sg

MSSD

MASTER OF SCIENCE IN SECURITY BY DESIGN

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

SUTD GRADUATE PROGRAMMES

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

Master of Science in Security by Design (MSSD)

Cybersecurity for a Smarter World

The MSSD programme includes the following areas of focus:

- **Foundations of Cybersecurity**
- **Secure Software Engineering**
- **Secure Cyber Physical Systems**
- **Cybercrime**

Programme Overview

The Master of Science in Security by Design (MSSD) focuses on cybersecurity foundations and applications, from early design stages to implementations, for **organisational domains** and **cyber-physical systems**.

Students will be able to design, analyse, implement and manage secure systems ranging from online services and business to **large-scale infrastructures** (e.g. power grid, water treatment).

Unique Features

- Access to World-Class Testbeds
- Active Learning and Hands-On Pedagogy
- Local and Overseas Attachment Opportunities (for Research Thesis OR Industry Project)

Testbeds

SUTD hosts several world-class testbeds that facilitate research and training in the design of secure large-scale cyber physical systems.

These systems include:

- **S**ecure **Wa**ter **T**reatment (SWaT)
- **Wa**ter **Di**stribution (WADI)
- **E**lectric **P**ower and **I**ntelligent **C**ontrol (EPIC)
- **Re**search in **S**ecurity **I**nnovation **L**ab for **I**nternet **o**f **T**hings (RESILIOT)

Programme Duration (Full-Time / Part-Time / Modular)

Each academic year is divided into 3 Terms:

	Full-Time	Part-Time	Modular
Duration	1 Year (3 Consecutive Terms)	2 to 3 years (Maximum of 9 Terms)	Up to 5 Years (Maximum of 15 Terms)

Curriculum Overview

The MSSD programme starts in September and ends in the following August.

Term 1 (Sept to Dec)
- Foundations of Cybersecurity
- Computer Networks
- Elective Module 1
- Security Tools Laboratory 1

Term 2 (Jan to Apr)
- Secure Software Engineering
- System Security
- Elective Module 2
- Security Tools Laboratory 2

Term 3 (May to Aug)
- Research Thesis OR Industry Project

Part-time students must complete the above curriculum within 9 Terms.

Featured Elective Modules

- Machine Learning
- Secure Cyber Physical Systems
- Cybercrime

For more details, please visit **https://istd.sutd.edu.sg/mssd/programme-structure/**

Admission Requirements

At least a **Bachelor's degree** with
- Second-Upper Class Honours and majoring in **engineering** or **computer science**
  OR
- At least **2 years** of work experience in the information & communications technology sector

Applicants should also possess the following:
- Proficiency in at least one of the following programming languages: **Java**, **C/C++**, **Python** (or other modern programming language)
- English language proficiency (**TOEFL** or **IELTS** may be required if English is not your medium of instruction)

Admission Assessments

- Programming Test
- Face-to-Face OR Video Conference Interview

Credit exemption for academic modules will be evaluated on a case-by-case basis

Featured Scholarships

National Cybersecurity Postgraduate Scholarship

Open to Singapore Citizens and Permanent Residents

Center for Cyber Safety and Education Graduate Scholarship

Open to all local and international students

Contact Us

For admission and programme enquiries:
Email: mssd@sutd.edu.sg

Company Partnerships

- Certis CISCO
- Cyber Security Agency of Singapore
- Netherlands Organisation for Applied Scientific Research (TNO)
- Public Utilities Board, Singapore's National Water Agency
- StarHub Ltd
- ST Electronics (Info-Comm Systems) Pte Ltd

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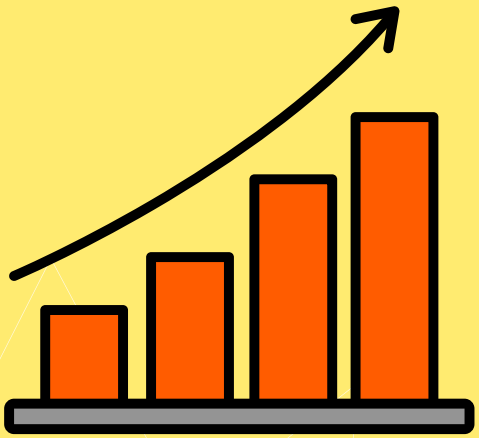


MUSPP

MASTER OF SCIENCE IN URBAN SCIENCE, POLICY AND PLANNING

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

Master of Science in Urban Science, Policy and Planning (USPP)

Programme Overview

The Master of Science in Urban Science, Policy and Planning (USPP) is a 12-month, full-time programme aimed at training the next generation of **urban researchers**, **analysts** and **practitioners** to be well-grounded in theory, skilled in data and analytics and adept at policy and planning.

Complex Urban Challenges

The USPP programme responds to a new paradigm of rapidly expanding, globally connected cities and enables students to develop novel solutions to urban challenges such as sustainable mobility, inclusive urban growth and new modes of governance for the 21st century.

Students combine **advanced social and data science research methods** and **computational techniques** with urban theory, planning and practice to explore current and emerging topics and shape the cities of the future.

Integrative Approach

Courses are taught by SUTD's multi-disciplinary and international faculty alongside practitioners and policymakers in Singapore who are uniquely positioned to provide insights into the country's **technological** and **engineering expertise** and experience in urban planning and development.

The programme integrates coursework with hands-on experience and independent research, and builds upon SUTD's research and industry partnerships with government agencies and private firms.

Core Focus Areas

Urban Theory

Students are provided with a theoretical foundation that incorporates centuries of critical thinking about cities, social theory and historical and emerging urban planning paradigms.

Urban Data and Methods

Students are trained in social science research methods, Geographic Information Science (GIS) and relevant data science techniques such as machine learning, network analysis and interactive data visualisation.

Urban Practice and Policy

Students are prepared to critically assess, understand and craft evidence-based policies and programmes positioned within the institutional context of urban economics, politics and governance.

Curriculum Overview

Term 1 (Sept to Dec)	**Urban Theory I** Theory and Dynamics of Urban Social Processes	**Urban Data & Methods I** Research Methodology for Urban Analysis	**Urban Practice & Policy I** Techniques and Methods of Planning and Policy	**Urban Practice & Policy II** Smart Global City: Leadership and Planning in Singapore
	Urban Symposium			
Term 2 (Jan to Apr)	**Urban Data & Methods II** Computational Urban Analysis	**Research Studio** Applied Research and Field Work	**Electives I & II** Students will choose **two electives** from the Programme's Core Areas: • Urban Theory • Urban Data and Methods • Urban Practice and Policy Visit the website at: **http://urbanscience.sutd.edu.sg** for more details	
Term 3 (May to Aug)	**Independent Research Project**			

Admission Schedule / Deadlines

The 12-month, full-time programme runs from **September to August**.

For an up-to-date admissions schedule, please refer to the website: **http://urbanscience.sutd.edu.sg**

Contact Us

Email: **MUSPP@sutd.edu.sg**

Admission Requirements

Applicants should possess the following:

- **Bachelor's degree** or above
- Proficiency in English (**IELTS/TOEFL** is required for students whose last degree was not in English)
- Admission will be based on academic records, a statement of purpose and an in-person or video interview

Attractive **scholarship funding** is available for both Singaporean and international students.

Career Opportunities

Graduates of the Urban Science, Policy and Planning programme are well-positioned for careers in the following sectors:

- Government Ministries, Statutory Boards and other government-affiliated agencies

- Private-sector organisations and international consultancies specialising in urban development and management consulting

- Professional bodies/trade associations

- Non-governmental organisations, institutes of higher learning and research institutes focusing on urban, social, community, policy, economic and environmental issues

Singapore University of Technology and Design

The Singapore University of Technology and Design (SUTD) is Singapore's fourth autonomous university and one of the first universities in the world to incorporate the art and science of design and technology into a multi-disciplinary curriculum.

SUTD was established to advance knowledge and nurture technically-grounded leaders and innovators to serve societal needs and create a better world by design.

The USPP Programme is jointly organised by the **Humanities, Arts and Social Sciences** (HASS) cluster and the **Lee Kuan Yew Centre for Innovative Cities** (LKYCIC) research institute.

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

SUTD PhD PROGRAMME

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

SUTD PhD Programme (Full-Time / Part-Time)

The SUTD PhD Programme offers you a chance to collaborate with the best minds in their fields and conduct breakthrough research that will make a difference to the world.

Students who successfully complete the programme will graduate with a Doctor of Philosophy degree under the respective academic track.

SUTD offers the SUTD PhD Programme under these academic tracks:

Architecture and Sustainable Design (ASD)
- focusing on sustainable architectural and urban solutions to meet the present and future needs of buildings and cities

Engineering Product Development (EPD)
- focusing on innovative technology-intensive products that span multiple engineering disciplines

Engineering Systems and Design (ESD)
- focusing on large-scale complex systems whose performance and function depend on their technology and socio-economic context

Information Systems Technology and Design (ISTD) • focusing on information systems that interact with the physical world, humans and machines

Science and Math
- focusing on wide-ranging, interdisciplinary research that is grounded in Science and Math fundamentals and with practical applications.

SUTD PhD students will also benefit from the following:

PhD Industry / Research Internships
PhD students may embark on an internship at a company / external university for up to 6 months to gain hands-on project experience and broaden their research scope.

PhD Professional Development Short Courses
These short courses will provide PhD students with a well-rounded and holistic education. Topics covered include:
- Intellectual Property
- Scientific and Grant Writing
- Entrepreneurship
- Private Equity & Fund Raising for Businesses
- Corporate Grooming & Personal Branding
- Leadership & Teamwork

PhD Big-D Project
A task-based, self-driven entrepreneurial programme that aims to transform ideas, inventions and scientific understandings into tangible products, systems and / or services.

Attractive Scholarship Funding

<table>
<tr><th></th><th colspan="2">External Scholarships</th><th>SUTD Graduate Scholarships</th></tr>
<tr><td>For Singapore Citizens/ Permanent Residents</td><td>Design Singapore Scholarship (DSG)</td><td rowspan="2">A*STAR Graduate Scholarship (AGS)

AISG PhD Fellowship Programme</td><td rowspan="2">SUTD President's Graduate Fellowship
•Open to all nationalities
•Full tuition fees (for up to 4 years)
• Monthly stipend of:
° S$3,600 (Singapore Citizens)
° S$3,400 (Singapore Permanent Residents)
° S$3,100 (International Students)
• CPF contribution (Singapore Citizens only)

SUTD PhD Fellowship
• Open to all nationalities
• Full tuition fees (for up to 4 years)
• Monthly stipend of:
° S$2,800 (Singapore Citizens)
° S$2,400 (Singapore Permanent Residents)
° S$2,200 (International Students)
• CPF contribution (Singapore Citizens only)
• Scholars who pass the PhD Qualifying Examination will be eligible for an additonal stipend of up to S$500 per month.</td></tr>
<tr><td>For All Nationalities</td><td>Facebook Fellowship Programme</td></tr>
</table>

Candidature Period

Full-Time 3 to 5 years (Maximum candidacy of 5 years)
Part-Time 4 to 5 years (Maximum candidacy of 5 years)

Admission Schedule / Deadlines

There are two PhD intakes a year, in September and January. The deadline for each intake is:

September Intake: End of March
January Intake: End of September

Please apply at https://admission.sutd.edu.sg

Admission Requirements

Applicants should possess the following:

- At least a Bachelor's degree or above with excellent academic standing
- Proficiency in English (IELTS or TOEFL is required if English is not your medium of instruction in your studies)

SUTD PhD Programme students are required to pass the following in order to graduate:

- Coursework requirements
- Oral and/or written examination
- Submission of a thesis for evaluation committee's approval

Contact Us

Application, Admission & Scholarships:

Office of Graduate Studies: phd@sutd.edu.sg

View Faculty's Research Here:

ASD	https://asd.sutd.edu.sg/people/faculty/
EPD	https://epd.sutd.edu.sg/people/faculty/
ESD	https://esd.sutd.edu.sg/people/faculty/
ISTD	https://istd.sutd.edu.sg/people/faculty/
Sci & Math	https://academics.sutd.edu.sg/science-math/science-faculty/

SUTD-NUS (JDP)

JOINT PhD PROGRAMME

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

SUTD GRADUATE PROGRAMMES

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

SUTD-NUS Joint PhD Programme (JDP) (Full-Time)

(SUTD PhD Programme and NUS Faculty of Engineering)

Upon successful completion of the SUTD-NUS JDP, you will be conferred a PhD degree awarded jointly by SUTD and NUS.

Programme Overview

The SUTD-NUS JDP imparts the best of both world-class institutions. It combines SUTD's innovative, flexible curriculum and its unique Big-Design perspective with NUS's established graduate programmes and research track record.

- **For SUTD students, the Home Institution is SUTD and the Host Institution is NUS**
- **For NUS students, the Home Institution is NUS and the Host Institution is SUTD**

Candidature Period (Full-Time)

Students are required to spend at least half the duration of their candidature at their Home Institution, and should typically spend a minimum of 1 year and a maximum of 2 years at the Host Institution.

The first and last term of candidature must be done at the Home Institution. Modules taken at the Host Institution can be used to satisfy graduation requirements, subject to the approval of the JDP Committee. The expected duration to complete this JDP is 4 years of full-time study.

To apply to SUTD as the home institution, please submit your application to:

https://admission.sutd.edu.sg

In the application form, please indicate 'Yes' to be considered for the SUTD-NUS Joint PhD Programme.

Students should indicate the choice of prospective advisor at SUTD (**EPD, ISTD, ESD**) and **NUS (Faculty of Engineering).**

Programme Requirements

In addition to the Course Requirements of the SUTD PhD Programme, the SUTD-NUS JDP requires applicants to meet the following criteria:

- Must meet English language proficiency criteria of the Home institution
- Must have an offer to join the PhD programme at the Home Institution
- Must be accepted by at least 2 faculty members as supervisors, where at least 1 supervisor must be from each university

For more information regarding the PhD Programme at NUS or SUTD, please visit the respective websites below:

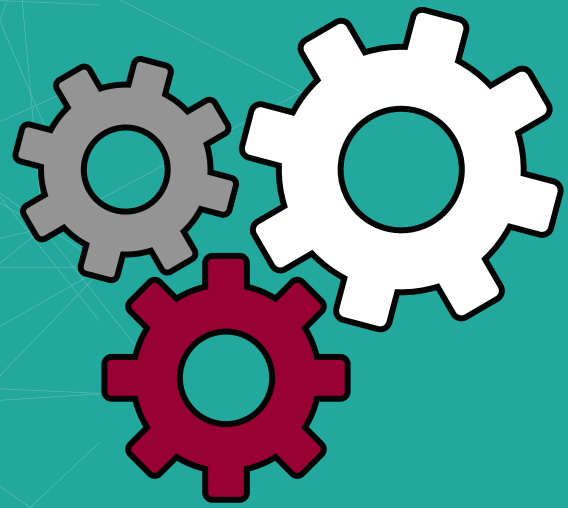
NUS:
https://www.eng.nus.edu.sg/graduate-studies/collaborative-programmes/nus-sutd-joint-phd/

SUTD:
http://sutd.edu.sg/Admissions/Graduate/PhD-Programmes/SUTD-NUS-Joint-PhD-Programme

EngDoc

SUTD ENGINEERING DOCTORATE PROGRAMME

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN



SUTD GRADUATE PROGRAMMES

SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN

SUTD Engineering Doctorate (EngD) Programme (Full-Time/Part-Time)

Programme Overview

The SUTD Engineering Doctorate (EngD) provides graduate students with industry-relevant training to enable the translation of research & development (R&D) efforts into tangible products, systems and services.

In general. the EngD is oriented toward research of a technical readiness level (TRL) of 3–4, compared with a PhD degree that is traditionally oriented toward a TRL of 1–2.

EngD students must demonstrate a high level of expertise in both theoretical scientific principles and the implementation of said theory on realistic and industry-relevant needs. EngD students will be co–supervised by SUTD faculty members and industry supervisors.

In additional to passing the EngD qualifying examination (within 2 years) and submitting an EngD thesis, students are required to complete the following coursework components:
(refer to overleaf for more details)

- 4 Professional Development Short Courses
- 2 Technical Courses
- 2 PhD-Level Seminars

Candidature Period

Full-Time	3 to 5 years (Maximum candidacy of 5 years)
Part-Time	4 to 5 years (Maximum candidacy of 5 years)

Admission Requirements

Applicants should possess the following:

- At least a Bachelor's degree or above with excellent academic standing
- Proficiency in English (IELTS or TOEFL is required if English is not your medium of instruction in your studies)

Admission Schedule / Deadline

There are two EngD intakes a year, in September and January. The deadline for each intake is:

September Intake: End of March
January Intake: End of September

Please apply at https://admission.sutd.edu.sg

Contact Us

Application, Admission & Scholarships:

Office of Graduate Studies: phd@sutd.edu.sg

View Faculty's Research Here:

ASD	https://asd.sutd.edu.sg/people/faculty/
EPD	https://epd.sutd.edu.sg/people/faculty/
ESD	https://esd.sutd.edu.sg/people/faculty/
ISTD	https://istd.sutd.edu.sg/people/faculty/
Sci & Math	https://academics.sutd.edu.sg/science-math/science-faculty/

View SUTD Research Centres Here:
https://sutd.edu.sg/Research/Research-Centres

View Selected Research Projects:
https://sutd.edu.sg/Admissions/Graduate/Graduate-Research/Projects-and-opening

Attractive Scholarship Funding

Economic Development Board (EDB) Industrial Postgraduate Programme (IPP)	SUTD Graduate Scholarships
The EDB-IPP offers you the opportunity to pursue a company-related research project as your EngD thesis while continuing as a full-time company employee. For IPP Partnering Companies • Must be based in Singapore • Have an established corporate R&D presence in Singapore (i.e. Doctorate-level researchers, good track record of research activities, etc.) • Committed to supporting IPP trainees toward attaining MEng or Doctoral qualifications For IPP Trainees • Singapore Citizens / PRs only • Eligible to pursue MEng or Doctoral studies • Must be an employee of the Partnering Company (may be either new or existing employee)	SUTD President's Graduate Fellowship • Open to all nationalities • Full tuition fees (for up to 4 years) • Monthly stipend of: ° S$3,600 (Singapore Citizens) ° S$3,400 (Singapore Permanent Residents) ° S$3,100 (International Students) • CPF contribution (Singapore Citizens only) SUTD PhD Fellowship • Open to all nationalities • Full tuition fees (for up to 4 years) • Monthly stipend of: ° S$2,800 (Singapore Citizens) ° S$2,400 (Singapore Permanent Residents) ° S$2,200 (International Students) • CPF contribution (Singapore Citizens only) • Scholars who pass the PhD Qualifying Examination will be eligible for an additonal stipend of up to S$500 per month

Professional Development Short Courses

These short courses will provide EngD students with a well-rounded and holistic education. Topics covered include:

- Intellectual Property (IP) Clinic
  Learn more about the fundamentals of IP and why it is an essential part of a business growth strategy.
- Scientific and Grant Writing
  Develop your scientific writing and grant proposal writing skills.
- Entrepreneurship
  A practical-oriented course that teaches you how to turn business or product ideas into a successful commercial venture.
- Private Equity (PE) & Fund Raising for Businesses
  Acquire practical knowledge, competencies and key insights regarding the PE industry.
- Corporate Grooming & Personal Branding
  Groom your professional image and build up your business etiquette for better work relationships.
- Leadership & Teamwork
  Learn how emotional intelligence can positively impact team dynamics and professional engagements.

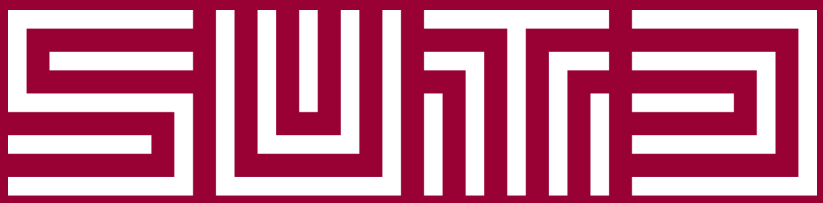
Technical Courses

These technical modules will provide EngD students with the core skills necessary for robust research. Some examples include (but are not limited to):

Engineering Product Development (EPD)
- Applied Mathematics for Engineering
- Design Science
- Computational Science and Engineering
- Optimization and Control
- Research Methods

Engineering Systems and Design (ESD)
- Linear Optimization
- Operations Management
- Probability Theory
- Statistics
- Stochastic Modeling

Information Systems Technology and Design (ISTD)
- Analysis of Algorithms
- Computer Networks
- Machine Learning
- Software Engineering
- Wireless Communications and Networking



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