

LEADING INTELLIGENT  
BUSINESS TRANSFORMATION

# Master of IT in Business

Master Your Future



School of  
**Computing and  
Information Systems**



Gabriella Pauline Djojaputro  
Data Scientist,  
Shift Technology

POSTGRADUATE

# WHY SMU MASTER OF IT IN BUSINESS (MITB)?



## MESSAGE FROM THE ASSOCIATE DEAN



The School of Computing and Information Systems (SCIS) at SMU, with our distinctive blend of practice, research and education, leads the way in the areas of Fintech, Analytics, Artificial Intelligence, and Digital Transformation.

The launch of the Master of IT in Business (MITB) programme with specialisation in Financial Services in August 2007 marked the birth of a unique programme. This programme focuses on training IT professionals in Financial Technology, Operations, Processes and Systems in different banking businesses. The recent growth of interest in Fintech and Analytics reaffirms our belief that our Financial Technology & Analytics (FTA) track will train talents to bring the banking industry to new heights.

Our Analytics (AT) track launched in January 2011 is the first in Asia. It develops a new breed of IT professionals with skills and in-depth knowledge in data analytics for different industries. Our Artificial Intelligence (AI) track goes even further, training professionals who are able to build AI tools and implement algorithms to solve complex problems. Our new track in Digital Transformation (DT) equips graduates with the blend of ICT knowledge and skills to strategise and execute digital transformation successfully for a complex organisation in a rapidly changing environment.

Apart from practical internships and capstone project opportunities with our industry partners, our state-of-the-art research labs constantly provide cutting-edge research topics for our curriculum, so that our students are not only trained for the present, but also the future.

We welcome you to join our MITB programme.

**Michelle Cheong Lee Fong**  
Professor of Information Systems (Education)  
Associate Dean, SCIS Postgraduate Professional Education  
Director, Doctor of Engineering  
School of Computing and Information Systems (SCIS)  
Singapore Management University

## 1 CUTTING-EDGE CURRICULUM

We constantly update our curriculum to align with market trends and technology advancements, ensuring you learn the most current and relevant knowledge and skills.

## 2 PRACTICAL EXPERIENCE

Gain real-world experience through internships, capstone projects, and SMU-X courses, allowing you to apply what you've learned and develop valuable life skills.

## 3 INDUSTRY CONNECTIONS

Our industry partners not only provide valuable feedback on our curriculum to ensure relevance and practicality, but also offer networking opportunities, internships, and industry seminars to our students.

## 4 WORLD-CLASS FACULTY

Learn from experienced faculty who bring a wealth of knowledge and experience from diverse industries, enabling you to gain insights from real-world scenarios.



**MASTER OF IT IN BUSINESS**

**#2 in Asia 2024**

QS BUSINESS MASTERS RANKINGS: BUSINESS ANALYTICS

# MITB SPECIALISATION TRACKS

Graduates from the SMU Master of IT in Business are highly sought after by employers and are in high demand in numerous sectors. Here are some career roles that our graduates can look forward to or have taken on:

 <p><b>FINANCIAL TECHNOLOGY &amp; ANALYTICS</b></p>	 <p><b>ANALYTICS</b></p>	 <p><b>ARTIFICIAL INTELLIGENCE</b></p>	 <p><b>DIGITAL TRANSFORMATION</b></p>
<p>In a rapidly evolving financial landscape, fintech and digital finance are driving innovation across financial institutions from revolutionising digital banking and enhancing customer insights to fostering market intelligence.</p> <p>The Financial Technology &amp; Analytics (FTA) track equips you with essential knowledge and skills to navigate the convergence of financial technology, analytics, and management, exposing to fintech fundamentals such as digital banking, blockchain technology, while also immersing you in emerging trends such as Web 3.0, digital currencies and Regulatory Technology.</p> <p>Examples of job roles include (but not limited to):</p> <ul style="list-style-type: none"> <li>▶ Banking &amp; Financial Digital Transformation Specialist</li> <li>▶ Digital Banking Analyst/Consultant</li> <li>▶ Digital Product Manager</li> <li>▶ Fintech Product Specialist/Founder</li> <li>▶ Investment/Treasury Tech Specialist</li> <li>▶ Risk &amp; Compliance Management Specialist</li> </ul>	<p>In today's data-driven world, the strategic power of data analytics and data science are undeniable and the demand for professionals skilled in harnessing data to solve complex challenges is on the rise. The Analytics track is designed to equip you with strong problem-solving skills, technical concepts, methodologies, and industry best practices to translate data-driven insights into crucial impactful decisions.</p> <p>Through hands-on experience with real-world use cases and practicum projects, you'll master the art of data analytics and become a driving force behind informed decision-making and strategic success.</p> <p>Examples of job roles include (but not limited to):</p> <ul style="list-style-type: none"> <li>▶ Business Analyst</li> <li>▶ Consultant</li> <li>▶ Data Analyst</li> <li>▶ Data Engineer</li> <li>▶ Data Scientist</li> <li>▶ Product Manager</li> </ul>	<p>Artificial Intelligence (AI) is poised to reshape industries and revolutionise the way we interact with technology. Governments and businesses alike are leveraging AI to tackle societal and industrial challenges.</p> <p>Designed in response to these dynamic trends, the Artificial Intelligence Track is dedicated to nurturing the next generation of AI leaders. You will master the art of constructing AI tools and deploying adaptive closed-loop solutions for multifaceted business complexities.</p> <p>Examples of job roles include (but not limited to):</p> <ul style="list-style-type: none"> <li>▶ AI Scientist</li> <li>▶ AI Solution Architect</li> <li>▶ Algorithm Engineer</li> <li>▶ Data Scientist</li> <li>▶ Machine Learning Engineer</li> </ul>	<p>Digital Transformation is the integration of cutting-edge digital technologies and innovative strategies to reshape organisations. It harnesses digital technologies to enhance customer experiences, streamline operations, and create new opportunities.</p> <p>In the Digital Transformation track, you'll gain a comprehensive understanding of digital technologies while attaining the skills to orchestrate transformative change in organisations and become transformation enablers.</p> <p>Examples of job roles include (but not limited to):</p> <ul style="list-style-type: none"> <li>▶ Digital Business Consultant</li> <li>▶ Digital Change Management Specialist</li> <li>▶ Digital Innovation Manager</li> <li>▶ Digital Product Manager</li> <li>▶ Digital Transformation Specialist</li> </ul>

# GRADUATION REQUIREMENTS

Students must complete and pass a total of 15 Course Units (CUs) with a minimum cumulative Grade Point Average (GPA) of 2.5 to graduate with the MITB degree.

	FINANCIAL TECHNOLOGY & ANALYTICS (FTA)	ANALYTICS (AT)	ARTIFICIAL INTELLIGENCE (AI)	DIGITAL TRANSFORMATION (DT)
<b>POSTGRADUATE PROFESSIONAL DEVELOPMENT COURSE (1 CU)</b>	4 Workshop Topics During Candidature Period			
<b>PROGRAMME CORE (3 CUs)</b>	Spreadsheet Modelling for Decision Making Statistical Thinking for Data Science Computational Thinking with Python			
<b>TRACK CORE (4 CUs)</b>	Digital Banking & Trends	Data Analytics Lab	Algorithm Design & Implementation	Digital Transformation Strategy
	Fintech Innovations & Startups*	Data Science for Business*	Introduction to Artificial Intelligence*	Digital Organisation & Change Management
	Digital Payments & Innovation	Applied Machine Learning*	Applied Machine Learning*	Agile & DevSecOps
	RiskTech & RegTech	Query Processing & Optimisation	Query Processing & Optimisation	(digital) Product Management
<b>TRACK ELECTIVES (3 CUs)</b>	Choose 1 Fintech and 2 Analytics electives	Choose 3 Analytics electives	Choose 3 AI electives	Choose 3 DT electives
<b>OPEN ELECTIVES (4 CUs)</b>	Choose any 4 CUs from the following <sup>†</sup> : <ul style="list-style-type: none"> <li>• Internship or Capstone Project (2 CUs)</li> <li>• Courses from any series in the MITB curriculum</li> <li>• Courses from other SMU Master Programmes (up to 2 CUs)</li> </ul>			

<sup>†</sup> Students are strongly encouraged to take up an immersive component (such as an Internship, Capstone Project or SMU-X course) during their study at MITB.

# THE MITB CURRICULUM

The MITB curriculum has its courses classified into the following series:

<b>FINANCIAL TECHNOLOGY (FINTECH)</b>	<ul style="list-style-type: none"> <li>• Digital Banking &amp; Trends</li> <li>• Fintech Innovations &amp; Startups*</li> <li>• Corporate &amp; Consumer Financial Technology</li> <li>• Web 3.0 in Tokenised Assets &amp; NFTs (0.5 CU)</li> </ul>	<ul style="list-style-type: none"> <li>• Data Science in Financial Services*</li> <li>• Quantum Computing in Financial Services*</li> <li>• Financial Markets Systems &amp; Technology</li> </ul>	<ul style="list-style-type: none"> <li>• Digital Payments &amp; Innovations</li> <li>• RiskTech &amp; RegTech</li> <li>• Web 3.0 in Digitalised Currencies &amp; CBDCs (0.5 CU)</li> </ul>
<b>ANALYTICS TECHNOLOGY &amp; APPLICATIONS (ANALYTICS)</b>	<ul style="list-style-type: none"> <li>• Data Management</li> <li>• Computational Thinking with Python</li> <li>• Big Data: Tools &amp; Techniques</li> <li>• Social Analytics &amp; Applications</li> <li>• Data Science for Business*</li> <li>• Applied Healthcare Analytics (0.5 CU)</li> </ul>	<ul style="list-style-type: none"> <li>• Data Analytics Lab</li> <li>• Customer Analytics &amp; Applications (SMU-X)</li> <li>• Visual Analytics &amp; Applications</li> <li>• Query Processing &amp; Optimisation</li> <li>• Prompt Engineering for LLMs (0.5 CU)</li> </ul>	<ul style="list-style-type: none"> <li>• Text Analytics &amp; Applications</li> <li>• Applied Machine Learning*</li> <li>• Statistical Thinking for Data Science</li> <li>• Geospatial Analytics &amp; Applications</li> <li>• Operations Analytics &amp; Applications</li> </ul>
<b>ARTIFICIAL INTELLIGENCE &amp; APPLICATIONS (AI)</b>	<ul style="list-style-type: none"> <li>• Introduction to Artificial Intelligence*</li> <li>• Deep Learning for Visual Recognition<sup>†</sup></li> <li>• AI Planning &amp; Decision Making<sup>†</sup></li> <li>• Introduction to Reinforcement Learning*</li> <li>• Prompt Engineering for LLMs (0.5 CU)</li> </ul>	<ul style="list-style-type: none"> <li>• Machine Learning Engineering<sup>†</sup></li> <li>• Algorithm Design &amp; Implementation</li> <li>• Natural Language Processing for Smart Assistants*</li> <li>• Applied Machine Learning*</li> </ul>	<ul style="list-style-type: none"> <li>• Multi-Agent Systems<sup>†</sup></li> <li>• AI System Evaluation<sup>†</sup></li> <li>• Recommender Systems*</li> <li>• AI Translational Research Seminar* (Without credit)</li> </ul>
<b>DIGITAL TRANSFORMATION (DT)</b>	<ul style="list-style-type: none"> <li>• Agile &amp; DevSecOps</li> <li>• Digitalisation and Process Innovation</li> <li>• Business Applications of Digital Technology</li> <li>• Digital Technologies and Sustainability (0.5 CU)</li> </ul>	<ul style="list-style-type: none"> <li>• Digital Enterprise Architecture</li> <li>• Digital Organisation &amp; Change Management</li> <li>• Digital Transformation Strategy (SMU-X)</li> </ul>	<ul style="list-style-type: none"> <li>• Experimental Learning &amp; Design Thinking</li> <li>• Digital Governance &amp; Risk Management</li> <li>• (digital) Product Management</li> </ul>
<b>Courses in the Tech and Practicum series are open to students in all tracks</b>			
<b>INFORMATION TECHNOLOGY MANAGEMENT (TECH)</b>	<ul style="list-style-type: none"> <li>• Cybersecurity Technology &amp; Applications</li> <li>• Global Sourcing of Technology &amp; Processes</li> <li>• Modern Software Solution Development</li> </ul>	<ul style="list-style-type: none"> <li>• Blockchain Technology</li> <li>• Spreadsheet Modelling for Decision Making</li> <li>• IoT: Technology &amp; Applications</li> </ul>	<ul style="list-style-type: none"> <li>• IT Project &amp; Vendor Management</li> <li>• Business Applications of Digital Technology</li> <li>• RPA for Business Applications (0.5 CU)</li> </ul>
<b>PRACTICUM</b>	<ul style="list-style-type: none"> <li>• Internship (2 CUs)</li> </ul>	<ul style="list-style-type: none"> <li>• Capstone Project (2 CUs)</li> </ul>	

Students may choose to cross-enrol up to two (02) pre-approved SCIS PhD courses and count towards MITB graduation requirements as track electives or open electives.

<sup>†</sup> A pre-requisite course is required.

<sup>†</sup> These courses cannot be taken in students' first term of study. As a result, some full-time students may need to extend to their fourth term of study in order to read these courses. Only students with special exemptions can be allowed to read these courses in their first term of study.

<sup>‡</sup> The AI Translational Research Seminar is a graduation requirement (without credit) for AI track students.

Course modules listed are subject to change.

## FINANCIAL TECHNOLOGY & ANALYTICS

The MITB programme has significantly enhanced my skill set in strategic thinking, data analysis, and technology management, providing me with specialised knowledge for applying holistic technology solutions in the financial services industry. This expertise has bolstered my qualifications for leadership positions within my organisation. Moreover, MITB facilitated my transition from a purely technical role to a business transformation-focused role. Completing the MITB programme successfully has boosted my confidence, allowing me to take on more challenging leadership roles, pursue ambitious goals, and navigate the complexities of the financial industry with a greater sense of self-assurance.

**Ravish Khanna**  
Director, Business Change & Transformation  
BNP Paribas Wealth Management

Watch his video



## ANALYTICS

During my internship at UOB Asset Management, I had the privilege to work as a Data Scientist and contribute to end-to-end data science projects. This opportunity allowed me to develop my skills in data gathering, data wrangling, feature engineering, model training, hyperparameter tuning, presenting insights to users, and even user interface development. It was gratifying to apply the knowledge and skills learned from MITB to solve real-world problems and deliver effective solutions that were later implemented by users within the organisation. Beyond the technical knowledge, SMU's interactive teaching approach and emphasis on practical applications have also enhanced my soft skills, contributing to my growth as a well-rounded data scientist.

**Gabriella Pauline Djojaputro**  
Data Scientist,  
Shift Technology

Watch her video



# CLASS PROFILE

Discover the profile of great minds you could be networking with.

Average GMAT  
**670**

Typical Age Range  
**22-33**



International Students  
**42%**

Total Nationalities  
**15**

Average Years of Work Experience  
**5.0**

Student profiles taken from Classes of 2022-2023 (Full-time & Part-time)

 Download Employment Report



## GRADUATES' EMPLOYABILITY



**~95%** employed within **6 months** upon graduation\*

\*Graduates' employability data is based on survey conducted for MITB students who filed for graduation in 2022.

## ACADEMIC BACKGROUND



Business/Finance  
**34%**



Engineering  
**21%**



Computing  
**18%**



Science  
**14%**



Arts & Social Science  
**13%**

Student profiles taken from Classes of 2022-2023 (Full-time & Part-time)

## ARTIFICIAL INTELLIGENCE

SMU's experienced professors and instructors played a crucial role in helping me excel in my studies. Assistant Prof Dai Bing Tian's ability to simplify complex concepts and his Algorithm Design module was key in building my technical foundation. I enjoyed the Recommender Systems module where I worked on a group project that involved building and deploying a multimodal recommendation engine. This engine was designed to suggest good coffee joints based on factors like price, location, and online reviews. As a coffee enthusiast, I was elated that I could make use of the recommendations for my coffee hunts. Designing practical solutions that can benefit the public gives me a great sense of fulfilment.

**Loh Si Jun, Shauna**  
Data Scientist,  
OCBC AI Lab

Watch her video



## DIGITAL TRANSFORMATION

I chose the MITB Digital Transformation track to acquire skills and knowledge for supporting change in organisations. SMU's seminar style classes helped me step out of my comfort zone and be involved in group discussions and rich exchanges of ideas with my professors and course mates. Through the MITB experience, I have honed my business acumen and am more confident when communicating digital solutions to the C-suite and implementing effective cybersecurity strategies in my day-to-day job.

**Wong Yew Hoong**  
Senior Assistant Director,  
Cyber Security Agency of Singapore (CSA)

Watch his video



## ADMISSIONS CRITERIA

- A good GMAT/GRE/SMU Admission Test score. (SMU's GMAT Code: F8D-Z4-61 & GRE Code: 2861)
- IELTS/UKVI (Academic)/TOEFL is required for applicants whose Bachelor's/Master's/PhD Degree programme was not taught in English.
- Applicants from all degrees are encouraged to apply.
- Preferably 2 years of work experience in a business or technology role for all track applicants.

## PERIOD OF CANDIDATURE

The Master of IT in Business is a rigorous programme with 2 modes of study:

	Period of Candidature	
	Minimum	Normal
<b>Full-time</b>	1 year	1.5 years
<b>Part-time</b>	2 years	2.5 years

## PROGRAMME CALENDAR

There are two intakes each year, in August and January.

August Intake	Aug - Nov	Nov - Dec*	Jan - Apr	Apr - Jul	Jul - Aug*	Aug - Nov	Nov - Dec*	Jan - Apr	Apr - Jul
<b>Full-time (12 months)</b>	4 CUs	4 CUs	4 CUs						
		Internship/Capstone Project (2 CUs)^							
	Postgraduate Professional Development Course (1 CU)								
<b>Full-time (16 months)</b>	4 CUs	3 CUs	3 CUs	2 CUs					
		Internship/Capstone Project (2 CUs)^							
	Postgraduate Professional Development Course (1 CU)								
<b>Part-time (24 months)</b>	2 CUs	2 CUs	2 CUs	2 CUs	2 CUs	2 CUs			
			Internship/Capstone Project (2 CUs)^						
	Postgraduate Professional Development Course (1 CU)								
January Intake	Jan - Apr	Apr - Jul	Jul - Aug*	Aug - Nov	Nov - Dec*	Jan - Apr	Apr - Jul	Jul - Aug*	Aug - Nov

^ Internships are to be completed over a 6-month period (typical cycles: Jan - Jun, May - Nov) and Capstone Projects are to be completed over two terms.  
\* Nov - Dec and Jul - Aug are special terms and they are optional.

## APPLICATION DETAILS

We offer two application periods each year. For the August intake, we welcome applications from 1st January to 31st May, and for the January intake, applications are accepted from 1st June to 31st October.

Application Period	Intake
January to May	August
June to October	January the following year

## SCHOLARSHIPS AND FINANCIAL ASSISTANCE

Our MITB programme offers a diverse range of scholarships and awards, tailored to support various tracks within the programme. To learn more about these opportunities, please visit: <https://smu.sg/mitbscholars>

## PROGRAMME FEES

The current fees for the programme are:

Fees	Amount
Application	S\$100 (Inclusive of GST)
Registration	Singapore Citizens & Permanent Residents S\$400 (inclusive of GST) Foreigners S\$500 (inclusive of GST)
Tuition*	Please refer to the programme website for the prevailing tuition fees. <a href="https://smu.sg/mitbprogfees">https://smu.sg/mitbprogfees</a>

\* Tuition fees are locked in once the student enters the programme. SMU reserves the right to alter tuition fees for new incoming cohorts when required.



Join our events



Apply now

# SMU - IN THE HEART OF SINGAPORE, IN THE HEART OF ASIA

In the dynamic, cosmopolitan hub that is Singapore, you will find a vibrant city-state that pulses with the diversity of both East and West. Situated at the crossroads of the world, Singapore is home to multinational companies and thousands of small and medium-sized enterprises flourishing in a smart city renowned for its business excellence and connectivity. With its strong infrastructure, political stability and respect for intellectual property rights, this City in a Garden offers you unique opportunities to develop as a global citizen.

Tapping into the energy of the city is a university with a difference – the Singapore Management University. Our eight schools: School of Accountancy, Lee Kong Chian School of Business, School of Computing and Information Systems, School of Economics, College of Graduate Research Studies, College of Integrative Studies, Yong Pung How School of Law, and School of Social Sciences, form the country's only city university campus, perfectly sited to foster strategic links with businesses and the community.

SMU generates leading-edge research with global impact and produces broad-based, creative and entrepreneurial leaders for a knowledge-based economy. Discover a multi-faceted lifestyle right here at SMU, in the heart of Singapore.

## THE SMU MASTERS ADVANTAGE



### GLOBAL RECOGNITION

SMU is globally recognised as one of the best specialised universities in Asia and the world. Its research rankings, programme rankings, accreditations and professional recognition are testaments to its achievements and standing.



### INTERACTIVE PEDAGOGY

SMU's interactive, seminar-style pedagogy brings you stimulating, multidisciplinary learning under the mentorship of the thought leaders and subject experts who make up our faculty. You will hone your analytical skills, teamwork and communication skills.



### INNOVATIVE CURRICULUM

Stay relevant with courses that combine cutting-edge research and up-to-date knowledge with best business practices. SMU's Postgraduate Professional Development Course and award-winning Asian case studies help you approach topics from different practical perspectives for greater insights.



### NETWORKING AND CAREER OPPORTUNITIES

SMU has a diverse student population from many different countries, bringing equally diverse personal and professional experience into your network. Take advantage of comprehensive guidance from our dedicated career services to aid your career transition or advancement.



### CITY CAMPUS

SMU is nestled within the arts and heritage precinct, right next to the Central Business District, with unrivalled connectivity for public transport and multiple amenities around campus. Discover how life beyond the classroom is as enriching as within.



For a full listing of SMU Masters programmes, visit [masters.smu.edu.sg/programmes](https://masters.smu.edu.sg/programmes)





Singapore Management University  
School of Computing and Information Systems 2  
90 Stamford Road Singapore 178903

 [smu.edu.sg/mitb](https://smu.edu.sg/mitb)   /SMUMITB

 SMUPGPP  [mitb@smu.edu.sg](mailto:mitb@smu.edu.sg)