SMU MASTER OF IT IN BUSINESS (ANALYTICS)

MITB – Transforming Business

SINGAPORE MANAGEMENT UNIVERSITY
Why MITB (Analytics)?

Data is a strategic asset
With the advent of the Internet and the pervasive use of communication technology, companies are collecting massive amounts of data. They have come to realise that data is a strategic asset and in order to gain significant business benefits from it, Analytics is required. Analytics is the use of data through statistical/quantitative analysis to drive business decisions and actions.

Strong demand for Analytics professionals
Well-trained professionals are in high demand and this demand is foreseen to increase further given that more companies realise the need to gain competitive advantage through mining insights from their data. The strong demand for Analytics skills has prompted the Infocomm Development Authority of Singapore (IDA) to categorise it as a sector it wants to develop.

The MITB (Analytics) programme is the definitive postgraduate degree that grooms personnel for Analytics job roles. Courses are designed together with industry leaders to ensure relevance and applicability, and are constantly reviewed to stay up-to-date with the latest trends and technologies.

Broad-based exposure with in-depth knowledge
The MITB (Analytics) programme gives students comprehensive and in-depth knowledge of business methods and management concepts required to assume senior Technology & Operations and Analytics roles in various sectors, including healthcare, hospitality, retail, supply chain, transportation and entertainment. It also enables students to adopt a data-centric perspective for understanding service delivery with the emphasis on emerging “next-practices” of real-time, adaptive data analytics with massive amounts and multiple types of data.

Becoming the next generation of leaders
The MITB (Analytics) programme provides the right platform for professional students aspiring to be the industry’s leaders – capable of merging the power of data analytics technology with an organisation’s operational capability.

“The programme provides an opportunity for students to work on critical business issues. As a business analyst in the retail industry, this programme has provided me with the exposure and relevant knowledge to pursue my long-term career in this area.”

Ong Yeru, Cally
MITB (Analytics) Class of 2014
Business Analyst (Process Mgmt & Profit Protection), Metro Pte Ltd
Recipient of SAS Scholarship, 2012

“Business analytics will be a growing field in the coming years as most companies do not exhaust all possibilities. SMU is the first university in Asia which offers a Master’s degree programme that addresses this topic. In addition, the programme’s focus on leadership and communications skills, as well as the diversity of class student profile, led to my decision to join MITB-Analytics.”

Lukas Valentin Wellinger
MITB (Analytics) Class of 2014
Associate, Information Management & Advanced Analytics, Ernst & Young
Data and Analytics are everywhere!
The ability to use data to sense what is happening with customers and the external environment, as well as with internal processes and operations, is transforming the business world. In every industry, data collection and management, analytics, and leveraging of analytic insights are becoming more real-time, more complex, and more critical to every tactical and strategic aspect of business decision making.

The Singapore Management University (SMU) is proud to be the first university in Asia, and perhaps in the world, to offer a professional Master's degree programme that addresses this exploding new world of data pervasiveness by deeply integrating the four aspects highlighted below. This programme, the Master of IT in Business (Analytics), is committed to being the best in the world at preparing professionals to manage and integrate:

• Massive amounts of real-time data from multiple sources
• Analytics for insights to improve service offerings, productivity and business agility
• Business processes
• IT solutions and architecture for enterprise analytics implementations

We co-design and co-develop our curriculum with leading global and regional firms. Organisations which are the best practice leaders and next-practice early adopters in the following industries are partnering with us to design and deliver our labs, case studies and learning experiences:

• Hospitality, Tourism and Entertainment
• Supply Chain, Distribution and Retail
• Healthcare
• Public Sector
• Telecommunications and Internet/Media
• Infocomms

In accordance with the overall Master of IT in Business (MITB) programme, the Analytics track also prepares professionals for IT and Project Management, as well as for selected aspects of General Management required for the techno-strategist who can effectively link IT with business. We welcome you into the MITB (Analytics) programme. This programme will prepare you for the future of technology, operations and innovation in the industry.

Best Regards,

Steven Miller
Vice Provost (Research) and Dean,
School of Information Systems,
Professor of Information Systems (Practice)
Board of Advisors

The senior executives below serve on the Board of Advisors of the SMU School of Information Systems (SIS), and provide guidance and supervision for the Master of IT in Business (Analytics) programme’s educational efforts in the area of data and decision analytics.

Data Analytics is the next big thing in business.

Data can be a lazy asset and is often undervalued – finding ways to help businesses organise and better understand all of the data they capture, will help them make better business decisions, reduce risks and improve returns. There are oceans of data being amassed by companies but only islands of insights. Data can give clients best practice and benchmarking information, as well as provide predictions for business trends. A lot of corporations have well-organised data repositories and some have an analytics capability, but few have the capability and bandwidth to combine both and apply it to specific business issues. SMU’s new programme will develop professionals who will truly be part of the next big thing in business.

Tim Phillipps
Global Leader – Deloitte Analytics
Executive Sponsor – Deloitte Analytics Institute, Asia
The Curriculum

CURRENT COURSE LISTING FOR MITB (ANALYTICS)

<table>
<thead>
<tr>
<th>B. Analytics Technology &amp; Applications</th>
<th>C. Information Technology Management</th>
<th>D. General Management for Technology &amp; Operations</th>
<th>E. Internship/Capstone Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.1 Analytics Framework &amp; Business Context</td>
<td>C.1 Innovation Management</td>
<td>D.1A Financial Accounting</td>
<td>E.1 Internship</td>
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<tr>
<td>B.2 Data Analytics Lab</td>
<td>C.2 Spreadsheet Modelling for Technology &amp; Operation Decisions</td>
<td>D.1C Management Accounting for Technology &amp; Operations Managers</td>
<td>– Internship Job description definition</td>
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<tr>
<td>B.3 Customer Analytics &amp; Applications</td>
<td>C.3 IT Project &amp; Vendor Management</td>
<td>D.2 Strategy and Organisation</td>
<td>– Resume writing, internship application &amp; interviews</td>
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<tr>
<td>B.4 Operations Analytics &amp; Applications</td>
<td>C.4 Global Sourcing of Technology &amp; Processes</td>
<td>D.3 Finance for Technology &amp; Operations Managers</td>
<td>– Industry attachment to company</td>
</tr>
<tr>
<td>B.5 Cloud and Big Data Analytics</td>
<td></td>
<td>D.4* HRM for Technology &amp; Operations Managers</td>
<td>E.2 Capstone Project</td>
</tr>
<tr>
<td>B.6 Visual Analytics &amp; Applications</td>
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<td></td>
<td>– Project definition, development &amp; critique workshops</td>
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<tr>
<td>B.7 Text Analytics &amp; Applications</td>
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<td>– Industry expert seminars &amp; company site visits</td>
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<tr>
<td>B.8 Social Analytics &amp; Applications</td>
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<td>– Project Delivery</td>
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<td>B.10 Business Analytics Practicum</td>
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*Half module

Note: Students must read a total of 13 Course Units (CUs) which comprise:
- a minimum of 5 CUs under Series B courses, including B.1 and B.2 which are compulsory
- a minimum of 4 CUs under Series C and D courses, including C.2, D.1A and D.1C which are compulsory
- Capstone Project (worth 2 CUs)
- Curriculum subject to changes. Please refer to website for updates

MASTER'S DEGREE PROGRAMME COMPLETION

Students must complete and pass a total of 13 Course Units (CUs) in order to graduate with the MITB (Analytics) degree. Each CU is typically completed in 12 lessons, delivered twice a week over 7 weeks. Some CUs are delivered over 15 weeks. Half-courses comprise 6 lessons delivered once a week over 7 weeks. Each lesson entails 3 hours of in-class time plus some additional out-of-class time for assignments and projects.

CORE COURSES IN ANALYTICS TECHNOLOGY & APPLICATIONS (SERIES B)

A minimum of 5 Series B Course Units (including compulsory ones) are required. In case a student is exempted from a compulsory course from Series C or D, he/she must replace it with another Course Unit. The replacement course can be from Series A, B, C or D. Series A courses are offered under the MITB (Financial Services) track.

OPTION FOR MITB DUAL TRACK (SERIES A, FINANCIAL SERVICES AND SERIES B, ANALYTICS)

The MITB programme has 2 tracks: Financial Services (FS) and Analytics. Students can pursue the MITB Dual Track programme where both tracks will be covered. There is also an option to graduate with a general MITB degree, without specialisation in any track. Please enquire for further details with the MITB office.

IT MANAGEMENT AND GENERAL MANAGEMENT FOR TECHNOLOGY & OPERATIONS PROFESSIONALS (SERIES C AND SERIES D)

A basket of courses on IT Project Management and General Management are provided. Students can choose to read electives from these course offerings and customise their curriculum accordingly.

INTERNSHIP/CAPSTONE PROJECT (SERIES E)

The capstone project or internship component in the programme enables students to apply and integrate the knowledge they have accumulated by working with the sponsoring company. For the capstone project, a well-defined project scope with clear deliverables will be established, so that students can create new solutions to solve business problems. Some capstone projects will require the students to work on-site with the sponsoring company. For the internship, students will work at the sponsoring company during the day to understand the business domain and contribute using the knowledge they acquired in the programme.
The Programme/Course Delivery

ACADEMIC CALENDAR
The MITB programme runs its academic year based on that of the Singapore Management University, which operates on 3 regular terms. Each of these 15-week regular terms is then further divided into two 7-week mini-terms with a 1-week break. Therefore, courses in the programme are offered across 6 mini-terms in any given academic year.

COURSE DELIVERY
Most MITB class sessions are 3 hours long, and are conducted in a highly interactive manner. Class sessions combine lectures with discussions, hands-on lab sessions, problem-solving practice classes and group work. The faculty is assisted by full-time instructors and student teaching assistants. In addition, students also meet with industry experts who share their experiences and perspectives through regular seminars organised by the MITB (Analytics) programme.

TIMETABLE
All classes are held either on weekday evenings from 7pm onwards, Saturday mornings, or Saturday afternoons. These timings have been chosen to accommodate the working schedules of part-time, working students, and full-time students who might be engaged with industry attachments.

CHOOSE BETWEEN FULL-TIME OR PART-TIME STUDY
The MITB (Analytics) is an intensive programme with 2 options for completion:
• Full-time candidature: a minimum of 1 year to a maximum of 2 years and 8 months
• Part-time candidature: a minimum of 2 years to a maximum of 4 years
Students can switch between these 2 modes of candidature at any time, but the change can only be made once.

COURSE STRUCTURE EXAMPLE

<table>
<thead>
<tr>
<th>Course Series Key</th>
<th>Year 1</th>
<th>Year 2</th>
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<tbody>
<tr>
<td></td>
<td>Term 1A</td>
<td>Term 1B</td>
</tr>
<tr>
<td>B.1 Analytics Framework &amp; Business Context</td>
<td>B.7 Text Analytics &amp; Applications</td>
<td>B.8 Social Analytics &amp; Application</td>
</tr>
<tr>
<td>B.2 Data Analytics Lab</td>
<td>D.1A* Financial Accounting</td>
<td>D.1C* Management Accounting</td>
</tr>
<tr>
<td>B.5 Cloud &amp; Big Data</td>
<td>D.2 Strategy &amp; Organization</td>
<td>C.3 IT Project &amp; Vendor Management</td>
</tr>
<tr>
<td>C.2 Spreadsheet Modeling</td>
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MITB-AT (FULL-TIME)

Year 1
Term 1A
B.1 Analytics Framework & Business Context
B.7 Text Analytics & Applications
B.2 Data Analytics Lab
B.5 Cloud & Big Data
C.2 Spreadsheet Modeling

Term 1B
B.8 Social Analytics & Application
D.1A* Financial Accounting
D.1C* Management Accounting
D.2 Strategy & Organization

Term 2A
B.4 Operations Analytics & Application

Term 2B
B.6 Visual Analytics & Application

Term 3A
C.3 IT Project & Vendor Management

Term 3B
Capstone project / Internship (2.0 CU)

MITB-AT (PART-TIME)

Year 1
Term 1
B.1 Analytics Framework & Business Context
B.7 Text Analytics & Applications
B.2 Data Analytics Lab
B.5 Cloud & Big Data
C.2 Spreadsheet Modeling

Year 2
Term 2
B.8 Social Analytics & Application
B.10 BA Practicum
D.1A* Financial Accounting
D.2 Strategy & Organization

Term 3
B.4 Operations Analytics & Application
D.1C* Management Accounting
D.3 Finance

Capstone project / Internship (2.0 CU)
Application

APPLICATION REQUIREMENTS
The MITB (Analytics) programme has two intakes – January and August each year. The programme seeks applicants with the following:
- A good Bachelor’s degree
- A valid GMAT score (SMU’s GMAT code: F8D-Z4-61)
- Preferably 2 or more years of working experience
- TOEFL/IELTS is required for applicants who have not received a degree from a programme taught in English

PROGRAMME FEES
The current fee structure for the programme is as follows:

<table>
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<tr>
<th>Service</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Application Fee</td>
<td>S$100</td>
</tr>
<tr>
<td>Registration Fee</td>
<td>Singapore Citizens &amp; Permanent Residents – S$400, Foreigners – S$500</td>
</tr>
<tr>
<td>Tuition Fee</td>
<td>S$45,000</td>
</tr>
</tbody>
</table>

* Please note that tuition fees are locked in once the student enters the programme. The Singapore Management University reserves the right to alter tuition fees for new incoming cohorts, as and when necessary, S$2,000 off for full upfront payment; 10% discount for SMU alumni and fast-track students. Refer to our website for details.

FINANCIAL ASSISTANCE
The following sections outline the variety of financial aid schemes available. For more information, please visit www.smu.edu.sg/MITB

SCHOLARSHIPS AND AWARDS
- Alexandra Health’s T-Lab Scholarship
- SAS Scholarship
- MITB Scholarship
- Eastern Health Alliance Scholarship
- Green Transformation Lab’s Scholarship
- Eddie Chau SIS Outstanding Student Award in Social and Contextual Analytics
- Outstanding Student Awards
- IDA’s Top Student Award

FAQ
My first degree is not related to IT or Business. Can I still apply for the MITB programme?
Yes, applicants with a keen interest may apply for the programme. Generally, we take into consideration the candidate’s work experience, aptitude and previous academic prowess when doing our candidate assessment.

What is the minimum GMAT score I need to attain? Will you accept GRE in place of the GMAT?
We do not specify a score range because our assessment is holistic, with the GMAT being just one consideration out of many others. We do accept valid GRE scores in place of the GMAT, but on a case-by-case basis.

What happens if I’m not able to attend class for an extended period of time due to work or personal commitments?
Students can apply for a Leave of Absence (LOA) if they are unable to attend courses for a regular term (15 weeks) or more.

HOW TO APPLY
To apply, please file an online application at www.smu.edu.sg/MITB

DEADLINES
Applications are open from January to May for the August intake and June to October for the following year’s January intake.