Testimonials

“The course content was superbly well thought out with many industry examples. The lecturers were extremely knowledgeable and they brought with them a wealth of industry experience and academia experience. This really helped me put what I learnt into perspective.”

Maximilian Jackson Yap, Singapore
Data Science & Analytics Consultant, DataSpark
Master of Technology in Enterprise Business Analytics (MTech EBAC), Class of 2015

“ISS is known to be practical and industry-based, having lecturers coming directly from the industry. This makes the lessons and lectures relevant to the current working environment. Being a part-time student, I appreciate the fact that classes are conducted on weekends, which allows me to focus on my day job and broaden my understanding of how Data Analytics is being practically applied in the real world today during the weekends.”

Ian Lo, Singapore
Solution Architecture Analyst, MavenWire Pte Ltd
Master of Technology in Enterprise Business Analytics (MTech EBAC), Class of 2016

Other Graduate Programmes by NUS-ISS

- Master of Technology in Intelligent Systems
  Available as Stackable Certificate Programme in Intelligent Systems

- Master of Technology in Software Engineering
  Available as Stackable Certificate Programme in Software Engineering

- Graduate Diploma in Systems Analysis
  Available as Stackable Certificate Programme in Digital Solutions Development

About the Institute of Systems Science (NUS-ISS)

Established in 1981, the Institute of Systems Science at the National University of Singapore (NUS-ISS) develops digital talent for the industry through graduate education, professional development programmes, consultancy, applied research and career services. NUS-ISS is widely recognized as a champion of the national SkillsFuture movement, enabling a digital economy that is always learning and always leading.

NUS-ISS has implemented a unique portfolio of multiple learning pathways, with a wide spectrum of programmes in critical industry disciplines such as software development, data science, artificial intelligence, cybersecurity, smart health, digital government and digital innovation.

To date, over 120,000 infocomm & business professionals, 6,800 corporate customers and 5,500 post-graduate alumni members have benefitted from NUS-ISS’s suite of services. Its programmes are delivered by ISS staff with an average of more than 20 years of industry experience.

Institute of Systems Science  National University of Singapore  25 Heng Mui Keng Terrace, Singapore 119615
http://www.iss.nus.edu.sg  (65) 6516 2093  isspostgrad@nus.edu.sg  facebook.com/iss.nus  linkedin.com/company/iss.nus
MASTER OF TECHNOLOGY IN
ENTERPRISE BUSINESS
ANALYTICS

Available as Stackable Certificate Programme in Business Analytics

Leading to the Master of Technology in Enterprise Business Analytics

Harness the power of data
The NUS Master of Technology in Enterprise Business Analytics programme is designed to meet the industry demand for data scientists who can enable organisations achieve improved business outcomes through data insights. It is best suited for professionals who wish to enhance their existing skills sets to progress from the entry level to specialist or expert level positions in the data science and business analytics domain.

The programme prepares the candidates for specialist, expert and leadership roles in enterprise business analytics to create business value through strategic use of data, visualisation methods, modelling techniques and frontline tools.

**Programme Delivery**

M Tech EBAC candidates must successfully complete 2 mandatory topics from the fundamental areas, any 2 of 4 topics from specialist areas as well as complete a capstone project. Students are evaluated through a combination of course work, project work and examinations.

**Recognition:**
- Top student is awarded the IBM Medal and Book Prize
- Best Project Prize

---

### Semester 1

<table>
<thead>
<tr>
<th>Fundamental Areas</th>
<th>Core Analytics Techniques</th>
<th>Customer Analytics</th>
</tr>
</thead>
<tbody>
<tr>
<td>NICF – Data Analytics Process &amp; Best Practice (SF)</td>
<td>NICF – Statistics Boot Camp</td>
<td>NICF – Customer Analytics</td>
</tr>
<tr>
<td>NICF – Data Story Telling</td>
<td>NICF – Predictive Analytics – Insights of Trends and Irregularities</td>
<td>NICF – Advanced Customer Analytics</td>
</tr>
<tr>
<td>NICF – Data Governance &amp; Protection</td>
<td>NICF – Text Analytics</td>
<td>NICF – Campaign Analytics</td>
</tr>
<tr>
<td>NICF – Managing Business Analytics Projects</td>
<td>NICF – Recommender Systems (SF)</td>
<td></td>
</tr>
</tbody>
</table>

**Graduate Certificate in Management of Business Analytics Project**

**Graduate Certificate in Business Analytics Practice**

**Graduate Certificate in Customer Analytics**

### Learning Outcomes
- Essential skills to manage small analytics projects, comprising of multiple stakeholders and data sources
- Reasonable understanding of the solution structure

### Job Roles
- Data Analytics Manager
- Data Analytics Project Manager

### Capstone Project in Data Analytics

Student projects for MTech EBAC students include 3 months of full-time engagement with the industry for full-time students, and 6-12 months for part-time students. Students are allowed to conduct their project as a team-based internship, if desired. The expected commitment for the project is minimum 30 man-days per team member.

### Learning outcomes:
- Apply business analytics methods and techniques to solve identified business problems.
- Plan and execute business analytics projects by understanding business problems, identifying appropriate analytics techniques, and then applying data exploration, model building, testing and validating of results.
Who Should Apply

- IT professionals who wish to carve a new career in the area of analytics
- Research professionals in quantitative disciplines, who wish to increase proficiency in the area of business analytics
- Marketing professionals who wish to leverage data for better targeting and achieve increased business growth
- Data and business analysts who are interested upskill or cross-skill in the field of business analytics
- Individuals who would like to incorporate data analytics for planning, forecasting, increasing productivity and better decision making

Admission Criteria

- Bachelor’s degree preferably in Mathematics, Statistics, Econometrics, Management Science, Operational Research, Science or Engineering, and a grade point average of at least B
- Proficiency in the English Language (written and spoken)*
- Have passed an entrance test
- Preferably two years relevant working experience
- Has received a favourable assessment at admissions interview conducted by NUS-ISS

*Applicants whose native tongue and medium of university instruction is not in English should submit their TOEFL or IELTS score as evidence of the proficiency in English

TOEFL
- Paper-based test (580)
- Computer-based test (237)
- Internet-based test (85)

IELTS
- Result of 6.0

How to apply?

All applicants are required to apply online via the Graduate Admission System (Coursework). Come and find out more about the MTech programmes at our info sessions.

Visit [www.iss.nus.edu.sg/graduate-programmes](http://www.iss.nus.edu.sg/graduate-programmes) for more details. We conduct in-country entrance tests and interviews in selected countries.

<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Semester 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Part-time</td>
</tr>
<tr>
<td></td>
<td>Full-time</td>
</tr>
</tbody>
</table>

Specialist Areas

**Big Data Processing**
- Feature Engineering & Analytics using IoT Data
- Graph & Web Mining
- NICF - Big Data Engineering for Analytics

**Practical Language Processing**
- NICF - New Media and Sentiment Mining (SF)
- NICF - Text Processing Using Machine Learning (SF)
- Conversational Interfaces

**Advanced Predictive Modelling Techniques**
- NICF - Service Analytics
- Generalized Predictive Modelling & Forecasting
- NICF - Health Analytics (SF)

Graduate Certificate in Big Data Engineering & Web Analytics
Graduate Certificate in Practical Language Processing
Graduate Certificate in Specialised Predictive Modelling & Forecasting

Capstone Project (Part-time, 6 - 12 months)

Learning Outcomes
- Able to work with big data
- Capable of understanding, designing and solving problems in the space of Big Data and Web

Job Roles
- Big Data Analyst / Developer
- Data Scientist
- Big Data Engineer
- Data Science Engineer

Learning Outcomes
- Advanced skills in handling unstructured data and apply techniques for understanding opinions, predictive modelling with unstructured data, classification, chatbot creation etc

Job Roles
- Natural Language Processing Data Scientist
- Data Scientist
- Senior Data Scientist

Learning Outcomes
- Advanced skills in predictive and forecasting techniques, applicable in the area of health, government and many other domains

Job Roles
- Senior Consultant
- Lead Analyst
- Senior Data Scientist

Stackable Graduate Certificate Programme in Business Analytics

Stackable Certificate Programme in Business Analytics enables Professionals, Managers and Executives (PMEs) to attain a series of NUS-ISS graduate certificates over a period of five years without disrupting your careers. You will have the flexibility of studying at your own pace by taking the required modular courses that make up the certificates to meet your needs. PMEs who do not wish to attain a certificate, graduate diploma or degree can continue to attend individual modular courses thus allowing you to gain the skills to meet your career needs.

Participants who wish to continue their learning journey towards the Master of Technology in Enterprise Business Analytics degree will have to complete two graduate certificates (fundamental), any two graduate certificates (specialist) and a capstone project in Data Analytics.

Visit [www.iss.nus.edu.sg/stackable-programmes](http://www.iss.nus.edu.sg/stackable-programmes) to find out more.