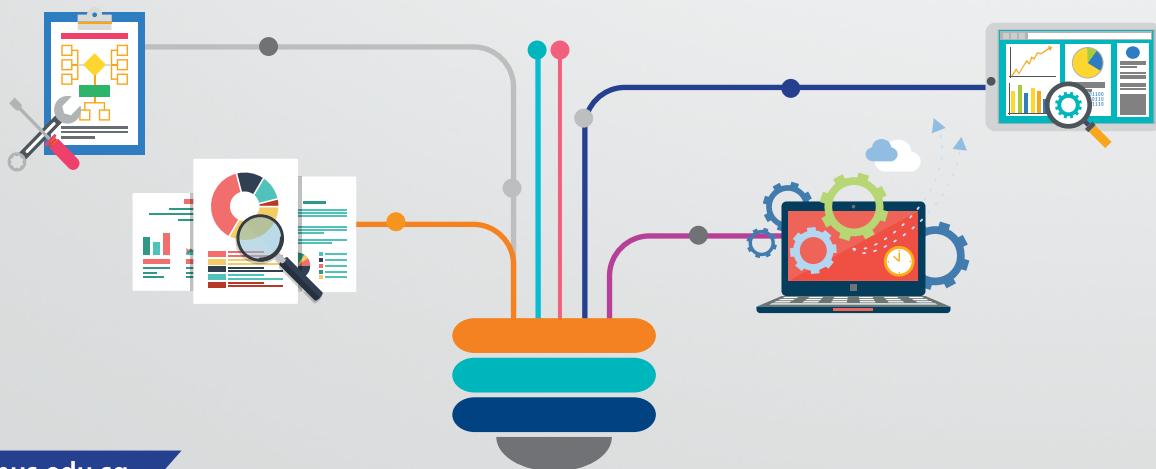


INTERNSHIP PROGRAMME

Tap on our talent pool to prepare your business for the digital future



Student interns can serve as a valuable resource for organisations to meet immediate resource crunch as well as a potential talent pool to help you grow your business. Having interns as part of your organisation's HR practice can benefit your productivity, revenue and staffing objectives in the long run. Student interns often bring along new ideas and fresh approaches. Internship programmes also provide an opportunity for both graduating students and employers to evaluate prior to a decision regarding full-time employment.

NUS-ISS GRADUATE INTERNSHIP PROGRAMME (FOR FULL-TIME STUDENTS)

Internship programme is an integral part of the graduate programme curriculum. The purpose of internship is to provide our students with an opportunity to apply what they have learnt in their coursework to real-life work environments. They can then gain deeper industry insights and develop right expectations for their future careers. It is also a platform for students to observe and experience future work roles in the industry and enhance their interpersonal and collaborative skills as they transit to the workplace upon graduation. This experience is also a valuable opportunity for them to build useful business networks.

NUS-ISS offers five graduate programmes namely, the Graduate Diploma in Systems Analysis (GDipSA), the Master of Technology in Enterprise Business Analytics (MTech EBAC), the Master of Technology in Knowledge Engineering (MTech KE), the Master of Technology in Software Engineering (MTech SE) and the Master of Technology in IT Leadership, where students embark on a capstone project instead of an internship.

GRADUATE DIPLOMA IN SYSTEMS ANALYSIS (GDIPSA)

This programme is designed for graduates who recognise the need to equip themselves with the latest IT knowledge and skills, and wish to advance their careers in their current field. It also provides an opportunity for non-IT graduates to craft a new career path in the IT industry.

In this one-year full-time programme, students are taught how to build IT solutions through lectures, workshops, laboratory sessions, projects and internships. Students will be able to apply techniques they have learnt during the course to gather user requirements, analyse and design feasible solutions. They will then move on to code, test and implement these solutions. The numerous projects in this programme offer ample hands-on practices for students to deliver IT solutions covering client/server, internet/intranet and mobile platforms.

The GDipSA programme also emphasises the building and enhancing of essential soft skills such as project management qualities, independent/co-operative team working attitudes and effective team leader techniques. Students will be assigned to work in project teams learning through "on the job training".

INTERNSHIP PROJECT OBJECTIVES	LEARNING OUTCOMES FOR STUDENTS	DURATION	PROPOSAL SUBMISSION DEADLINE	NUMBER OF STUDENTS PER GROUP	MONTHLY ALLOWANCES
<ul style="list-style-type: none">Exposure to real-life work environmentsLearn new domain knowledgePractise new technical skillsDevelop feasible IT solutions for the internship company	<ul style="list-style-type: none">Develop solutions using SQL, C#.Net, ASP.NET, Java EE, HTML5, AngularJS/NodeJS as well as iOS and Android	<ul style="list-style-type: none">Feb Intake – Sep to JanAug Intake – Mar to Jul	<ul style="list-style-type: none">Feb Intake – mid JunAug Intake – mid Dec	2 to 4	Min \$800

MASTER OF TECHNOLOGY PROGRAMMES

Master of Technology in Enterprise Business Analytics (MTech EBAC)

Data is now more accessible to business professionals and managers than ever before. This allows for better decisions to be made using that data, for example to drive revenue, decrease costs, improve customer experience and engagement, optimise processes, reduce risk and prevent fraud and many more.

The MTech EBAC programme is specifically designed to satisfy the demands of the industry for practical Business Analytics skills and knowledge by developing new practitioners or upgrading entry level practitioners who have a suitable professional background such as IT professionals, or business, marketing and operation analysts, but who lack the necessary academic fundamentals to move into Specialist or Expert positions in Business Analytics.

Graduates of this programme will be capable of undertaking advanced data analytics projects across a wide variety of business domains including:

- Discovering insights from integrating data from multiple sources
- Applying data analytics concepts and techniques to solve major business problems
- Applying customer segmentation and customer value techniques to impact business strategy and customer engagement model
- Applying forecasting and prediction techniques to better manage company, sales or channel performances.
- Applying sentiment mining techniques to monitor customer feedback on social media and surveys
- Resource optimisation to maximise company profit
- Operationalising analytics models within the organisation

Master of Technology in Knowledge Engineering (MTech KE)

The MTech KE programme equips students with skills to solve business problems using intelligent systems. Students will attain competency in areas such as Data Mining, Statistical & Machine Learning, Text Mining, Data-warehousing & Business Intelligence, Neural Networks, Fuzzy Systems and many other intelligent systems techniques. They will also be proficient in developing business analytics algorithms for prediction, forecasting, classification, clustering, association and optimisation. Upon graduation, students will be capable of:

- Applying Intelligent Systems concept, techniques and methods to solve complex problems in engineering, science and business domain
- Leading the development of Intelligent Business Analytics systems by applying proper methods, tools and technologies
- Designing and customising algorithms to solve specific knowledge- and data-intensive business analytics problems

Master of Technology in Software Engineering (MTech SE)

The MTech SE curriculum is aimed at providing students with skills to manage and build quality software solutions. It emphasises the understanding and exploitation of advanced technologies and management disciplines. It also focuses on the practical application of innovative techniques and development of the IT professional's capability for innovation. This degree aims to create graduates who are capable of fulfilling the following roles in the IT industry:

- Technically-oriented software project managers capable of successfully delivering projects that meet international quality standards and applying the major contemporary software platforms, technologies and methodologies
- Management-aware software architects capable of architecting and designing systems that exploit the major contemporary software platforms, technologies and methodologies, and leading the development work in a managed quality-oriented environment.



						
PROGRAMME	INTERNSHIP PROJECT OBJECTIVES	LEARNING OUTCOMES FOR STUDENTS	DURATION	PROPOSAL SUBMISSION DEADLINE	NUMBER OF STUDENTS PER GROUP	MONTHLY ALLOWANCES
MTech EBAC	<ul style="list-style-type: none"> Practise new technical skills through a real-life consulting engagement Apply tools, methods and techniques learnt 	<ul style="list-style-type: none"> Understand business problems and identify appropriate analytics techniques that will resolve the problems Plan and execute business analytics projects Conduct data exploration, model building and testing of results in a particular business domain Present and report results and recommendations to a business audience 	<ul style="list-style-type: none"> Phase 1 – Aug to Nov (2 days per week on-site) Phase 2 – Dec to Mar (5 days per week on-site) 	End May	1 to 3	<ul style="list-style-type: none"> Phase 1 – Min \$400 (pro-rated) Phase 2 – Min \$1,000
MTech KE	<ul style="list-style-type: none"> Acquire hands-on experience in analysing needs of the internship company Provide identifiable benefits to the internship company using KE techniques 	<ul style="list-style-type: none"> Apply KE techniques in experimenting, proto-typing, building, testing and validating an intelligent system to provide business value 	<ul style="list-style-type: none"> Phase 1 – Aug to Nov (2 days per week on-site) Phase 2 – Dec to Mar (5 days per week on-site) 	End May	1 to 3	<ul style="list-style-type: none"> Phase 1 – Min \$400 (pro-rated) Phase 2 – Min \$1,000
MTech SE	<ul style="list-style-type: none"> Design and develop a practical software system Demonstrate technical and management skills by documenting various aspects of the system development Deliver a system that fulfills the requirements of the internship company 	<ul style="list-style-type: none"> Conduct a project following a formal incremental approach Engineer solutions using an object-oriented analysis and design method and object-oriented construction technologies Apply project and quality management techniques to deliver a solution that meets user requirements 	<ul style="list-style-type: none"> Phase 1 – Aug to Nov (2 days per week on-site) Phase 2 – Dec to Mar (5 days per week on-site) 	End May	5 to 6	<ul style="list-style-type: none"> Phase 1 – Min \$400 (pro-rated) Phase 2 – Min \$1,000

PROJECT WORK FOR PART-TIME STUDENTS

The MTech EBAC, KE and SE part-time students undertake off-site projects with the same objectives and structure as the internship (on-site) projects undertaken by the full-time students. However, as their projects are off-site, they are not conducted at the sponsoring company's premises or using the company's resources (unless required by the sponsor) and are scheduled over a longer period due to the part-time nature of their studies.

				
PROGRAMME	DURATION	PROPOSAL SUBMISSION DEADLINE	NUMBER OF STUDENTS PER GROUP	MONTHLY ALLOWANCES
MTech EBAC MTech KE MTech SE	Feb to Jan of the following year	End of Oct of the previous year	2 to 5 for EBAC 2 to 4 for KE 5 to 6 for SE	Not Applicable

What Our Students Say

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The GDipSA curriculum and assignments have prepared me well for my internship. Not only did I pick up technical skills, soft skills such as communication and presentation skills were covered as well, and they were very useful during the UAT phase, where I had to present and talk to users. Overall, the internship gave me exposure to IT industry, potential challenges I may face and the soft skills required to excel in the job.

Low Yi Chai

GDipSA 40th Intake

Project Consultant, MavenTree Technology Pte Ltd

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The MTech EBAC course was an enjoyable time of learning from the experiences of industry professionals, as well as acquiring relevant and practical skills through the hands-on sessions, which were very useful for my internship project. This experience allowed me to gain a better understanding of the real industry environment.

Matthew Chia

MTech EBAC, Class of 2015

Analyst, Inland Revenue Authority of Singapore

“

The MTech KE programme was exactly what I was looking for: industry-oriented curriculum, experienced lecturers and hands-on projects that allow us to put our knowledge into practice. The classes were taught in an interactive manner, allowing me to build on my experience by learning from fellow classmates as well as the lecturers.

David Low

MTech KE, Class of 2016

Data Scientist, Infocomm Development Authority of Singapore

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NUS-ISS offers a Master of Technology programme that promises an immersive internship programme, advanced electives and innovative subjects. This programme carries a perfect mix that is not offered anywhere else.

Priyanshu Kumar Jha

MTech SE, Class of 2013

Software Development Engineer, Microsoft USA

What Organisations Say

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The most impressive quality of the interns is their versatility. Many of them are asked to pick up new skills, new computing languages as they embarked on their internship programme. Grounded in the skills that they have learnt from the Graduate Diploma in Systems Analysis programme, many of them excel in displaying resourcefulness and initiative by picking up other skill sets required.

Ms Ng Wee Wei

Managing Director, Health & Public Service ASEAN, Accenture

Member of the Judging Panel for the Accenture Best Internship Project Award

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The NUS-ISS GDipSA programme provides a comprehensive and holistic IT education that will equip their students with the latest infocomm technology knowledge and skills. We have actively participated in the ISS internship programme for a number of years and have benefited from the quality of interns coming through the programme. Most of them were made full-time employees after their graduation due to their exemplary internship performance.

Mr Kevin Wo

General Manager, ASEAN, Avanade Asia

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In addition to their technical knowhow, the MTech SE students were able to bring a fresh perspective to the table, which was something that we really wanted to tap into via NUS-ISS's internship programme. We were really keen for them to help us come up with creative ways to improve our existing business organisation.

Edmund Shen

Technology Consultant, Action X



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Internship is a win-win for everybody involved. You always get back more than you put in. Companies get trained and motivated students who bring fresh perspectives, increased diversity, opportunities for developing staff supervisory experience, and a cost-effective way to evaluate and recruit potential hires. Students get on-the-job training, exposure to the real world, experience teamwork, and delivery deadlines; what they need to succeed later on. It's also a chance to match interests to potential hire opportunities.

Dr. Leong Mun Kew
Deputy Director, NUS-ISS

Our students have interned at companies like:

Accenture	DBS Bank	Lynx Analytics	SAFRA
Action X	Hewlett Packard	Massive Infinity	SATS
Autodesk	Infineon Technologies	Ministry of Foreign Affairs	SingTel
BCS Information Systems	Institute for Infocomm Research	NCS	SP PowerGrid
BMW	Integral Solution	OCBC Bank	ST Electronics
Boehringer Ingelheim	Integrated Health Information Systems	Philips Electronics	(Info-Software Systems)
Crayon Data	Keppel Land	Port of Singapore Authority	StarHub
CrimsonLogic	Land Transport Authority	Resorts World Sentosa	STMicroelectronics
CrimsonWorks Solutions		Rolls Royce	

ABOUT NUS-ISS

Backed by a heritage of more than 30 years, the Institute of Systems Science at the National University of Singapore (NUS-ISS) continues to be the leading institute providing post-graduate education, professional development courses, consultancy and research services, in developing infocomm leaders, driving business and organisation innovation.

NUS-ISS is appointed the National Continuing Education & Training (CET) Institute (NCI) for the National Infocomm Competency Framework (NICF) by Singapore Workforce Development Agency. It is also a Programme Partner for WDA's Service Excellence Competency & Creative Industries Frameworks. The institute is accredited by leading international and local accreditation, and certification bodies to deliver programmes that lead to recognised certifications and qualifications.

Presently, more than 101,000 infocomm professionals, 5,400 corporate customers and 4,800 post-graduate alumni members have benefitted from our suite of services.

NUS-ISS CAREER SERVICES

The Career Services Office seeks to enhance employability in the infocomm industry by equipping graduate students and unemployed participants from the NICF short course training programme with career development and planning skills. NUS-ISS Career Services also collaborates with WDA to provide services and events such as personalised career coaching, job placements and bi-annual career fairs.

Contact

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