

## **COURSE MODULES**

### **LEVEL 1.1**

#### **Accounting**

This module introduces the basic theory and concepts of accounting through the introduction of Business Structures and Financial Institutions. Basic accounting concepts and principles form the foundation of the module and students will be taught the complete accounting cycle; setting up the chart of accounts, balancing the trial balance and preparing financial statements. It also introduces risk and controls and accounting standards and regulations governing the financial services industry. Students will also learn about the differences between financial and management accounting as well as funding methods and financial ratios for business and banks.

#### **Computing Mathematics**

This module introduces the basic concepts of relations and functions, matrices and methods of statistics and their applications relevant to IT professionals. The main emphasis in this module is to develop students' ability in solving quantitative problems in computing mathematics, and probability and statistics. Topics covered include fundamentals of statistics and probability, discrete and continuous probability distributions.

#### **Economics**

The Economics module aims to introduce students to the basic concepts and principles in economics. Students would learn about the 10 principles of economics, demand and supply and its elasticities as well as government policies impacting them. Students would also be equipped with macroeconomics knowledge which includes National Income Accounting, Production and Growth, Inflation, Savings and Investments as well as Banking Competition and Theory of Banking Firm and its Structures. At the end of the module, students will be able to apply the concepts to world issues and understand how economic decisions impact financial markets and institutions.

#### **Enterprise Information Systems**

Companies today are adopting the use of technology not just to assist them in their day-to-day operations but also gain an advantage over their competitors. Many companies are implementing enterprise-wide information systems that provide them with platforms to integrate and coordinate their business processes. The use of enterprise information systems has become a necessity in multi-national companies (MNCs) as well as small and medium enterprises (SMEs). Within an enterprise information system, there is an intricate relationship between business strategy, organisational structure, business processes and technology resulting in challenges and issues during implementation.

This module introduces students to the different components that build up an enterprise information system. Different types of information systems are used for business processes, from communication and order processing to data analysis for decision making, and in almost all business functions ranging from marketing, sales, procurement, and human resource, to product development and manufacturing, accounting and finance.

Students will learn about the organisations and mapping the business processes to draw the activity diagram flows. It is essential for students to understand how information systems are used to help organisations and they are expected to suggest solutions and new uses of information systems to solve business problems. This will enhance their IT and business processes knowledge to prepare them for future modules, future employment or even future entrepreneurship.

#### **Fundamentals for IT Professionals I**

This module provides an introduction to the field of IT by exploring the roles, professional practices, ethical expectations and career development paths of IT professionals. Through a guided inculcation of interpersonal and team work skills with strong team bonding spirit, the module aims to deepen students' commitment to the sector that the course prepares them for. In addition, students will be required to begin charting their career path in the IT industry by considering crucial aspects such as personal preferences and aptitude, job roles and responsibilities, skills needed and further education.

## **Programming I**

This module introduces the fundamentals of programming and how to develop programs using appropriate problem-solving techniques in a modular style. In this practice-oriented module, students are taught how to apply problem-solving skills using a top-down structured programming methodology and given ample practice in translating solutions into computer programs, then test and debug the programs. Topics include data types, variables, expressions, statements, selection structures, loops, simple computation and algorithms, and the use of libraries. Students will also practise the use of pseudocodes, best practices of programming, debugging techniques with the help of tools, development of test cases, and suitable program documentation. In addition, they will study various areas where application software plays a prominent part in helping organisations solve problems. Students will be given ample opportunity for independent and self-directed learning.

## **LEVEL 1.2**

### **Banking & Financial Products**

For banks and financial institutions to gain an edge over their competitors, many are providing consumers and corporates with a wide range of products and services. Many are harnessing information technology in their day-to-day operations to provide multiple channels and greater efficiency and effectiveness in banking and financial services to enhance overall customer experience.

This module provides a macro overview of the financial services industry, including financial intermediaries and allows students to understand the operational structure and the roles and responsibilities of different departments in banks at a high level. Subsequently, a myriad of banking and financial products that are widely available in commercial and investment banks and insurance companies would be discussed.

Students will learn about the fundamentals of retail, wholesale and investment products as well as risk associated with them and the mitigating controls that banks put in place to manage the risks. The role of Information Technology is intertwined into the module, allowing students to appreciate the use of IT to increase operational efficiency and effectiveness in financial institutions.

### **Databases**

Today's business organisations depend on information systems in virtually all aspects of their businesses. Corporate databases are set up to hold the voluminous business transactions generated by these information systems. This module introduces students to the underlying concepts of database systems and how to model and design database systems that reflect business requirements. Students will be taught how to analyse data needs, model the relationships amongst the data entities, apply normalisation process to relations and create the physical database. Skills to be taught include data modelling technique, transformation of data model to relations, normalisation technique and Structured Query Language (SQL).

### **Financial Ecosystem**

This module provides a macro overview of the network of organisations involved in the delivery of financial services through both competition and cooperation. Students will be introduced to the various participants in the financial ecosystem, which includes financial intermediaries, regulators, market operators, industry associations and customers. Subsequently, students would also learn about the market microstructures, interactions and interdependencies underlying the relationships intertwining these participants. Additionally, students would learn about the on-going digital evolution in the financial sector and its future implications for all participants.

### **IT Infrastructure & Security**

Knowledge in IT infrastructure and security are crucial for IT professionals in the Banking and Finance industry. Students will be introduced to typical IT infrastructure such as computer systems, applications, networks and security solutions. Students will also be introduced to the concepts of IT security vulnerabilities and risk analysis, and common security measures deployed in financial institutions to mitigate these risks.

## **Programming II**

This module builds upon the knowledge and skills acquired in Programming I. It aims to provide opportunities for the students to develop medium- scale applications based on the Object-Oriented (OO) approach. A suitable object-oriented high-level programming language will be used for students to continuously apply their problem-solving skills. The main concepts of OO and the implementation of applications using the OO approach will be taught in this module.

The module may also cover the concepts of Abstract Data Types (ADTs) and the implementation of some selected ADTs using the OO approach. Suitable sorting and search algorithms and the use of Application Protocol Interface (API) will be introduced when required. Other key topics include the introduction of system design concepts such as the class diagram. Software robustness and correctness, and good programming practices will be emphasised throughout the module. Independent and self-directed learning will also be encouraged.

## COURSE CURRICULUM

Module Name	Credit Units
<b>YEAR 1</b>	
<b>Level 1.1 (27 hours per week)</b>	
Accounting	4
Computing Mathematics	4
Economics	4
Enterprise Information Systems	4
Fundamentals for IT Professionals I	3
Programming I	4
Innovation Toolkit ^	4
<b>Level 1.2 (26 hours per week)</b>	
Banking & Financial Products	4
Databases	4
Financial Ecosystem	4
IT Infrastructure & Security	4
Programming II	4
Communication & Contemporary Issues ^	4
Sports & Wellness ^	2

### Notes:

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### IS Modules

The School of Interdisciplinary Studies (IS) delivers a broad-based curriculum, which nurtures a new generation of professionals with multidisciplinary skills and an innovative and entrepreneurial spirit to meet the challenges of a knowledge economy. IS offers both prescribed modules and electives to challenge boundaries. Prescribed modules develop students' competencies in core areas such as Communication, Innovation and Enterprise, Culture and Communication, and Personal Mastery and Development, while elective modules provide insights into Arts and Humanities, Business, Design, and Science and Technology.

## COURSE MODULES

### LEVEL 2.1

#### Banking Technology & Operations

This course aims to provide students with an overview of the process and transaction processing systems in the

financial industry. For banks and financial institutions to stay competitive, many are also making use of information technology to assist them in their day-to-day operations to provide efficient and effective banking and financial services to serve their customers better.

### **Enterprise Business Processes**

Business processes are a set of activities that are designed to produce a specific output for an organisation. Processes can be cross-functional or even spanning across organisations. For today's businesses, especially for large and complex organisations with complex products and services, they very much rely on the efficiency and effectiveness of their business operations to compete with competitors, often with the help of IT systems. However, these business processes need to be agile and flexible in order to adapt to changes in business needs. Organisations which are unable to do this will be at a disadvantage. The study of enterprise business processes will illustrate to students the key business processes in typical organisations.

Students will learn about the business strategies used in organisations while implementing business processes, the typical deliverables for a business process that each organisation adopts, the importance of integration of information across different departments or organisations and the relationship between the banks and organisations for all payments with customer and vendors. In addition, students are expected to draw detailed activity diagrams for the major business processes. At the end of the module, students will be able to appreciate the complexity of business processes, how IT can help organisations to be more competitive and gain basic management skills required to manage business processes in an organisation.

### **Enterprise System Analysis & Design**

The world is changing rapidly. The demand for innovation is ever-increasing and disruptions is around every corner. Most companies are inundated with messages about disruptive technologies. This module will introduce how to drive this digital transformation using design thinking.

Design thinking is a human-centered approach to innovation, which helps to map out the optimal customer experiences and identify the problems that are worth solving. Students will embolden to become empathetic to better understand the needs and innovation opportunities of customers; to collaborate across functions to bring diverse perspectives to create more coherent customer experiences and highly iterative to more quickly understand market feedback and success.

Students will explore business from new perspectives and discover the needs, goals and desires of their customers and stakeholder through design-driven techniques. They will unlock provocative insights, reframe existing problems and generate ideas in response to what was discovered. Students will follow the 5 steps to design thinking: empathy, define, ideate, prototype and test as a methodology for this module.

### **Secure Software Development**

Insecure software cost companies data thefts, large fines and regulatory burdens. Therefore, this module and the Secure Software Development 2 module provide students with the knowledge of secure software development lifecycle and the skills needed to develop secure software that is reliable, hacker-resilient and recoverable upon disruptions. In the Secure Software Development 1 module, students begin with learning foundational concepts of object oriented programming, and web technologies such as HTML, CSS, JavaScript, PHP, and MySQL.

Students are then trained to capture the security requirements that need to be designed and implemented in the software. They will learn secure software design, where implementation of several secure design principles and threat modelling are taught. From here on, students will dive into writing secure code that is resilient against injection attacks, cross-site scripting attacks, cross-site request forgery, click jacking, buffer overflows, phishing attacks, etc. Students will learn how software vulnerabilities can be exploited and how to address the risks.

### **Web Application Development**

This module provides students with the knowledge and skills needed to develop web applications and web Application Programming Interfaces (API). Students will be introduced to an integrated development environment that will enable them to design and develop web applications and web APIs over the Internet.

They will learn how to make use of web development technologies such as the ASP.NET framework, jQuery for rich internet applications, data interchange formats such as JSON AJAX, source code version control systems such as GIT or SVN to develop effective web applications, and web APIs targeting both mobile web and unified web experience. This module aims to provide students with a good understanding of the web development architecture and service layer as well as the various issues related to web application development.

## LEVEL 2.2

### Financial Spreadsheet Engineering

The spreadsheet is an indispensable tool for professionals, especially in the banking and finance industry, to solve business problems and make better informed decisions. This module will introduce students to the use of spreadsheets as a reporting and modelling tool in the areas of business and finance. Through hands-on Excel practical sessions in class, students will explore various spreadsheet functions and simple macros used for analysing, formatting and presenting data. Students will also be equipped with an understanding of best practices in spreadsheet usage and design.

### Fundamentals for IT Professionals II

This module gives a course-based experience in which students can engage with the local community and industry. This includes participation in community service events or in Service-Learning projects that leverages on students' discipline knowledge and skills to meet identified needs. Through iterative and guided reflection on the service experience, students gain a broader appreciation of their discipline and an enhanced sense of personal voice, empathy and civic responsibility. Industry talks and seminars are organised to keep students up-to-date on emerging trends so as to build up their interpersonal, team and networking skills with the community and industry.

### Software Development Methodology

This module aims to integrate the knowledge acquired by students in application analysis, design and development to develop and application based on the Agile methodology. Students will get to work in teams to automated testing and source version controls. Experience a real life application development cycle from application design to test scenarios development. Other topics will include key elements in project management.

## COURSE CURRICULUM

Module Name	Credit Units
<b>YEAR 2</b>	
<b>Level 2.1 (24 hours per week)</b>	
Career & Professional Preparation II	2
Banking Technology & Operations	4
Enterprise Business Processes	4
Enterprise Systems Analysis & Design	4
Secure Software Development	4
Web Application Development	4
Programming I	4
Interdisciplinary Studies (IS) elective ^	2
<b>Level 2.2 (24 hours per week)</b>	
Financial Spreadsheet Engineering	4
Fundamentals for IT Professionals II	2
Software Development Methodology	4

Prescribed/Elective module #	4
Prescribed/Elective module #	4
Prescribed/Elective module #	4
Interdisciplinary Studies (IS) elective ^	2

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# The prescribed/elective modules offered may change from year to year, depending on relevance and demand. They may also include modules available in other diplomas offered by the School.

**COURSE MODULES**

**LEVEL 3.1**

**Fundamentals for IT Professionals III**

This module provides a stepping stone to the students in their IT career. Students are given an insight into the infocomm industries and are kept abreast of the updates and the necessary skill sets required in their IT career path. They also have the opportunity to be exposed to the various institutes of higher learning to further enhance their skill sets.

**Technologies for Financial Industry**

This is an awareness module which provides the technical knowledge required by an IT Professional for the banking and finance industry. The module will cover the basic concepts and principles in the operations of infrastructure facilities (e.g. a data centre) for an organisation. This includes the areas of facilities management, operations, software installation and configuration, storage capacity sizing as well as network administration to ensure performance. The second half of the module will focus on typical organisation on IT support and standards such as infrastructure support and operations contracts, service level agreements and standard operating procedures. The module will also include concepts in IT service transition which include change management, release management, deployment management, asset management, configuration management and testing.

**LEVEL 3.2**

**Internship or Project**

This module provides students with the opportunity to apply the knowledge and skills gained to develop an IT solution to solve a practical problem. Students may undertake an in-house industry-driven project, a Technopreneurship Enterprise project or a real-life IT project in a local or overseas organisation. These projects may include problem definition, requirements analysis, design, development and testing, delivery and presentation of the solution. Through the project, students will learn to appreciate the finer points of project planning and control issues relating to IT project development.

**BANKING & FINANCE SPECIALISATION**

**Corporate Banking Applications & Processes**

This course aims to provide students with an overview of the process and transaction processing systems in a wholesale bank. The module begins with a look at the overall organisational structure, an overview of the high level roles and responsibility of each function and the systems architecture in a Wholesale bank.

Subsequently, project management techniques are discussed based on case studies, intertwining both product and processes. For banks and financial institutions to stay competitive, many are also making use of information technology to assist them in their day-to-day operations to provide efficient and effective banking and financial services to serve their customers better. The module will also discuss the use of information technology in wholesale banks.

### **Customer Experience Management**

With SMAC (Social, Mobility, Analytics and Cloud) technologies resulting in a new competitive environment, the control has shifted from the seller to buyer. This module provides students with the knowledge and understanding of Customer Experience Management (CXM) as a business strategy in this new environment. The buyer's experience is not limited to a single transaction but includes the sum of all experiences across all touch points and channels between a buyer and a seller over the duration of their relationship. This strategy aims to achieve a sustainable competitive advantage to help sellers manage the buyer's experience that is both collaborative and personalised.

Students will have an opportunity to have hands-on experience with customer management systems used by sellers that collect and create customer data, segment that data into manageable data sets, make sense of the data and make it available for timely delivery. This allows companies to deliver consistent customer experiences that delight customers or achieve other organisational goals.

### **Financial Analysis & Modelling**

Decision making is critical to organisations. A good model and thorough analysis is needed for good and quick decision making. This module introduces students to frameworks used for financial analysis and financial models that can be developed for decision making.

Through the use of hands-on practical exercises, students will get to develop their model to analyse financial reports and to understand the position and financial health of an organisation. Students will also be equipped with basic financial analysis and decision-making techniques.

### **IT Outsourcing**

Outsourcing involves the transfer of responsibilities of services to third-party vendors based on a contractual agreement. This has become a trend in today's business world as the need for companies to stay responsive and flexible increases. Research has found that companies will likely increase their outsourcing investments in the years ahead. Functions that could possibly be outsourced include information technology, human resource, finance, logistics and even market research. In this module, students will get a better understanding of the needs and challenges in IT Outsourcing as well as Business Process Outsourcing. With the facilitation of their tutors, students will discuss topics in outsourcing strategies and management. At the end of this module, students can better appreciate why outsourcing has been widely adopted by the industries.

### **Retail Banking Applications & Processes**

This course aims to provide students with an overview of the process and transaction processing systems in retail banks. The module begins with a look at the overall organisational structure, an overview of the high level roles and responsibility of each function and the systems architecture in a retail bank. Subsequently, project management techniques are discussed based on case studies, intertwining both product and technology to assist them in their day-to-day operations to provide efficient and effective banking and financial services to serve their customers better. The module will also discuss the use of information technology in retail banks.

### **Risk Management**

The module aims to introduce students to risk management principles, frameworks and practices adopted by financial institutions. Students will learn about the different types of risks faced by financial institutions (operational, market and credit risk) and their drivers. Students will also be equipped with knowledge on the control processes and measurement techniques for each type of risk, as well as the IT applications and systems associated with them.

## **FINANCIAL ANALYTICS SPECIALISATION**

### **Applied Analytics – Business**

This module will teach students to analyse customers, products and price using business analytics techniques to improve the competitiveness of the business. The techniques taught include Customer Lifetime Value analysis, customer segmentation, customer churn, customer retention, campaign management, cross-sell and up-sell, discount, price optimization, and fraud detection. Case studies from various domains such as Banking and Finance, Healthcare, Tourism and Hospitality, Manufacturing, Transport, Telecommunication and Retail will enable students to apply the business analytics techniques. Tools used with the case studies may include a data mining tool and/or spreadsheets to perform analytics using sample datasets from these domains.

### **Applied Analytics – Finance**

This module will teach students to analyse customers, products and services using business analytics techniques to improve the competitiveness of businesses in the financial industry. The analysis will be centred on answering questions such as: How to discover characteristics of customers? How to identify potential new customers? How to determine credit rating of customers? How can we identify suspicious transactions and prevent them?

### **Data Visualisation**

This module discusses the techniques and algorithms for creating effective visualisations based on principles and techniques from graphic design, visual art, perceptual psychology and cognitive science. The module is targeted towards students interested in using visualisation in their own work, as well as students interested in building better visualisation tools and systems.

### **Descriptive Analytics**

Descriptive Analytics refers to a discipline used by many companies to analyse their data for improved decision making. Descriptive Analytics describes what happened in the past. It can include various forms of reports, queries and dashboards. This module aims to teach students the descriptive analytics lifecycle. Students will learn to ask the appropriate analytics questions, identify and aggregate data sources and create data models. They will apply techniques to analyse the data captured in these models. They will also create appropriate visualisation components to gain insights from the data. These visualisation components will be synthesised into dashboards that add value and can be readily consumed by business users.

### **Predictive Analytics**

Predictive analytics uses models of the past to predict the future. The main focus of this module will be to teach students data mining techniques and their applications in predictive analysis that seek to answer the “What could happen in the future” question. The module will introduce the principles of data mining. Students will learn about data pre-processing and exploration and pattern discovery. Students will use a data mining tool to explore the use of various data mining techniques using sample datasets from various domains. Techniques used in predictive modelling such as decision trees, regressions and neural networks will also be taught. Students will also learn to assess and implement models and gain an understanding of ethics involved.

### **Quantitative Analysis**

This module provides students with an introduction to applied statistical reasoning and the full process of statistical inquiry and evaluation. This module will cover methods of data collection, the construction of effective graphical and numerical displays to understand data, the estimation and description of errors in estimates, and the use of statistical testing.

## **ELECTIVE MODULES**

### **Big Data**

This introductory module covers the fundamentals of elements of Big Data: volume, velocity and variety. Students will learn various technologies & tools used to create a big data ecosystem which is able to handle storing, indexing & search. This module also covers the whole technology stack of Big Data: infrastructure, data management and analytics. Tools such as Hadoop, HDFS, and MapReduce will be taught in this module.

### **Capstone Project**

In this module, students are required to complete a substantial project that is the culmination of their education in the School of InfoComm Technology. The project can be a real-world problem proposed by a client, or it can be proposed by students in pursuit of their personal interests.

### **Data Structures & Algorithms**

This module aims to provide students with the knowledge and skills to analyse, design, implement, test and document programmes involving data structures. It teaches basic data structures and algorithms within the conceptual framework of abstract data types. The emphasis here is to use the class feature of an Object-Oriented language platform to give the concrete implementation of various abstract data types.

### **eCommerce Applications Development**

This module aims to provide students with the technical skills as well as an appreciation of the business perspective on electronic commerce (eCommerce). The main focus will be on building a Business-to-Consumer (B2C) eCommerce website. Students will be taught the building blocks and enabling technologies for building eCommerce applications, the processes of eCommerce transactions and some business issues on eCommerce. The module will also provide hands-on experiences for students to build a simple B2C eCommerce website on their own.

### **Enterprise Resource Planning**

More and more businesses adopt Enterprise Resource Planning (ERP) systems nowadays. It helps organisations to improve efficiency and productivity by integrating the different types of transactions from different business processes into one common database. The data can be extracted easily for analysis and decision making. ERP systems have the capability to integrate the data and processes of an organisation with external business partners such as customers, vendors and banks which improved collaborations and workflows.

In this module, students will have hands-on exposure to the world market leading ERP software, for example SAP, to learn and demonstrate how basic business processes are represented and integrated in a real world business setting. Students are able to apply and link the concepts learnt from other modules (e.g. Enterprise Information System, Accounting, Enterprise Business Processes, Enterprise System Analysis and Design) in ERP systems which allow them to understand the importance of information sharing is critical for any organisations. In addition, students will also learn about the challenges and issues in ERP implementations.

### **Mobile Applications Development**

This module focuses on the design and development of applications for mobile devices like hand phones, personal digital assistants (PDAs) and handheld computers. Due to the nature of these handheld devices, issues such as memory storage, user interface and data input methods require more careful consideration and planning. At the end of this module, students will be able to develop applications that can run on mobile devices and interact wirelessly with server-side programmes.

### **Mobile Applications Development II**

This module builds upon the skills and knowledge that students have acquired from the Mobile Applications Development module. It will focus on the development of advanced applications and emerging mobile operating systems. For example, students could develop applications for industries such as entertainment, games and healthcare. They will learn to develop applications for emerging operating systems such as the iPhone OS and Android.

### **Service Management**

This module provides students with an understanding of service management processes that enables more effective IT operations. It equips students with the skills to manage services' cost, create value and measure IT performance. It includes the knowledge of Information Technology Infrastructure Library (ITIL®) and financial management for IT services.

### **Technopreneurship**

The rapid emergence of new infocomm technologies is empowering new capabilities as well as opportunities for

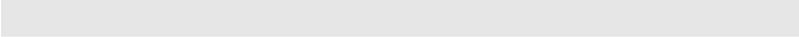
creativity and entrepreneurship. This module focuses on the processes and mechanisms by which new ideas and inventions can be commercialised in the market. Students will examine case studies of real- world examples of technopreneurship. They will also learn about the issues and challenges of transforming a technological innovation into a successful product or service in the market place.

### User Experience

This module focuses on the principles and techniques for designing good user experience in software applications and other products such as ATMs, kiosks, etc. Students will learn to apply business requirement gathering techniques as well as the analysis, design and validation phases of the user experience design life cycle, with emphasis on building empathy with users. They learn to communicate designs through deliverables such as personas, sitemaps and wireframes. Practical hands-on design activities will be guided by concepts such as information architecture, content strategy, formulation of user needs, and the application of design principles in interface, navigation, interaction and usability. The student will apply these concepts and techniques to design and prototype a web/ mobile application, and to present and critique design decisions.

## COURSE CURRICULUM

Module Name	Credit Units
<b>YEAR 3</b>	
<b>Level 3.1 (26 hours per week)</b>	
Capstone Project or 2 Elective Modules #	8
Fundamentals for IT Professionals III	2
Prescribed/Elective Module #	4
Prescribed/Elective Module #	4
Technologies for Financial Industry	4
Interdisciplinary Studies (IS) elective ^	2
World Issues: A Singapore Perspective ^	2
<b>Level 3.2</b>	
Internship or Project	22
<i>In the second year, students choose to major in a specialisation option. Each specialisation requires the completion of three prescribed modules.</i>	
<b>BANKING &amp; FINANCE SPECIALISATION</b>	
<ul style="list-style-type: none"> <li>• Corporate Banking Applications &amp; Processes</li> <li>• Customer Experience Management</li> <li>• Financial Analysis &amp; Modelling</li> <li>• Retail Banking Applications &amp; Processes</li> <li>• Risk Management</li> <li>• IT Outsourcing</li> </ul>	
<b>FINANCIAL ANALYTICS SPECIALISATION</b>	
<ul style="list-style-type: none"> <li>• Applied Analytics – Business</li> <li>• Applied Analytics – Finance</li> <li>• Data Visualisation</li> <li>• Descriptive Analytics</li> <li>• Quantitative Analysis</li> <li>• Predictive Analytic</li> </ul>	

  
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