

DOUBLE DEGREE

COMPUTER ENGINEERING OR COMPUTER SCIENCE WITH BUSINESS

The School of Computer Science and Engineering and the Nanyang Business School have come together to design two hybrid undergraduate Double Degree programmes to meet the challenges of a changing economic landscape. A specialisation in business analytics will equip students to monitor target markets, analyse information and forecast future trends across various industries while formulating ways to improve business strategies, operations and business decisions.

The double degree programme is a comprehensive and well-rounded curriculum to be completed in 4 years while integrating two disciplines, thereby broadening the scope of the students and enabling them to leverage on a kaleidoscope of opportunities.

The programmes are planned to enable graduates to hone their business management and computer science and engineering skills, helping to discover and maximise their capabilities which will enable them to develop relevant skills that are much sought after in today's job market.

Such a mix of business skills and technical knowledge will definitely provide graduates an edge over their competitors and also a wider range of career opportunities.

Graduates are also given the exciting opportunity to embark on a 10-week Professional Attachment in leading technology, management consulting or financial firms in key industries.



BEng (CS) and BBus (with BA Specialisation)

BEng (CE) and BBus (with BA Specialisation)

**YEAR
1**

Common Year

- ▶ Engineering Mathematics I
- ▶ Engineering Mathematics II
- ▶ Introduction to Computational Thinking
- ▶ Physics for Computing

- ▶ Engineers & Society
- ▶ Financial Accounting
- ▶ Business Law
- ▶ Introduction to Sustainability: Multidisciplinary Approaches and Solutions

- ▶ Digital Logic
- ▶ Computer Organization and Architecture
- ▶ Data Structures
- ▶ Discrete Mathematics

- ▶ Management Accounting
- ▶ Organisation Behaviour and Design
- ▶ Communication Management Fundamentals

- ▶ Algorithms
- ▶ Object Oriented Design and Programming
- ▶ Computer Graphics and Visualisation
- ▶ Statistical and Quantitative Methods
- ▶ Data Mgt and Business Intelligence
- ▶ Analytics I: Visual and Predictive Analytics
- ▶ Ethics & Moral Reasoning

- ▶ Human Computer Interaction
- ▶ Operating Systems
- ▶ Software Engineering
- ▶ Financial Management
- ▶ Analytics II: Advanced Predictive Analytics
- ▶ Career Foundations I
- ▶ Unrestricted Elective

- ▶ Algorithms
- ▶ Object Oriented Design and Programming
- ▶ Digital Systems Design
- ▶ Statistical and Quantitative Methods
- ▶ Data Mgt and Business Intelligence
- ▶ Analytics I: Visual and Predictive Analytics
- ▶ Ethics & Moral Reasoning

- ▶ Circuits and Signal Analysis
- ▶ Operating Systems
- ▶ Software Engineering
- ▶ Financial Management
- ▶ Analytics II: Advanced Predictive Analytics
- ▶ Career Foundations I
- ▶ Unrestricted Elective

**YEAR
2**

**YEAR
3**

- ▶ Advanced Computer Architecture
- ▶ Advanced Software Engineering
- ▶ Software Systems Analysis and Design
- ▶ Marketing
- ▶ Career Foundations II
- ▶ Enterprise & Innovation

- ▶ Unrestricted Elective
- ▶ Multidisciplinary Design Project
- ▶ Artificial Intelligence
- ▶ Communication Management Strategy
- ▶ Business/CS Integration 1
- ▶ Professional Attachment (Special Semester)

- ▶ Microprocessor-based Systems Design
- ▶ Advanced Computer Architecture
- ▶ Sensors, Interfacing and Control
- ▶ Computer Networks
- ▶ Marketing
- ▶ Career Foundations II

- ▶ Enterprise & Innovation
- ▶ Microcontroller Programming
- ▶ Multidisciplinary Design Project
- ▶ Communication Management Strategy
- ▶ Business/CS Integration 1
- ▶ Professional Attachment (Special Semester)

- ▶ Final Year Project
- ▶ Net Centric Computing
- ▶ Technical Elective 1
- ▶ Technical Elective 2
- ▶ Principles of Economics
- ▶ Business/CS Integration 2

- ▶ Final Year Project
- ▶ Science & Technology
- ▶ Compiler Techniques
- ▶ Technical Elective 3
- ▶ Business Analytics Consulting
- ▶ Strategic Management

- ▶ Final Year Project
- ▶ Digital Signal Processing
- ▶ Technical Elective 1
- ▶ Technical Elective 2
- ▶ Principles of Economics
- ▶ Business/CS Integration 2

- ▶ Final Year Project
- ▶ Science & Technology
- ▶ Digital Communications
- ▶ Technical Elective 3
- ▶ Business Analytics Consulting
- ▶ Strategic Management

**YEAR
4**

**Business/CS
Integration
Courses
(Students to
choose any 2)**

- ▶ Enterprise Analytics
- ▶ Financial Service Processes and Analytics
- ▶ Social Media and Digital Analytics
- ▶ Service Operations Management

- ▶ Lean and Process Analytics
- ▶ Service Operations Analytics
- ▶ Supply Chain Analytics
- ▶ Search Engine and Web Analytics