



Business Process & Systems Engineering

Overview

With Singapore's vision to be a world-class service centre and logistic hub, the 21st century will see extensive growth and a strong demand for diploma holders with multi-disciplinary knowledge and skills.

The introduction of business concepts and principles as well as digital analytics into a core of engineering fundamentals will enable our diploma holders to secure a career in both the engineering and service sectors in Singapore and the region.

At the same time, bosses today highly value employees who have knowledge about how companies function and their operational systems, as well as how to do market analysis and plan strategies to maximise profits for the company – all of which is provided by this course.



Career Opportunities

Armed with the skills of both the business and engineering disciplines, you will be able to find excellent career opportunities as:

- Business Analysts
- Customer Relationship Executives
- Logistics & Supply Chain Executives
- Market Researchers
- Product Marketing Executives
- Productivity & Management Systems Executives
- Quality Assurance & Control Specialists



Entry Requirements

5 GCE 'O' Level subjects comprising:

English Language (EL1)	(Grades 1-7)
Mathematics (E or A Maths)	(Grades 1-6)
One of the following subjects *	(Grades 1-6)
Any two other subjects (except CCA)	–

* *Biology, Biotechnology, Chemistry, Combined Science, Computing / Computer Studies, Design & Technology, Electronics / Fundamentals of Electronics, Physics / Engineering Science, Science (Chemistry, Biology), Science (Physics, Biology), Science (Physics, Chemistry) / Physical Science.*

Note: Applicants should not be suffering from severe vision impairment.

Diploma Core Subjects

Year 1:

- Business Fundamentals
- Circuit Analysis
- Computer Programming for Problem Solving
- Digital Fundamentals 1
- Engineering Mathematics 1
- Introduction to Processes & Systems
- Quantitative Methods

Year 2:

- Customer Relationship Management
- Data Visualisation & Analytics
- Decision Analysis
- Manufacturing Logistics & Simulation
- Process Management Systems
- Process Optimisation & Improvement
- Project Management
- Sustainable Supply Chain Management
- Systems Modelling & Simulation

Cluster Electives:

Intelligent Automation
Procurement & Materials Management

Year 3:

- Major Project

Cluster Electives:

- Data Management for Process Analytics
- Distribution Centre Management
- International Trade & Transport
- IoT Security
- Work-Based Learning



Further Studies

You can gain admission into a wide range of degree programmes at local and overseas universities such as those in USA, UK, Australia and New Zealand. Advance standing for specific modules or up to 2 years exemption may be given depending on the relevance of the degree programme.

Success Stories



After **Rebecca Tan Li Kiat** graduated with a Diploma in Business Process & Systems Engineering, she joined Keystone Cable Pte Ltd as a Marketing Executive under the SMA Talent Programme, deciding to put on hold her further studies plans. "I chose to work immediately after getting my diploma so that I can learn to apply my skills and knowledge, while gaining priceless industry experience," says the former Anglican High School student.

After 2 fruitful years with the company, she then enrolled for a Bachelor of Computing (Information Systems) degree programme at NUS. "Working in the industry allowed me to identify and fill my knowledge gaps, putting me in an even stronger position to pursue my degree," she reflects. "This is what SkillsFuture is all about – being able to apply what you have learnt in the world of work, and in the process acquire priceless skill-sets that would stay with you for life," she adds.

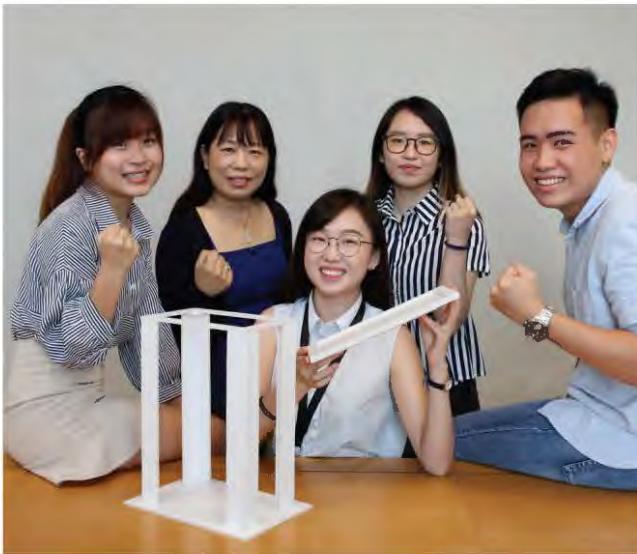
"All these would not have been possible without my diploma, which gave me the strong foundation to pursue my dreams," says Rebecca gratefully.

Core Strengths

This is the only integrated business and engineering diploma course that truly focuses on applying systems engineering principles in overcoming business challenges, while introducing you to business analytics. You will be extremely versatile because most companies today require professionals who have not just product knowledge but also business skills and the know-how to help a company to improve its operations.

You will also gain additional skill sets in digital analytics that will empower you to navigate in, and add value to, any company regardless of its size or stage of digitalisation.

Furthermore, this course's strong focus on Business Process Improvement (BPI) to enhance productivity will make you a talent that employers are looking for. This is because companies today are rationalising its operations and focusing on raising productivity so as to maintain profitability, amidst growing manpower constraints and increasing competition.



Student Life & Facilities

Your life on campus will be varied and vibrant. Sporting competitions, artistic pursuits, adventure learning programmes, team building games, student club gatherings, as well as the annual Campus Care Network Day carnival when students and staff join forces to raise funds, are some of the many exciting activities that will pepper your life as a student.

Located in a picturesque environment that is close to nature, the campus provides you with the ideal setting for work, play and recreation.



Always at the forefront of technology, the School emphasises innovation, creativity, problem-based learning and a practical, hands-on approach. With a wide range of modern and well-equipped facilities, and a rigorous and industry-relevant curriculum, we are well positioned to prepare you for a bright future.

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School of Engineering

*The information in this brochure is accurate at the time of printing
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