

# Bachelor of Engineering (Honours) in Building Services Engineering 屋宇設備工程 (榮譽) 工學士

Year

**1**

Entry

SSSDP JUPAS  
Catalogue No.  
JSSV10

Year

**3** FT or PT

Entry

Self-financed  
ST125103 (FT)  
ST525103 (PT)

## PROGRAMME HIGHLIGHTS

- Develop students to be highly skilled in designing and managing building services systems
- Subjects include electrical and mechanical services in buildings as well as modern building technologies, environmental issues and professional skills

## Programme Overview

This programme aims to develop students to be highly skilled in developing, designing and managing building services systems and be problem-solvers to meet ever-changing industry challenges, which involves complex building technology, virtual design and construction, innovative and low-carbon building design, and green building assessment.

The programme curriculum covers modules related to electrical and mechanical services in buildings including air-conditioning, ventilating, fire services, water supply and drainage, electrical supply and lighting systems. It also includes modules on modern building technologies, environmental issues and professional skills, such as building information modelling, building sustainability, building energy efficiency, commissioning, operation and maintenance.

## Career Prospects

Building Services Engineers are in high demand in job market, with good employment prospects. This programme provides academic base for professional career in the building and construction industry. The knowledge and skills learnt from this programme will enable our graduates to pursue broader career interests and become highly adaptable.

## Professional Recognition

The programme is provisionally accredited by Hong Kong Institution of Engineers (HKIE).



資歷架構  
Qualifications  
Framework

This programme is recognised under the QF (Level 5)  
QR Registration No.: 15/000513/L5  
Registration Validity Period: 01/09/2015-31/08/2020

## Industry Endorsement

"THEi's programmes produce talents to meet the manpower demand of the industry. We will work closely with THEi to provide internship for students to gain valuable experience at member institutions."

## Martin WAN

President (2014 - 2016)

Building Services Operation and Maintenance Executives Society



## Programme Structure

Year 1	Year 2	Year 3	Year 4
<ul style="list-style-type: none"> <li>General Education Core Module: Chinese 1</li> <li>General Education Core Module: English for Academic Studies 1</li> <li>General Education Core Module: The Human Spirit</li> <li>Calculus</li> <li>Engineering Physics</li> <li>Architecture &amp; Buildings</li> <li>Engineering Drawing &amp; Construction CAD</li> <li>Built Environment</li> <li>Fluid Mechanics</li> <li>Electrical Services Fundamental</li> <li>Engineering Thermodynamics</li> <li>Safety, Health and Industrial Training</li> </ul>	<ul style="list-style-type: none"> <li>General Education Core Module: Social Dynamics of Organizations</li> <li>General Education Core Module: Habits of Scientific Thinking</li> <li>Heat &amp; Mass Transfer</li> <li>Advanced Engineering Mathematics</li> <li>Advanced Electrical Technology</li> <li>HVACR I</li> <li>Piped Services</li> <li>Power Distribution and Machines</li> <li>Engineering Management</li> <li>Indoor Environmental Engineering</li> <li>General Education Elective Module 1</li> <li>General Education Elective Module 2</li> </ul>	<ul style="list-style-type: none"> <li>General Education Core Module: Chinese 2</li> <li>General Education Core Module: English for Academic Studies 2</li> <li>General Education Core Module: English for Professional Purposes</li> <li>HVACR II</li> <li>Fire Services</li> <li>Lighting Technology</li> <li>Basics of Building Information Modelling</li> <li>Commissioning of Facilities</li> <li>Numerical Method for Analysis</li> <li>Building Information Modelling for BSE</li> <li>General Education Elective Module 3</li> <li>Industrial Attachment</li> </ul>	<ul style="list-style-type: none"> <li>Design for Operation and Maintenance</li> <li>Building Energy Efficiency cum Carbon Emission</li> <li>Building Sustainability and Green Building Assessment</li> <li>Final Year Project 1 (BSE Conceptual Design)</li> <li>Final Year Project 2 (Applied Research Project)</li> <li>Final Year Project 3 (MEP Design)</li> <li>General Education Elective Module 4</li> <li>Programme Elective 1</li> <li>Programme Elective 2</li> <li>Programme Elective 3</li> </ul>

## Programme Electives\*

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|---|---|---|
| <ul style="list-style-type: none"> <li>Building Automation and Control</li> <li>Fire Dynamics</li> <li>Renewable Energy</li> <li>Acoustics Engineering</li> <li>Indoor Air Quality</li> </ul> | <ul style="list-style-type: none"> <li>Technology Integration for Facility Management</li> <li>Facility Management Professional Practice</li> <li>Economics for Facility Management</li> <li>Engineering Risk, Reliability &amp; Decision</li> <li>Principles of Project Finance</li> </ul> | <ul style="list-style-type: none"> <li>Construction Law &amp; Practice</li> <li>Biological Wastewater Engineering</li> <li>Environmental Impact Assessment</li> </ul> |
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## General Education Elective Modules\*

### Faculty of Design and Environment (FDE)

- Effective Branding & Consumer Behaviour
- Impact of Contemporary Design on Society
- Landscape Appreciation
- Urban Greenery & Ecology
- Tree Safety Inspection & Climbing
- The Art & Science of Film
- Web Technology & E-Commerce
- Housing Policy & Management

### Faculty of Management and Hospitality (FMH)

- Stress Management
- Wellness & Lifestyle Management
- Corporate Social Responsibility in Action
- Personal Financial Management
- Self-marketing & Personal Branding
- The Tourism Industry in Hong Kong
- Marketing Essentials
- Accounting for Non-Accountants
- Business Management in Hong Kong
- Essentials in People Management

### Faculty of Science and Technology (FST)

- Urban Development in Hong Kong
- Nutrition & Health<sup>^</sup>
- Technological & Economic Development in a Global Context
- Food in Daily Life<sup>^</sup>
- Safety & Quality of Consumer Products
- Introduction to Astronomy

## School of General Education and Languages (SGEL)

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|--|---|---|
| <ul style="list-style-type: none"> <li>Hong Kong Society: Continuity &amp; Change</li> <li>Literature &amp; Modern China</li> <li>The Modern World: History &amp; Culture</li> <li>Language, Culture &amp; Society</li> <li>Translation in Everyday Life (English-Chinese)</li> <li>Journey to the Exotic World of Microorganisms</li> <li>Plants &amp; Human Civilisations</li> </ul> | <ul style="list-style-type: none"> <li>Creative Writing in Chinese</li> <li>Introduction to Spanish Language &amp; Culture</li> <li>Service Leadership in a New Era</li> <li>Making Sense of Our World: Selected Topics in Sociology</li> <li>Cantonese in Hong Kong Popular Culture</li> </ul> | <ul style="list-style-type: none"> <li>Beyond Hollywood: Introduction to World Cinema</li> <li>Western Classical Music Appreciation</li> <li>Hong Kong Literature : the Locals, the Mainland &amp; the world</li> </ul> |
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\* More selective modules will be offered. Modules offered are subjected to change.

Students may be required to attend additional training and industrial attachments, for which separate fees will be charged.

Completion of additional core module(s) may be required prior to commencement or during Year 3 study for Year 3 entry.

<sup>^</sup> Students are allowed to either take "Nutrition & Health" or "Food in Daily Life" but not both modules to fulfil the graduation requirements.