

Technological and Higher Education
Institute of Hong Kong
香港高等教育科技學院

BEng(Hons) in Building Services Engineering
(BEng-BSE) 屋宇設備工程 (榮譽) 工學士
[SSSDP: JUPAS No. JSSV10; ST145103]

[Self-finance: Full-time: ST125103; Part-time: ST525103]

BSE

<http://ibse.hk/>

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Member of VTC Group
VTC 機構成員

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Tsing Yi Campus 青衣校園



VTC Student Dormitory (Tsing Yi) 職業訓練局學生宿舍 (青衣)

880 beds with excellent student-enrichment facilities

More information:

<http://dormitories.vtc.edu.hk/>



Chai Wan Campus 柴灣校園



Programme Information

Programme and Award Title	Bachelor of Engineering (Honours) Degree in Building Services Engineering
Code	SSSDP: JUPAS No. JSSV10; ST145103 Self-finance: ST125103 (Full-time) / ST525103 (Part-time)
Faculty	Science and Technology
Department	Construction Technology and Engineering
Qualifications Framework (QF) Level, by HKCAAVQ	BEng(Hons) degree award – QF Level 5 Higher Diploma exit award – QF Level 4
Mode and Duration of Study	Year 1 Entry: Full time, 4 years Year 3 Entry: Full time, 2 years; Part time, 4 years
Programme Launch	1 September 2015
SSSDP Year 1 Admission (JUPAS)	Starting from AY2018/19
Admission	Year 1 Entry (start in 2015-16); Year 3 Entry (start in 2017-18)
Venue	Mainly at Tsing Yi Campus

Programme Highlights:

- Professional-oriented degree programme with work-ready graduates
- Fine balance in theoretical and practical education
- Accredited by Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ) and Hong Kong Institution of Engineers (HKIE)
- Include under Study Subsidy Scheme for Designated Professions/Sectors (SSSDP) for JUPAS admission
- Develop students with integrated concept of building sustainability through the life cycle of a building project, from cradle to grave
- New modules on BIM, green building, O&M

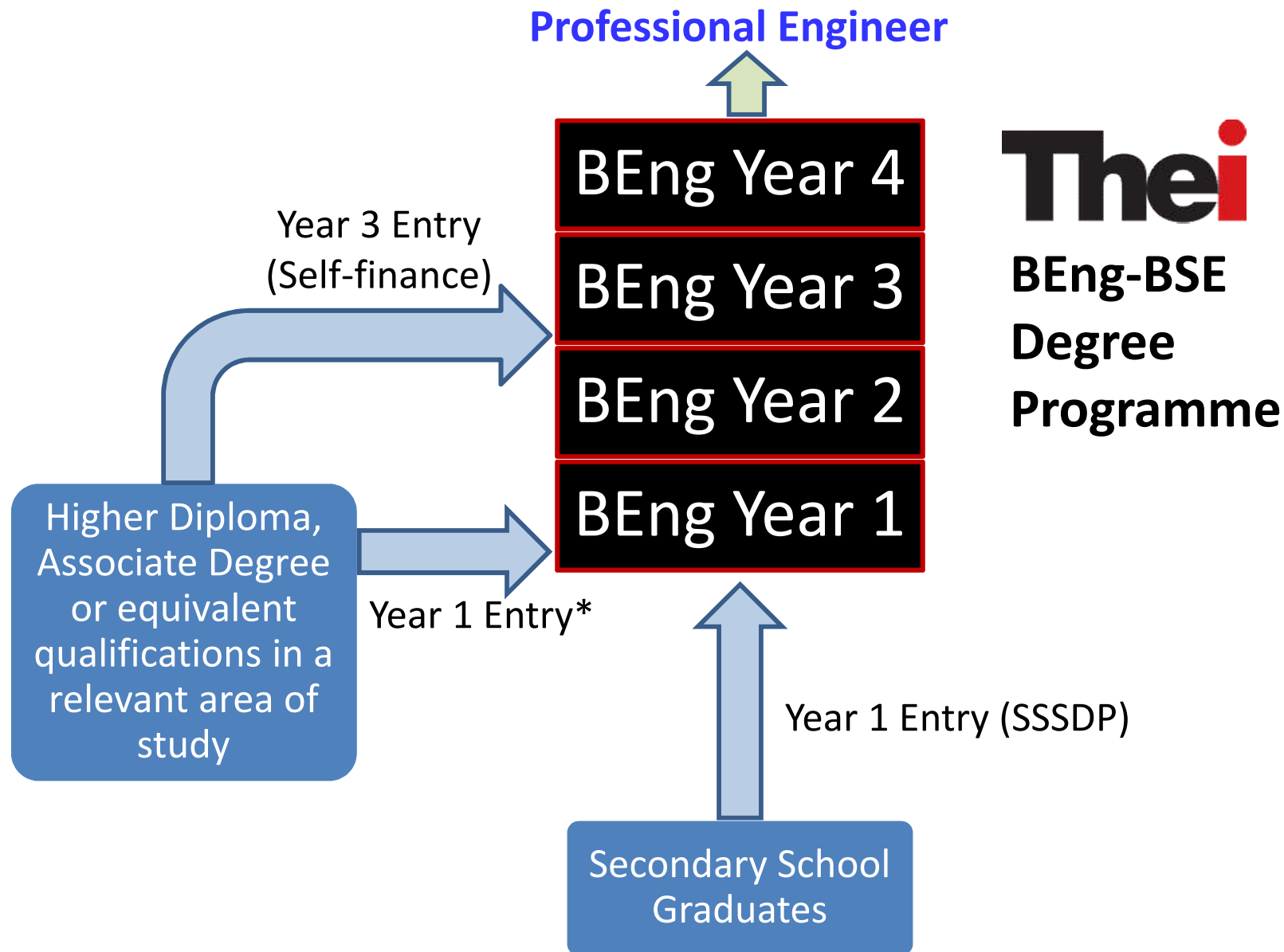


Career Prospect:

- Building services design consultants
- Engineering contractors
- Properties developer/management
- Public utilities (e.g. CLP, MTR)
- Government departments (e.g. EMSD)
- Equipment supplier/manufacturer
- Teachers/researchers



Admission Process

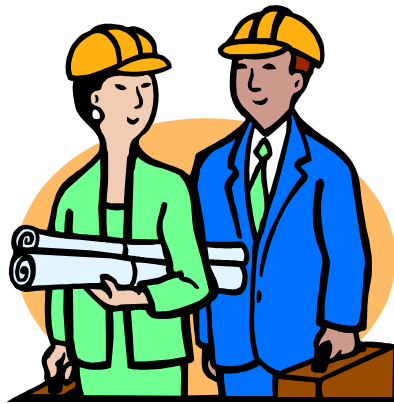


Remarks:

* Candidates with appropriate qualifications can apply for advanced standing and credit transfer/module exemption (this may help reduce the total duration of study).

Programme Aims:

- To develop students to be highly skilled in developing and designing building services systems and be **problem-solvers** to meet ever-changing industry challenges, which involves complex building technology, air conditioning design, and green building assessment
- To equip students with the knowledge and skills of **building services technologies**, with emphasis on using projects as the main learning and teaching assessment method to reflect general industry practice



Programme Objectives (PO):

- **PO1:** Equip students with **solid fundamental knowledge** of science and engineering that will prepare them for professional careers in the building services engineering industry;
- **PO2:** Train students with the abilities to apply theoretical engineering knowledge to **professional practice** and the solution of complex contemporary problems;
- **PO3:** Develop students with **professional skills** in the design, operation, testing and maintenance of building services systems and with **independent problem-solving skills**, as well as good communication skills, so that they can work effectively in a multi-disciplinary project;
- **PO4:** Strengthen students' commitment to understand the importance of **ethical and societal considerations**, including those related to health, safety and environmental sustainability; and
- **PO5:** Build up students' **leadership** with national and international perspectives in the professional building services engineering and with a **lifelong learning** attitude.



Programme Content and Structure

General Education and Languages

- General Education Core and Elective Modules
- Chinese and English Modules

Engineering Fundamentals

- Architecture & Buildings, Built Environment, Engg. Drawing
- Engg. Physics , Calculus , Advanced Engg. Mathematics
- Engg. Thermodynamics, Fluid Mechanics, Heat & Mass Transfer, Numerical Method for Analysis

Building Services Technology

- Electrical Services Fundamental, Advanced Electrical Technology, Power Distribution & Machines
- HVACR I, HVACR II, Indoor Environmental Engineering
- Piped Services, Fire Services, Lighting Technology

Pragmatic Application

- Construction CAD by AutoCAD, Basics of BIM, BIM for BSE
- Engineering Management, Commissioning of Facilities, Design for Operation & Maintenance
- Design Projects (Conceptual/Detail), Appl. Research Project
- Building Sustainability & Green Building Assessment, Building Energy Efficiency cum Carbon Emission
- + Programme Elective Modules, Work-Integrated Learning, Safety, Health & Training

Total 45 modules (132 institute credit units, 4 years)

Study Modules in Year 1 and Year 2

BEng Year 1

GEC4201	English for Academic Studies 1
GEC4301	The Human Spirit
SBS4111	Calculus
SBS4112	Engineering Physics
SBS4113	Architecture & Buildings
SBS4125	Engineering Drawing and Construction CAD
GEC4101	Chinese 1
SBS4114	Built Environment
SBS4121	Fluid Mechanics
SBS4123	Electrical Services Fundamental
SBS4124	Engineering Thermodynamics
SBS4109	Safety, Health & Industrial Training

BEng Year 2

GEC5202	English for Academic Studies 2
---	Select one GE Elective
SBS4211	Heat & Mass Transfer
SBS5211	Advanced Engineering Mathematics
SBS5212	Advanced Electrical Technology
SBS5225	HVACRI
GEC4302	Habit of Scientific Thinking
---	Select one GE Elective
SBS5221	Pipe Services
SBS5222	Indoor Environmental Engineering
SBS5223	Power Distribution & Machines
SBS5224	Engineering Management

Study Modules in Year 3 and Year 4

BEng Year 3

GEC5102	Chinese 2
GEC4303	Social Dynamics of Organisations
SBS5311	HVACRII
SBS5312	Lighting Technology
SBS5313	Fire Services
SBS5322	Basics of Building Information Modelling
GEC5206	English for Professional Purposes
---	Select one GE Elective
SBS5314	Commissioning of Facilities
SBS5321	Numerical Method for Analysis
SBS5411	Building Information Modelling for BSE
SBS4309	Industrial Attachment

BEng Year 4

---	Select one General Education Elective
SBS5397	Final Year Project 1 (BSE Conceptual Design)
SBS5412	Design for Operation & Maintenance
SBS5413	Building Sustainability & Green Building Assessment
---	Select one Programme Elective
SBS5421	Building Energy Efficiency cum Carbon Emission
SBS5498	Final Year Project 2 (Applied Research Project)
SBS5499	Final Year Project 3 (BSE Detail Design)
---	Select one Programme Elective
---	Select one Programme Elective

BSE Staff and Students



BSE Student Activities



Technical visit to Smart Power Centre



Technical visit to Trade & Industry Tower



Seminar by HKIE Past President Ir F C Chan



Singapore Study Tour 2017