College of Engineering

World Recognition

Quacquarelli Symonds (QS) World University Rankings
Worldwide (2021) 48th
By Subjects (2020) Top 100
- Architecture/ Built Environment
- Civil & Structural Engineering
- Computer Science & Information Systems
- Electrical & Electronic Engineering
- Materials Science

Academic Ranking of World Universities (ARWU) (2020)
By Subjects
Top 50
- Automation & Control
- Biomedical Engineering
- Civil Engineering
- Computer Science & Engineering
- Instruments Science & Technology
- Materials Science & Engineering
- Metallurgical Engineering
- Nanoscience & Nanotechnology
- Telecommunication Engineering

Top 100
- Electrical & Electronic Engineering
- Mechanical Engineering
- Transportation Science & Technology

U.S. News and World Report University Rankings (2020)
City University of Hong Kong
13th Best Global Universities for Computer Science
15th Best Global Universities for Electrical and Electronic Engineering
16th Best Global Universities for Engineering
Bachelor’s Degree

For admission to the 4-year bachelor’s degree, students will be enrolled to one of the departments and choose majors available in the respective department after completing the first year of study, except for departments offering one single major.

Department of Architecture and Civil Engineering

(852) 3442 7609  acddept@cityu.edu.hk  www.ace.cityu.edu.hk

Architectural Engineering

This major is fully accredited by the Hong Kong Institution of Engineers (HKIE) as a recognized degree for applying professional engineer qualification. The major aims to provide students with the academic background necessary for a professional architectural and building services engineer. They will be able to manage the design, manufacturing, installation, commissioning and maintenance of various building services engineering systems including air-conditioning systems, electrical services, fire protection systems and pipe systems. They will also be equipped with the concept of integration between various disciplines within the architectural and building services engineering and also the other trades of the building industry.

Civil Engineering (with 2 streams in Structural Engineering / Infrastructure and Smart City*)

This major is fully accredited by the Hong Kong Institution of Engineers (HKIE) as a recognized degree for applying professional engineer qualification. This major aims at equipping students with a solid foundation to work as a civil engineer. It covers a wide spectrum of areas, for example, construction technology and materials, engineering management, environmental engineering, geotechnical engineering, green urbanism, hydraulic engineering, structural engineering and transportation engineering. There are two specialisms in the major: structural engineering, and infrastructure & smart city*. Graduates are expected to work as civil/structural engineers, geotechnical engineers, construction and site engineers, construction project managers, building engineers, transport engineers, etc. in private and government sectors. There are opportunities for further studies and research at graduate levels in Hong Kong, Mainland China and overseas.

* The Infrastructure and Smart City stream is subject to the approval of the University.

Surveying

This Hong Kong Institute of Surveyors (HKIS) and The Royal Institution of Chartered Surveyors (RICS) accredited major aims to provide students with the necessary skills to i) participate in real estate and infrastructure development, ii) analyse building development proposals, iii) appraise contemporary building science and engineering techniques, iv) advise on appropriate means of procurement, v) pursue financial control of construction projects and vi) apply a multi-disciplinary approach to manage construction processes.

Department of Biomedical Engineering

(852) 3442 8420  bmegeo@cityu.edu.hk  www.cityu.edu.hk/bme

Biomedical Engineering

This major aims to pursue excellence in education research and innovation through the fusion of engineering with life sciences for the advancement of human health. Students will be prepared to apply their skills to a variety of challenges in their chosen field, to solve problems in the biomedical engineering related professions, to make decisions that are socially and ethically responsible, and to build and expand upon their undergraduate foundations by engaging in learning opportunities throughout their careers. Graduates from this major are expected to possess expertise that will address the increasing public concerns and demands on medical diagnostics and therapeutic treatments, biomedical instruments, food safety and quality, advancement in pharmaceutical and health maintenance products, as well as the awareness for human health and wellness.

Department of Computer Science

(852) 3442 8580  csadm@cityu.edu.hk  www.cs.cityu.edu.hk

Computer Science

The major aims to provide the best possible undergraduate education with a well-balanced emphasis on computer science theories, practical hands-on development skills, as well as software engineering know-how that are necessary for successful careers as professional software developers, system analysts, system architects and technology officers. Our study streams (Data Science, Information Security, Multimedia Computing, Software Engineering and Project Management, and Artificial Intelligence) allow students to further specialize in different areas of expertise. In addition, the major has a mandatory placement component that allows students to gain real world experience, which will provide a significant edge when students look for employment after graduation.

(*The admission model of the Department of Architecture and Civil Engineering is subject to the approval of the University)
Bachelor’s Degree
Architecture and Civil Engineering

Institution of Chartered Surveyors (RICS) accredited major aims to provide students with the necessary skills to participate in the building professions. Graduates are expected to perform practical surveying works and become an Associate Member of the Hong Kong Institution of Surveyors (HKIS) and The Royal Institution of Engineers (HKIE). By completing the professional assessment, students may also join the building industry in supporting roles in the design and documentation of building projects. They may also continue their study in architectural studies degree programmes in local and overseas universities. They may also apply for admission to their Assessment of Professional Competence (APC) Scheme leading to professional membership under the Building Surveying Scheme.

Department of Mechanical Engineering

This major aims to provide a well-structured curriculum that combines education, research and development of innovative technologies which enables students to tackle engineering problems in mechanical-related areas efficiently and independently. It equips students with critical thinking, independent research abilities, qualitative and quantitative analysis capacities and also prepares them for professional employment in areas such as engineering design of materials, dynamical and control analysis, automation engineering and micro & nano technologies.

Nuclear and Risk Engineering

This major aims to equip students with multi-disciplinary knowledge in nuclear and risk engineering to meet the growing demands in low carbon power generation, healthcare and risk engineering sectors. Graduates can work in a broad spectrum of related professions or industrial sectors, such as nuclear power industry, materials engineering, nuclear medicine related fields, radiation protection, environmental protection, nuclear radiation equipment industry, risk assessment in the financial sector and also disaster management.

Department of Systems Engineering and Engineering Management

Intelligent Manufacturing Engineering

This major emphasizes the integration of intelligent manufacturing systems, industrial engineering, systems modeling and optimization, quality and reliability engineering, automation and robotics, advanced manufacturing technologies, with particular emphasis on electronics and semiconductor manufacturing. This multi-disciplinary program aims to produce graduates who are capable of using cutting-edge engineering knowledge, computational, experimental and analytical techniques to plan, design, implement and improve technology-based manufacturing and operations systems.

(• The new major Intelligent Manufacturing Engineering is subject to the approval of the University.)
Top-up Bachelor’s Degree

Department of Architecture and Civil Engineering

(For Advanced Standing II admission only)

Admission Code

Architectural Studies

The Programme enables students to develop an attitude of professionalism and the ability to integrate diverse knowledge in advanced technology, design and construction management, and to produce innovative and creative architecture. This HKIA-accredited bachelor degree programme prepares graduates for further study to enter the profession of Architecture. The programme provides articulation for holders of an associate degree or higher diploma to attain a higher qualification in architectural studies. Graduates are highly sought after in the building professions.

Associate Degree

Department of Architecture and Civil Engineering

(852) 3442 7609  acedept@cityu.edu.hk  www.ace.cityu.edu.hk

Architectural Studies

This government-funded associate degree programme provides a broad-based academic foundation in Architectural Studies. It focuses on the major aspects of architectural design such as design studio, communication studies, technical studies, social studies, environmental studies and professional practice. Based on the knowledge modules and skill-sets taught in our curriculum, graduates may continue their study in architectural studies degree programmes in local and overseas universities. They may also join the building industry in supporting roles in the design and documentation of building projects.

Division of Building Science and Technology

Building Services Engineering

This programme is accredited by the Hong Kong Institution of Engineers (HKIE). By equipping students with a solid academic foundation and practical skills, the programme aims to produce quality graduates in building system design, commissioning, control and maintenance. The programme will also provide opportunities for students to develop their technical and academic competence in undertaking duties in consultancy, contracting, research and facility management. Upon completion of this programme, students are able to perform works in building services engineering, or articulate to bachelor’s degree programmes in local and overseas universities.

Construction Engineering and Management

This programme is accredited by both the Hong Kong Institution of Engineers (HKIE) and the Hong Kong Institute of Construction Managers (HKICM). It is also recognized by the Chartered Institute of Building (CIOB). The programme aims to provide students with a broad-based academic foundation and practical skills in construction engineering and construction management for entering into an international workplace or articulation to bachelor’s degree programmes in local and overseas universities. The programme provides opportunities for students to develop intellectual abilities and transferable skills to deal with problems creatively, to communicate, interact and work well with people, and to operate across disciplines and professional boundaries.

Surveying

This programme is accredited and recognized by the Hong Kong Institute of Surveyors (HKIS) as a cognate sub-degree programme for admission to their Assessment of Professional Competence (APC) Scheme leading to professional membership under the Building Surveying Division, General Practice Division and Quantity Surveying Division. Upon completion of this programme, students are expected to perform practical surveying works and become an associate member and further, a corporate member of the HKIS.

This programme aims to provide students with an all-round academic foundation and practical skills in surveying for entering into the local construction and property industries. It equips them with multiple intelligences to discover and solve problems innovatively. After completion of this programme, students are encouraged to pursue bachelor’s degrees in local and overseas universities.
Joint Bachelor’s Degree Programmes

Joint Bachelor’s Degree Programmes provide students with an international undergraduate educational experience. Students will spend two years at CityU and two years at the partner university. On completion of the curriculum requirements of both universities, students will earn two bachelor’s degrees - one from CityU and one from the partner university.

City University of Hong Kong  
Columbia University

Curriculum Design

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Eligibility

- Studying the 4-year degree majoring in Computer Science
- Complete Year 1 with a minimum CGPA of 3.30 or above
- Fulfill one of the following English Language Requirements
  - a minimum TOEFL total score of 100 (ibt); or
  - a minimum IELTS overall band score 7.0
- Students are required to complete a mandatory one-year internship in Hong Kong prior to the commencement of study at Columbia University.

Tuition and Fees

Students pay tuition and fees to the University in which they are enrolled. Students can apply for available scholarships.

CityU and National Taiwan University

Curriculum Design

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Eligibility

- Studying the 4-year degree majoring in Civil Engineering or Materials Science and Engineering
- A minimum CGPA of 3.30 or above
- Fulfill one of the following English Language Requirements
  - a minimum TOEFL total score of 79 (ibt); or
  - a minimum IELTS overall band score 6.5

Tuition and Fees

Students pay tuition and fees to their home University. Students can apply for available scholarships.
College of Engineering

Department of Architecture and Civil Engineering (ACE)
Department of Biomedical Engineering (BME)
Department of Computer Science (CS)
Department of Electrical Engineering (EE)
Department of Materials Science and Engineering (MSE)
Department of Mechanical Engineering (MNE)
Department of Systems Engineering and Engineering Management (SEEM)
Division of Building Science and Technology (BST)
Co-operative Education Centre