



College of Science

香港城市大學  
City University of Hong Kong

# College of Science CSCI

Chemistry · Mathematics · Physics

4

**Undergraduate  
Programmes**  
for Admission

3

**Joint Bachelor's  
Degree Programmes**

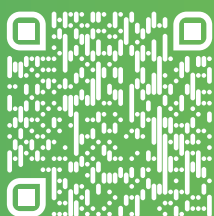
- Columbia University
- The University of Edinburgh
- The University of Manchester

2

**Undergraduate  
+ Master's**  
Degree Programmes

1

**Flagship  
Programme**  
GREAT



# Global Research Enrichment and Technopreneurship (GREAT)

[Majors: BSc Chemistry / BSc Computing Mathematics / BSc Physics + Global Research Enrichment and Technopreneurship (GREAT)]



## For elite students who aspire to change the world through science

This Flagship Programme exposes students to the world of new scientific discoveries and innovative technologies, suitable for elites who are interested in pursuing a career in scientific research or starting business ventures. Admitted students will study a tailored common first-year curriculum under the College of Science. After one year of study, they can freely choose their specialised GREAT streams offered by our three departments:

- Bachelor of Science in Chemistry (GREAT stream)
- Bachelor of Science in Computing Mathematics (GREAT stream)
- Bachelor of Science in Physics (GREAT stream)

### Highlighted Features of Flagship Programme - GREAT:

- **Inquiry-based** and **research-driven** learning
- **Mentorship** by world-renowned professors and experienced industrialists
- Integrating curriculum with **entrepreneurship** and **business planning**
- **Overseas** academic and research **exchange**
- **Research internship** at **world-renowned universities**
- **Internship** at technological start-ups
- **Guaranteed admission** to the respective PhD programme in Science (upon attainment of entrance requirements) for local students
- **Flagship Scholarships** available for local entrants

The GREAT programme is supported by the **Federation of Hong Kong Industries (FHKI)**, through providing mentorship and internship opportunities.



香港城市大學  
City University of Hong Kong



GREAT students who are eager to start their entrepreneurship journey are highly encouraged to sign up for **HK Tech 300**, a large-scale flagship innovation and entrepreneurship programme organised by CityUHK. Upon successful enrolment, all eligible participants will be sponsored for an 8-week training programme to learn how to kick start their entrepreneurial journey from scratch, develop a business plan and deliver a pitch. Seed funds, angel funds, and external funds (up to HK\$100,000, HK\$1 million and HK\$10 million, respectively) will also be made available to potential start-ups.



JUPAS Code | Non-JUPAS Code  
**JS1200 | 1200**

☎ +852 3442 4567  
✉ [csci.office@cityu.edu.hk](mailto:csci.office@cityu.edu.hk)  
🌐 [www.cityu.edu.hk/csci](http://www.cityu.edu.hk/csci)

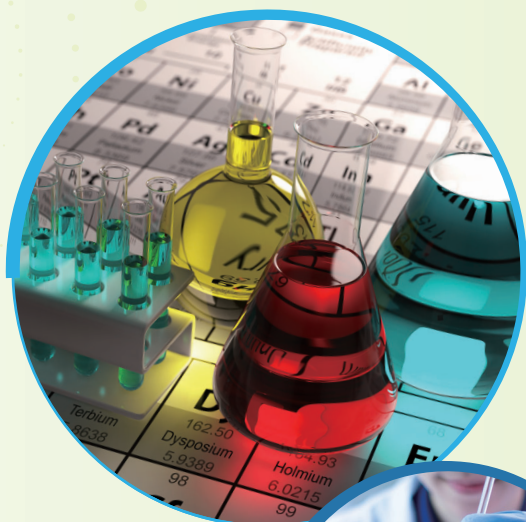
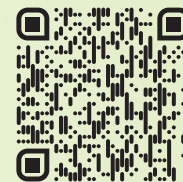


# BSc Chemistry

[Streams: Comprehensive Chemistry / Global Research Enrichment and Technopreneurship (GREAT) / Forensic Chemistry / Cosmetic Chemistry]

## DEPARTMENT OF CHEMISTRY

Best in HK: Performance Rankings of Scientific Papers for World Universities (NTU Rankings) 2024



### Curriculum Highlights:

- **Comprehensive Chemistry stream** is accredited by the UK Royal Society of Chemistry (RSC)
- **Cosmetic Chemistry stream** collaborates with the Hong Kong Society of Cosmetic Chemists
- **Forensic Chemistry stream** provides knowledge and training in crime solving and applied chemistry

### Career Prospects:

Students will acquire subject-specific knowledge and equipped with analytical, numerical, research, communication and problem-solving skills. Students can consider pursuing **further study** or entering **local and regional industrial, commercial, government, education, and research sectors**, for example:

- **Chemistry-related Business**
- **Civil Services**
- **Consultancy & Non-Government Organisations**
- **STEM Education**
- **Quality Control & Product Safety**
- **Testing, Inspection & Certification Services**

The Major provides a firm foundation in chemical sciences on the topics below:

- Analytical Chemistry
- Inorganic Chemistry
- Organic Chemistry
- Physical Chemistry

Joint Bachelor's Degree Programme with **The University of Manchester, UK**

After fulfilling the Joint Bachelor's Degree Programme's requirements, students could be **awarded with two bachelor's degrees** from CityUHK and The University of Manchester, normally within **four years**.

MANCHESTER  
1824

The University of Manchester

### Undergraduate plus Master's Degree Programme:

- Eligible entrants are given an offer into the BSc in Chemistry programme, plus a conditional offer into the self-financing MSc in Chemistry programme.
- Upon successful completion of degree requirements, students would **receive 2 separate degrees: Bachelor of Science in Chemistry and Master of Science in Chemistry**.

JUPAS Code | Non-JUPAS Code  
**JS1202 | 1202**

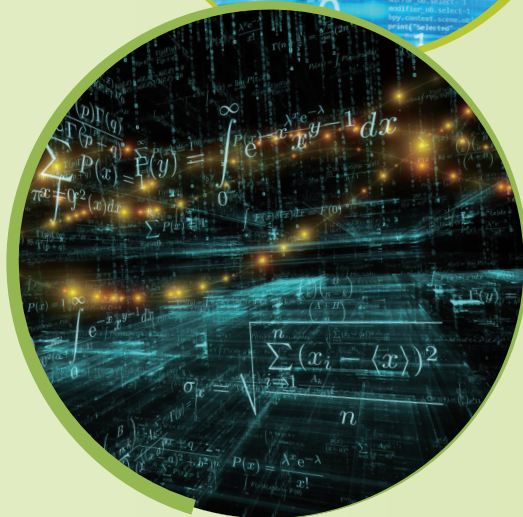
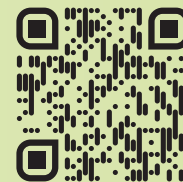
☎ +852 3442 7404  
✉ chem.enquiry@cityu.edu.hk  
🌐 www.cityu.edu.hk/chem

# BSc Computing Mathematics

[Streams: Enriched Mathematics / Financial Mathematics / Global Research Enrichment and Technopreneurship (GREAT)]

## DEPARTMENT OF MATHEMATICS

Ranks 2nd in HK: Performance Rankings of Scientific Papers for World Universities (NTU Rankings) 2024



### Curriculum Highlights:

- Nurture graduates in computing mathematics with a strong background of knowledge and skills in **data analysis, mathematical modelling, scientific computing** and technical computer software.
- Provides training in the ability to **think quantitatively and analyse problems critically**.
- Emphasises the balance between theories and their applications to practical problems, with a special focus on **applied mathematics linked to computational aspects**.
- The major provides **internship opportunities** in local firms and overseas universities.

### Career Prospects:

Programme graduates usually secure jobs in the **finance and technological sectors**, and in fields including:

- Business Intelligence Analysis
- Data Analysis
- STEM Education
- Mathematical Modelling
- Quantitative Business Planning
- Scientific Programming

Joint Bachelor's Degree Programmes with

- **Columbia University, USA**
- **The University of Edinburgh, UK**

After fulfilling the Joint Bachelor's Degree Programme's requirements, students could be **awarded with two bachelor's degrees** from CityUHK and a partner university, normally within **four years**.



THE UNIVERSITY  
of EDINBURGH

JUPAS Code | Non-JUPAS Code  
**JS1206 | 1206**

☎ +852 3442 8643  
✉ [mabscm@cityu.edu.hk](mailto:mabscm@cityu.edu.hk)  
🌐 [www.cityu.edu.hk/ma](http://www.cityu.edu.hk/ma)

**CityU**  
**COLUMBIA**

City University of Hong Kong | Columbia University  
Joint Bachelor's Degree Program

# BSc Physics

[Features: Classical Physics / Modern Physics / Experimental and Computational Physics / Medical Physics / Condensed Matter Physics / Global Research Enrichment and Technopreneurship (GREAT)]

## DEPARTMENT OF PHYSICS

### Best in HK: Performance Rankings of Scientific Papers for World Universities (NTU Rankings) 2024



#### Curriculum Highlights:

##### Fundamental Physics

- Classical Mechanics
- Electromagnetism
- Quantum Physics
- Thermodynamics
- Experimental and Mathematical Methods
- Computational Physics

##### Special Topics

- Financial Engineering
- Soft Matter and Biophysics
- Medical Physics
- Optics
- Materials Science / Solid-state Physics

Students may take part in the **frontier research** with world-leading scholars, **industrial internships**, and the **department-based research attachment scheme**, which provides an early exposure to discovery and innovation.

#### Career Prospects:

The programme equips students with logical thinking and problem-solving skills, essential for various career paths. Graduate job opportunities include technical roles in **research and development** across **science, technology, engineering, IT, civil services, product certification and quality assurance, medicine and health care, STEM education sector**, or positions such as:

- **Scientific Research and Technological Development Jobs**
- **Medical Physicists**
- **Financial Analysts**
- **Data Scientists**



#### Joint Bachelor's Degree Programmes with Columbia University, USA

After fulfilling the Joint Bachelor's Degree Programme's requirements, students could be **awarded with two bachelor's degrees** from CityUHK and Columbia University, normally within **four years**.



#### Undergraduate Plus Master's Degree Programme:

- Eligible entrants are given an offer into the BSc in Physics programme, plus a conditional offer into the self-financing MSc in Physics with Data Modelling and Quantum Technologies programme.
- Upon successful completion of degree requirements, students would **receive 2 separate degrees: Bachelor of Science in Physics and Master of Science in Physics with Data Modelling and Quantum Technologies**.

JUPAS Code | Non-JUPAS Code  
**JS1208 | 1208**

☎ +852 3442 7831  
✉ [phy.go@cityu.edu.hk](mailto:phy.go@cityu.edu.hk)  
🌐 [www.cityu.edu.hk/phy](http://www.cityu.edu.hk/phy)

# Global Outreach & Internship Opportunities

## CityUHK X Sino Grand Challenges Scholars Program (GCSP)

The GCSP is a combined curricular and extra-curricular program, endorsed by the National Academy of Engineering (NAE) of the United States in February 2009, to prepare students to be the future engineers and scientists capable of solving the 14 Grand Challenges facing the world in this century. The learning components include participation in research projects, entrepreneurship schemes, interdisciplinary courses, service-learning activities and overseas exchange programme.

## Student Exchange

More than 400 partner institutions at Departmental, College or Institutional level are offering global exchange places for College of Science students, from Asia to Australia and Pacific region, Europe and North America.

## Internship Schemes

College of Science students can gain valuable practical work experience, build professional networks, and prepare for future career by joining the schemes below:

- Co-operative Education Scheme (CES)
- Industrial Attachment Scheme (IAS)
- Overseas Internship Scheme (OIS)
- STEM Internship Scheme



# Admissions Requirements & Scholarships

For more information, please visit the Admission Office's website at <https://www.cityu.edu.hk/admo>

## College of Science, CityUHK

☎ +852 3442 4567  
✉ [csci.office@cityu.edu.hk](mailto:csci.office@cityu.edu.hk)  
🌐 [www.cityu.edu.hk/csci](http://www.cityu.edu.hk/csci)

📍 G5351, Green Zone,  
5/F, Yeung Kin Man Academic Building,  
City University of Hong Kong,  
Tat Chee Avenue, Kowloon, Hong Kong SAR

Follow us on:

