City University of Hong Kong Summer Research Internship Programme 2026 (in-person)

Programme Overview

City University of Hong Kong (CityU) Summer Research Internship Programme allows students to have a hands-on experience in conducting scientific research related to their field of study. It aims to provide students with the opportunity to conduct a research project to widen their horizons and apply their knowledge practically. Cultural activities and industrial visits will be organised to give participants a brief understanding of industrial establishments in Hong Kong, as well as have a taste of Chinese culture.

Requirements

Refer to CityU's Inbound Summer Exchange Programme page for more information on the programme.

The list of projects available can be found at the end of this document.

Location

This programme takes place in Hong Kong.

Dates

15 June – 7 August 2026 (8 weeks)

Credit Transfer

This programme may be mapped to a 4-unit UROPS course code or a 4-unit department dummy exchange course code (counting towards unrestricted electives).

Refer to the course mapping instructions (with effect from AY26/27) and credit transfer policy (with effect from AY26/27) found on the FoS SEP website for information on course mapping and credit transfer. Do note that there is an exception for Overseas Summer UROPS regarding the number of credits that can be transferred.

Additional assessment may be required by the NUS department for transferring of credits. Not all UROPS course code can be counted towards major requirements. Please check which graduation requirement the UROPS will count towards and if you are unsure, please check with your department.

Students can transfer a total of 12 units from a maximum of 2 overseas summer/winter programmes without having to pay NUS tuition fee during their course of study. Any additional units mapped will be subjected to NUS Special Term fees.

Eligibility Criteria

NUS students must:

- Be a full-time Faculty of Science student, with a primary major in science
- Have a clean disciplinary record
- Have completed 2 – 6 semesters in NUS by the start of the programme (i.e. current Year 1, Year 2 and Year 3 students)
- Have a minimum GPA of 3.0
- Not be intending to graduate at the end of AY2025/2026 Semester 2
- Not be called up for National Service during the programme dates. A deferment letter will not be provided.

An internal offer does not guarantee your placement in the programme. Your admission outcome is at the discretion of the partner institution.

Number of Places

There are 4 places available.

Programme Cost

Students do not need to pay NUS Special Term fees or tuition fees to CityU if they do not exceed the credit transfer limit stated under the section "Credit Transfer" above. However, students are responsible for their own airfare, accommodation, meals, personal expenses, etc.

Estimated cost (*Please note that the figures provided are only estimates*)

Item	Cost
Return Airfare	SGD400
Accommodation	SGD1,500
Food, Transportation and other Expenses	SGD1,500

Please visit the SRO website for further information regarding on-campus lodging. On-campus residence will be arranged for successful applicants, subject to availability of hostel places.

Financial Assistance

The financial aid available for this programme are the NASA Enhancement Bursary, the Science Student Overseas Exposure Fund (SSOEF), and the Opportunity Enhancement Grant (OEG). Students may also apply for the Overseas Student Programme (OSP) Loan. Refer to the respective links for more information.

Please note that application for NASA Enhancement Bursary should be done through EduRec, as mentioned in the page linked above. Do not apply for NASA Enhancement Bursary through the application form linked in the FoS Financial Assistance Schemes page.

Programme Application Procedure and Deadline

Login to EduRec and submit your application under External Study Type "Research Attachment/Internship/ Industrial Attachment", External Study Setup ID: **03599**. Please refer to the Guide for Student Programme Application before starting your application.

Application Deadline: **Tuesday, 16 December 2025, 11:59pm Singapore Time**

Documents required (upload into your online application in EduRec):

1. Latest NUS unofficial transcript
2. Curriculum Vitae – Highlight any prior research experience that you may have to support your application
3. Personal Statement – Indicate 5 project choices in order of preference, including the area of your research interest and why you are interested in the mentioned projects

Note:

- Students who receive an offer from NUS are required to submit a separate application to CityU
- Admission into the programme is at the discretion of CityU
- Allocation of project is done by CityU

If you face difficulties uploading the documents, submit the required documents via SCI UG Queries (category: SAP) by **16 December 2025, 11:59pm Singapore Time**.

Applications would be **deemed incomplete if the required documents are incomplete or not submitted** by the stipulated deadline, and therefore disqualified from the application.

To be fair to students who abide by the deadline, incomplete or late application will strictly not be considered.

Insurance

All students travelling overseas for activities or purposes approved, endorsed, organised, sponsored or authorised by NUS will be covered by the NUS Student Travel Insurance Policy. Click here for more information.

Exclusions to the NUS Student Travel Insurance may apply. Students are to ensure that they have sufficient travel insurance coverage and may consider purchasing additional travel insurance if required.

Contact

If you have any questions, please submit your enquiry via SCI UG Queries (category: SAP).

Updated: 5 December 2025

CityUHK College of Science Summer Exchange Programme 2026
Project list

Department	Project Title	Please provide a short description of the project and outline the research objectives	No. of Vacancy	Supervisor information
				Name
Chemistry	Photoredox and Metallaphotoredox Catalysis	Students will be exposed to organic synthesis and homogeneous catalysis based on photoredox and/or metallaphotoredox methods. Students will also learn continuous flow synthesis.	1	Prof. FU Wai Chung Stephen
	Ecological Risks of Organic UV Absorbers to Marine Cetaceans: Bioaccumulation and Trophic Transfer	Organic ultraviolet absorbers (OUVAs), commonly used in consumer and industrial products, are emerging contaminants of global concern. However, their occurrence, fate and ecological impacts in subtropical marine ecosystems like Hong Kong waters remain poorly understood, leading to potentially underestimated risks. This project will systematically examine the pollution levels, trophic transfer dynamics, and ecotoxicological risks of OUVAs in key marine species within the Hong Kong waters. The scientific findings will contribute to proposing regulatory measures for pollution control to conserve the cetacean habitats and fishery in local waters.	1	Prof. RUAN Yuefei Phoebe
	Application of Machine Learning in Computational Chemistry	This project applies machine learning (ML) to accelerate and enhance computational studies of chemical reactions and molecular structures. By integrating data-driven models with established quantum chemistry methods, we aim to obtain faster, more accurate insights into reaction mechanisms, energetics, and molecular geometries, thereby deepening our understanding of chemical behavior and properties.	2	Prof. LAU Kai Chung
	Development of the test kits for the detection of counterfeit drugs	Depending on the counterfeit drug, students will be exposed to organic synthesis and analytical chemistry or development of aptamers and investigation of their binding to the target molecules.	1	Prof. Maria BABAK
	Development of novel anticancer drugs for the treatment of "undruggable" cancers	This project involves either the synthesis of anticancer drug candidates or their testing in cancer cell culture and investigation of their mechanism of action.	2	Prof. Maria BABAK
	Development of the novel database for the AI prediction of anticancer drugs	This project is the most flexible and can be done both from the lab or from home and requires the preparation of the scientific database and subsequent AI prediction of the properties of anticancer drugs. Coding skills are preferred but not necessary.	1	Prof. Maria BABAK
Mathematics	Neural Networks for solving partial differential equations	Neural networks, particularly deep learning models, are increasingly being utilized to solve partial differential equations (PDEs) by approximating the solution functions that satisfy the equations. These data-driven approaches, such as Physics-Informed Neural Networks (PINNs), incorporate the PDEs directly into the network's loss function, enabling the network to learn the relationship between inputs (like spatial coordinates and time) and outputs (the dependent variables) while respecting the underlying physical laws. The major objective is to explore neural network to solve fluid flow equations and understand the underlying mechanisms."	1	Prof. Lina Zhao
	Modeling Immune Responses Against HPV Infection and Cervical Cancer	We will develop a mathematical model to study HPV infection with immune responses. This model will serve as a powerful tool for predicting disease progression, guiding drug development, and informing personalized therapeutic strategies. Stochastic analysis and numerical methods will be applied to analyze the model.	1	Prof. LO Wing Cheong
	Scientific Computing and Machine Learning	The student is expected to study how to use the flow-based models like normalizing flow, score-based diffusion models, to solve scientific computing problem related to stochastic models. The second choice is to understand the transformer architecture using interactive particle dynamics.	2	Prof. ZHOU Xiang
	Elliptic equations with oblique derivative boundary conditions	Oblique boundary condition is a typical boundary condition for elliptic PDEs, which generalizes the Neumann condition by prescribing a directional derivative that is transversal to the boundary but not purely normal. This small twist breaks reflection tricks and leads to rich boundary phenomena. Beyond their mathematical elegance, oblique conditions model reflected diffusions in probability (e.g., reflected Brownian motion) and appear in physics problems like gas dynamics. In this project, the student will gain a taste of elliptic regularity in the oblique setting ---maximum principles, barrier ideas, and how boundary geometry shapes solutions. Depending on the student's interests, we can explore applications in probability or physics, or dive deeper into PDE theory. Ideal for students considering further study in analysis and PDE.	1	Prof. Zongyuan Li

	Convex relaxation for Gibbs sampling	Gibbs sampling is a Markov Chain Monte Carlo (MCMC) technique used to approximate complex, high-dimensional probability distributions, often over discrete variables (e.g., spins in the Ising model, labels in a Potts model, bits in a latent factor model). The fundamental challenge is the combinatorial explosion of the state space. Gibbs sampling tackles this by iteratively sampling each variable conditioned on its neighbors. However, it can suffer from slow mixing and high variance. This project aims to transform Gibbs sampling into semidefinite programs to overcome the above issues and develop solvers that are fast and provably convergent.	1	Prof. Bowen Li
	Neural Networks for solving multiscale partial differential equations	This project develops neural network–based frameworks for efficiently solving multiscale partial differential equations (PDEs) with heterogeneous and high-contrast features. By combining multiscale modeling principles with physics-informed and operator-learning techniques, the goal is to capture fine-scale effects within a reduced computational setting while maintaining physical accuracy.	1	Prof. Wing Tat Leung
Physics	Manipulate small particles by using Star Trek inspired tractor beams	In the popular Star Trek movies, the starship can emit a beam to attract objects from a distance. A similar phenomenon has been realized by physicists in the microscopic scale with laser beams. In this project, we will theoretically and computationally investigate what types of microscopic particles can be manipulated by optical tractor beams and how to achieve a strong pulling force on the particles.	2	Prof WANG Shubo
	Mapping the Landscape of Self-Interacting Dark Matter	Build the first coherent, citable synthesis of constraints on self-interacting dark matter (SIDM) since its proposal in 2000, covering both velocity-dependent elastic SIDM and dissipative SIDM. Produce an open database and a plotting tool that researchers can use to query, compare, and visualize bounds across velocity scales (dwarf, Milky Way, galaxy clusters) and astrophysical probes (lensing, halo shapes, clustering, and merging clusters).	1	Prof ZHONG Yiming
	Single-molecule conductance study by the scanning tunneling microscope-based break junction technique	The student will (1) learn how to run experiments in STM break junction setups, (2) learn the basic theory of charge transport through single-molecule devices, and (3) measure the conductance of a few organic molecules and study the mechanism.	1	Prof LI Haixing



香港城市大學
City University of Hong Kong

SUMMER EXCHANGE PROGRAMME 2026

15 JUNE - 7 AUGUST 2026

Looking for an overseas learning experience blended with research internship?
City University of Hong Kong is the right place for you!

APPLICATION DEADLINE: 15 February 2026


RESEARCH EXPERIENCE


INDUSTRIAL VISITS


CULTURAL ACTIVITIES

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