

# GRADUATE DIVISION OF EARTH & ATMOSPHERIC SCIENCES 地球與大氣科學學部

**Earth and Atmospheric Sciences** is a scientific discipline of critical importance for tackling various major challenges of global and regional concerns in the 21<sup>st</sup> century in relation to the evolution of the Earth system, including global environmental and climate change, exploration of natural and energy resources, hazard reduction, and sustainable development. The Chinese University of Hong Kong offers a graduate programme on Earth & Atmospheric Sciences (EASC) at both M.Phil. and Ph.D. levels. EASC is the only interdisciplinary graduate programme in the region that focuses on critical facets of the basic and applied sciences of the lithosphere, atmosphere, hydrosphere, biosphere, and the interaction between them. Research interests of its dynamic faculty span the whole spectrum of Earth system science. The graduate programme aims to educate and mentor outstanding young scientists for careers in academia, government, and the private sector.

# **Courses (selected)**

Geomorphology	Research Frontiers in Earth & Atmospheric Sciences	
Geophysics	Boundary Layer Meteorology and Land-Atmosphere Interaction	
Geodynamics	Tropical Meteorology	
Aerosol Physics and Chemistry	Statistical Methods and Data Analysis	
Atmospheric Dynamics	Numerical Methods and Modelling	
Global Environmental Change	Remote Sensing – Principles and Applications	
Petrology	Volcanology	

## **Study Period**

Degree	Normative Study Period Full-time (only)	Course Work	Thesis Research
MPhil	24 months	12 units	6 units each term
Ph.D.*	48 months	12 units	6 units each term during pre-candidacy period and 12 units each term during post-candidacy period

\*36 months for student with a research MPhil degree or other research master's degree awarded by Hong Kong UGC-funded institutions.

## Fees & Financial Supports

Annual tuition fee	HKD42,100 (Full-time MPhil-PhD)		
Postgraduate studentship for	HKD18,025 per month		
MPhil-PhD students			
The Hong Kong PhD Fellowship	HKD27,600 per month + Conference Travel Allowance HKD13,800 per year		
Scheme (HKPFS)			

Application Deadlines

Hong Kong PhD Fellowship Scheme Early December

Regular MPhil-PhD admission Late January

## Summer Workshop

EASC organizes workshop in every summer which is open to all potential applicants to our MPhil / PhD programme. We welcome undergraduate students in their last year of study or master students to apply. We will announce application details on our website in spring.

The above information is for reference only. Please contact CUHK Graduate School (Website: https://www.gs.cuhk.edu.hk; gradschool@cuhk.edu.hk) for up-to-date details.



Prof. Man Nin CHAN 陳文年 Ph.D., Environmental Science and Engineering, California Institute of Technology **Research Fields** • Aerosol physics and chemistry • Chemical ageing of organic aerosol Email mnchan@cuhk.edu.hk

- Multiphase, heterogeneous oxidative chemistry and kinetics
- Ambient pressure soft ionization (Direct Analysis in Real Time, DART)



Prof. Alex Tat-Shing CHOW 周達誠 Ph.D., Hydrologic Science, University of California, Davis **Research Fields**  Carbon-Neutral Water System • Environmental Organic Chemistry Email achow@cuhk.edu.hk Prof. Lin LIU 劉琳

 Chemical Hydrology Watershed Biogeochemistry Ph.D., Geophysics, University of Colorado at Boulder **Research Fields**  Cryosphere geophysics Geodesv and near surface geophysics • Remote sensing: Deep Learning applications in Earth system science Email liulin@cuhk.edu.hk



#### Prof. Amos P. K. TAI 戴沛權 Ph.D., Engineering Sciences (Environmental Science and Engineering), Harvard University **Research Fields** • Air pollution, climate change and land use change • Atmosphere chemistry and physics • Interactions between climate, ecosystems, and atmospheric composition

• Impacts of global environmental change on public health, agriculture and poverty Email amostai@cuhk.edu.hk



Prof. Francis C Y TAM 譚志勇 Ph.D., Atmospheric and Oceanic Sciences, Princeton University **Research Fields** • Climate dynamics, tropical meteorology • Impact of climate change Email Francis.Tam@cuhk.edu.hk

• Subduction zone dynamics and megathrust earthquakes

• High-resolution imaging of crustal fault zones and subsurface structure

- Seasonal climate prediction
- Statistical and dynamical downscaling
- · Seismic imaging and monitoring with ambient noise
- Machine learning and data science

• Earthquake source mechanics





• Earthquake detection and location Email hyang@cuhk.edu.hk

- Background influences on air quality
- Nutrient and carbon cycles



#### Prof. Benoit THIBODEAU

Prof. Yen Joe TAN 陳衍佐

• Volcanic eruption dynamics

Prof. Hongfeng YANG 楊宏峰 Ph.D., Seismology, Saint Louis University

Email vitan@cuhk.edu.hk

**Research Fields** 

**Research Fields** 

Ph.D., Geophysics, Columbia University

• Induced and triggered earthquakes

Ph.D Environmental Sciences, University of Quebec at Montreal, Canada (GEOTOP) **Research Fields** • Marine Nitrogen Cycle

- Paleoceanography and Paleoclimate
- Wetland Biogeochemistry
- Email benoit.thibodeau@cuhk.edu.hk



#### Prof. Yan ZHAN 詹彦

Ph.D. Geology, University of Illinois at Urbana-Champaign **Research Fields** 

- Data Assimilation in Geoscience
- Dynamics of Magma
- Lithospheric Deformation Email yanzhan@cuhk.edu.hk

- Numerical Modelling of Crustal Processes
- Volcano Geophysics

Interested student please visit EASC website for detailed **Admission Requirements and Application Procedures. Enquiries** Email eas@cuhk.edu.hk Phone (852) 3943 9323

Website http://www.cuhk.edu.hk/sci/eas

