

The University of Hong Kong
Department of Earth Sciences

Continuing Professional Development (CPD) Courses from the MSc in Applied Geosciences

JANUARY TO MAY 2017

GEOS7012 Site investigation and engineering geological techniques (approximately 36 hours) Fees \$10,000 **HKIE**

Taught by Dr RP Martin, Ir Kevin Styles and Ir Philip Chung
(Thursdays 19 January to 27 April 2017, 7:00pm - 9:45pm, 12 meetings)

A professional course on the concepts and skills used in geotechnical site investigation. Topics include the design of site investigations, desk study and walkover survey, aerial photographic interpretation, soil and rock description and classification, ground investigation technology and soil and rock laboratory testing.

GEOS7035 Intermediate geology (approximately 36 hours) Fees \$10,000

Taught by Prof MF Zhou, Dr MC Cheung and Dr Xuran Zuo
(Wednesdays 18 September to 26 April 2017, 7:00pm – 9:45pm, 12 meetings)

The course gives an introduction to mineralogy, petrology and structural geology for non-geologists to prepare them to take course GEOS7033 Geology of Hong Kong.

Pre-requisite: Passed GEOS7010 Geology principles and practice or equivalent

GEOS8001 Hydrogeology (approximately 18 hours) Fees \$5000 **HKIE**

Taught by Prof J Jiao
(Mondays 16 January to 24 April 2017, 7:00pm – 9:45pm, 6 meetings)

To study the role of sub-surface water in engineering and environmental applications. Topics include the hydrologic cycle, properties of aquifers controlling the transmissivity storage and quality of groundwater, quantification of groundwater flow, the field investigation of groundwater and assessment of field parameters and applications of hydrogeology in engineering and environmental studies.

GEOS8206 Mathematics II (approximately 36 hours) Fees \$10,000 **HKIE**

Taught by Dr FL Tsang
(Fridays 16 January to 28 April 2017, 7:00pm – 9:45pm, 12 meetings)

This course is a continuation of GEOS8205 (Mathematics I). The first part of the course aims to teach students different solution methods to first order differential equations (separable, linear, Bernoulli, exact/non-exact types), second order linear differential equations with constant coefficients using characteristic equation, method of variation of parameters, method of educated guess. The second part introduces the concept of probability and statistics, topics include counting, probability (using the language of sets), random variables (including Binomial, Poisson, Exponential, Normal), probability density/distribution functions, cumulative distribution functions, joint distributions, independence, mean, variance, covariance, moment generating functions, sampling and confidence intervals (using Normal/t- distributions).

Pre-requisite: Passed GEOS8205 Mathematics I or equivalent

HKIE Courses approved by HKIE. These are some of the courses which a graduate in Earth Sciences or Geology would need to meet the entry requirements of the Hong Kong Institution of Engineers in the Geotechnical Discipline.

A student must attend at least 80% of the meetings to receive a Certificate of Attendance. A Certificate of Completion is awarded to students who also successfully complete the coursework assessment and pass the examination.

For queries please contact Prof. Andrew Malone awmalone@hku.hk Tel: 2559 2555
or Miss Erica Lee erica25@hku.hk DES General Office Tel: 2857 8247

**Application Form for Enrolment in CPD Courses from the MSc in Applied Geosciences
JANUARY TO MAY 2017**

Apply by 9 January 2017

<u>Courses</u>	<u>credits</u>	<u>Fees</u>
GEOS7012 Site investigation and engineering geological techniques	6 credits	HK\$10,000
GEOS7035 Intermediate geology	6 credits	HK\$10,000
GEOS8001 Hydrogeology	3 credits	HK\$5000
GEOS8206 Mathematics II	6 credits	HK\$10,000

Family Name: _____ Given names: _____

Postal Address: _____

Phone numbers: Day _____ Home/Mobile _____ Fax: _____

Personal email: **ESSENTIAL** _____

Current position: _____ Company: _____

First Degree field of study: _____ Other Degrees _____

Course(s) applied for: _____

Total fees: HK\$ _____

Signature: _____ Date: _____

How did you find out about these CPD courses? _____

Please return a completed application form and your cheque, payable to "*The University of Hong Kong*", to the following address:

**Director, MSc in Applied Geosciences
Department of Earth Sciences
The University of Hong Kong
Pokfulam Road
Hong Kong**

You will be notified by email regarding approval of application and meeting dates and venue.