HKU Summer Institute 2019

Undergraduate Programmes

Course Details	
Course Code	MATH1641
Course Title	Mathematical Laboratory and Modeling
Credit Bearing Programme	6 credits
Course Description	This course introduces elementary mathematical modeling techniques. Also, a powerful and free software Scilab would be taught and used to study models in Physics, Chemistry, Biology, Ecology and Management. Students may need to bring their own notebooks.
Course Outline	In this course, we shall 1. introduce fundamental programming techniques in SciLab, 2. demonstrate how mathematical models are formulated, and 3. how to interpret these models with the help of computer. Some basic techniques in calculus and linear algebra will be covered in due course.
Learning Outcomes	On successful completion of this course, students should be able to: Course Learning Outcomes (CLO) CLO 1 recognize the importance of numerical methods in mathematical modeling CLO 2 demonstrate basic algebraic and arithmetic computations in the Scilab environment CLO 3 write and interpret programs in Scilab programming language CLO 4 solve simple numerical problems by using interactive Scilab commands CLO 5 solve moderately complicated numerical problems by writing Scilab programs
Study Load	36 contact hours + 120 learning hours
Assessments	Assignments / in-class activities (20%), two midterm tests (30%) and one written examination (50%) No supplementary examination will be offered.
Language of Instruction	English

Class Schedule	
Course Period	July 15 - August 2, 2019
Class Day & Time	Monday, Tuesday, Thursday & Friday 09:30 - 12:30 ▪ There would be one more lecture on July 24 or 31 ▪ Examination: August 2, 2019 (Friday)
Venue	The University of Hong Kong

Application	
Target Students	Non HKU Undergraduates, Postgraduate Students
Pre-requisite	High score in NCEE (Gaokao) math or in AP Calculus, or Good grade in IB Math (DP) or in GCE A-level Further/Pure math, or Equivalent. Applicants should provide a list of current courses and past exam result sheets or transcripts.
Remarks	Students without Permanent Hong Kong Identity Cards may require visas to study in HKU. For student visa, please visit **Here**. HKU accommodation is also available, with priority given to students not residing in Hong Kong. For details, please visit **Here**.
Online Application	Please visit the **webpage of "MATH1641 Mathematical Laboratory and Modeling"** for **Online Application**.
Course Fee	HK$13,500
Discount	10% off for students from HKU exchange partners
Early Bird Offer	Apply on or before February 28, 2019: 5% discount on course fee; Priority in social & cultural activities registration (the early bird offer is not valid in conjunction with other discounts)
Deadline for Application	March 31, 2019 (The course is FULL. For students who are interested in taking the course, we welcome your early application in 2020 summer. Thank you for your attention.)

Enquiries

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