



## Module Descriptor

**Code:** COIS61184

**Version:** -

**Approval Status:** N/A

**Title:** KNOWLEDGE DISCOVERY AND DATA MINING

**Section:** School of Computing and Digital Technologies

**Level:** 6

Contact	E-mail Address	VLE
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### Pattern Of Delivery

Contact Hours	Independent Study Hours	Total Learning Hours
24	126	150

Description of Pattern of Delivery
Occurrence A, Stafford Campus, UG Semester 1
Occurrence A, Stoke Campus, UG Semester 1
Occurrence B, City University of Hong Kong, UG Semester 3
Occurrence B, City University of Hong Kong, UG Semester 3
Occurrence B, City University of Hong Kong, UG Semester 3

Credits
15

Site
City University of Hong Kong
Stafford Campus
Stoke Campus

Assessment
ASSIGNMENT (3000 WORDS APPROX) weighted at 100%.

Registration Conditions	Module Version Condition Text
None	

Module Details	
ADDITIONAL ASSESSMENT DETAILS	An Assignment length 3000 words weighted at 100%. (Learning outcomes 1 to 4)
INDICATIVE CONTENT	Knowledge discovery and data mining in context. Data mining primitives, languages and system architecture. Data mining methodology and algorithms. Text mining algorithms and Information extraction systems. Data mining and data privacy. Social impact and ethical issues
LEARNING STRATEGIES	12 lecture hours and 12 tutorial hours
PROSPECTUS INFORMATION	You will be introduced to the fundamental concepts of knowledge discovery and to current algorithms and techniques available to extract knowledge and identify patterns from raw data in the context of knowledge management.
TEXTS	Data Mining : A Knowledge Discovery Approach, K. Cios, W. Pedrycz, R. Swiniarski, L. Kurgan, : 2007., Springer, ISBN: 978-0-387-33333-5  Data Mining : Concepts and Techniques Jiawei Han, Micheline Kamber, , 2006, Morgan Kaufmann, ISBN 1558609016

	Making Sense of Data: A Practical Guide to Exploratory Data Analysis and Data Mining, Glenn J. Myatt,:2006 , John Wiley, ISBN: 0-470-07471-0
LEARNING OUTCOMES	1) DEMONSTRATE SYSTEMATIC UNDERSTANDING OF THE FIELD OF KNOWLEDGE DISCOVERY, DATA MINING CONCEPTS AND METHODOLOGIES, IN ORDER TO CRITICALLY IDENTIFY THE MOST SUITABLE DATA MODELLING FOR SOLVING SPECIFIC PROBLEMS IN THE CONTEXT OF KNOWLEDGE MANAGEMENT. (Knowledge and Understanding). 2) CRITICALLY INVESTIGATE AND IDENTIFY THE BUSINESS REQUIREMENTS AND DEVELOP A MODEL FOR DATA MINING APPLICATION. (Application) 3) SELECT THE MOST SUITABLE DATA MINING TECHNIQUES FOR SOLVING SPECIFIC PROBLEMS AND TO CRITICALLY EVALUATE THEIR STRENGTHS AND LIMITATIONS. (Problem Solving) 4) CRITICALLY ANALYSE THE SOCIETAL IMPACTS AND ETHICAL ISSUES ASSOCIATED WITH DATA MINING. (Analysis)

<b>Learning Outcome</b>
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