

**UNIVERSITI TEKNOLOGI MARA****LAS618: GEOGRAPHICAL INFORMATION SYSTEM IN LANDSCAPE ARCHITECTURE**

Course Name (English)	GEOGRAPHICAL INFORMATION SYSTEM IN LANDSCAPE ARCHITECTURE APPROVED	
Course Code	LAS618	
MQF Credit	4	
Course Description	The course is designed as a 'training ground' to deal with the information science and technology used as a decision-making tool in real world practice of landscape architecture and exploit GIS as a tool to manage limited landscape resources vis-à-vis modern land development. It provides the theoretical and practical knowledge required to begin solving spatial problems and strategizing landscape resource optimization using desktop Geographic Information Systems. The content of the course is structured into landscape planning database design, formulating GIS Model Data for landscape resource optimization program, and testing model system on a study site. Among the highlights of the course is to expose GIS as a tool to provide information quickly and efficiently, to model different landscape planning scenarios and to evaluate a range of alternatives to facilitate decision making process.	
Transferable Skills	Demonstrate professional skills, knowledge and competencies.	
Teaching Methodologies	Lectures, Lab Work, Tutorial	
CLO	CLO1 Examine the concepts and tools of GIS to facilitate the analysis, assessment, and evaluation of resources in landscape planning process. CLO2 Manipulate GIS tools and technologies to enhance spatial thinking in landscape planning. CLO3 Explain the basic technical and analytical skills in using desktop applications in landscape resource, land use, and spatial planning.	
Pre-Requisite Courses	No course recommendations	
Reading List	Recommended Text	<ul style="list-style-type: none">• Stephen Wise 2016, <i>GIS Fundamentals, Second Edition</i>, 2nd Edition Ed., CRC Press [ISBN: 1498785654]• Peter A. Burrough, Rachael McDonnell, Rachael A. McDonnell, Christopher D. Lloyd 2015, <i>Principles of Geographical Information Systems</i>, 3rd Edition Ed., Oxford University Press [ISBN: 0198742843]• Kang-tsung Chang 2015, <i>Introduction to Geographic Information Systems</i>, 8th Edition Ed., McGraw-Hill Education New York, United States [ISBN: 0078095131]• D. Ian Heywood, Ian Heywood, Sarah Cornelius, Steve Carver 2012, <i>An Introduction to Geographical Information Systems</i>, 4th Edition Ed., Pearson Education Limited Harlow, United Kingdom [ISBN: 027372259]• Michael N. DeMers 2009, <i>Fundamentals of Geographical Information Systems</i>, 4th Edition Ed., John Wiley & Sons Incorporated [ISBN: 9780470129067]
	Reference Book Resources	<ul style="list-style-type: none">• Davis, Bruce E. 2001, <i>GIS: A Visual Approach</i>, Second Edition Ed., World Press, Thomson New York• Karen C. Hanna, R. Brian Culpepper 1998, <i>GIS and Site Design</i>, John Wiley & Sons [ISBN: 0471163872]• Karen Calhoon Hanna 1999, <i>GIS for Landscape Architects</i>, Volume 1 Ed., Esri Press [ISBN: 1879102641]

Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources