

**SUMMARY OF INFORMATION ON EACH COURSE**

1.	Name of Course	Web Techniques and Applications
2.	Course Code	TWT 2231
3.	Status of Course [Applies to (cohort) ]	Specialisation Core for B.IT Security Technology
4.	MQF Level/Stage  Note : <i>Certificate – MQF Level 3</i> <i>Diploma – MQF Level 4</i> <i>Bachelor – MQF Level 6</i> <i>Masters – MQF Level 7</i> <i>Doctoral – MQF Level 8</i>	Bachelor – MQF Level 6
5.	Version (State the date of the Senate approval – history of previous and current approval date)	Date of previous version : -  Date of current version : June 2014
6.	Pre-Requisite	None
7.	Name(s) of academic/teaching staff	Dr. Md. Shohel Sayeed  Chong Lee Ying Dr. Pang Ying Han
8.	Semester and Year offered	Trimester 2, Year 2
9.	Objective of the course in the programme : This course is an introduction to Web-based programming. Topics include HTML, XHTML, DHTML, XML, CSS, JavaScript, PHP, Servlet, JSP, ASP.NET, Perl, MySQL, Ruby on Rails, and Ajax. The students will	

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	learn the basic concepts of WWW client-server communications and the skill to use the above tool to create Web applications									
10.	<p>Justification for including the course in the programme :</p> <p>This course covers introduction to the World Wide Web, Web software, connections and hardware, introduction to Web programming and scripting, Website maintenance and Web applications.</p>									
11.	Course Learning Outcomes :						Domain	Level		
	LO1	Identify the principles for effective Web page design				Cognitive		4		
	LO2	Compare Web programming languages				Cognitive		6		
	LO3	Develop Web-based applications for different purposes such as e- commerce				Cognitive		5		
	LO4	Analyse the problems and solutions to web applications				Cognitive		4		
12.	Mapping of Learning Outcomes to Programme Outcomes :									
	Learning Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
	LO1	X	X							
	LO2	X	X					X	X	
	LO3	X	X	X				X	X	
	LO4	X	X	X				X	X	
13.	Assessment Methods and Types :									

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Method and Type		Description/Details			Percentage
Assignment		Written report, group project, with teamwork scores, presentation			30%
Test		Written examination			20%
Final Examination		Written examination			50%
14.	Mapping of assessment components to learning outcomes (LOs)				
	Assessment Components	LO1	LO2	LO3	LO4
	Assignment	30	30	100	30
	Test	20	20		20
	Final Examination	50	50		50
15.	Details of Course				
Topics		Mode of Delivery (eg : Lecture, Tutorial, Workshop, Seminar, etc.) Indicate allocation of SLT (lecture, tutorial, lab) for each subtopic			
		Lecture	Lab		
1.	<b>Introduction to the World Wide Web</b> The Internet, The Transmission Control Protocol, The Hypertext Transfer Protocol, Hypertext, Client-Server environment: Browsers and Web Servers, Uniform Resource Locators, Web Navigation, Net Information	4	2		

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	Space Searching		
2.	<b>Web Software, Connections, and Hardware</b> Internet Service Providers, Types of Internet Connections, Intranets & Extranets, Browsers: Netscape Communicator, Internet Explorer, Browser Plug-Ins, Helper Applications, Web Authoring Tools, Internet Hardware Requirements.	8	4
3.	<b>Introduction to Web Programming and Scripting</b> Introduction to Hypertext Mark-up Language, HTML Standards, HTML Extensions, Types of Web Pages, Webpage Basics: HTML Tags, Text and Information, Links, Lists, Tables, Multimedia: Graphics, Audio, Video, Enhanced Features: Image Maps, Counters, User Interaction: Forms, CGI, PERL, Java, Design Considerations, Dynamic Web Pages, Active Server Page, XML, WML, WAP-enabled databases, Webpage Design Tools.	8	6
4.	<b>Website Maintenance</b> Designing and Managing Websites, Connecting to the Web Provider, Publishing Web Pages, Website Maintenance Tools, Factors Affecting Website Performance, Interfacing with Other Information Servers, Internet and WWW Standardization Activities, Guidelines for the Evaluation of New Technologies, Strategies for Integrating New Technologies in a Web Environment.	4	4
5.	<b>Web Applications</b> Transactions through the Web, Web Portals: Internet Marketing Basics; Developing and Integrating Internet	4	4

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	Communication Strategy; Creative Strategies, Business Models, Online Databases, VRML, Security and Legal Considerations, Future Trends.		
	<b>Total</b>	<b>28</b>	<b>20</b>
15.	Total Student Learning Time (SLT)	Face to Face / Guided Learning	Independent Learning
	Lecture	28	28
	Tutorials		
	Laboratory/Practical	20	10
	Presentation	1	3
	Assignment		10
	Mid Term Test	1	3
	Final Exam	2	14
	Final Exam	2	15
	Sub Total	52	68
	Total SLT	<b>120</b>	
	Credit Value	<b>120/40 = 3</b>	
	16.	Reading Materials :	
Textbooks			
1. Deitel, Deitel, Nieto, (2011). Internet & World Wide Web, How to Program, 5 <sup>th</sup> Edition, Prentice Hall.			
Reference Material (including 'Statutes' for Law)			
1. Duckett, J. (2011). HTML and CSS: Design and Build Websites: Wiley. com.			
2. Jackson, J. C. (2006). Web Technologies: a computer science perspective: Prentice-Hall, Inc.			
3. Nixon, R. (2012). Learning PHP, MySQL, JavaScript, and CSS: A Step-by-Step Guide to Creating Dynamic Websites: O'Reilly Media.			

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4. Powers, D. (2010). PHP Solutions: Dynamic Web Design Made Easy: Apress.
5. Scobev, P. (2012). Web programming and Internet technologies: An E-commerce approach: Jones & Bartlett Publishers..

Appendix (to be compiled when submitting the complete syllabus for the programme) :

1. Mission and Vision of the University and Faculty
2. Programme Objectives or Programme Educational Objectives
3. Programme Outcomes (POs)
4. Mapping of POs to the 8 MQF domain
5. Summary of the Bloom's Taxonomy's Domain Coverage in all the Los in the format below :

Subject	Learning Outcomes (please state the learning Outcomes)	Bloom's Taxonomy Domain		
		Affective	Cognitive	Psychomotor
ABC1234	Learning Outcome 1			
	Learning Outcome 2			
	Learning Outcome 3			
	Learning Outcome 4			
DEF5678	Learning Outcome 1			
	Learning Outcome 2			
	Learning Outcome 3			
	Learning Outcome 4			

6. Summary of LO to PO measurement
7. Measurement and Tabulation of result for LO achievement
8. Measurement Tabulation of result for PO achievement