

QF01/0408-4.0E	Course Plan for Bachelor program - Study Plan Development and Updating Procedures/ Artificial Intelligence Department
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Study plan No.	2021/2022	University Specialization		Cybersecurity
Course No.	0125220	Course name		Internet Application Programming
Credit Hours	3 hours	Prerequisite Co-requisite		Principles of Programming
Course type	<input type="checkbox"/> MANDATORY UNIVERSITY REQUIREMENT	<input type="checkbox"/> UNIVERSITY ELECTIVE REQUIREMENTS	<input type="checkbox"/> FACULTY MANDATORY REQUIREMENT	<input type="checkbox"/> Support course family requirements
Teaching style	<input type="checkbox"/> Full online learning	<input type="checkbox"/> Blended learning	<input checked="" type="checkbox"/> Traditional learning	<input type="checkbox"/> Elective requirements
Teaching model	<input type="checkbox"/> 2 Synchronous: 1 asynchronous	<input type="checkbox"/> 2 face to face : 1 synchronous	<input checked="" type="checkbox"/> 3 Traditional	

Faculty member and study divisions' information (to be filled in each semester by the subject instructor)

Name	Academic rank	Office No.	Phone No.	E-mail	
To be filled by the instructor					
Division number	Time	Place	Number of students	Teaching style	Approved model
To be filled by the instructor					

Brief description

This course provides the students with important components of HTML5, teaching students how to add images, hyperlinks, lists, video, audio and forms to web pages. Further, this course provides an overview of CSS3 and JavaScript, which facilitate disciplined approach to designing computer programs that enhance the functionality and appearance of Web pages.

Learning resources

Course book information (Title, author, date of issue, publisher ... etc)	H. Deitel, P. Deitel and T. Nieto: "INTERNET & World Wide Web How To Program", Prentice Hall 5 th edition (2011)				
Supportive learning resources (Books, databases, periodicals, software, applications, others)	<ol style="list-style-type: none"> Ben Frain, Responsive Web Design with HTML5 and CSS3, Packt Publishing - ebooks Account; 2 edition (September 1, 2015) Terry Felke-Morris, Web Development and Design Foundations with HTML5, Pearson; 6 edition (February 27, 2012) Jon Duckett, JavaScript and JQuery: Interactive Front-End Web Development, Wiley; 1 edition (June 30, 2014) Eric A. Meyer, Estelle Weyl, CSS: The Definitive Guide: Visual Presentation for the Web, O'Reilly Media; 4 edition (November 9, 2017)				
Supporting websites	https://www.w3schools.com/				
The physical environment for teaching	<input checked="" type="checkbox"/> Class room	<input type="checkbox"/> labs	<input type="checkbox"/> Virtual educational platform	<input type="checkbox"/> Others	
Necessary equipment and software	<ul style="list-style-type: none"> Adobe Dreamweaver 2021 Sublime Text 4 				
Supporting people with	-----				

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special needs	
For technical support	-----

Course learning outcomes (S= Skills, C= Competences K= Knowledge,)

No.	Course learning outcomes	The associated program learning output code
Knowledge		
K1	Understanding the evolution of the Internet and the World Wide Web.	MK2
K2	Understanding important components of HTML5 documents.	MK2
K3	Understanding a website's appearance with style sheets.	MK2
K4	Understanding and applying JavaScript programs.	MK2
Skills		
S1	Knowledge of the structure and model of the Web Pages.	MS2
S2	Knowledge the interactive Front-End Web Development.	MS2
S3	Develop Web and Design using HTML5, CSS and JavaScript.	MS2
Competences		
C1	The ability to using the important components of HTML5 documents.	MC1
C2	Applying a style sheet to give all the pages of a website the same look and feel.	MC1
C3	Using JavaScript statements.	MC1

Mechanisms for direct evaluation of learning outcomes

Type of assessment / learning style	Fully electronic learning	Blended learning	Traditional Learning (Theory Learning)	Traditional Learning (Practical Learning)
First exam	0	0	%20	0
Second / midterm exam	%30	%30	%20	30%
Participation / practical applications	0	0	10	30%
Asynchronous interactive activities	%30	%30	0	0
final exam	%40	%40	%50	40%

Note: Asynchronous interactive activities are activities, tasks, projects, assignments, research, studies, projects, and work within student groups ... etc, which the student carries out on his own, through the virtual platform without a direct encounter with the subject teacher.

Schedule of simultaneous / face-to-face encounters and their topics

Week	Subject	learning style*	Reference **
1	<ul style="list-style-type: none"> ● Introduction to Internet ● Introduction to HTML5 <ul style="list-style-type: none"> – Introduction – Editing HTML5 – First HTML5 Example – Headings – Linking – Images – Alt Attribute – Using Images as Hyperlinks 	Lectures	37 - 49

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	– Special Characters and Horizontal Rules		
2	<ul style="list-style-type: none"> – Video – Audio – Lists – Tables part 1 – Exercises 	Lectures	51-54
3	<ul style="list-style-type: none"> – Tables part 2 – Forms 	Lectures	58-69
4	<ul style="list-style-type: none"> – New HTML5 Form Input Types – Input and Data list Elements and Autocomplete Attribute 	Lectures	77-87 87-90
5	<ul style="list-style-type: none"> ● Page-Structure Elements – Header Element – Nav Element – Summary Element and Details Element – Text Mark Element – Div Element 	Lectures	90 - 98
6	<ul style="list-style-type: none"> ● Introduction to Cascading Style Sheets (CSS): – Introduction – Inline Styles – Embedded Style Sheets – Conflicting Styles – Linking External Style Sheets – Positioning Elements: Absolute Positioning, Z-Index – Positioning Elements: Relative Positioning, Span – Backgrounds – Element Dimensions 	Lectures	106-122
7	<ul style="list-style-type: none"> – Box Model and Text Flow – Media Types and Media Queries – Drop-Down Menus – Text Shadows – Rounded Corners – Color – Box Shadows <p>Midterm Exam (30%)</p>	Lectures	123 - 145
8	<ul style="list-style-type: none"> ● JavaScript: Introduction to Scripting – Introduction – Your First Script: Displaying A Line of Text with Javascript in A Web Page – Modifying Your First Script – Obtaining User Input With Prompt Dialogs 	Lectures	148-177
9	<ul style="list-style-type: none"> – Adding Integers – Arithmetic – Decision Making: Equality and Relational Operators 	Lectures	185-202

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10	<ul style="list-style-type: none"> ● JavaScript: Control Statements <ul style="list-style-type: none"> – Control Statements – If Selection Statement – If...Else Selection Statement While Repetition Statement 	Lectures	214-268
11	<ul style="list-style-type: none"> ● JavaScript: Functions <ul style="list-style-type: none"> – Program Modules in Javascript – Function Definitions 	Lectures	
12	<ul style="list-style-type: none"> ● JavaScript: Arrays <ul style="list-style-type: none"> – Declaring and Allocating Arrays – Examples using Arrays – Creating, Initializing and Growing Arrays – Initializing Arrays with Initializer Lists 	Lectures	324 - 347
13	<ul style="list-style-type: none"> ● JavaScript: Objects <ul style="list-style-type: none"> – String Object – Date Object 	Lectures	360 - 377
14	<ul style="list-style-type: none"> ● JavaScript Event Handling <ul style="list-style-type: none"> – Load Event – Event Mouse Move and The Event Object – Rollovers with Mouse over and Mouse out – Form Processing with Focus and Blur – More Form Processing with Submit and reset – Onchange Event – OnClick Event/on Double Click Event ● Introduction to canvas 	Lectures	22 - 436 444
15	<ul style="list-style-type: none"> ● Document Object Model (DOM): ● Objects and Collections <ul style="list-style-type: none"> – Introduction – Modeling A Document: DOM Nodes and Trees – Traversing and Modifying A DOM Tree – DOM Collections – Dynamic Styles – Using A Timer and Dynamic Styles To Create Animated Effects 	Lectures	395 – 413
16	Final Exam		

* Learning styles: Lecture, flipped learning, learning through projects, learning through problem solving, participatory learning ... etc.

** Reference: Pages in a book, database, recorded lecture, content on the e-learning platform, video, website ... etc.