FUTURE UNIVERSITY IN EGYPT جامعة المستقبل

Faculty of Engineering & Technology

Elective 2 \ Computer Applications for Architects 2

Information :

Course Code :	ARC E02	**Level :**	Undergraduate	**Course Hours :**	3.00- Hours

Department : Department of Architectural Engineering

Instructor Information :

Title	Name	Office hours
Lecturer	Marwa Abdelkader Mohamed Elgendey	4
Assistant Lecturer	RANDA MEDHAT HUSSIEN KHALIL MOHAMED	
Teaching Assistant	Kamal Abdeleziz Ali Selim	1
Teaching Assistant	Omar Magdy Ahmed Ibrahim Elbahrawy	

Area Of Study :

Upon successful completion of the course, the student should be able to:
ÅUse computer simple modeling software to visualize architecture projects in 3D digital forms, make 3D animations & 2D rendered graphics by the aid of programs such as ñSketchupò& "Vray".
ÅUse computer rendering programs to produce professional Scenes, renderings, and professional animations by the aid of programs such as ñLUMION 5ò

Description :

3D Computer modeling using Sketchup, Assigning Sketcup materials to masses, Assigning Sketchup lighting properties, Adding components, Assigning shots and saving them, surface rendering in variable "styles", Animations & settings. Using Vray for materials and lighting, Using Vray renderer. Rendering, Animations, and Presentations using LUMION 5 Software.

Course outcomes :

a.Knowledge and Understanding: :	
1 -	a1. Identifying different architectural computer modeling, simulation, rendering, animation, and presentation techniques.
2 -	a2. Identifying different types of lighting and materials.
3 -	a3. Identifying the different uses of 2D & 3D computer interfaces.
b.Intellectual Skills: :	
1 -	b1. Visualizing graphical forms in three dimensions.
2 -	b2. Choosing proper tool for modeling, simulation, rendering, animation, and presenting architectural projects.
3 -	b3. Choosing proper components, lighting features, and materials.
c.Professional and Practical Skills: :	
1 -	c1. Building architectural digital models using sketchup software.
2 -	c2. Preparing 2D, 3D, and rendered drawings and animations.

d.General and Transferable Skills: :	
1 -	d1. Do simple Search for information.
2 -	d2. Manage time to meet deadlines.

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction to Sketchup.	4	2	2
Importing CAD to Sketchup.	4	2	2
Modeling using Sketchup.	16	8	8
Adding Components and Materials.	12	6	6
Animations using Sketchup	4	2	2
Assign Lighting and Rendering via Vray.	4	2	2
Rendering, Animations, and Presentations using LUMION 5 Software.	16	8	8

Teaching And Learning Methodologies :

Lectures.

Lab Work

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignment	20.00		a1 a2 a3 b1 b2 b3 c1 c2 d1 d2
Final exam	40.00		
Midterm	30.00		a1 a2 a3 b1 b2 b3 c1 c2 d1 d2
Participation	10.00		

Recommended books :

Manual of Sketchup 2015, VRay, & Lumion5 Software 2015.
Help Menu of Sketchup 2015, VRay, & Lumion5 Software 2015.

Periodicals :

Web Sites :

www.ASCAAD.com