



**Jordan University of Science and Technology**  
**Faculty of Architecture And Design**  
**Architecture Department**

ARCH204 Computer Aided Design (2)

Summer Semester 2019-2020

**Course Catalog**

3 Credit Hours. Systematically applies CAD systems to the different phases of planning: pre-design, design, & construction documents. Focuses on data exchange between different software, including the extraction of volumetric data and transfer them to spreadsheet and/or database management software, rendering software, post-rendering work in pixel-editing software, animated walk-throughs with motion-supporting software. Presentation and training focuses on advanced AutoCAD, PhotoShop & 3Dmax software, with the intent to develop basic familiarity and proficiency with the digital rendering and multi-media techniques. Highlights motion & animation enhancement to architectural presentations.

**Text Book**

<b>Title</b>	Autodesk Revit 2019 Architecture: Conceptual Design and Visualization (Metric Units)
<b>Author(s)</b>	Ascent - Center for Technical Knowledge
<b>Edition</b>	1st Edition
<b>Short Name</b>	1
<b>Other Information</b>	

**Course References**

Short name	Book name	Author(s)	Edition	Other Information
2	Revit to Unity for Architecture, Visualization, and VR	Logan Smith	1st Edition	
3	Adobe Photoshop Classroom in a Book (2020 release)	Conrad Chavez, Andrew Faulkner	1st Edition	
4	Revit 2020 for Architecture: No Experience Required	Eric Wing,	2nd Edition	
5	Revit Architecture: The Family Editor by	Paul F. Aubin	1st Edition	

**Instructor**

<b>Name</b>	Tamer Al Radaideh
<b>Office Location</b>	-
<b>Office Hours</b>	
<b>Email</b>	tsalradeh@just.edu.jo

**Class Schedule & Room**

Section 1:  
 Lecture Time: Sun, Mon, Tue, Wed : 11:30 - 14:30  
 Room: LAB

**Prerequisites**

Line Number	Course Name	Prerequisite Type
2212010	ARCH201 Computer Aided Design (1)	Prerequisite / Study

**Tentative List of Topics Covered**

Weeks	Topic	References
Week 1	Course policy, syllabus and revision	
Week 2	Revision: 3D modelling	
Week 3	Advanced modelling	From 1
Week 4	Using massing to design building forms, Adaptive components	From 1
Week 5	Refining building maker elements, Applying finishing touches	From 1
Week 5	Family Concepts	From 5
Week 7	Creating parametric relationships	From 5
Week 8	Building complex families	From 5
Week 9	3D visualization and VR	From 2

Week 10	3D visualization and VR	From 2
Week 11	3D visualization and VR	From 2
Week 12	3D visualization and VR	From 2
Week 13	Photoshop	From 3
Week 14	Photoshop	From 3

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Utilize the computer visual media capability that may satisfy students present and future thinking and representation requirements in the domain of architectural education [1B.B4]	20%	
Obtain the ability to design and create a diverse series of architectural interiors and exterior models [1B.B4]	25%	
Exhibit a proficient skill level of correctly creating and mapping textures for 3D environmental models. [1A.A1]	5%	
Display a proficient use and understanding of the rendering modes that make mathematical calculations of reflection and refraction of light in order to produce realistic, superior quality 3D images and animations. [1A.A1]	30%	
Utilize the digital tools to represent the design outcome in a different format [1A.A1]	20%	

Relationship to Program Student Outcomes (Out of 100%)																									
A.A1	A.A2	A.A3	A.A4	A.A5	A.A6	A.A7	A.A8	B.B1	B.B2	B.B3	B.B4	B.B5	B.B6	B.B7	B.B8	B.B9	B.B10	C.C1	C.C2	C.C3	D.D1	D.D2	D.D3	D.D4	D.D5
55											45														

Policy	
Cheating	Cheating is not tolerated and against the university rules. Cheating will result in failing the course and reporting the incidence to the dean of the college of architecture and design.
Submission of Assignments	<ul style="list-style-type: none"> <li>- All work must be submitted on time.</li> <li>- Late submissions will not be accepted and will not be evaluated.</li> <li>- All assignments should be individually developed. There will be no "team" assignments.</li> <li>- Assignments are normally to be submitted before the next course assignment starts.</li> <li>- Each assignment builds on the previous one so, in case of not submitting an assignment on time, it will be the responsibility of the student to catch up and finish the upgraded assignment to be able to continue for the new assignment.</li> </ul>

Date Printed: 2020-09-24