

## Course Information Package

## PLANNING FORM FOR AN EDUCATIONAL MODULE (to be completed by the teacher)

Programme of Studies:	BA in Interior Design
Name of the module:	IND223 COMPUTER AIDED DESIGN II
Target group:	Interior Design students
Level of the unit:	BA – 4 <sup>th</sup> Semester
Entrance requirements:	IND213
Number of ECTS credits:	5 (Average student working time: 125 hours)

Com	Competences to be developed:		
1	To develop further and greater understanding for the use of electronic imaging		
2	To employ IT technologies as vehicle for producing practical work		
3	To experiment with image manipulation and to operate scanning, printing and other output applications		
4	To give a critical framework from which to view, access and evaluate the spread of information technology in relation to art and design		
5	To use the computer as a tool for constructing, developing projects as well as use of the computer on projects in conjunction with other courses through individual guidance		

Estimated student's work time distribution in hours:				
Conduct hours		Student's private time		
Lecture	13	Project work	20	
Studio Work	13	Experimentation	15	
Final Critique	3	Research	10	
Interim Critiques	3	Interim Critiques Preparation	12	
Final Assessments	3	Final Critique Preparation	9	
		Use of External Resources	12	
		Tutorials	12	
Total:	35	Total:	90	

Learning outcomes	Educational activities	Estimated student's work time in hours	Continuous Assessment based on Project work
WEEK 1:	Lecture Attendance	1	Design Intelligence –
- Introduction to project.	Studio Work	1	40%
<ul> <li>SKETCH UP PRO.</li> <li>Presentation of visuals.</li> </ul>	Project work/ Experimentation/ Research	1	
	Interim Critique Preparation	0	Research and
	Final Critique Preparation	0	Methodology – 20%
	Tutorial	1	
WEEK2:	Lecture Attendance	1	Experimentation and
- Interface basics.	Studio Work	1	Analysis – 20%
<ul><li>Adding toolbars.</li><li>Navigating.</li><li>Changing perspective.</li><li>Walking around.</li></ul>	Project work/ Experimentation/ Research	2	
<ul><li>Creating camera views.</li><li>Shading faces and edges.</li></ul>	Interim Critique Preparation	1	Time management
<ul><li>Creating shadows and fog.</li><li>Creating Scenes Setting</li></ul>	Final Critique Preparation	0	and Presentation – 20%
preferences.  - Manipulating Objects.  - Selecting and moving objects.  - Scaling and rotating objects.  - Manipulating faces and edges.  - Advanced selection tools.	Tutorial	1	
WEEK 3:	Lecture Attendance	1	
- Drawing Line tool fundamentals.	Studio work	1	
<ul> <li>Refining objects with the Line tool.</li> <li>Using the Rectangle tool.</li> <li>Pushing and pulling faces into 3D.</li> <li>Creating circles and polygons.</li> </ul>	Project work/ Experimentation/ Research	2	
<ul><li>Creating arcs.</li><li>Using the Offset tool to create</li></ul>	Interim Critique Preparation	1	
outlines Using the Follow Me tool.	Final Critique Preparation	0	
<ul> <li>Softening round edges.</li> <li>Measuring and Labelling.</li> <li>Using the Tape Measure tool.</li> <li>Using the Protractor tool.</li> <li>Creating text labels.</li> <li>Using the Dimension tool.</li> <li>Creating sections.</li> </ul>	Tutorial	1	
WEEK 4:	Lecture Attendance	1	
- Working with Components.	Studio Work	1	
<ul> <li>The Component window.</li> <li>Creating components.</li> <li>Using the 3D Warehouse.</li> <li>Using the Interact tool.</li> <li>Using the Component Options window.</li> </ul>	Project work/ Experimentation/ Research	4	
	Interim Critique Preparation	1	
	Final Critique Preparation	3	
	Tutorial	1	
WEEK 5:	Lecture Attendance	1	
- Organizing Scenes.	Studio Work	1	

- Grouping objects Working with layers Creating layers Using the Outliner.	Project work/ Experimentation/ Research	4
<ul><li>Hiding and unhiding objects.</li><li>Locking and unlocking objects.</li></ul>	Interim Critique Preparation	1
	Final Critique Preparation	0
	Tutorial	1
	Sub-Total:	-

Learning outcomes	Educational activities	Estimated student's work time in hours	Assessment
WEEK 6:	Lecture Attendance	1	
- Creating Textures and Materials.	Studio Work	1	
<ul><li>Applying materials.</li><li>Editing materials.</li><li>Creating materials.</li></ul>	Project work/Experimentation/ Research	4	
<ul><li>Adjusting materials.</li><li>Applying bitmap images.</li></ul>	Interim Critique Preparation	1	
<ul><li>Mapping curved objects.</li><li>Projecting maps on curved</li></ul>	Final Critique Preparation	0	
objects.  Importing floor plans.  Modelling with floor plans.  Rendering and Animating.  Applying styles.  Editing styles.  Outputting 2D bitmaps.  Basic animation.  Advanced animation.	Tutorial	1	
WEEK 7:	Lecture Attendance	1	
- SketchUp Pro: Creating Dynamic	Studio Work	1	
Components.  - Using the Component Attributes window.	Project work/Experimentation/ Research	4	
<ul><li>Exposing component attributes.</li><li>Using math and functions.</li></ul>	Interim Critique Preparation	1	
<ul><li>Creating dynamic materials.</li><li>Creating a dynamic staircase.</li></ul>	Final Critique Preparation	0	
<ul> <li>Creating a dynamic stallcase.</li> <li>Hiding objects dynamically.</li> <li>Configuring staircase rise and run.</li> <li>Adding interactivity: Motion</li> <li>Adding interactivity: Rotation</li> <li>Adding interactivity: Changing colours.</li> <li>Working with the Solid Tools.</li> <li>Creating solids Using Boolean operations (Union, Intersect, Subtract).</li> <li>Working with Trim and Split Creating outer shells.</li> </ul>	Tutorial	1	
WEEK 8:	Lecture Attendance	1	
- Adding interactivity: Motion	Studio Work	1	
<ul> <li>Adding interactivity: Rotation</li> <li>Adding interactivity: Changing colours.</li> </ul>	Project work/Experimentation/ Research	4	
<ul><li>Working with the Solid Tools.</li><li>Creating solids Using Boolean</li></ul>	Interim Critique Preparation	1	
operations (Union, Intersect, Subtract).	Final Critique Preparation	3	
Working with Trim and Split Creating outer shells.	Tutorial	1	
WEEK 9:	Lecture Attendance	1	
- SketchUp Pro: Importing and	Studio Work	1	
Exporting.  - Importing objects from AutoCAD.  - Importing other 3D objects.	Project work/Experimentation/ Research	4	
<ul><li>Exporting objects.</li><li>Exporting objects for rendering.</li></ul>	Interim Critique Preparation	1	
	Final Critique Preparation	0	

	Tutorial	1
	Sub-Total:	-

Learning outcomes	Educational activities	Estimated student's work time in hours	Assessment
WEEK 10:	Lecture Attendance	1	
- Getting Ready to Render with V-Ray.	Studio Work	1	
- Installing V-Ray Locating V-Ray tools and features Lighting the Place Up.	Project work/Experimentation/ Research	4	
- Creating natural daylight with the V-Ray Sun and Sky.	Interim Critique Preparation	1	
,	Final Critique Preparation	0	
	Tutorial	1	
WEEK 11:	Lecture Attendance	1	-
- Using the Omni Light.	Studio Work	1	-
Exploring the Rectangle Light.     Exploring the Spotlight.     Exploring the IES light type.	Project work/Experimentation/ Research	4	
Setting up image-based lighting.     Working with the Physical Camera.	Interim Critique Preparation	1	
Overview of the physical cameras.     Understanding the Exposure	Final Critique Preparation	0	
controls Handling perspective correction Setting up for a depth-of-field effect.	Tutorial	1	
WEEK 12:	Lecture Attendance	1	
- Working with the Physical Camera.	Studio Work	1	
Overview of the physical cameras. Understanding the Exposure controls. Handling perspective correction. Setting up for a depth-of-field effect.	Project work/Experimentation/ Research	4	
	Interim Critique Preparation	1	
	Final Critique Preparation	1	
	Tutorial	1	
WEEK 13: Continuation with workshop	Lecture Attendance	1	
on advanced layer techniques. Importing a layer from another file.	Studio Work	1	
Applying layer styles. Duplicating and clipping a layer. Liquifying a layer.	Project work/Experimentation/ Research	4	
Creating a border layer.	Interim Critique Preparation	1	]
	Final Critique Preparation	3	
	Tutorial	1	
	Sub-Total:	104	
Use of Resources:		0	
Library	Manuals search, research	2	
Hi End Lab	Printing, scanning, Editing	5	
General IT labs	General use, Internet use	3	

Workshops	General use according to project work	0	
Print Resources	Printing, scanning, Editing	2	
Sub-Total:		12	

## **PART B: Complementary Material.**

Language of Instruction:	
English	

Assessment Type		Weights
Interim Critique	Exercises in Class.	33%
Final Critique	Final presentation of the project.	33%
Final Assessments	Final presentation of the project.	34%
	TOTAL	100%

<u>Note:</u> The assessment criteria for Interim/Final Critiques and the Final Assessment are: Design Intelligence 40%, Research and Methodology 20%, Experimentation and Analysis 20%, Time management and Presentation 20%