

**School of Architecture & Interior Design –[ SAID- KTR]  
School of Architecture Environment and Design –[ SEAD- RPM]**

Faculty of engineering and Technology  
SRM Institute of Science and technology

**LESSON PLAN – Studio Course**

**Course Code** : 16AR307  
**Course Title** : COMPUTER STUDIO -I  
**Year & Semester** : V SEM  
**Course time** : Odd Semester (July- Nov 2018)  
**Location** : Architecture Department

**Faculty Details:**

Faculty Name	Designation	Sec.	Campus	Office	Mail Id	Mobile No.
Ms. Monisha.M	Assistant.Prof	A	KTR	Arch Dept.	monish.m@ktr.srmuniv.ac.in	8667063975
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**References:**

1. User manual & tutorials of Google Sketch Up software.
2. Auto CAD reference manual – Autodesk UNC, 1998
3. Auto CAD architectural users guide – Autodesk Inc. 1998
4. Sham Tickoo, Advance Technique in Auto CAD Re.14 – 1977
6. Sham Tickoo, Understanding Auto CAD – 14 (windows) – 1977
5. Photoshop CS Bible – Deke McClelland.
6. Adobe Photoshop 7.0 classroom in a book – Adobe creative team.

**Objectives:**

The prime objective of this course is to introduce the fundamental concepts of computer systems, hardware and software and to develop basic skills in programming, Application of Information Technology tools and technical in Architecture.

**Tentative Assessment Dates**

Midterm Test : As per the Schedule  
Model Examination : As per the Schedule

**Assessment Portions:**

Continuous assessment based on model practicing during work hours.

**Assessment Details**

Portfolio : 50 Marks  
End-Semester Practical Examination : 50 Marks

**Course Outcome**

Exposure to CAD and Photoshop will help students to produce their operation and critical parameters. Presentations for large gatherings, corporate CAD drawings, pictures, 3D images, text etc

## Detailed Session Plan

Units	Class	Topics to be Covered	Reference Text Book referred	Page No
1		<b>AUTOCAD</b>		
	1-4	<b>Syllabus Introduction</b>		1-3
	4-8	Productivity tools in CAD, Workspace, Ribbon, Application Menus, Quick access tool bar, Context Menus etc		4-10
	9-12	Tool palettes and its properties, Drawing status bar, Command line, applications of status bar, etc.		31-40
	13-16	Info center in tool bar, steer wheels, navigation bar and other miscellaneous		45-59
	17-20	Working with objects - using workspace using basic tools commands, Productivity tools in CAD, use of blocks and symbols hatch patterns.		62-78
	21-24	Shortcut keys - tool tips, user guide, help command etc.		80-90
	25-28	Create drawings in workspace - tool catalogue items also be done, import, export cad drawings to other formats		91-94
	29-32	Computer as a design tool: Repetition of forms mirroring, coping, and array etc. calculation of areas, volumes.		95-135
	33-36	Creating and using templates, blocks, and symbols and using them in architectural drawings	Auto CAD architectural users guide - Autodesk Inc. 1998	145-165
	36-40	Cad final project portfolio using all the above efficient command to optimize the drawing efficiency.		165-189
2.		<b>PHOTOSHOP</b>		
	41-44	<b>Introduction to Photoshop-</b> basic commands & tool bar access		1-17
	45-48	Creating and saving images		18-76
	49-52	basic image editing		78-95
	53-56	Photoshop tool box and tools, using layers, special effects.		97-150
	56-60	Project Portfolio final submissions		
		<b>End Semester Practical Exam/Presentation</b>	Photoshop CS Bible - Deke McClelland	

Faculty in-Charge

Ms. Monisha.M

Ms. Ankita Vernekar

Mr. Vignashwar.C

Mr. Narayanan.M

Ms. Thulasi.G

Mr. Naresh Kumar.K.V

HEAD/ S.A.I.D

Prof. CT. Lakshmanan

V.P. Academics/SEAD.

Dr. Devyani Gangopadhyay

Students develop understanding of material properties and construction techniques of industrial buildings. Students gain knowledge on different interior finishes, progressively and to enable them to represent the different building components through relevant drawings.

**REFERENCES:**

1. W.B. Mckay – Building construction Vol. 1 (5<sup>th</sup> edition), Vol. 2 (4<sup>th</sup> edition) and Vol. 3 (5<sup>th</sup> edition)
2. R.Chudley&R.Greeno – Building Construction Handbook, ninth edition
3. Francis D.K.Ching – Building Construction illustrated, 4th edition, 2015
4. R.Chudley&R.Greeno – Building Construction Handbook, ninth edition
5. Arthur Lyons, Materials for Architects and Builders – Oxfordshire, England,New York : Routledge, 2014
6. Don A.Watson, construction materials and process, McGraw Hill Co, 1972
7. Stephen Emmitt, Christopher A. Gorse - Barry's Advanced Construction of Buildings, 3rd Edition
8. The American Institute of Architects - Architectural Graphics standards – 11<sup>th</sup> edition

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16AR 307	COMPUTER STUDIO I	0	0	4	2

**OBJECTIVES:**

- The prime objective of this course is to introduce the fundamental concepts of computer systems; hardware and software and to develop basic skills in programming, Application of Information Technology tools and technical in Architecture.

**Computer as a drafting tool:** Productivity tools in CAD, organization of layers for working drawings, use of blocks and symbols hatch patterns. Dimensioning systems extracting of areas from drawings, concept of paper space plotting the drawings

**Computer as a design tool:** Repetition of forms mirroring, coping, and array etc. calculation of areas, volumes. Creating and using templates, blocks, and symbols and using them in architectural drawings. - Managements of large drawing files. - Working in a network environment-Security systems-converting drawing files into Internet compatible files.

**Photoshop:** Creating and saving images, basic image editing, Photoshop tool box and tools, using layers, special effects.

**TOTAL: 60 Hours**

**OUTCOME:**

Exposure to CAD and Photoshop will help students to produce their operation and critical parameters. Presentations for large gatherings, corporate clients-using CAD drawings, pictures, 3D images, text etc.

**REFERENCES:**

1. User manual & tutorials of Google Sketch Up software.
2. Auto CAD reference manual – Autodesk UNC, 1998
3. Auto CAD architectural users guide – Autodesk Inc. 1998
4. Sham Tickoo, Advance Technique in Auto CAD Re.14 – 1977 6. Sham Tickoo, Understanding Auto CAD – 14 (windows) – 1977
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