

1. Name of the Faculty: Dr. Durgansh Sharma Course Code: CSGG 4101

2. Course : Graphics and Animation Tools - Lab
3. Program : B.Tech. CSE- OSS
4. Target : Level-2
7: 0
9: 2
7: 1

# **COURSE PLAN**

Target	50% (marks)
Level-1	40% (population)
Level-2	50% (population)
Level-3	60% (population)

#### 1. Method of Evaluation

UG	PG
Quizzes/Tests, Assignments (30%)	Quizzes/Tests, Assignments, seminar (50%)
Mid Examination (20%)	End semester (50%)
End examination (50%)	

2. Passing Criteria

Scale	PG	UG
Out of 10 point scale	SGPA – "6.00" in each semester CGPA – "6.00" Min. Individual Course Grade – "C" Course Grade Point – "4.0"	SGPA – "5.0" in each semester CGPA – "5.0" Min. Individual Course Grade – "C" Course Grade Point – "4.0"

<sup>\*</sup>for PG, passing marks are 40/100 in a paper

# 3. Pedagogy

- Lab Practical sessions
- Project sessions

#### 4. References:

Text Books	Web resources	Journals	Reference books
1) Blender Foundations - The essential			1. Blender Foundations -
Guide to learning Blender 2.6 by Roland			The essential Guide to learning
Hess			Blender 2.6 by Roland Hess
2) Character Animation Fundamentals - Developing skills for 2D and 3D Character			2. Character Animation
animation by Steve Roberts			Fundamentals - Developing skills
difficulties by Steve Hoberts			for 2D and 3D Character
			animation by Steve Roberts

<sup>\*</sup>for UG, passing marks are 35/100 in a paper



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#### Instructions to Students:

1. Go through the 'Syllabus' in the Black Board section of the web-site (https://learn.upes.ac.in) in order to find out the Reading List.

- 2. Get your schedule and try to pace your studies as close to the timeline as possible.
- 3. Get your on-line lecture notes (Content, videos) at <u>Lecture Notes</u> section. These are our lecture notes. Make sure you use them during this course.
- 4. Check your blackboard regularly
- 5. Go through study material and asynchronous sessions
- 6. Check mails and announcements on blackboard on regular basis
- 7. Keep updated with the posts, assignments and examinations which shall be conducted on the blackboard
- 8. Be regular, so that you do not suffer in any way
- 9. Cell Phones and other Electronic Communication Devices: Cell phones and other electronic communication devices (if not used for attending class) are not permitted, especially during Tests or the Mid/End Term Examination. Such devices MUST be turned off during the class session.
- 10. **E-Mail and online learning tool:** Each student in the class should have an e-mail id and a pass word to access the LMS system regularly. Regularly, important information Date of conducting class tests, guest lectures, via online learning tool. The best way to arrange meetings with us or ask specific questions is by email and prior appointment. All the assignments preferably should be uploaded on online learning tool. Various research papers/reference material will be mailed/uploaded on online learning platform time to time.
- 11. **Attendance:** Students are required to have minimum attendance of 75% in each subject. Students with less than said percentage shall NOT be allowed to appear in the end semester examination.

This much should be enough to get you organized and on your way to having a great semester! If you need us for anything, send your feedback through e-mail to your concerned faculty. Please use an appropriate subject line to indicate your message details.

There will no doubt be many more activities in the coming weeks. So, to keep up to date with all the latest developments, please keep visiting this website regularly.



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# **RELATED OUTCOMES**

# 1. The expected outcomes of the Program are:

PO1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.



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PO11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

# 2. The expected outcomes of the Specific Program are: (upto3)

PSO1	Perform system and application programming using computer system concepts, concepts of Data Structures, algorithm development, problem solving and optimizing techniques.
PSO2	Apply software development and project management methodologies using concepts of front-end and back-end development and emerging technologies and platforms.
PSO3	Apply the concept, methodologies, tools, open standards and techniques in Open Source Software Development.

# 3. The expected outcomes of the Course are: (minimum 3 and maximum 6)

CO 1	Able to work on GIMP
CO 2	Understand the GIMP interface to build 2d and 3d graphics
CO 3	Able to work on Blender
CO 4	Able to develop graphics and animation in Blender



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9: 2
1: 0
1: 0
2: 0
4: 0
5: 0
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# 4. Co-Relationship Matrix

Indicate the relationships by 1- Slight (low) 2- Moderate (Medium) 3-Substantial (high)

Program Outcome s										P	P	Р			PSO
Course	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	0 10	0 11	0 12	PSO 1	PSO 2	3
Outcome															
CO 1	1		2										1	2	1
CO 2														2	
CO 3			2		1										3
CO 4					1										3
Average	1		2		1								1	2	1.66

# 5. Course outcomes assessment plan:

components Course Outcomes	Performance and Records	Test/Quiz	Mid Semester Viva	End Semester Viva	Assignment Project
CO 1	✓	✓	✓	✓	✓
CO 2	✓	✓	✓	✓	✓
CO 3	✓	✓		✓	✓
CO 4	✓	✓		✓	✓



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# LAB COURSE COVERAGE – LIST OF EXPERIMENTS

#### Course Activities: List of Experiments

- 1. Experiments -1 Installation of GIMP AND BLENDER.
- 2. Experiment 2 Design of Logo using GIMP.
- 3. Experiment 3 Design of Google Logo using GIMP.
- 4. Experiment 4 Design your own animation using GIMP
- 5. Experiment 5 Design of 3D Text using Blender.
- 6. Experiment 6 Design of 3D Hut using Blender.
- 7. Experiment 7 Design of 3D Rocket using Blender.
- 8. Experiment 8 Design of 3D Car using Blender.
- 9. Experiment 9 Design of 3D Mountain Landscape using Blender.
- 10. Experiment 10 Design of 3D UPES Landscape using Blender.

Sessions: 16 [Total No. of Instructional periods available for the course]