

UNDERGRADUATE PROGRAM IN COMPUTER SCIENCE
DEPARTMENT OF COMPUTER ENGINEERING
FACULTY OF INTELLIGENT ELECTRICAL AND INFORMATICS TECHNOLOGY

Module name	Computer Graphic	
Module level	Undergraduate	
Code	EC184945	
Courses (if applicable)	Computer Graphic	
Semester	Elective	
Contact person	Eko Mulyanto	
Lecturer	Reza Fuad Rachmadi	
Language	[Indonesia / English]	
Relation to curriculum	Undergraduate degree program, <i>Elective</i>	
Type of teaching, contact hours	Lecture, < 60 students, 170 Minutes * 3 SKS	
Workload	<ol style="list-style-type: none"> 1. Lectures: 3 x 50 = 150 minutes (2.5 hours) per week. 2. Exercises and Assignments: 3 x 60 = 180 minutes (3 hours) per week. 3. Private study: 3 x 60 = 180 minutes (3 hours) per week. 	
Credit points	3 credit points (sks).	
Requirements according to the examination regulations	A student must have attended at least 75% of the lectures to sit in the exams.	
Mandatory prerequisites	Linear Algebra and Discrete Mathematics Data Structure and Algorithm Analysis Digital Image and Video Processing	
Learning outcomes and their corresponding PLOs	CLO 1 Students can understand the concept and applying basic computer graphic algorithm. CLO 2 Students can understand the concept and workings on computer graphic framework. CLO 3 Students can understand the concept and applying advanced computer graphic algorithm. CLO 4 Students can explain and implement simple project that utilize computer graphic algorithm	PLO 3 PLO 3 PLO 4 PLO 4 PLO 5 PLO 6
Content	In this course, students are able to explain the concepts, implementing various computer graphic algorithms, and creating/manage simple computer graphic project/application.	

Study and examination requirements and forms of examination	<ul style="list-style-type: none"> • <i>In-class exercises</i> • <i>Quiz 1 and 2</i> • <i>Assignment 1, 2, 3</i> • <i>Mid-term examination</i> • <i>Final examination</i> • <i>Project Presentation</i>
Media employed	<i>LCD, whiteboard, websites (myITS Classroom).</i>
Reading List	<ul style="list-style-type: none"> • WebGL Programming Guide. Matsuda & Lea • WebGL: Up and Running: Building 3D Graphics for the Web. Tony Parisi • OpenGL Programming Guide: The Official Guide to Learning. Dave Shreiner, Graham Sellers, and John M. Kessenich • Paper from SIGGRAPH and ACM MM conference