



**MODULE HANDBOOK DESCRIPTION**

Module designation	Game Development Techniques	
Code	FBD0009	
Semester(s) in which the module is taught	6 / third year	
Person responsible for the module	Giri Wahyu Wiriasto, S.T., M.T.	
Language	Indonesian	
Relation to curriculum	Free Elective for Computer Engineering	
Teaching methods	Lectures, Case Base Method, project base learning	
Workload (incl. contact hours, self-study hours)	Contact minutes every week, each week of the 16 weeks/semester: <ul style="list-style-type: none"> <li>• Lectures: 2 x 50 minutes</li> <li>• Exercises and Assignments: 2 x 60 minutes</li> <li>• Private study: 2 x 60 minutes.</li> </ul> Total study hours = 5 hours 40 minutes/week	
Credit points	2 (~ 3,2 ECTS)	
Required and recommended prerequisites for joining the module	-	
Module objectives/intended learning outcomes	1. Students are able to explain about Concept and design: The idea behind the game is created and fleshed out, including mechanics, story, and art style. 2. Students are able to explain a basic working version of the game is created to test and refine the core mechanics.	PLO3

	<p>3. Students are able to design using game engine is chosen and set up to handle tasks such as graphics, audio, and physics simulation.</p> <p>4. Students are able to design particular game object like Art, graphics, sound, and music are created and integrated into the game engine including placement of enemies, power-ups, and other game elements.</p> <p>5. Students are able design The game logic, mechanics, and interactions are programmed, including player controls, AI, and game rules using godot engine.</p>	PLO4
	<p>6. Students are able to planning how to create opportunity with the development of game project.</p>	PLO8
Content	Introduction to Game Development Techniques, Concept and Design, Prototype, Game Engine, Art and Assets, and Programming.	
Examination forms	Presentation case study, project game design using godot engine	
Study and examination requirements	Theory and presentation = 50% Project = 50%	
Reading list	<ol style="list-style-type: none"> <li>1. "Godot Engine Game Development Projects" by Chris Bradfield.</li> <li>2. "Godot Engine Game Development in 24 Hours" by Mark Des Cotes.</li> <li>3. "Godot Engine Game Development for Beginners" by Chris DeLeon.</li> <li>4. "Getting Started with Godot" by Harrison Ferrone.</li> <li>5. "Godot Engine Game Development Essentials" by Richard Stevens.</li> <li>6. "Mastering Godot Game Development" by Shrinivas Kulkarni.</li> <li>7. "Godot 3 Game Engine Programming in 24 Hours" by George Paterson.</li> <li>8. "Learn to Code by Making Games with Godot Engine" by John Park.</li> </ol>	