UNIVERSITAS MATARAM

(University of Mataram)

FAKULTAS TEKNIK

(Faculty of Engineering)

PROGRAM STUDI TEKNIK INFORMATIKA

(Department of Informatics Engineering)

MODULE HANDBOOK DESCRIPTION

Mobile Game (P22C07)

Module designation	Mobile Game
Semester(s) in which the module is taught	*6 / third year*
Person responsible for the module	*Raphael Bianco Huwe, S.T., M.T.*
Language	*Indonesian*
Relation to curriculum	*Compulsory*
Teaching methods	*Lectures, Discussions, Quiz, Project*
Workload (incl. contact hours, self-study hours)	Contact Hours every week, each week of the 16 weeks/semester including Evaluation ● 2 x 50 minutes lecturer/week ● 2 x 60 minutes class exercise/week ● Self Study hours = 120 minutes/week Total workload 340 minutes/week
Credit points	*2 (~ 3,2 ECTS)*
Required and recommended prerequisites for joining the module	-

Module objectives/intended learning outcomes	This course aims to equip students with the knowledge and skills necessary to design, develop, and optimize mobile games. Upon completing this course, students are expected to: Understand fundamental game development concepts including game design principles, mechanics, and mobile gaming trends. Apply programming techniques for mobile game development using game engines such as Unity or Unreal Engine. Implement core game mechanics, including character movement, collision detection, physics simulations, animations, and audio integration.
Content	1. Introduction to Mobile Game Development 2. Game Development Tools and Programming 3. Game Mechanics and Physics 4. Audio and Visual Effects in Mobile Games 5. Game Optimization and Performance Tuning 6. Multiplayer and Networked Games 7. Publishing and Monetization 8. Final Project
Examination forms	*Assignments, Quiz, Project*
Study and examination requirements	*Quiz and Assignments 30%,* *Mid Exam 35%* *Final Exam 35%*
Reading list	1. Schell, J. (2019). The Art of Game Design: A Book of Lenses (4th Edition). CRC Press. 2. Nystrom, R. (2014). Game Programming Patterns. Genever Benning. 3. Unity Technologies. Unity Documentation and Tutorials – https://docs.unity3d.com 4. Unreal Engine. Unreal Engine Documentation – https://www.unrealengine.com/en-US/documentation 5. Rogers, S. (2014). Level Up! The Guide to Great Video Game Design (2nd Edition). Wiley.