



UNIVERSITAS MATARAM

(University of Mataram)

FAKULTAS TEKNIK

(Faculty of Engineering)

PROGRAM STUDI TEKNIK INFORMATIKA

(Department of Informatics Engineering)

MODULE HANDBOOK DESCRIPTION

Software Management (P22C06)

Module designation	Software Management
Semester(s) in which the module is taught	6 / third year
Person responsible for the module	Royana Afwani, S.T., M.T.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Lectures, Lectures, Discussions, Case Studies
Workload (incl. contact hours, selfstudy hours)	Contact Hours every week, each week of the 16 weeks/semester including Evaluation • 2 x 50 minutes lecturer/week • 120 minutes class exercise/week • Self Study hours = 150 minutes/week • Midterm Exam = 60 minutes • Final Exam = 60 minutes Total workload 88,33 hours/semester
Credit points	2 (~ 3,53 ECTS)
Required and recommended prerequisites for joining the module	-

Module objectives/intended learning outcomes	The Software Management course aims to provide students with knowledge and practical skills in planning, managing, and controlling software projects. Upon completing this course, students are expected to: Understand the fundamentals of software management, including project planning, risk management, and cost estimation. Apply agile and traditional project management methodologies, such as Scrum, Kanban, Waterfall, and DevOps. Develop software requirement specifications and conduct stakeholder analysis. Manage software development teams and workflows, ensuring efficiency and effective collaboration. Implement version control systems and continuous integration/continuous deployment (CI/CD) pipelines in software projects. Monitor project performance and quality assurance, using software metrics and evaluation techniques. Handle software maintenance, documentation, and post-deployment processes, including bug tracking and user feedback management.
Content	1. Introduction to Software Management 2. Software Development Methodologies 3. Software Project Planning 4. Character Control and Animation 5. Risk Management in Software Development 6. Cost Estimation and Budgeting 7. Software Team and Workflow Management 8. Version Control and CI/CD 9. Software Quality Assurance and Testing 10. Software Metrics and Performance Evaluation 11. Final Project
Examination forms	<i>Assignments, Quizzes, Case Studies, Final Project</i>
Study and examination requirements	<i>Assignments: 15%</i> <i>Quizzes: 20%</i> <i>Case Studies: 30%</i> <i>Final Project: 35%</i>
Reading list	1. Sommerville, I. (2020). Software Engineering (10th Edition). Pearson. 2. Pressman, R. S., & Maxim, B. R. (2020). Software Engineering: A Practitioner's Approach (9th Edition). McGraw-Hill. 3. Martin, R. C. (2019). Clean Architecture: A Craftsman's Guide to Software Structure and Design. Pearson. 4. Schwaber, K., & Sutherland, J. (2020). The Scrum Guide. Scrum.org. 5. Bass, L., Weber, I., & Zhu, L. (2015). DevOps: A Software Architect's Perspective. Addison-Wesley.

