UNIVERSITAS MATARAM

(University of Mataram)

FAKULTAS TEKNIK

(Faculty of Engineering)

PROGRAM STUDI TEKNIK INFORMATIKA

(Department of Informatics Engineering)

MODULE HANDBOOK DESCRIPTION

Interaction Engineering (P22C11)

Module designation	Interaction Engineering
Semester(s) in which the module is taught	*5 / third year*
Person responsible for the module	*Noor Alamsyah, S.T., M.T.*
Language	*Indonesian*
Relation to curriculum	*Compulsory*
Teaching methods	*Lectures, Discussions, Case Studies, Practical Assignments*
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	When we discuss the interaction between systems and humans, we are essentially talking about how humans themselves typically interact. Referring to Abraham Maslow's hierarchy of needs, four out of five levels of human needs demonstrate how humans interact: Security Needs: Users expect systems to be safe, reliable, and trustworthy Belongingness Needs: Systems should foster social interactions, personalization, and engagement. Esteem Needs: Interfaces should provide users with a sense of accomplishment, recognition, and feedback.
Content	1. Introduction to Interaction Engineering 2. Human-Centered Design 3. Psychological and Cognitive Aspects of Interaction 4. User Experience (UX) and Usability Testing 5. Multimodal and Advanced Interaction Techniques 6. Designing for Security and Trust 7. Interaction Prototyping and Development 8. Social and Collaborative Interactions 9. Human-AI Interaction and Automation 10. Final Project
Examination forms	*Assignments, Quizzes, Case Studies, Final Project*
Study and examination requirements	*Assignments: 15%* *Quizzes: 20%* *Case Studies: 30%* *Final Project: 35%*
Reading list	1. Norman, D. (2013). The Design of Everyday Things (Revised Edition). MIT Press. 2. Krug, S. (2014). Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability. New Riders. 3. Nielsen, J. (2020). Usability Engineering. Morgan Kaufmann. 4. Garrett, J. J. (2010). The Elements of User Experience: User-Centered Design for the Web and Beyond. New Riders. 5. Hassenzahl, M., & Tractinsky, N. (2006). User Experience – A Research Agenda.