UNIVERSITAS MATARAM

(University of Mataram)

FAKULTAS TEKNIK

(Faculty of Engineering)

PROGRAM STUDI TEKNIK INFORMATIKA

(Department of Informatics Engineering)

MODULE HANDBOOK DESCRIPTION

Data Compression Method (P22A04)

Module designation	Data Compression Method
Semester(s) in which the module is taught	*6 / third year*
Person responsible for the module	*Ramaditia Dwiyansaputra, S.T., M.Eng.*
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	In this course, students are expected to be able to understand the basic concepts of data compression techniques/methods based on statistics and dictionary method.
Content	Data Compression Method studies various compression methods with statistical, dictionary, and preprocessing approaches to text, image, audio, and video data. Course materials include basic introduction to compression technique; loosy and loosless compression techniques; compression techniques with statistical approaches such as huffman, adaptive huffman, and arithmetic coding; dictionary-based compression techniques such as LZ77, LZ78, and LZW.
Examination forms	*Assignments, Quiz, Project*
Study and examination requirements	*Quiz and Assignments 30%,* *Mid Exam 35%* *Final Exam 35%*
Reading list	1. David Salomon & Giovanni Motta. 2010. Handbook of Data Compression 5th Edition. Springer 2. Khalid Sayood. 2012. Introduction to Data Compression 4th Edition. Morgan Kaufmann Pub.