

MODULE HANDBOOK
**MANAGEMENT OF
INFORMATION
SYSTEM**



**BACHELOR DEGREE PROGRAM
DEPARTEMENT OF STATISTICS
FACULTY OF SCIENCE AND DATA ANALYTICS
INSTITUT TEKNOLOGI SEPULUH NOPEMBER**

ENDORSEMENT PAGE




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MANAGEMENT OF
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Proses Process	Penanggung Jawab Person in Charge			Tanggal Date
	Nama Name	Jabatan Position	Tandatangan Signature	
Perumus <i>Preparation</i>	Dr. Kartika Fithriasari, M.Si	Dosen <i>Lecturer</i>		March 28, 2019
Pemeriksa dan Pengendalian <i>Review and Control</i>		Tim kurikulum <i>Curriculum team</i>		April 15, 2019
Persetujuan <i>Approval</i>	Prof. NUR Iriawan	Koordinator RMK <i>Course Cluster Coordinator</i>		July 17, 2019
Penetapan <i>Determination</i>	Dr. Kartika Fithriasari, M.Si	Kepala Departemen <i>Head of Department</i>		July 30, 2019


MODULE HANDBOOK
MANAGEMENT OF INFORMATION SYSTEM

Module name	Management of Information System	
Module level	Undergraduate	
Code	KS184648	
Course (if applicable)	Management of Information System	
Semester	Sixth Semester (Genap)	
Person responsible for the module	Dr. Kartika Fithriasari, M.Si	
Lecturer	Dr. Dra. Kartika Fithriasari, M.Si ; Adatul Mukarromah, S.Si. M.Si	
Language	Bahasa Indonesia and English	
Relation to curriculum	Undergraduate degree program, mandatory , 6 th semester.	
Type of teaching, contact hours	Lectures, <50 students	
Workload	<ol style="list-style-type: none"> 1. Lectures : 3 x 50 = 150 minutes per week. 2. Practicum : 135 minutes per week. 3. Exercises and Assignments : 3 x 60 = 180 minutes (3 hours) perweek. 4. Private learning : 3 x 60 = 180 minutes (3 hours) per week. 	
Credit points	3 credit points (SKS)	
Requirements according to the examination regulations	A student must have attended at least 80% of the lectures to sit in the exams.	
Mandatory prerequisites	Pemrograman Komputer/ <i>Computer Programming</i>	
Learning outcomes and their corresponding PLOs	<i>CPMK.1 Able to apply knowledge of Management Information System concept</i> <i>CPMK.2 Able to explain the procedure for creating a Management Information System</i> <i>CPMK.3 Able to apply Management Information System to analyze data and interpret it</i> <i>CPMK.4 Able to identify, formulate, and solve statistical problems using Management Information System techniques</i> <i>CPMK.5 Able to use computing techniques and modern computer devices required in the creation of Management Information Systems</i> <i>CPMK.6 Have knowledge of current and upcoming issues related to the field of Management Information Systems</i> <i>CPMK.7 Able to communicate effectively and cooperate in interdisciplinary and multidisciplinary teams</i>	PLO – 1 PLO – 3 PLO – 4 PLO – 5

	<p><i>CPMK.8 Has professional responsibilities and ethics</i></p> <p><i>CPMK.9 Able to motivate yourself to think creatively and learn throughout life</i></p>	
Content	<p><i>Management of Information Systems are courses in computing. Competencies that want to be achieved after attending this course are students can:</i></p> <ol style="list-style-type: none"> <i>1. Understand the concept of computer-based management of Information and Information management as a means of management in decision making in controlling an organization both academic institutions and the modern business world;</i> <i>2. Using information technology to gain a competitive advantage for individuals and organizations;</i> <i>3. Create a management information system in various fields.</i> <i>4. Learning strategies applied in this lecture students are given an explanation of the understanding of computer-based information and information management in human resource management systems, finance, manufacturing, marketing and some other modern business system management. The end of this lecture students make an application management information system by adding statistical method feature in the application to provide support in decision making.</i> 	
Study and examination requirements and forms of examination	<ul style="list-style-type: none"> • In-class exercises • Assignment 1, 2, 3 • Mid-term examination • Final examination 	
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom.	
Reading list	<ol style="list-style-type: none"> 1. Alexander, M. and Kusleika, R., 2016. <i>Access 2016 Bible</i>. 1st edition. Indianapolis, Indiana, USA : John Wiley and Sons Inc. 2. Churcher, C. 2012. <i>Beginning Database Design : From Novice to Professional</i>, KG, Berlin, Germany : Springer-Verlag Berlin and Heidelberg GmbH dan Co. 3. Hales, J. 2005. <i>SQL Guide</i>. Boca Raton, United States: Barcharts. 4. Kroenke, Hatch. 1994. <i>Management Information System</i>. McGraw Hill. 5. Oz, E., 2009. <i>Management Information Systems</i>. 6th edition. Thomson Course Technology. 6. Raymond, McLeod. 1996. <i>Sistem Informasi Manajemen (terjemahan) jilid 1 dan 2</i>. Prentice Hall. 7. Turban, E., Volonino, L. and Wood, G. R., 2013. <i>Information Technology for Management: Advancing Sustainable, Profitable Business Growth</i>. 9th edition. John Wiley dan Sons. 8. Turban, E., McLean, E. and Wetherbe, J., 2013. <i>Information Technology for Management: Transforming Organizations in the Digital Economy</i>. 9th edition. John Wiley dan Sons. 9. Viescas, J. L. and Hernandez, M. J., 2014. <i>SQL Queries for Mere Mortals: A Hands-On Guide to Data Manipulation in SQL</i>. 3rd edition. Ann Arbor, Michigan : Edwards Brothers Malloy. 	

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	Mata Kuliah	Sistem Informasi Manajemen
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	Semester/SKS	VI/3
	MK Prasyarat	Pemrograman Komputer
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Bahan Kajian/Study Materials	<p>Pengumpulan Data, Deskripsi dan Eksplorasi, Komputasi dan Data Processing, Industri dan Bisnis, Pemerintahan dan Kependudukan, Ekonomi dan Manajemen, Kesehatan dan Lingkungan</p> <p><i>Data Collection, Description and Exploration, Computing and Data Processing, Industry and Business, Government and Population, Economy and Management, Health and Environment</i></p>
CPL yang dibebankan MK/PLO	<p>CPL-1 Mampu menerapkan pengetahuan teori statistika, matematika, dan komputasi</p> <p>CPL-3 Mampu menganalisis data dengan metode statistika yang tepat dan menginterpretasikannya</p> <p>CPL-4 Mampu mengidentifikasi, memformulasi, dan menyelesaikan masalah statistika di berbagai bidang terapan</p> <p>CPL-5 Mampu menggunakan teknik komputasi dan perangkat komputer modern yang diperlukan dalam bidang statistika dan sains data</p> <p><i>CPL-1 Able to apply statistical, mathematical, and computational theory knowledge</i></p> <p><i>CPL-3 Able to analyze data with the right statistical methods and interpret it</i></p> <p><i>CPL-4 Able to identify, formulate, and solve statistical problems in various applied fields</i></p> <p><i>CPL-5 Able to use the computing techniques and modern computer devices required in the field of statistics and data science</i></p>
CP-MK/CLO	<p>CPMK.1 Mampu menerapkan pengetahuan konsep Sistem Informasi Manajemen</p> <p>CPMK.2 Mampu menjelaskan prosedur pembuatan Sistem Informasi Manajemen</p> <p>CPMK.3 Mampu mengaplikasikan Sistem Informasi Manajemen untuk menganalisis data dan menginterpretasikannya</p> <p>CPMK.4 Mampu mengidentifikasi, memformulasi, dan menyelesaikan masalah statistika menggunakan teknik Sistem Informasi Manajemen</p> <p>CPMK.5 Mampu menggunakan teknik komputasi dan perangkat komputer modern yang diperlukan dalam untuk pembuatan Sistem Informasi Manajemen</p> <p>CPMK.6 Memiliki pengetahuan tentang isu terkini dan mendatang yang berkaitan dengan bidang Sistem Informasi Manajemen</p> <p>CPMK.7 Mampu berkomunikasi secara efektif dan bekerjasama dalam tim yang interdisiplin dan multidisiplin</p> <p>CPMK.8 Memiliki tanggung jawab dan etika profesi</p> <p>CPMK.9 Mampu memotivasi diri untuk berpikir kreatif dan belajar sepanjang hayat</p> <p><i>CPMK. 1 Able to apply knowledge of Management Information System concept</i></p> <p><i>CPMK. 2 Able to explain the procedure for creating a Management Information System</i></p> <p><i>CPMK. 3 Able to apply Management Information System to analyze data and interpret it</i></p> <p><i>CPMK. 4 Able to identify, formulate, and solve statistical problems using Management Information System techniques</i></p> <p><i>CPMK. 5 Able to use computing techniques and modern computer devices required in for the creation of Management Information Systems</i></p> <p><i>CPMK. 6 Have knowledge of current and upcoming issues related to the field of Management Information Systems</i></p> <p><i>CPMK. 7 Able to communicate effectively and cooperate in interdisciplinary and multidisciplinary teams</i></p> <p><i>CPMK. 8 Has professional responsibilities and ethics</i></p>

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CPMK.9 Able to motivate yourself to think creatively and learn throughout life
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Pertemuan Meeting	Kemampuan Akhir Sub CP-MK Sub CLO Final Capability	Keluasan (materi pembelajaran) Extent (Learning Materials)	Metode Pembelajaran Learning Methods	Estimasi Waktu Estimated Time	Bentuk Evaluasi Evaluation Form	Kriteria dan Indikator Penilaian Assessment Criteria and Indicator	Bobot Penilaian Score Weight
1	1. Dapat menjelaskan Konsep dasar sistem <i>1. Can explain the basic concepts of the system</i>	Konsep dasar sistem <i>Basic concept of system</i>	Ceramah interaktif Diskusi (CID) <i>Interactive lectures Discussions (CID)</i>	150 menit <i>150 minutes</i>	Observasi Aktifitas di kelas <i>Observation Activities in class</i>	1.1 Dapat mendefinisikan pengertian sistem 1.2 Dapat menjelaskan sistem informasi untuk keunggulan kompetitif. 1.3 Dapat menjelaskan teknologi informasi dalam menjalankan perdagangan elektronik (E-Commerce) 1.4 Dapat menjelaskan pengguna dan pengembang sistem <i>1.1 Can define the understanding of the system 1.2 Can explain the information system for competitive advantage. 1.3 Can explains information technology in conducting e-commerce 1.4 Can explains the user and developer of the system</i>	5%/5%



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Pertemuan <i>Meeting</i>	Kemampuan Akhir Sub CP-MK <i>Sub CLO Final Capability</i>	Keluasan (materi pembelajaran) <i>Extent (Learning Materials)</i>	Metode Pembelajaran <i>Learning Methods</i>	Estimasi Waktu <i>Estimated Time</i>	Bentuk Evaluasi <i>Evaluation Form</i>	Kriteria dan Indikator Penilaian <i>Assessment Criteria and Indicator</i>	Bobot Penilaian <i>Score Weight</i>
2	2. Dapat menjelaskan sumber daya informasi <i>2. Can describe information resources</i>	Sumber Daya Informasi <i>Information Resources</i>	CID <i>CID</i>	150 menit <i>150 minutes</i>	Tes & Observasi Aktifitas di kelas <i>Test & Observation Activities in class</i>	2.1 Dapat menjelaskan sumber daya komputasi dan komunikasi 2.2 Dapat menjelaskan sistem manajemen Basis data 2.3 Dapat menggambarkan pengembangan sistem 2.4 Dapat menjelaskan informasi dalam praktik <i>2.1 Able to describes computing and communication resources</i> <i>2.2 Able to describes database management system</i> <i>2.3 Able to describe the development of the system</i> <i>2.4 Able to explain information in practice</i>	5%/10%
3	3. Dapat menjelaskan pengelolaan informasi dan teknologi <i>3. Can explain information and technology management</i>	pengelolaan informasi dan teknologi <i>Information and technology management</i>	CID <i>CID</i>	150 menit <i>150 minutes</i>	Observasi Aktifitas di kelas <i>Observation Activities in class</i>	3.1 Dapat menjelaskan pengertian keamanan informasi 3.2 Dapat menjelaskan implikasi etis dari teknologi informasi 3.3 Dapat menjelaskan sistem pendukung pengambilan keputusan	5%/15%



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	MK Prasyarat	Pemrograman Komputer
Dosen Pengampu	Dr. Dra. Kartika Fithriasari, M.Si ; Adatul Mukarromah, S.Si. M.Si	

Pertemuan <i>Meeting</i>	Kemampuan Akhir Sub CP-MK <i>Sub CLO Final Capability</i>	Keluasan (materi pembelajaran) <i>Extent (Learning Materials)</i>	Metode Pembelajaran <i>Learning Methods</i>	Estimasi Waktu <i>Estimated Time</i>	Bentuk Evaluasi <i>Evaluation Form</i>	Kriteria dan Indikator Penilaian <i>Assessment Criteria and Indicator</i>	Bobot Penilaian <i>Score Weight</i>
						3.1 Able to explain the definition of information security 3.2 Able to explore the ethical implications of information technology 3.3. Able to explain the decision-making support system	
4-5	4. Dapat merancang database sesuai dengan kasus <i>4. Can design database according to case</i>	1. Konsep Database 2. Konsep normalisasi 3. Konsep relasi <i>1. Database Concept 2. Concept of normalization 3. Relationship concept</i>	CIDLS <i>CIDLS</i>	300 menit <i>300 minutes</i>	Latihan, Test <i>Exercise, Test</i>	4.1 Dapat menjelaskan konsep database, DBMS, file, record, atom, entitas, kunci 4.2 Dapat melakukan tahapan-tahapan normalisasi 1 s/d 3 4.3 Mampu membuat relasi antar tabel <i>4.1 Can describe the concept of databases, DBMS, files, records, atoms, entities, keys 4.2 Can perform normalization stages 1 to 3 4.3 Able to create relationships between tables</i>	10%/25%




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6-9	5 Dapat membuat sistem informasi dengan MS Office sesuai dengan kasus <i>5. Can create information systems with MS Office according to the case</i>	<ol style="list-style-type: none"> Membuat sistem Pengelolaan database dan programnya menggunakan MSAccess Studi Kasus perancangan Data Base dengan MS Access <p><i>1. Create a database management system and its programs use MSAccess</i></p> <p><i>2. Case Study of Data Base Design with MS Access</i></p>	CIDLS <i>CIDLS</i>	400 menit <i>400 minutes</i>	Latihan, Praktikum, Test, Tugas <i>Exercise, Practice, Test, Assignment</i>	<ol style="list-style-type: none"> Bisa merancang File pada MS Access Bisa membuat Form pada MS Access Bisa membuat Query pada MS Access Bisa Report pada MS Access <p><i>5.1 Can Design Files in MS Access</i></p> <p><i>5.2 Can create Forms in MS Access</i></p> <p><i>5.3 Can Create a Query in MS Access</i></p> <p><i>5.4 Can Report on MS Access</i></p>	25%/50%
10 ETS/Midterm							
11-18	6 Dapat menggunakan SQL untuk membuat sistem informasi sederhana <i>6. Can use SQL to create simple information systems</i>	<ol style="list-style-type: none"> Pengenalan SQL Studi Kasus perancangan Data Base sederhana dengan SQL <p><i>1. Introduction to SQL</i></p>	CIDLS Active Learning (AL) : Studi kasus riil <i>CIDLS Active Learning : Case Study</i>	800 menit <i>800 minutes</i>	Tugas & Observasi Aktifitas di kelas <i>Assignment & Observation Activities in class</i>	<ol style="list-style-type: none"> Bisa mengoperasikan SQL Bisa merancang database sederhana dan mengimplementasikannya menggunakan SQL <p><i>6.1 Can operate SQL</i></p>	20%/70%



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		2. Case Study of Simple Data Base Design with SQL				6.2 Can design a simple database and implement it using SQL	
19-24	7 Dapat menganalisis sistem informasi yang sudah ada <i>7. Can analyze existing information systems</i>	Analisis Sistem Informasi menggunakan studi kasus <i>Information System Analysis using case studies</i>	CIDLS AL : Studi kasus riil <i>CIDLS Active Learning : Case Study</i>	600 menit <i>600 minutes</i>	Tugas, presentasi <i>Assignment, Presentation</i>	7.1 Dapat menformulasikan sistem riil kedalam database 7.2 Dapat membuat relationship database yang sesuai dengan kasus 7.3 Dapat menjelaskan kelemahan sistem 7.4 Dapat mengetahui faktor-faktor yang mempengaruhi pengembangan sistem 7.5 Dapat merancang pengembangan sistem informasi <i>7.1 Able to formulates a real system into a database 7.2 Able to create a relationship database that corresponds to the case 7.3 Can explain system weaknesses 7.4 Can find out the factors that affect system development</i>	30%/100%

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Pertemuan <i>Meeting</i>	Kemampuan Akhir Sub CP-MK <i>Sub CLO Final Capability</i>	Keluasan (materi pembelajaran) <i>Extent (Learning Materials)</i>	Metode Pembelajaran <i>Learning Methods</i>	Estimasi Waktu <i>Estimated Time</i>	Bentuk Evaluasi <i>Evaluation Form</i>	Kriteria dan Indikator Penilaian <i>Assessment Criteria and Indicator</i>	Bobot Penilaian <i>Score Weight</i>
						7.5 Can design information system development	
16	EAS/Finalterm						

PUSTAKA/References :

1. Turban, E., Volonino, L. dan Wood, G. R., *Information Technology for Management: Advancing Sustainable, Profitable Business Growth*, 9th Edition, John Wiley & Sons, 2013
2. Turban, E., McLean, E. dan Wetherbe, J., *Information Technology for Management: Transforming Organizations in the Digital Economy*, 9th Edition, John Wiley & Sons, 2013
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7. Alexander, M., Kusleika, R., *Access 2016 Bible 1st Edition*, John Wiley and Sons Inc., Indianapolis, Indiana, USA, 2016.
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9. Hales, J., *SQL Guide*, Barcharts, Boca Raton, United States, 2005.