



Universitas  
Alma Ata  
The Globe Inspiring University

# MODUL HANDBOOK

2024



**INFORMATION SYSTEM**

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# **SEMESTER 1**

Module designation	<b>FKOM002 Interpersonal Communication</b>
Semester(s) in which the module is taught	1
Person responsible for the module	Avrillaila Akbar Harahap, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Cooperative Learning/CoL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs051 - Able to understand the code of ethics in the use of data information in the design, implementation and use of a system  CLOs052 - Able to apply a code of ethics in the use of data information in the design, implementation and use of a system  CLOs081 - Able to analyze business processes for business sustainability in accordance with current developments

Content	This course aims to maintain, develop, and create good relationships between individuals, as well as between individuals and organizations by using speaking skills or providing content, both verbally and non-verbally, utilizing all available means effectively and efficiently
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. Elva Ronaning Roem, Sarmiati. KOMUNIKASI INTERPERSONAL. CV IRDH, 2019.</p> <p>2. Hartati, Aseh Suci. Komunikasi yang Efektif dalam Organisasi. 2019.</p> <p>3. Nurrohim, Hassa. EFEKTIVITAS KOMUNIKASI DALAM ORGANISASI. Jurnal Manajemen, Vol.7, No.4, Mei 2009.</p>

Module designation	<b>SI050 Discrete Structure</b>
Semester(s) in which the module is taught	1
Person responsible for the module	Yanuar Wicaksono, S.Kom., M.Kom
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes</p> <p>Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>

Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs011 - Able to understand the basic concepts of information systems
Content	The Discrete Structures course is one of the basic courses in the Bachelor of Information Systems Study Program. In general, this course covers several major topics, namely: Propositions and Logic, Set Theory, Functions and Relations, Boolean Algebra and its applications, as well as other topics of discussion. Students will be equipped with discrete mathematical concepts related to Information Systems and the ability to think logically, analytically, and systematically.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<ol style="list-style-type: none"> <li>1. Munir, Rinaldi, Matematika Diskrit, Penerbit Informatika, Bandung, 2010</li> <li>2. Retno Hendrowati; Bambang Hariyanto, Logika Informatika, Penerbit Informatika, Bandung, 2000.</li> <li>3. Setiadji, Logika Informatika, Graha Ilmu, Jakarta, 2007.</li> <li>4. F. Soesianto, Djon Dwijono, Logika Matematika untuk Ilmu Komputer, Penerbit ANDI, Yogyakarta, 2010.</li> </ol>

Module designation	<b>SI051 Introduction to Information Systems</b>
Semester(s) in which the module is taught	1
Person responsible for the module	Avrillaila Akbar Harahap, S.Kom., M.Kom.,
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Cooperative Learning/CoL Collaborative Learning/Cl Discovery Learning and Inquiry



Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs011 - Able to understand the basic concepts of information systems
Content	This course studies the concepts of information systems, information technology, and organizational/company involvement
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	1. Anggraeni, Elisabet Yunaeti dan Rita Irviani. (2017). Pengantar Sistem Informasi. Yogyakarta: ANDI. 2. Widarti, Erni dkk. (2024). BUKU AJAR PENGANTAR SISTEM INFORMASI, Jambi:PT. Sonpedia Publishing Indonesia. 3. Harahap, A. A. 2018. PERANCANGAN WEB E-SHOP PADA TOKO SANDY DENGAN MENGGUNAKAN PHP DAN MySQL. Indonesian Journal of Business Intelligence (IJUBI), 1 (1), 17-24. 4. Rochmadi, Tri dkk. (2023). Pendampingan Pembuatan Website untuk Pemasaran Wisata dan UMKM Melalui Internet. Journal Darma Abdi Karya, 2 (1), 31-35. 5. The Role of Informations System in The Digital Era

Module designation	<b>SI052 Basic Accounting</b>
Semester(s) in which the module is taught	1

Person responsible for the module	Dr. Kusumaningdiah Retno Setiorini, SE, Ak, M.Ak.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Case Based Learning/CBL
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs023 - Able to process data using data processing tools and techniques  CLOs062 - Able to apply information systems to achieve short-term organizational goals and objectives
Content	Accounting is the process of recording all transactions within a company at various scales. It is at the core of company activities, enabling management to accurately manage cash flow without errors.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	1. Ikatan Akuntan Indonesia. (2018). Standar Akuntansi Keuangan Entitas Mikr, Kecil dan Menengah. Jakarta. 2. Jusup, A. (2011). Dasar - dasar Akuntansi Jilid 1 (7 ed.). Yogyakarta: Sekolah Tinggi Ilmu Ekonomi YKPN. 3. Kieso, D. E., J. W., & P. K. (2014). Accounting Principles (7 ed.). Jakarta: Salemba Empat.

Module designation	<b>SI053 Organization and Management</b>
Semester(s) in which the module is taught	1
Person responsible for the module	Dimas Wibisono, S.E., M.B.A.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs062 - Able to apply information systems to achieve short-term organizational goals and objectives  CLOs081 - Able to analyze business processes for business sustainability in accordance with current developments
Content	This course provides students with knowledge, understanding and comprehension to master the insight and scope of various business and management concepts. This course also provides knowledge related to managerial competence, business communication, as well as social and ethical responsibility, both nationally and internationally.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<ol style="list-style-type: none"> <li>1. Robbins, Stephen.P., dan Coulter, Mary. (2016). <i>Management, Thirteenth Edition</i>. London: Pearson Education Limited</li> <li>2. Sule, Ernie Tisnawati., dan Saefullah, Kurniawan. (2014). <i>Pengantar Manajemen</i>. Jakarta: Prenadamedia Group</li> </ol>
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Module designation	<b>SI054 Programming Algorithms</b>
Semester(s) in which the module is taught	1
Person responsible for the module	Tri Rochmadi, S.Kom., M.Kom.,
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Case Based Learning/CBL Self-Directed Learning/SDL
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs032 - Able to use various system development tools

Content	Students are able to remember the etymology and terminology of algorithms & programming, goals and benefits, roles and functions, and examples of algorithms in everyday life. Moreover, they can recognize the algorithmic notation of certain programming languages, basic algorithmic structures, certain algorithmic components, etymology and terminology of data & operators, data types and operator types, arithmetic expressions on data types and operator types, sequential algorithms, branching algorithms, and loop algorithms to object-oriented programming.
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	1. Logika Pemrograman Python: oleh Abdul Kadir, 2019, Jakarta: PT. Elex Media Komputindo 2. Algoritma & Pemrograman Implementasi dengan Python pada Google Colab: 208976024466831, 292p.: ill. 3. <a href="https://www.python.org/doc/">https://www.python.org/doc/</a>

Module designation	<b>SI055 Digital Transformation</b>
Semester(s) in which the module is taught	1
Person responsible for the module	Yanuar Wicaksono, S.Kom., M.Kom
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Cooperative Learning/CoL
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760

Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs031 - Able to understand various system development methodologies</p> <p>CLOs041 - Able to plan IT infrastructure, network architecture, and physical/cloud services</p> <p>CPMK051 - Able to understand the code of ethics in the use of data information in the design, implementation and use of a system</p> <p>CLOs052 - Able to apply a code of ethics in the use of data information in the design, implementation and use of a system</p>
Content	Digital transformation course generally discusses the process of using digital technology to build new ways of various human activities and/or solve the problems faced.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<p>1. Ahmed Bounfour (auth.) Progress in IS: Digital Futures, Digital Transformation: From Lean Production to Acceluction [1 ed.]</p> <p>2. George Westerman, Didier Bonnet, Andrew McAfee. Leading Digital: Turning Technology into Business Transformation. Harvard Business Review Press. 2014</p> <p>3. Gerhard Oswald, Michael Kleinemeier (eds.) Shaping the Digital Enterprise: Trends and Use Cases in Digital Innovation and Transformation [1 ed.]. Springer International Publishing. 2017</p> <p>4. Penguatan Good governance Practice melalui Kegiatan Literasi Digital dengan Pemanfaatan Sistem Informasi Kependudukan di Dusun Jenis, Sendangsari, Bantul, Yogyakarta</p> <p>5. STRENGTHENING COMMUNITY CHARACTER AND LITERATURE IN HANDLING STUNTING THROUGH VILLAGE DIGITALIZATION IN GUWOSARI SUB-DISTRICT</p> <p>6. Sosialisasi dan Pendampingan Pembuatan NIB pada Pelaku UMKM Pasar Kebon Empring</p>
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Module designation	<b>UAA001 Kealmaataan I</b>
Semester(s) in which the module is taught	1
Person responsible for the module	Dr. Laelatul Badriah, M.Pd
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Contextual Instruction/CI
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Total : 4.760</p>

Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs091 - Able to demonstrate an attitude of devotion to God Almighty in accordance with the values of Islamic teachings Rohmatan lil'alamin (practicing Pancasila, based on law, love of others, tolerant and not radical)
Content	This course discusses Marching drill and Attitude
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	1. Kealmaatatan Team, 2024. Module of Kealmaatatan. Universitas Alma Ata. Yogyakarta 2. Latif, Z.M., Muqoddas, F., Akhwan, M., Mukri, B., Mu'allim, A., & Munthoha, 2002. Thoughts on Islamic Civilisation, UII Press, Yogyakarta. 3. Faqih, A. R. & Munthoha, 2002. Islamic Thought & Civilisation. UII Press: Yogyakarta.

Module designation	<b>UAA004 Indonesian Language</b>
Semester(s) in which the module is taught	1
Person responsible for the module	Dr (Cand). Ruwet Rusiyono, M.Pd
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Cooperative Learning/CoL Discovery Learning and Inquiry



Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs092 - Able to demonstrate an entrepreneurial spirit, independence and leadership based on norms and ethical values as well as being professional and responsible.
Content	This course is to equip students with knowledge and competence in mastering scientific Indonesian language skills in accordance with good and correct Indonesian language rules.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<ul style="list-style-type: none"> <li>. Ningsih, dkk., 2007, <i>Bahasa Indonesia Untuk Mahasiswa</i>, Yogyakarta: Penerbit Andi, 2007.</li> <li>. Iskandar Wassid, Sunendar Dadang, 2008. <i>Strategi Pembelajaran Bahasa</i>. Bandung: Remaja Rosdakarya</li> <li>. Syakur Nazri,. 2008. <i>Proses Psikologik dalam Pemerolehan dan Belajar Bahasa</i>. Yogyakarta: UIN Sunan Kalijaga Press.</li> <li>. Richards, Jack C. dan Renandya, Willy A. 2008. <i>Methodology in Language Teaching</i>. Cambridge: Cambridge University Press.</li> <li>. Suyatno, 2004. <i>Teknik pembelajaran Bahasa dan Sastra; Berdasarkan Kurikulum Berbasis Kompetensi</i>, Surabaya: Penerbit SIC.</li> <li>. Dawud, 2008. <i>Perspektif Pembelajaran Bahasa Indonesia</i>. Malang: UM Press.</li> <li>. Farida Rahim. <i>Pengajaran membaca di Sekolah Dasar</i>. 2007. Jakarta: Bumi Aksara</li> </ul> <p>Erneste, Pamusuk, 2005, <i>Buku Pintar Penyuntingan Naskah</i>. Jakarta: Gramedia Pustaka Utama.</p>
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Module designation	<b>UAA006 Pancasila (Five Principles)</b>
Semester(s) in which the module is taught	1
Person responsible for the module	Dr. Lathifatul Izzah, S.Th.I., M.Ag.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Cooperative Learning/CoL Discovery Learning and Inquiry

Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Total : 4.760</p>
Credit points	<p>2 credits</p> <p>3.14 ECTS</p>
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs091 - Able to demonstrate an attitude of devotion to God Almighty in accordance with the values of Islamic teachings Rohmatan lil'alamin (practicing Pancasila, based on law, love of others, tolerant and not radical)
Content	This course provides students with the ability to learn about the concept and role/position of Pancasila (Five Principles) in various life contexts. This course will be studied using a student-centered learning approach strategy, through tutorial discussions, lectures, and structured assignments.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. ----- . 2005. Pancasila dan UUD 1945. Jakarta: Pradnya Paramita.</p> <p>2. ----- . 2005. Sistem Pemerintahan Indonesia. Jakarta: Bumi Aksara.</p> <p>3. Hasan, M. Iqbal. 2002. Pokok-pokok Materi Pendidikan Pancasila. Jakarta: Raja Grafindo Persada</p>



# SEMESTER 2

Module designation	<b>FKOM004 Database</b>
Semester(s) in which the module is taught	2
Person responsible for the module	Tri Rochmadi, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Case Based Learning/CBL Collaborative Learning/CL

Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs021 - Able to design databases</p> <p>CLOs022 - Able to use databases</p> <p>CLOs033 - Able to analyze user needs in building information systems to achieve organizational goals</p> <p>CLOs071 - Able to understand the concepts, techniques and methodology of information systems project management</p>
Content	The Database Systems course teaches students to have a strong understanding of database system concepts and have the ability to build database systems as solutions to everyday problems.
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	1. Basis Data; Fathansyah, Ir.; CV. Informatika; 1999 2. Database System, Second Edition; Thomas Conolly dan Carolyn Begg, 2005 3. <a href="http://www.mysql.com">www.mysql.com</a> 4. ANALISIS ANTENATAL CARE (ANC) PADA SURVEILANS KESEHATAN IBU DAN ANAK DENGAN TAHAPAN AGREGASI PIPELINE NOSQL
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Module designation	<b>SI056 Archive System and File Access</b>
Semester(s) in which the module is taught	2
Person responsible for the module	Asti Ratnasari, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	-

Module objectives/intended learning outcomes	<p>CLOs011 - Able to understand the basic concepts of information systems</p> <p>CLOs012 - Able to analyze organizational processes and systems</p>
Content	<p>This course provides an understanding of managing very large volumes of data, provides a basis for developing methods to manage such data, including file systems in operating systems and access methods applied by operating systems and/or system software. It also covers understanding algorithms and secondary storage management techniques and analyzing the performance of the appropriate file structure for the application, so that it can provide an assessment and select the right method according to the characteristics of the application.</p>
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<ol style="list-style-type: none"> <li>1. Pengantar Berkas &amp; Akses, Boenawan , Kalya Prasetya, Gunadarma,1996</li> <li>2. File Management Tehniques, John Wiley &amp; Sons, Billy G Claybrook.</li> <li>3. Data Management File Structure, Mary Es Loomise, Prentice Hall</li> <li>4. Brenton, Chris. Cameron Hunt. 2003. Network Security. PT. Elek Media Komputindo. Jakarta.</li> <li>5. Pengembangan Sistem Arsip Korespondensi Berbasis Laman Portal Untuk Kemudahan Pengelolaan Desa (Kasus: Kapanéwon Mlati, Sleman, Yogyakarta)</li> </ol>

Module designation	<b>SI057 Scientific Writing</b>
Semester(s) in which the module is taught	2
Person responsible for the module	Asti Ratnasari, S.Kom., M.Kom



Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Problem Based Learning/PBL Discovery Learning and Inquiry Self-Directed Learning/SDL
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs091 - Able to demonstrate an attitude of devotion to God Almighty in accordance with the values of Islamic teachings Rohmatan lil'alamin (practicing Pancasila, based on law, love of others, tolerant and not radical)
Content	This course studies how to draw information from reading text and creating summaries, overviews/abstracts, and syntheses; compiling information into scientific papers or journals; and compiling, developing, and presenting ideas in writing based on primary/secondary data or relevant literature studies, and adhering to the standards for composing scientific journal manuscripts.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<p>1. George M. Hall. How to write a paper, fourth edition. England : John Wiley &amp; Sons Ltd, 2012.</p> <p>2. DIKTI. Peraturan Direktur Jenderal Pendidikan Tinggi Kementerian Pendidikan Nasional Republik Indonesia Nomor: 49/DIKTI/Kep/2011 tentang Pedoman Akreditasi Terbitan Berkala Ilmiah. Jakarta : DIKTI. 2011.</p> <p>3. Prof. Dr. Adiwijaya. Membangun Spirit untuk Menulis Penelitian Publikasi Internasional</p> <p>4. Buku Pedoman PKM</p> <p>5. Rino R, A. Anis A, Tri Rochmadi. Menulis dan Mempublikasikan Artikel Ilmiah di Jurnal Nasional</p> <p>6. Lecturers' and students' responses toward the implementation of the Freedom to Learn - Independent Campus Policy (FLIC) program at Universitas Alma Ata</p>
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Module designation	<b>SI060 Computer Networks and Data Communications</b>
Semester(s) in which the module is taught	2
Person responsible for the module	Yanuar Wicaksono,S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Problem Based Learning/PBL
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>

Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs041 - Able to plan IT infrastructure, network architecture, and physical/cloud services</p> <p>CLOs042 - Able to analyze the concepts of identification, authentication, access authorization in the context of system security</p>
Content	The Computer Networks and Data Communications course is a course that discusses the concepts, technology and protocols used in data communications and computer network operations.
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. B. A. Forouzan, DATA COMMUNICATIONS AND NETWORKING, vol. 32. 2010.</p> <p>2. Kurose, Ross, 2017, Computer Networking, A Top-Down Approach (Seventh Edition), Pearson, New York</p> <p>3. Lukas, J., 2006, Jaringan Komputer, Graha Ilmu, Yogyakarta</p> <p>4. Sutanta, E., 2005, Komunikasi Data &amp; Jaringan Komputer, Graha Ilmu, Yogyakarta</p>

Module designation	<b>SI067 Computer Organization</b>
Semester(s) in which the module is taught	2
Person responsible for the module	Avrillaila Akbar Harahap, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory

Teaching methods	Cooperative Learning/CoL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs041 - Able to plan IT infrastructure, network architecture, and physical/cloud services
Content	A course that studies operational units between the components that make up a computer system and the factors that underlie an expert in making a computer to meet the needs of various users.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	1. Suryawinata, Mohammad. (2018). Arsitektur dan Organisasi Komputer. Jawa Timur: UMSIDA Press. 2. Syahrul. (2010). Organisasi dan Arsitektur Komputer. Yogyakarta: ANDI.

Module designation	<b>UAA002 Kealmaataan II</b>
Semester(s) in which the module is taught	2
Person responsible for the module	Dr. Muh. Mustakim, S.Pd., M.Pd.I.

Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Cooperative Learning/CoL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 1 Sch X 14 Weeks = 700 Minutes Structured Assignments : 60 Minutes X 1 Sch X 14 Weeks = 840 Minutes Self-Study : 60 Minutes X 1 Sch X 14 Weeks = 840 Minutes Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes Total : 4.760 Minutes
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	Kealmaataan I
Module objectives/intended learning outcomes	CLOs091 - Able to demonstrate an attitude of devotion to God Almighty in accordance with the values of Islamic teachings Rohmatan lil'alam (practicing Pancasila, based on law, love of others, tolerant and not radical)
Content	This course provides the ability to understand the principles of Islam recognised in Indonesia, focusing on Islam in relation to the study of Islam as Rohmatan Lil'alam. This Islamic Religious Studies 2 discusses: 1) Thoharoh 2) prayer 3) Fasting, 4) Zakat, Infaq & Shodaqoh, 5) Hajj & Umrah, 6) Munakahat, 7) Mu'amalah, 8) Dhikr and prayer
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<ol style="list-style-type: none"> <li>1. Kealmaatanaan Team, 2024. Module of Kealmaatanaan. Universitas Alma Ata. Yogyakarta</li> <li>2. LPBA Team. 2015. Module of the Institute for Qur'an Reading and Prayer Practice. Alma Ata College: Yogyakarta.</li> <li>3. KH. Ali Maksum, Risalah Ahlu Sunnah Wal jamaah, Yogyakarta: Menara Kudus Yogyakarta</li> <li>4. Dr Budioro B, MPh, 2006, Introduction to Islamic Studies III, 2nd Edition. Semarang: Univ. Diponegoro</li> <li>5. Prof. Dr Soekidjo Notoatmodjo, 2003, Islamic Religious Studies III 2nd Edition, Jakarta: Rineka Cipta</li> <li>6. Ash-Sheikh Muhammad bin Qasim Al-Ghazy. 1991. Fath-Hul Qarib. Al Hidayah: Surabaya.</li> <li>7. Wahbah. 2011. Fiqh Islam Wa Adillatuhu, Jakarta: Darul Fikir, Al-Fauzan,</li> </ol>
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Module designation	<b>UAA005 Civic education</b>
Semester(s) in which the module is taught	2
Person responsible for the module	Dr. Lathifatul Izzah, S.Th.I., M.Ag.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Cooperative Learning/CoL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS

Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs091 - Able to demonstrate an attitude of devotion to God Almighty in accordance with the values of Islamic teachings Rohmatan lil'alamin (practicing Pancasila, based on law, love of others, tolerant and not radical)
Content	This course provides insight and aims to cultivate citizens with insights, attitudes and behavior rooted the Pancasila (Five Principles) paradigm, appropriate Indonesian nationalism, national identity. Furthermore, it contributes to the development of the nation and state within the framework of the Indonesian nation-state concept. By understanding Indonesia's constitutional political and governmental system, every citizen will be able to recognize the importance of political life and a constitutional state. This course is expected to be able to form attitudes and behavior that understand and respect human rights, fulfilling one's rights and obligations as an Indonesian citizen as a democratic civil society. Additionally, this course also provides insight into the country's territorial aspects (historical, juridical and national jurisdiction) as well as geopolitics and geostrategy of development across various fields. The course also emphasizes Indonesia's role in realizing world peace based on independence.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<ol style="list-style-type: none"> <li>1. Eko Praetyo, HAM Kejahatan Negara&amp;Iperiaisme Modal, Insist,2001</li> <li>2. Junaidi, dkk, Pendidikan Kewarganegaraan, Surabaya: LAPIS, 2009</li> <li>3. Kaelan&amp;Achmad Zubaidi, Pendidikan kewarganegaraan Untuk Perguruan Tinggi, Paradigma, 2007</li> </ol>
Module designation	<b>UAA007 English I</b>

Semester(s) in which the module is taught	2
Person responsible for the module	Ika Tri Susilowati, M.Pd.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Cooperative Learning/CoL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs092 - Able to demonstrate an entrepreneurial spirit, independence and leadership based on norms and ethical values as well as being professional and responsible.
Content	This course aims to enable students to master the basic concepts of English related to the 4 integrated skills that must be mastered, namely listening, writing, reading and speaking skills.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings



Reading list	<p>1. Alexander, L.G. 1967. Practice and Progress (New Concept English) An Integrated Course for Intermediate Students. New York: Longman</p> <p>2. Phillips, Deborah. 2001. Longman Complete Course for TOEFL test. New York: Pearson Education.</p> <p>3. Richards, J.C., Hull, J., and Proctor, S. (1997). New Interchange 2: English for International Communication. Cambridge: Cambridge University Press.</p> <p>4. Rost, M (Ed.). 1995. Introductory Topics: Intermediate Listening Comprehension. Longman: Longman Publishing Group.</p> <p>5. Murphy, Raymond. 2000. English grammar in Use: A Self-Study reference and Practice book for Intermediate Students. Cambridge: Cambridge University Press.</p>
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Module designation	<b>UAA008 Entrepreneurship</b>
Semester(s) in which the module is taught	2
Person responsible for the module	Nila Hidayah, S.E., M.Ak.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Cooperative Learning/CoL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Total : 4.760</p>
Credit points	<p>2 credits</p> <p>3.14 ECTS</p>

Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs092 - Able to demonstrate an entrepreneurial spirit, independence and leadership based on norms and ethical values as well as being professional and responsible.
Content	The Entrepreneurship course aims to provide understanding and improve abilities and skills to foster an entrepreneurial attitude, generate business ideas, business plans, and implement them. It also build awareness that there are many opportunities in the field of entrepreneurship as a viable option for students to manage and leverage resources and personal strength in their environment in this modern era. This course is designed to equip students with valuable tools for their future endeavors.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<ol style="list-style-type: none"> <li>1. Hendro.2011. Dasar-Dasar Kewirausahaan. Penerbit Erlangga. Jakarta</li> <li>2. Wardhana &amp; Makodian.2010. Technopreneur. Penerbit PT. Elex Media Komputindo. Jakarta</li> <li>3. Suhartanto &amp; Setijadi dkk. 2010. Technoprenuerhsip: Strategi Penting Dalam Bisnis Berbasis Teknologi. Penerbit PT. Elex Media Komputindo. Jakarta</li> </ol>

## SEMESTER 3

Module designation	<b>FKOM003 Data Structures</b>
Semester(s) in which the module is taught	3
Person responsible for the module	Andri Pramuntadi, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Case Based Learning/CBL

Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	Programming Algorithms
Module objectives/intended learning outcomes	<p>CLOs081 - Able to analyze business processes for business sustainability in accordance with current developments</p> <p>CLOs082 - Able to design business processes for business sustainability in accordance with current developments</p>
Content	<p>Data structures are methods for storing, retrieving, and arranging data. They enable easier access and updating of data on a computer. The foundation of every computer program is data and algorithms; with algorithms, computer programs can use data effectively. Meanwhile, data structures are like containers that store lots of data with a certain layout. Each type of data structure has its own layout. Because computer memory is limited, the data layout must be arranged properly. Therefore, data storage requires a special "formation" so that the data is neater and doesn't use up a lot of memory.</p>
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. Sjukani, Moh. 2010. (Algoritma Dan Struktur Data I) Dengan C, C++ dan Java. Jakarta: Mitra Wacana Media.</p> <p>2. Erliansyah Nasution dan Indra Yatini B.2005. Algoritma dan Struktur Data. Graha Ilmu. Yogyakarta.</p>

Module designation	<b>FKOM005 Statistics and Probability</b>
Semester(s) in which the module is taught	3
Person responsible for the module	Ahmad Anis Abdullah, S.Si. M.Sc
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs023 - Able to process data using data processing tools and techniques  CLOs024 - Able to analyze data using data processing tools and techniques  CLOs051 - Able to understand the code of ethics in the use of data information in the design, implementation and use of a system  CLOs052 - Able to apply a code of ethics in the use of data information in the design, implementation and use of a system

Content	This course focuses on data collection, presentation, analysis, and interpretation to inform decision-making. The topics covered in statistics include: definitions, functions, roles, and classifications of statistics; differences between description and inference statistics; population and sample; types of data; data collection and presentation methods; measures of concentration and distribution of data; basic probability concepts; random variables; probability distribution of random variables; sampling distribution; estimation and parameters; hypothesis testing; one and two sample estimation; chi-square distribution and F distribution; simple linear regression and correlation analysis; and multiple linear regression.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<ol style="list-style-type: none"> <li>1. De Veaux, R.D., Velleman, P.F., Bock, D.E., Vukov, A.M., Wong, A.C. and Burkett, C., 2005. Stats: data and models (p. 743). Boston: Pearson/Addison Wesley.</li> <li>2. Bruce, P., Bruce, A., &amp; Gedeck, P. (2020). Practical statistics for data scientists: 50+ essential concepts using R and Python. O'Reilly Media.</li> <li>3. Haslwanter, T., 2016. An introduction to statistics with python. With Applications in the Life Sciences; Springer International Publishing: Cham, Switzerland.</li> <li>4. Field, A., 2024. Discovering statistics using IBM SPSS Statistics. SAGE Publications Limited.</li> <li>5. Adopting Assignment technology fit model on e-voting technology</li> </ol>

Module designation	<b>FKOM007 English II</b>
Semester(s) in which the module is taught	3
Person responsible for the module	Esthi Nawangsasi, M.A.

Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Cooperative Learning/CoL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	English I
Module objectives/intended learning outcomes	CLOs091 - Able to demonstrate an attitude of devotion to God Almighty in accordance with the values of Islamic teachings Rohmatan lil'alamin (practicing Pancasila, based on law, love of others, tolerant and not radical)  CLOs092 - Able to demonstrate an entrepreneurial spirit, independence and leadership based on norms and ethical values as well as being professional and responsible.
Content	This course is a continuation of the English 1 course, which covered general English. In English 2, students are encouraged to be more active in applying the knowledge and skills acquired in English 1, both orally and in writing, tailored to their specific fields of study. Consequently, the material presented and discussed in English 2 is more specialized and targeted, aligning with the students' academic disciplines, commonly referred to as ESP (English for Specific Purposes).
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<ol style="list-style-type: none"> <li>1. Alexander, L.G. 1967. Practice and Progress (New Concept English) An Integrated Course for Intermediate Students. New York: Longman</li> <li>2. Phillips, Deborah. 2001. Longman Complete Course for TOEFL test. New York: Pearson Education.</li> <li>3. Richards, J.C., Hull, J., and Proctor, S. (1997). New Interchange 2: English for International Communication. Cambridge: Cambridge University Press.</li> <li>4. Rost, M (Ed.). 1995. Introductory Topics: Intermediate Listening Comprehension. Longman: Longman Publishing Group.</li> <li>5. Murphy, Raymond. 2000. English grammar in Use: A Self-Study reference and Practice book for Intermediate Students. Cambridge: Cambridge University Press.</li> <li>6. Oshima, Alice., Ann Hogue 3rd ed. (1991). Writing Academic English: Longman: Longman Publishing Group</li> <li>7. Mikulecky, Beatrice., Linda Jeffries. More Reading Power: Longman</li> <li>8. Mikulecky, Beatrice., Linda Jeffries. Advanced Reading Power: Longman</li> <li>9. Bates, Jefferson, Writting with Precision.</li> <li>10. Krohn, Robert. English Sentence Structure</li> </ol>
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Module designation	<b>SI058 Human and Computer Interaction</b>
Semester(s) in which the module is taught	3
Person responsible for the module	Asti Ratnasari, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Cooperative Learning/CoL Problem Based Learning/PBL Discovery Learning and Inquiry



Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes</p> <p>Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs033 - Able to analyze user needs in building information systems to achieve organizational goals</p> <p>CLOs051 - Able to understand the code of ethics in the use of data information in the design, implementation and use of a system</p> <p>CLOs052 - Able to apply a code of ethics in the use of data information in the design, implementation and use of a system</p>
Content	<p>This course provides the conceptual and practical basis of human and computer interaction, interaction models, design and implementation of human and computer interfaces as well as the use of tools for developing human and computer interface software. By the end of this course, students are expected to understand human cognition, human memory, problem-solving, language, and how these factors relate to designing and developing interactive systems.</p>
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<p>[1] P. I. Santosa, Interaksi Manusia dan Komputer, Penerbit Universitas Terbuka, 2020.</p> <p>[2] J, Dalle, dkk, Pengantar Interaksi Manusia dan Komputer, Raja Grafindo Persada, 2019.</p> <p>[3] Plaisant, Catherine, et al. Designing the User Interface: Strategies for Effective Human-Computer Interaction. United Kingdom, Pearson Education, 2017.</p> <p>[4] E. Herder, Personalized Human-Computer Interaction. Austria, De Gruyter, 2019</p> <p>[5] Feng, Jinjuan Heidi, et al. Research Methods in Human-Computer Interaction. United States, Elsevier Science, 2017.</p> <p>Pengembangan Sistem Arsip Korespondensi Berbasis Laman Portal Untuk Kemudahan Pengelolaan Desa (Kasus: Kapanéwon Mlati, Sleman, Yogyakarta)</p>
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Module designation	<b>SI059 Cyber Security</b>
Semester(s) in which the module is taught	3
Person responsible for the module	Tri Rochmadi, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Cooperative Learning/CoL Project Based Learning/PjBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes</p> <p>Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	3 credits 4.71 ECTS

Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs042 - Able to analyze the concepts of identification, authentication, access authorization in the context of system security
Content	The primary goal of this course is to introduce the fundamentals of security systems, basic cryptography, program security in everyday applications, and the basics of digital forensics.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<p>1. Batelli, F., &amp; Bruchi, D. (2008). Network security: From risk analysis to protection strategies. ISACOM Stampa: PrintArt.</p> <p>2. Bauman, S. (2008). The role of elementary school caunselors in redusing school bullying. The Elementary School Journal.</p> <p>3. Begotti, T., &amp; Maran, D. A. (2019). Characteristics of cyberstalking behavior, consequences, and coping strategies : A cross- sectional study in a sample of italian university students.</p> <p>4. CSCU</p> <p>5. T. Rochmadi and Ike Yunia Pasa, “PENGUKURAN RISIKO DAN EVALUASI KEAMANAN INFORMASI MENGGUNAKAN INDEKS KEAMANAN INFORMASI DI BKD XYZ BERDASARKAN ISO 27001 / SNI”, csecurity, vol. 4, no. 1, pp. 38–43, Jun. 2021.</p> <p>6. Nur, Nur et al. “Multi-Level Fusion for Enhanced Host-based Malware Detection in ICT-Enabled Smart Cities.” Fusion: Practice and Applications (2024): n. pag.</p> <p>7. Tri Rochmadi, Yanuar Wicaksono, Nanda Dhea Nisa . Digital Evidence Identification of Android Device using Live Forensics Acquisition on Cloud Storage (iDrive). International Journal of Computer Applications. 175, 26 ( Oct 2020), 40-43. DOI=10.5120/ijca2020920815</p> <p>8. Mukhlis Prasetyo Aji et al 2020 IOP Conf. Ser.: Mater. Sci. Eng. 771 012024 Logical acquisition in the forensic investigation process of android smartphones based on agent using open source software</p>
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Module designation	<b>SI061 Business Process Analysis</b>
Semester(s) in which the module is taught	3
Person responsible for the module	Raden Nur Rachman Dzakiyullah, S.Kom., M.Sc.
Language	Indonesian
Relation to curriculum	Compulsory

Teaching methods	Case Based Learning/CBL Collaborative Learning/CL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs051 - Able to understand the code of ethics in the use of data information in the design, implementation and use of a system  CLOs052 - Able to apply a code of ethics in the use of data information in the design, implementation and use of a system
Content	This course studies the concepts, knowledge, and skills needed to understand and analyze business processes. It offers an introduction to the concept of business processes and their analysis, utilizing case studies to highlight the challenges in understanding and analyzing the ongoing business processes
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<p>1. Brocke, Jan vom . 2015. Handbook on Business Process Management 1 Introduction, Methods, and Information Systems Second Edition. Berlin: Springer.</p> <p>2. Indrajit, Richardus Eko dan Djokopranoto. Konsep dan Aplikasi Business Process Reengineering.</p> <p>3. Andersen, Bjørn. 2007. Business Process Improvement Toolbox Second Edition. United States of America: ASQ Quality Press.</p>
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Module designation	<b>SI062 Information Systems Theory</b>
Semester(s) in which the module is taught	3
Person responsible for the module	Asti Ratnasari, S.Kom., M.Kom
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	<p>Case Based Learning/CBL</p> <p>Collaborative Learning/CL</p> <p>Problem Based Learning/PBL</p> <p>Discovery Learning and Inquiry</p>
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes</p> <p>Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	-

Module objectives/intended learning outcomes	<p>CLOs011 - Able to understand the basic concepts of information systems</p> <p>CLOs012 - Able to analyze organizational processes and systems</p>
Content	Theories related to the information system life cycle (Success Model, Technology Acceptance Model, User Resistance Theories, Assignment-Technology Fit Theory, Process Virtualization Theory, Theory of Deferred Action); Theories related to strategy and economics (Resource-Based View, Theory of Slack Resources, Portfolio Theory, Discrepancy Theory Models); Theories related to data analysis (Surveys, Sampling Techniques, Validity and Reliability Tests, Path Analysis, Multiple Regression Analysis, Factor Analysis, PLS and SEM).
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>Analisis Intensi Mahasiswa Terhadap Penerapan Portal Universitas Alma Ata Berbasis Mobile Menggunakan Metode Theory of Planned Behavior</p> <p>Analisis Pemanfaatan Teknologi Penghubung Lembaga Keuangan Syariah Dengan Usaha Mikro Kecil Menengah Untuk Meningkatkan Pangsa Pasar Syariah Di Yogyakarta</p> <p>Adopting Assignment technology fit model on e-voting technology</p> <p>The impact of knowledge management, administrative management, information technology for e-government success</p> <p>The impact of knowledge management, administrative management, information technology for e-government success</p>

Module designation	<b>SI063 Information Systems Analysis and Design</b>
Semester(s) in which the module is taught	3

Person responsible for the module	Dhina Puspasari Wijaya, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Project Based Learning/PjBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs012 - Able to analyze organizational processes and systems  CLOs041 - Able to plan IT infrastructure, network architecture, and physical/cloud services  CLOs042 - Able to analyze the concepts of identification, authentication, access authorization in the context of system security  CLOs081 - Able to analyze business processes for business sustainability in accordance with current developments  CLOs082 - Able to design business processes for business sustainability in accordance with current developments



Content	This course studies the Concept of Object-Orientation System Design Analysis; System Development Cycle (SDLC) and data collection to determine system requirements. It also describes the scope of the system; describes business processes through use case; describes the details of case studies activities that depict business process systems; designs the objects needed by the system; shows process behavior from the business process side (sequence of activities and communication between objects); shows the state change behavior of an object; and optimize the system form. Furthermore, it also involves system implementation as well as case Study analysis, design and implementation
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<ol style="list-style-type: none"> <li>1. Whitten, J.L., Bentley, L.D., dan Dittman, K.C., 2004, Metode Desain dan Analisis Sistem, McGraw-Hill, disadur oleh Andi Offset.</li> <li>2. O'Brien, J.A., dan Marakas, G.M., 2011, Management Information Systems 10 edition, McGrawHill Education.</li> <li>3. Nugroho, A., 2009, Rekayasa Perangkat Lunak Menggunakan UML dan Java, Andi</li> <li>4. Modul Mata kuliah : Analisis dan Perancangan Sistem Informasi . Universitas AMIKOM Yogyakarta. 2018.</li> <li>5. MODUL PRAKTIKUM Analisis dan Perancangan SI. Universitas Sriwijaya. 2016.</li> <li>6. Object-Oriented Analysis and Design for Information Systems. Raul Sidnei Wazlawick. 2013</li> <li>7. Harahap, A. A. 2018. PERANCANGAN WEB E-SHOP PADA TOKO SANDY DENGAN MENGGUNAKAN PHP DAN MySQL. Indonesian Journal of Business Intelligence (IJUBI), 1 (1), 17-24.</li> <li>8. Rochmadi, Tri dkk. (2023). Pendampingan Pembuatan Website untuk Pemasaran Wisata dan UMKM Melalui Internet. Journal Darma Abdi Karya, 2 (1), 31-35.</li> </ol>

## **SEMESTER 4**

Module designation	<b>FKOM001 Software engineering</b>
Semester(s) in which the module is taught	4
Person responsible for the module	Avrillaila Akbar Harahap, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Case Based Learning/CBL Collaborative Learning/CL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS

Required and recommended prerequisites for joining the module	Programming Algorithms
Module objectives/intended learning outcomes	<p>CLOs031 - Able to understand various system development methodologies</p> <p>CLOs032 - Able to use various system development tools</p> <p>CLOs073 - Able to apply information systems project management concepts, techniques and methodologies</p>
Content	In this course, students will gain an understanding of modern software engineering techniques and the software life cycle, covering areas such as requirements analysis, specification, design, implementation, testing, and maintenance.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<p>1. Roger S. Pressman and Bruce Maxim, Software Engineering: A Practitioner's Approach, 9th Edition, McGraw-Hill Higher International, 2019</p> <p>2. Ian Sommerville. Software Engineering, 10th edition, Pearson Education Limited, 2016.</p> <p>4. IEEE Xplore. (1998). IEEE Recommended Practice for Software Requirements Specifications. IEEE Std 830-1998 vol., no., pp.1-40, 20 Oct. 1998. Retrieved from <a href="https://ieeexplore.ieee.org/document/720574">https://ieeexplore.ieee.org/document/720574</a></p> <p>5. Scrum.org. (2022). What is Scrum?. Diakses 28 Juni 2022, dari <a href="https://www.scrum.org/resources/what-is-scrum">https://www.scrum.org/resources/what-is-scrum</a></p> <p>6. Software Testing Help. (2022). Agile Methodology: A Beginner's Guide to Agile Method and Scrum. Diakses 28 Juni 2022, dari <a href="https://www.softwaretestinghelp.com/agile-scrum-methodology-for-development-and-testing/">https://www.softwaretestinghelp.com/agile-scrum-methodology-for-development-and-testing/</a></p> <p>7. Visual Paradigm. (2022). What is Unified Modeling Language (UML)?. Diakses pada 28 Juni 2022, dari <a href="https://www.visual-paradigm.com/guide/uml-unified-modeling-language/what-is-uml/">https://www.visual-paradigm.com/guide/uml-unified-modeling-language/what-is-uml/</a></p> <p>8. Pengembangan Sistem Arsip Korespondensi Berbasis Laman Portal Untuk Kemudahan Pengelolaan Desa (Kasus: Kapanéwon Mlati, Sleman, Yogyakarta)</p>
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Module designation	<b>FKOM006 Web Programming</b>
Semester(s) in which the module is taught	4
Person responsible for the module	Dadang Heksaputra, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Case Based Learning/CBL

Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	Programming Algorithms
Module objectives/intended learning outcomes	<p>CLOs022 - Able to use databases</p> <p>CLOs031 - Able to understand various system development methodologies</p> <p>CLOs032 - Able to use various system development tools</p> <p>CLOs033 - Able to analyze user needs in building information systems to achieve organizational goals</p> <p>CLOs052 - Able to apply a code of ethics in the use of data information in the design, implementation and use of a system</p> <p>CLOs062 - Able to apply information systems to achieve short-term organizational goals and objectives</p>

Content	<p>Web Programming, often referred to simply as web programming, is a field closely associated with the internet and websites. It involves the process of creating websites for internet use. The World Wide Web (WWW) comprises interconnected web pages, or hyperlinks, forming a vast repository of information that operates using the HyperText Transfer Protocol (HTTP). Like other areas of programming—such as desktop, mobile, or game development—web programming relies on various programming languages. These languages contain statements, commands, and functions that ensure the created application aligns with the programmer's design. Thus, web programming encompasses a diverse range of languages used for development.</p>
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<ol style="list-style-type: none"> <li>1. Gumelar, A. A., &amp; Heksaputra, D. (2023). Sistem Informasi Seleksi Wisata Halal dengan Metode Analytical Hierarchy Process (AHP) di Bantul Yogyakarta. <i>Device</i>, 13(1), 75–87. <a href="https://ojs.unsiq.ac.id/index.php/device/article/view/4446">https://ojs.unsiq.ac.id/index.php/device/article/view/4446</a></li> <li>2. Sukmono Wahyudi, A. F., &amp; Heksaputra, D. (2023). Pembangunan Aplikasi Penilaian Pendidikan Berbasis Outcome-Based Education (OBE) menggunakan Website dengan Pendekatan Metode Waterfall. <i>Information System and Emerging Technology Journal</i>, 4(2), 86–94. <a href="https://ejournal.undiksha.ac.id/index.php/insert/article/view/65287">https://ejournal.undiksha.ac.id/index.php/insert/article/view/65287</a></li> <li>3. Abdulloh, R. (2018a). 7 IN 1 PEMROGRAMAN WEB UNTUK PEMULA Cara cepat efektif menjadi web programmer. In 7 in 1 pemrograman web untuk pemula (p. 4).</li> </ol>

Module designation	<b>FKOM008 Operating System</b>
Semester(s) in which the module is taught	4

Person responsible for the module	Hardan Deden gutama, S.Kom. M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Case Based Learning/CBL
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs041 - Able to plan IT infrastructure, network architecture, and physical/cloud services
Content	This course explores the function of operating systems in computers, focusing on how they manage hardware resources such as memory, storage, and I/O. It covers how operating systems handle concurrency, manage processes and threads, and perform scheduling, input/output operations, and file management. Additionally, the course addresses how operating systems provide protection and security.
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings



Reading list	<ol style="list-style-type: none"> <li>1. Tanenbaum, S. &amp; Bos, Herbert. 2008. Modern Operating System, Fourth Edition. New Jersey: Pearson Prentice-Hall.</li> <li>2. Silberschatz, A, et.al. 2013. Operating System Concepts, Ninth Edition. New Jersey: John Wiley &amp; Sons.</li> <li>3. Love, Robert. 2007. Linux System Programming. California: O 19Reilly Media.</li> <li>4. Liu, Yukun, et.al. 2011. UNIX Operating System: The Development Tutorial via UNIX Kernel Services. New York: Springer</li> <li>5. Aji, Kresno, R. 2003. System Administering RedHat Linux. Jakarta: Elex Media Komputindo</li> <li>6. Nick Blundell, 2010. Writing a Simple Operating System from Scratch. UK: School of Computer Science, University Birmingham</li> <li>7. Premkumar, S. Batch File Programming.W3Chert</li> <li>8. Pengembangan Sistem Arsip Korespondensi Berbasis Laman Portal Untuk Kemudahan Pengelolaan Desa (Kasus: Kapanéwon Mlati, Sleman, Yogyakarta)</li> <li>9. Analisis Persebaran Angka Kematian Ibu Hamil Berbasis WEB-GIS Menggunakan Metode Fuzzy Multiple Criteria Decision Making (FMCDM) di Daerah Yogyakarta</li> <li>10. Pendampingan Pembuatan Website untuk Pemasaran Wisata dan UMKM Melalui Internet</li> <li>11. Peningkatan Pengetahuan Pemasaran UKM Sempe Arum Manis Berbasis Website</li> </ol>
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Module designation	<b>SI064 Supply Chain Management</b>
Semester(s) in which the module is taught	4
Person responsible for the module	Raden Nur Rachman Dzakiyullah, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory

Teaching methods	Case Based Learning/CBL Collaborative Learning/CL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs041 - Able to plan IT infrastructure, network architecture, and physical/cloud services  CLOs082 - Able to design business processes for business sustainability in accordance with current developments
Content	This course covers Supply Chain Management, focusing on the analysis, design, and development of supply network systems. It examines the entire supply chain process, from procurement and production to distribution to customers. Key topics include fundamental principles and standards of supply chains, emerging trends, and their application in both corporate and government settings to ensure high service quality. The course also explores theoretical concepts that support more effective and efficient supply chain management processes.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<p>1. Min, Hokey. The essentials of supply chain management: New business concepts and applications. FT Press, 2015.</p> <p>2. Chopra, S. (2017). Supply Chain Management: Strategy, Planning, and Operation.</p> <p>3. Chaffey, D., 2015, Digital Business and E-Commerce Management: Strategy, Implementation and Practice, Sixth Edition, Pearson Education Limited, United Kingdom.</p> <p>4. Pulevska-Ivanovska, L., Kaleshovska, N., 2013, Implementation of e-Supply Chain Management, TEM Journal, 2 (4), pp. 314-322</p> <p>5. Strauss, J., Frost, R., 2014, E-Marketing, Seventh Edition, Pearson Education, Inc., New Jersey</p> <p>6. Turban, E. et al., 2012, Electronic Commerce 2012: A Managerial and Social Networks Perspective, Seventh Edition, Pearson Education, London.</p> <p>7. The Optimization Inventory Process on Identical Machine Job Shop with Multiple Setups Using Genetic Algorithm</p> <p>8. Mediation effect of collaborative performance system on fresh produce supply chain performance with a lateral collaboration structure model The Role Of Conflict Resolution On Supply Chain Performance</p> <p>9. The Role Of Conflict Resolution On Supply Chain Performance</p>
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Module designation	<b>SI065 Risk Management and Business Sustainability</b>
Semester(s) in which the module is taught	4
Person responsible for the module	Tri Rochmadi, S.Kom., M.kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	<p>Case Based Learning/CBL</p> <p>Collaborative Learning/CL</p> <p>Problem Based Learning/PBL</p> <p>Discovery Learning and Inquiry</p>

Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes</p> <p>Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	Cyber Security
Module objectives/intended learning outcomes	<p>CLOs042 - Able to analyze the concepts of identification, authentication, access authorization in the context of system security</p> <p>CLOs052 - Able to apply a code of ethics in the use of data information in the design, implementation and use of a system</p> <p>CLOs083 - Able to evaluate business processes for business sustainability in accordance with current developments</p>
Content	The Supply Chain Management course explores an integrated approach to overseeing the flow of materials (both raw and finished products), information, and finances within individual companies and across interconnected groups of companies, known as supply chains. Students will learn various concepts and methods designed to enhance a company's competitiveness in a highly competitive environment.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<p>1. Blokdijk, G., Engle, C. and Brewster, J., 2008. IT Risk Management Guide.</p> <p>2. Hopkin, Paul. Fundamentals of Risk Management: Understanding, evaluating and implementing effective risk management. Kopan Page: 2010.</p> <p>3. Business Continuity &amp; Disaster Recovery for IT professionals, Susan Snedaker</p>
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Module designation	<b>SI066 System Strategic Planning</b>
Semester(s) in which the module is taught	4
Person responsible for the module	Asti Ratnasari, S.Kom., M.Kom
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	<p>Case Based Learning/CBL</p> <p>Collaborative Learning/CL</p> <p>Problem Based Learning/PBL</p> <p>Discovery Learning and Inquiry</p>
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Total : 4.760</p>
Credit points	<p>2 credits</p> <p>3.14 ECTS</p>
Required and recommended prerequisites for joining the module	-

Module objectives/intended learning outcomes	<p>CLOs011 - Able to understand the basic concepts of information systems</p> <p>CLOs061 - Able to plan organizational information systems to achieve long-term organizational goals and objectives</p> <p>CLOs082 - Able to design business processes for business sustainability in accordance with current developments</p>
Content	This course covers the aspects and concepts of strategic management within the scope of information systems. It includes methodologies and frameworks for developing strategic plans for an organization's or company's information system.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. Ward, John dan Joe Peppard. Strategic Planning for Information Systems 3rd Edition. John Wiley &amp; Sons, Inc. 2003</p> <p>2. Cassidy, Anita. A Practical Guide to Information Systems Strategic Planning 2 nd edition. Auerbach Publications . 2005</p> <p>3. Turban, Efraim. et al. Information Technology for Management: Advancing Sustainable, Profitable Business Growth, 9th edition. John Wiley &amp; Sons, Inc. 2013</p> <p>4. Lean – Balanced Scorecard Integration Framework for Small Medium Enterprises</p>

Module designation	<b>SI068 Digital Innovation</b>
Semester(s) in which the module is taught	4
Person responsible for the module	Yanuar Wicaksono,S.Kom., M.Kom.
Language	Indonesian

Relation to curriculum	Compulsory
Teaching methods	Problem Based Learning/PBL Project Based Learning/PjBL
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs081 - Able to analyze business processes for business sustainability in accordance with current developments  CLOs082 - Able to design business processes for business sustainability in accordance with current developments  CLOs083 - Able to evaluate business processes for business sustainability in accordance with current developments
Content	The Digital Innovation course is designed to enhance understanding and skills in applying digital technology to create innovative solutions across various fields. Students will have the opportunity to foster their creativity and innovation, gaining insights into how to develop them in the innovation, processes, and business organizations.
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<ol style="list-style-type: none"> <li>1. Yosef Bonaparte Innovation and Entrepreneurship from the Stone Tool to Artificial Intelligence Cambridge Scholars Publishing 2024</li> <li>2. Haitham M. Alzoubi (editor), Muhammad Turki Alshurideh (editor), Srinidhi Vasudevan (editor) Technology Innovation for Business Intelligence and Analytics (TIBIA): Techniques and Practices for Business Intelligence Innovation (Studies in Big Data, 147) Springer 2024</li> <li>3. Tunable Error Reduction Scheme in Proximity Sensor Function Applied to Unmanned Vehicular Networks</li> <li>4. Ethnomathematics augmented reality: Android-based learning multimedia to improve creative thinking skills on geometry</li> <li>5. The Use of Ethnomathematics Learning Media Based on Augmented Reality for Madrasah Students</li> <li>6. The Design of a Microcontroller-based Self Balancing Robot Employing PID Control and Kalman Filter</li> <li>7. Design android-based learning media using augmented reality technology to support ethnomathematics materials at junior high school</li> <li>8. Ethnomatematics learning media based on augmented reality for learning geometry: A needs analysis</li> <li>9. Design android-based learning media using augmented reality technology to support ethnomathematics materials at junior high school</li> <li>10. Ethnomathematics: Exploration in cultural heritage buildings in Yogyakarta based on geometry perspective</li> <li>11. Indonesian ethnomathematics for mathematics learning in junior high schools: A scoping review</li> <li>12. Student Perceptions Towards Moodle and Kahoot Based e-Learning in Learning Mathematics</li> </ol>
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Module designation	<b>UAA003 Kealmaataan III</b>
Semester(s) in which the module is taught	4



Person responsible for the module	Dr. Ahmad Salim, S.Pd., M.Pd.I.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL Cooperative Learning/CoL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	Kealmaataan II
Module objectives/intended learning outcomes	CLOs091 - Able to demonstrate an attitude of devotion to God Almighty in accordance with the values of Islamic teachings Rohmatan lil'alam (practicing Pancasila, based on law, love of others, tolerant and not radical)
Content	This course provides the ability to understand concepts, principles and activities of Nahdlatul Ulama (NU) and Islamic values
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	1. Kealmaataan Team, 2024. Module of Kealmaataan. Universitas Alma Ata. Yogyakarta 2. KH. Ali Maksum, Risalah Ahlu Sunnah Wal jamaah, Yogyakarta: Menara Kudus Yogyakarta 3. Muchotob. 2017. Introduction to the Study of Aswaja An-Nahdliyah. Yogyakarta: LKis

## **SEMESTER 5**

Module designation	<b>FKOM009 Mobile Programming</b>
Semester(s) in which the module is taught	5
Person responsible for the module	Dadang Heksaputra, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Case Based Learning/CBL
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	Programming Algorithms
Module objectives/intended learning outcomes	CLOs031 - Able to understand various system development methodologies  CLOs032 - Able to use various system development tools  CLOs033 - Able to analyze user needs in building information systems to achieve organizational goals  CLOs012 - Able to analyze organizational processes and systems

Content	Tools and equipment that facilitate work and communication include gadgets, which are a component of technological advancement. Gadgets consistently introduce the latest technologies designed to simplify and enhance human activities.
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. Wicaksono, R. S., Heksaputra, D., Bahrudin, M. J. U. H., Rahmanto, D. N. A., Irsyad, S. M., &amp; Sani, A. A. (2020). Peningkatan Kesadaran Masyarakat Desa Parangtritis Dalam Reoptimasi Potensi Pariwisata Halal Melalui Program Sosialisasi dan. Jurnal Keuangan Umum Dan Akuntansi Terapan, 2(2), 105–113.</p> <p>2. Wijaya, D. P., Heksaputra, D., Wicaksana, R. S., &amp; Gautama, D. H. (2019). Pengembangan Aplikasi Adiba Msme Sebagai Penghubung Lembaga Keuangan Syariah Dengan Usaha Mikro Kecil Menengah. Indonesian Journal of Business Intelligence (IJUBI), 2(2), 58. <a href="https://doi.org/10.21927/ijubi.v2i2.1122">https://doi.org/10.21927/ijubi.v2i2.1122</a></p> <p>3. Dokumentasi frameworks pemrograman mobile</p> <p>4. Peningkatan Kesadaran Masyarakat Mengenai Potensi Desa Wisata Halal Melalui Program Sosialisasi dan Pemanfaatan Aplikasi ADIBA MSME</p>

Module designation	<b>SI069 System Implementation and Testing</b>
Semester(s) in which the module is taught	5
Person responsible for the module	Wahit Desta Prastowo, M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Collaborative Learning/CL

Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Total : 4.760</p>
Credit points	<p>2 credits</p> <p>3.14 ECTS</p>
Required and recommended prerequisites for joining the module	Business Process Analysis
Module objectives/intended learning outcomes	<p>CLOs032 - Able to use various system development tools</p> <p>CLOs033 - Able to analyze user needs in building information systems to achieve organizational goals</p> <p>CLOs072 - Able to identify concepts, techniques and methodologies for information systems project management</p> <p>CLOs073 - Able to apply information systems project management concepts, techniques and methodologies</p>
Content	<p>The System Implementation and Testing course covers strategies for integrating software test case design methods into neatly planned steps to produce successful software construction. The most important thing is that a software testing strategy provides a way for software developers, quality assurance organizations and customers for describing the steps that will be used as part of the testing. These steps are planned and then executed to identify the effort, time and resources required. Therefore, any testing strategy must include planning, testing, test case design, test execution, and collection, as well as evaluation of resultant data. The goal of testing is to reduce visible risks in a computer system. The testing strategy must address risks and provide processes that can reduce those risks.</p>
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test

Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. István Forgács, Attila Kovács. Modern Software Testing Techniques: A Practical Guide for Developers and Testers [1 ed.] Apress 2024</p> <p>2. P. Insap Santoso, Implementasi dan Pengujian Sistem : Teori dan Praktek, Andi Offset, Yogyakarta, 2004.</p>

Module designation	<b>SI070 Enterprise Architecture</b>
Semester(s) in which the module is taught	5
Person responsible for the module	Asti Ratnasari, S.Kom., M.Kom
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	<p>Case Based Learning/CBL</p> <p>Collaborative Learning/CL</p> <p>Problem Based Learning/PBL</p> <p>Discovery Learning and Inquiry</p>
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes</p> <p>Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	-

Module objectives/intended learning outcomes	<p>CLOs012 - Able to analyze organizational processes and systems</p> <p>CLOs021 - Able to design databases</p> <p>CLOs031 - Able to understand various system development methodologies</p> <p>CLOs041 - Able to plan IT infrastructure, network architecture, and physical/cloud services</p> <p>CLOs061 - Able to plan organizational information systems to achieve long-term organizational goals and objectives</p> <p>CLOs081 - Able to analyze business processes for business sustainability in accordance with current developments</p>
Content	In this course, students will study the enterprise architecture framework, namely the design and alignment between business aspects, information systems and technology in a company to achieve its goals.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<ul style="list-style-type: none"> <li>• Service-Oriented Architecture: Concepts, Technology, and Design by Thomas Erl, Prentice Hall PTR, 2005</li> <li>• Enterprise Integration: An Architecture for Enterprise Application and Systems</li> <li>• Integration by Cummins, Fred A, John Wiley &amp; Sons, 2002.</li> <li>• Koinfo : Enterprise Architecture &amp; IT Strategic Plan, Modul 8, 2013</li> <li>• Open Group Togaf Version 9.1, Published in US by the Open Group, 2011</li> <li>• Antonius Rahmat, Modul Arsitektur Aplikasi Perangkat Enterprise, 2014</li> <li>• Enterprise Integration: An Architecture for Enterprise Application and Systems</li> <li>• Integration by Cummins, Fred A, John Wiley &amp; Sons, 2002</li> </ul>
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Module designation	<b>SI071 Research methodology</b>
Semester(s) in which the module is taught	5
Person responsible for the module	Asti Ratnasari, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Case Based Learning/CBL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760



Credit points	2 ccredits 3.14 ECTS
Required and recommended prerequisites for joining the module	Scientific Writing
Module objectives/intended learning outcomes	<p>CLOs071 - Able to understand the concepts, techniques and methodology of information systems project management</p> <p>CLOs072 - Able to identify concepts, techniques and methodologies for information systems project management</p> <p>CLOs073 - Able to apply information systems project management concepts, techniques and methodologies</p>
Content	<p>This Research Methodology course aims to provide students with knowledge, understanding and application of various research methods in the context of preparing a thesis. This course explores different types of research and the stages of scientific research, including selecting a topic, identifying the problem, conducting a literature review, defining the focus of the problem, determining variables, choosing design and methods, selecting data collection techniques, and performing analysis and drawing conclusions. Learning activities feature lectures using various approaches and methods that engage students, including discussions, field observations for problem identification, and practice in developing pre-proposals. The course provides a balanced blend of theory and practice, with evaluation based on written tests, structured assignments, and student participation in class.</p>
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<ol style="list-style-type: none"> <li>1. thesis guide</li> <li>2. Qualitative study on mother's experiences for self-management of gestational gestational diabetes mellitus</li> <li>3. Factors Related To Hiv/Aids Knowledge Of Eligible Women</li> <li>4. The relationship of organizational justice on job satisfaction and job performance in banking company</li> <li>5. Mother's obstacles in managing gestational diabetes mellitus: a qualitative study</li> <li>6. Hasibuan, Zainal. A. Metodologi Penelitian Pada Bidang Ilmu Komputer Dan Teknologi Informasi: Konsep, Teknik dan Aplikasi. Fakultas Ilmu Komputer, Universitas Indonesia. 2007.</li> </ol>
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Module designation	<b>SI072 Business Models and Strategies</b>
Semester(s) in which the module is taught	5
Person responsible for the module	Avrillaila Akbar Harahap, S.Kom., M.Kom.,
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Case Based Learning/CBL Collaborative Learning/CL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS

Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs011 - Able to understand the basic concepts of information systems</p> <p>CLOs012 - Able to analyze organizational processes and systems</p> <p>CLOs013 - Able to assess data management processes and systems in organizations</p> <p>CLOs014 - Able to assess the role of information systems in providing recommendations for decision making in organizations</p>
Content	This course examines business analysis, strategic analysis, and process models using the Business Model Canvas. It includes business system modeling, business process modeling, requirements modeling, and methods for meeting requirements and implementing business changes.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. Osterwalder, A. dan Pigneur, Y. (2009), Business Model Generation, Self-Published, Modderman Drukwerk, Amsterdam, The Netherlands</p> <p>2. Manajemen Strategi: Konsep dan Model Bisnis. Juliansyah Noor. 2020</p> <p>3. Model Bisnis dan Strategi Pengembangan Usaha Pada The Coffee Bean dan Tea Leaf (TCBTL). Bambang Trenggono, dkk. 2018</p>

Module designation	<b>SI073 Organizational Behavior</b>
Semester(s) in which the module is taught	5

Person responsible for the module	Asti Ratnasari, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	1. Discovery Learning and Inquiry 2. Self-Directed Learning/SDL
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs091 - Able to demonstrate an attitude of devotion to God Almighty in accordance with the values of Islamic teachings Rohmatan lil'alamin (practicing Pancasila, based on law, love of others, tolerant and not radical)  CLOs092 - Able to demonstrate an entrepreneurial spirit, independence and leadership based on norms and ethical values as well as being professional and responsible.
Content	This course discusses the meaning of organizational behavior, attitudes and job satisfaction, personality and values, perception and decision making, motivation, group behavior, team work, communication, leadership, power and politics, conflict and negotiation, and organizational culture carried out in a organization. The approach used in this course is a theoretical approach and analysis of cases relevant to organizational behavior material.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	Amir, Taufiq. 2017. Perilaku Organisasi. Jakarta : Kencana Prenada Media Group, 2017.
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Module designation	<b>SI074 Data Mining</b>
Semester(s) in which the module is taught	5
Person responsible for the module	Yanuar Wicaksono, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Problem Based Learning/PBL
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs023 - Able to process data using data processing tools and techniques</p> <p>CLOs024 - Able to analyze data using data processing tools and techniques</p>
Content	This course covers data mining, focusing on its introduction, the data mining process, evaluation and validation, methods and algorithms, and various types of data mining research. Students completing this course are expected to understand the material thoroughly and conduct high-quality research on data mining and machine learning topics.

Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. Tan, Pang-Ning; Steinbach, Michael; Kumar, Vipin. 2018. Introduction to Data Mining, 2nd Edition. Pearson Education, Inc.</p> <p>2. Han Jiawei, Kamber Micheline, Pei Jian. 2012. Data Mining Concepts and Techniques. Elsevier</p> <p>3. Han, Jiawei; Kamber, Micheline, and Jian Pei, Morgan Kaufmann. 2011. Data Mining Concepts and Techniques 3rd Edition. Morgan Kaufmann, Inc.</p> <p>4. Maimon,Oded; Rocach, Lior. 2010. Data Mining and Knowledge Discovery, Handbook Second Edition . Springer.</p> <p>5. Pendekatan K-Means Clustering Metode Elbow Pada Analisis Motivasi Pengunjung Festival Halal JHF# 2</p> <p>6. Segmentasi Potensi Daerah Wisata di Kota Bima Menggunakan K-Means</p> <p>7. CLUSTERING RUMAH ISOLASI DI KOTA SURAKARTA</p> <p>8. Implementation of the convolutional neural network method to detect the use of masks</p> <p>9. Semi-Supervised Classification on Credit Card Fraud Detection using AutoEncoders</p>

Module designation	<b>SI090 Digital Marketing</b>
Semester(s) in which the module is taught	5
Person responsible for the module	Deden Hardan Gutama, S.Kom., M.Kom.
Language	Indonesian

Relation to curriculum	Elective
Teaching methods	Case Based Learning/CBL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CPMK082 - Able to design business processes for business sustainability in accordance with current developments
Content	Students will learn the fundamentals and concepts of Digital Marketing, including the stages, rules, and project management techniques relevant to e-commerce, which is not limited to one or two sales platforms. The course will guide students in developing online branding and creating sales websites.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<p>1. V. D. W. Aryanto dan Y. Wismantoro. Marketing Digital: Solusi Bisnis Masa Kini dan Masa Depan. PT. Kanisius, Yogyakarta, 2020.</p> <p>2. R. Sanjaya, dkk. Mudah Membuat Aplikasi Pemasaran Digital 360 Derajat. Elex Media Computindo, Indonesia, 2019.</p> <p>3. A. Agung. The Fundamental of Digital Marketing, Elex Media Computindo,, Indonesia, 2021</p> <p>4. G. M. Susanto. The Power of Digital Marketing, Elex Media Computindo, Indonesia, 2017.</p> <p>5. P. Kotler, Marketing 4.0: Bergerak dari Tradisional ke Digital, Gramedia Pustaka Utama, 2019</p> <p>6. Peningkatan Pengetahuan Pemasaran UKM Sempe Arum Manis Berbasis Website</p> <p>7. Pemanfaatan Digital Marketing Marketplace Dan Pengembangan Variasi Kerajinan Bambu Di Dusun Dalangan Desa Kebonsari Kabupaten Magelang</p> <p>8. Pendampingan Pembuatan Website untuk Pemasaran Wisata dan UMKM Melalui Internet</p> <p>9. Green Marketing: Reviewing Aspect of Communication Tools.</p>
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Module designation	<b>SI091 National Defense</b>
Semester(s) in which the module is taught	5
Person responsible for the module	Yanuar Wicaksono, S.Kom., M.Kom.,
Language	Indonesian
Relation to curriculum	Elective
Teaching methods	Collaborative Learning/CL
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Total : 4.760</p>



Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CPMK091 - Able to demonstrate an attitude of devotion to God Almighty in accordance with the values of Islamic teachings Rohmatan lil'alam (practicing Pancasila, based on law, love of others, tolerant and not radical)
Content	This course equips students with basic knowledge and skills regarding the relationship between citizens and the state, as well as preliminary education to defend the country so that they become citizens who can be relied on by their nation and state.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	UUD 1945

Module designation	<b>SI092 Information Technology Governance</b>
Semester(s) in which the module is taught	5
Person responsible for the module	Yanuar Wicaksono, S.Kom., M.Kom.,
Language	Indonesian
Relation to curriculum	Elective
Teaching methods	Problem Based Learning/PBL
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760

Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs041 - Able to plan IT infrastructure, network architecture, and physical/cloud services
Content	This course provides students with knowledge and skills regarding IT Governance (IT G) and matters related to it. This course discusses: basic IT G concepts, IT G elements, IT G Framework models as well as various case studies of IT G implementation and assessment in an organization.
Examination forms	Assignment, Mid-Semester Test, And Final Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<ol style="list-style-type: none"> <li>1. ISACA. 2017. CGEIT Review Manual [Internet], 7th ed. Rolling Meadow, IL, USA: ISACA;. Available from: <a href="http://www.isaca.org">www.isaca.org</a></li> <li>2. ISACA. 2012. COBIT 5 A Business Framework for the Governance and Management of Enterprise IT, 1st ed. Rolling Meadows, IL 60008 USA: ISACA</li> <li>3. Ali, S. 2014. Strategic Planning Using COBIT 5. COBIT® Focus, 2.</li> <li>4. ISACA. 2012. COBIT 5: A Business Framework for the Governance and Management of Enterprise IT. ISACA. IL: ISACA.</li> <li>5. ISO/IEC. 2008. ISO/IEC 38500: Corporate governance of information technology. Geneva, Switzerland.</li> <li>6. ISO/IEC. 2008. ISO/IEC 27000: Information technology — Security techniques. Geneva, Switzerland.</li> <li>7. The IT Service Management Forum (itSMF International). 2005. IT Governance based on CobiT® 4.1: A Management Guide. IT Governance Institute.</li> </ol>
Module designation	<b>SI093 Graphic design</b>

Semester(s) in which the module is taught	5
Person responsible for the module	Deden Hardan Gutama, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Elective
Teaching methods	Case Based Learning/CBL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Total : 4.760
Credit points	2 credits 3.14 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs051 - Able to understand the code of ethics in the use of data information in the design, implementation and use of a system
Content	Graphic design courses teach design principles, creative techniques, and tools used in the graphic design industry. This course also teaches design elements such as composition, color, typography, and use of space.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	1. The Elements of Graphic Design. Alex W. White. 2011. 2. Kreasi Desain Grafis Inovatif dengan CorelDRAW. Suparno Sastra M.. 2016 3. Menguasai desain grafis dengan kolaborasi coreldraw dan adobe photoshop. Taufiq Hidayatullah, A.. 2010

Module designation	<b>SI094 Enterprise Resource Planning</b>
Semester(s) in which the module is taught	5
Person responsible for the module	Tri Rochmadi, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Cooperative Learning/CoL Project Based Learning/PjBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs032 - Able to use various system development tools  CLOs033 - Able to analyze user needs in building information systems to achieve organizational goals  CLOs073 - Able to apply information systems project management concepts, techniques and methodologies

Content	This course covers company resource planning and provides a detailed exploration of ERP technology, its development in the business world, and ERP products available in the global and Indonesian markets. It includes examples of ERP products, an understanding of the modules used within ERP systems, and the relationships between these modules.
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<ol style="list-style-type: none"> <li>1. Motiwalla, L.F. and Thompson, J., 2012. Enterprise systems for management. Boston, MA: Pearson</li> <li>2. Anggraeni, Elisabet Yunaeti dan Rita Irviani. (2017). Pengantar Sistem Informasi. Yogyakarta: ANDI.</li> <li>3. Widarti, Erni dkk. (2024). BUKU AJAR PENGANTAR SISTEM INFORMASI, Jambi:PT. Sonpedia Publishing Indonesia.</li> <li>4. Harahap, A. A. 2018. PERANCANGAN WEB E-SHOP PADA TOKO SANDY DENGAN MENGGUNAKAN PHP DAN MySQL. Indonesian Journal of Business Intelligence (IJUBI), 1 (1), 17-24.</li> <li>5. Rochmadi, Tri dkk. (2023). Pendampingan Pembuatan Website untuk Pemasaran Wisata dan UMKM Melalui Internet. Journal Darma Abdi Karya, 2 (1), 31-35.</li> <li>6. The Role of Informations System in The Digital Era</li> </ol>

## **SEMESTER 6**

Module designation	<b>FKOM010 Community Service Program</b>
Semester(s) in which the module is taught	6
Person responsible for the module	Dhina Puspasari Wijaya, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Contextual Instruction/CI
Workload (incl. contact hours, self-study hours)	1 month field practice
Credit points	3 credits 4.71 ECTS

Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs052 - Able to apply a code of ethics in the use of data information in the design, implementation and use of a system</p> <p>CLOs072 - Able to identify concepts, techniques and methodologies for information systems project management</p> <p>CLOs073 - Able to apply information systems project management concepts, techniques and methodologies</p>
Content	<p>Thematic KKN (Community Service Program) is a student-led initiative aimed at applying knowledge and research in science and technology to enhance community welfare. It is part of higher education's commitment to the Tri Dharma of Higher Education: education and teaching, research, and community service. Consequently, the MBKM (Freedom to Learn-Independent Campus Program) thematic KKN program must be executed scientifically, systematically, synergistically, and professionally. The MBKM synergistic thematic KKN model is designed to be systemic and sustainable, reflecting higher education's service to the community through activities such as empowerment, training, counseling, guidance, mentoring, research, and the application of science and technology to develop potential and improve quality of life.</p>
Examination forms	Dissemination of results
Study and examination requirements	Complete the internship report approved by the partner
Reading list	<ol style="list-style-type: none"> <li>1. Buku Panduan Pelaksanaan KKN Tematik Universitas Alma Ata 2022</li> <li>2. Pedoman KKN Dikti</li> <li>3. SDGs Website</li> </ol>

Module designation	<b>SI076 Artificial Intelligen</b>
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Semester(s) in which the module is taught	6
Person responsible for the module	Yanuar Wicaksono,S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Specialisation
Teaching methods	Contextual Instruction/CI
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs081 - Able to analyze business processes for business sustainability in accordance with current developments</p> <p>CLOs082 - Able to design business processes for business sustainability in accordance with current developments</p> <p>CLOs083 - Able to evaluate business processes for business sustainability in accordance with current developments</p>
Content	<p>This course teaches students about the principles and concepts of business intelligence to carry out organizational governance. Starting from: basic concepts of business intelligence, history and objectives of business intelligence, organizational decision making processes and levels, personal knowledge and organizational knowledge, employment security, decision support systems using data mining techniques, expert systems, and data visualization techniques.</p>

Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. Business Intelligence Guidebook: From Data Integration to Analytics, Rick Sherman</p> <p>2. Vincent Charles, Pratibha Garg, Neha Gupta, Mohini Agarwal Data Analytics and Business Intelligence: Computational Frameworks, Practices, and Applications [1 ed.] CRC Press 2023</p> <p>3. Prediksi Rerata Harga Beras Tingkat Grosir Indonesia dengan Long Short Term Memory</p>

Module designation	<b>SI077 Change Management</b>
Semester(s) in which the module is taught	6
Person responsible for the module	Dimas Wibisono, M.B.A
Language	Indonesian
Relation to curriculum	Specialisation
Teaching methods	<p>Case Based Learning/CBL</p> <p>Collaborative Learning/CL</p> <p>Cooperative Learning/CoL</p> <p>Problem Based Learning/PBL</p> <p>Discovery Learning and Inquiry</p>
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes</p> <p>Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>

Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs013 - Able to assess data management processes and systems in organizations</p> <p>CLOs014 - Able to assess the role of information systems in providing recommendations for decision making in organizations</p> <p>CLOs061 - Able to plan organizational information systems to achieve long-term organizational goals and objectives</p> <p>CLOs062 - Able to apply information systems to achieve short-term organizational goals and objectives</p> <p>CLOs064 - Able to improve strategic information system services in the short term</p> <p>CLOs063 - Able to maintain organizational information systems to achieve short-term organizational goals</p>
Content	<p>This course studies the concept of change management in organizations/companies. It covers stages, processes, strategies and leadership roles in responding to changes that occur in the organizational/company environment. IT in the form of an information system can be a proposed business solution that is one of the pioneers of change, as well as the readiness of the organization/company to maintain and facilitate it.</p>
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<p>1. Prof. Dr. Manahan P. Tampubolon, SE., MM. CHANGE MANAGEMENT Manajemen Perubahan; Individu, Tim Kerja, Organisasi. 2020</p> <p>2. Agus Arijanto, dkk. Manajemen Perubahan: Pemahaman dan Implementasi Manajemen Perubahan Bagi Akademisi dan Pelaku Bisnis. 2018</p> <p>3. Unang Toto Handiman, dkk. Komunikasi dan Kepemimpinan Organisasi. 2022</p> <p>4. Jessica Mackenzie dan Rebecca Gordon. Studi Pengembangan Organisasi. 2016</p> <p>5. Amiruddin Siahaan dan Wahyuli Lius Zen. Manajemen Perubahan: Telaah Konseptual, Filosofis, dan Praksis Terhadap Kebutuhan Melakukan Perubahan dalam Organisasi. 2012</p>
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Module designation	<b>SI078 Digital Business</b>
Semester(s) in which the module is taught	6
Person responsible for the module	Avrillaila Akbar Harahap, S.Kom., M.Kom.,
Language	Indonesian
Relation to curriculum	Specialisation
Teaching methods	<p>Case Based Learning/CBL</p> <p>Collaborative Learning/CL</p> <p>Cooperative Learning/CoL</p> <p>Problem Based Learning/PBL</p> <p>Discovery Learning and Inquiry</p>
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes</p> <p>Total : 7.140 Minutes</p>

Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs081 - Able to analyze business processes for business sustainability in accordance with current developments</p> <p>CLOs082 - Able to design business processes for business sustainability in accordance with current developments</p> <p>CLOs083 - Able to evaluate business processes for business sustainability in accordance with current developments</p>
Content	<p>This course studies the concept of digital business and its distinction from conventional business. It emphasizes the role of IS/IT as the main key to digital business, changing mindsets, development of human resources and competencies, and the necessary infrastructure.</p> <p>Digital business is a real business that uses Internet media. For example, a fashion retailer usually has physical stores spread across various malls and shopping centers. However, with digital media, the existence of physical stores will be accompanied or replaced by digital-based stores such as e-commerce, websites, or social media.</p>
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<ol style="list-style-type: none"> <li>1. DIGITAL BUSINESS. Eka sudarmaji. 2022</li> <li>2. DIGITAL BUSINES. Musnaini, dkk. 2020</li> <li>3. INOVASI dan TRANSFORMASI PERUSAHAAN DIGITAL. Agus Wibowo. 2022</li> <li>4. EKONOMI DIGITAL. Muhammad Fitri Rahmadana. 2021</li> </ol>

Module designation	<b>SI079 Decision Support Systems</b>
Semester(s) in which the module is taught	6
Person responsible for the module	Dadang Heksaputra, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Specialisation
Teaching methods	Case Based Learning/CBL
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs061 - Able to plan organizational information systems to achieve long-term organizational goals and objectives</p> <p>CLOs062 - Able to apply information systems to achieve short-term organizational goals and objectives</p> <p>CLOs064 - Able to improve strategic information system services in the short term</p> <p>CLOs063 - Able to maintain organizational information systems to achieve short-term organizational goals</p>

Content	Decision Support Systems is a course that discusses systems computerized based (including knowledge/management based systems knowledge) that supports decision making in organizations as well as supporting components. SPK can be described as a system capable of supporting ad hoc data analysis and modeling decision, decision oriented, and future planning orientation. Topics in this course include: management support system (MSS), decisions making, systems and their supporters, Decision Support Systems (DSS), data management, data modeling and management, user interface, building DSS, DSS organization, group decision support system, distribution of group decision systems, executive information and its support systems, knowledge and data engines, as well as DSS applications and models.
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<ol style="list-style-type: none"> <li>1. Heksaputra, D., Bahrudin, M. J. . H., &amp; Fatimah, F. S. (2021). Analisis Persebaran Angka Kematian Ibu Hamil Berbasis WEB-GIS Menggunakan Metode Fuzzy Multiple Criteria Decision Making (FMCDM) di Daerah Yogyakarta. Indonesian Journal of Business Intelligence (IJUBI), 3(2), 54. <a href="https://doi.org/10.21927/ijubi.v3i2.1504">https://doi.org/10.21927/ijubi.v3i2.1504</a></li> <li>2. Indra Sanjaya, F., &amp; Heksaputra, D. (2016). Sistem Pendukung Keputusan Pemilihan Tenaga Kontrak Melalui Pendekatan Fuzzy Inference System dengan Metode Tsukamoto (Studi Kasus PT. Solo Murni). Seminar Nasional Aplikasi Teknologi Informasi (SNATi), 1907–5022.</li> <li>3. Kusumadewi, S. 2006, Fuzzy Multi-Attribute Decision Making (Fuzzy MADM), Graha Ilmu, Yogyakarta</li> <li>4. Sistem Penilaian Manajemen Stres dengan Variabel Fuzzy pada Pasien Rumah Sakit</li> <li>5. Sistem Pendukung Keputusan Untuk Mengukur Permintaan Produk Pada E-Commerce dengan Fuzzy Inference System:(Studi Kasus Orebae. com)</li> </ol>

Module designation	<b>SI080 Integration System</b>
Semester(s) in which the module is taught	6
Person responsible for the module	Dadang Heksaputra, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Specialisation
Teaching methods	Case Based Learning/CBL
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	Information Systems Analysis and Design
Module objectives/intended learning outcomes	CLOs022 - Able to use databases  CLOs064 - Able to improve strategic information system services in the short term
Content	An engineering process that combines different subsystems or components into one system. This allows each component to operate simultaneously and facilitates the easy integration of resulting data. The purpose of implementing system integration is to connect organizational functions from various systems.
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings



Reading list	<p>1. Heksaputra, D., Bahrudin, M. J. . H., &amp; Fatimah, F. S. (2021). Analisis Persebaran Angka Kematian Ibu Hamil Berbasis WEB-GIS Menggunakan Metode Fuzzy Multiple Criteria Decision Making (FMCDM) di Daerah Yogyakarta. Indonesian Journal of Business Intelligence (IJUBI), 3(2), 54. <a href="https://doi.org/10.21927/ijubi.v3i2.1504">https://doi.org/10.21927/ijubi.v3i2.1504</a></p> <p>2. dokumentasi postman (API)</p> <p>3. RANCANG BANGUN INTEGRASI SISTEM PENERIMAAN MAHASISWA BARU DENGAN METODE REST WEB SERVICE</p>
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Module designation	<b>SI081 Project management</b>
Semester(s) in which the module is taught	6
Person responsible for the module	Raden Nur Rachman Dzakiyullah, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Specialisation
Teaching methods	<p>Case Based Learning/CBL</p> <p>Collaborative Learning/CL</p> <p>Cooperative Learning/CoL</p> <p>Problem Based Learning/PBL</p> <p>Discovery Learning and Inquiry</p>
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes</p> <p>Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	-

Module objectives/intended learning outcomes	<p>CLOs071 - Able to understand the concepts, techniques and methodology of information systems project management</p> <p>CLOs072 - Able to identify concepts, techniques and methodologies for information systems project management</p> <p>CLOs073 - Able to apply information systems project management concepts, techniques and methodologies</p>
Content	This course provides students with an understanding of the basic principles of managing a project, including the various stages of a project and the criteria for determining its success in terms of meeting the main needs of the project.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. Heryanto, Imam &amp; Totok Triwibowo, 2015. Manajemen Proyek Berbasis Teknologi Informasi. Bandung :Informatika.</p> <p>2. Dimiyati, Hamdan &amp; Kadar Nurjaman, 2014. Manajemen Proyek. Bandung: Pustaka Setia.</p> <p>3. PMI. 2015. PM-BOK 5th Edition.</p>

Module designation	<b>SI082 Information System Audit</b>
Semester(s) in which the module is taught	6
Person responsible for the module	Dr. Kusumaningdiah Retno Setiorini, S.E., AK., M.Ak., CA.
Language	Indonesian
Relation to curriculum	Specialisation

Teaching methods	Case Based Learning/CBL Collaborative Learning/CL Cooperative Learning/CoL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 3 Sch x 14 Weeks = 2100 Minutes Structured Assignments : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes Self-Study : 60 Minutes x 3 Sch x 14 Weeks = 2.520 Minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	Information Systems Theory
Module objectives/intended learning outcomes	CLOs013 - Able to assess data management processes and systems in organizations  CLOs081 - Able to analyze business processes for business sustainability in accordance with current developments  CLOs083 - Able to evaluate business processes for business sustainability in accordance with current developments
Content	This course covers the scope of information system audits, including the audit control framework, computerization risks, audit planning, and the collection and analysis of audit data. It also addresses information system audit standards and the processes for reporting and making recommendations based on audit results.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<ol style="list-style-type: none"> <li>1. Gondodiyoto, S., Audit Sistem Informasi + Pendekatan CobIT, Edisi Revisi, 2007, Jakarta: Mitra Wacana Media.</li> <li>2. ISACA, CISA Review Manual 2015, <a href="http://www.isaca.org">http://www.isaca.org</a>, 2015</li> <li>3. Zuhrawaty, Panduan dan Kiat Sukses Menjadi Auditor ISO 9001 (Sistem Manajemen Mutu) Berdasarkan Persyaratan ISO 19011:2002, Cetakan 1, 2009, Yogyakarta: Media Pressindo.</li> <li>4. Sarno, R., Audit Sistem &amp; Teknologi Informasi, 2009, Surabaya: ITS Press.</li> <li>5. Jogiyanto, Abdillah, W., Sistem Tatakelola Teknologi Informasi, 2011, Yogyakarta: Penerbit Andi.</li> <li>6. Jogiyanto, Sistem Informasi Strategik untuk keunggulan kompetitif, 2005, Yogyakarta: Penerbit Andi.</li> <li>7. Seputra, Y.E.A., Belajar Tuntas Audit Berbantuan Komputer, Cetakan 1, 2013, Yogyakarta: Penerbit Gava Media.</li> <li>8. Restianto, Y.E., Bawono, I.R., Audit Sistem Informasi Menggunakan ActiveData for Excel, 2011, Yogyakarta: Penerbit Andi.</li> <li>9. Isa, I., Evaluasi Pengontrolan Sistem Informasi, Edisi Pertama, Cetakan Pertama, 2012, Yogyakarta: Graha Ilmu.</li> <li>10. IBISA, Evaluasi Paket Sistem Aplikasi Sistem Evaluasi dan Auditing Sistem Aplikasi bagi Perusahaan, 2010, Yogyakarta: Penerbit Andi.</li> <li>11. Akmal, Hadi, M., EDP Audit Praktek Teknik Audit Berbantuan Komputer dengan Aplikasi MS Excel dan ACL, 2010, Jakarta: Penerbit Erlangga.</li> </ol>
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Module designation	<b>SI083 Data Visualization</b>
Semester(s) in which the module is taught	6
Person responsible for the module	Avrillaila Akbar Harahap, S.Kom., M.Kom.,
Language	Indonesian
Relation to curriculum	Specialisation

Teaching methods	Case Based Learning/CBL Collaborative Learning/CL Cooperative Learning/CoL Problem Based Learning/PBL Discovery Learning and Inquiry
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes Total : 7.140 Minutes
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	Database
Module objectives/intended learning outcomes	CLOs023 - Able to process data using data processing tools and techniques  CLOs024 - Able to analyze data using data processing tools and techniques
Content	This course focuses on how to effectively and clearly visualize data. Supported by creativity and good critical thinking, students are expected to produce data visualizations that are not only interesting and valid but also user friendly, with attention to the details of the visual and data such as layout and coloring.
Examination forms	Assignment, Practises, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings

Reading list	<p>1. Ms Excel for Data Analyst. Bootcamp Edspert.id. 2023</p> <p>2. Pengantar Praktis Pemrograman R untuk Ilmu Komputer. Dr. Widodo Budiharto, S.Si., M.Kom dan Ro'fah Nur Rachmawati, S.Si., M.Si. 2013</p> <p>3. Data Visualization with ggplot2 Cheat Sheet <a href="https://rstudio.github.io/cheatsheets/html/data-visualization.html">https://rstudio.github.io/cheatsheets/html/data-visualization.html</a></p>
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Module designation	<b>SI084 Statistics for Business</b>
Semester(s) in which the module is taught	6
Person responsible for the module	Ahmad Anis Abdullah, M.Sc.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	<p>Case Based Learning/CBL</p> <p>Collaborative Learning/CL</p> <p>Cooperative Learning/CoL</p> <p>Problem Based Learning/PBL</p> <p>Discovery Learning and Inquiry</p>
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 2 Sch x 14 Weeks = 1400 Minutes</p> <p>Structured Assignments : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Self-Study : 60 Minutes x 2 Sch x 14 Weeks = 1680 Minutes</p> <p>Practice : 170 minutes x 1 sch x 14 weeks = 2380 minutes</p> <p>Total : 7.140 Minutes</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	Statistics and Probability

Module objectives/intended learning outcomes	<p>CLOs023 - Able to process data using data processing tools and techniques</p> <p>CLOs024 - Able to analyze data using data processing tools and techniques</p>
Content	<p>This course covers the application of statistical methods and econometric models in quantitative analysis within the fields of business, economics, and management. Key topics include: (1) data concepts and statistical measures, (2) probability theory, (3) hypothesis testing, (4) an introduction to econometric models and methodologies, (5) simple linear regression and correlation analysis, and (6) multiple linear regression and correlation analysis. The course focuses on mastering fundamental concepts in quantitative analysis through statistical methods and econometric modeling, with additional support on commonly used statistical analysis software.</p>
Examination forms	<p>Assignment, Practises, Mid-Semester Test, And End of Semester Test</p>
Study and examination requirements	<p>Have attended not less than 75% class meetings</p>

Reading list	<p>Santoso, P. (2018). Metode Penelitian Kuantitatif Pengembangan Hipotesis dan Pengujiannya Menggunakan SmartPLS. Yogyakarta: Penerbit ANDI.</p> <p>A. Ratnasari, “ANALISIS KEPUASAN MAHASISWA TERHADAP KINERJA PORTAL UNIVERSITAS ALMA ATA MENGGUNAKAN PENDEKATAN END-USER COMPUTING SATISFACTION DAN DELONE AND MCLANE MODEL,” Indonesian Journal of Business Intelligence (IJUBI), vol. 1, no. 2, p. 66, Mar. 2019, doi: 10.21927/ijubi.v1i2.897.</p> <p>Analisis Intensi Mahasiswa Terhadap Penerapan Portal Universitas Alma Ata Berbasis Mobile Menggunakan Metode Theory of Planned Behavior</p> <p>Mediation effect of collaborative performance system on fresh produce supply chain performance with a lateral collaboration structure model</p> <p>Analisis Pemanfaatan Teknologi Penghubung Lembaga Keuangan Syariah Dengan Usaha Mikro Kecil Menengah Untuk Meningkatkan Pangsa Pasar Syariah Di Yogyakarta</p>
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## **SEMESTER 7**

Module designation	<b>FKOM011 Field Work Lecture</b>
Semester(s) in which the module is taught	7
Person responsible for the module	Dadang Heksaputra, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Project Based Learning/PjBL Problem Based Learning/PBL Discovery Learning and Inquiry Self-Directed Learning/SDL Contextual Instruction/CI
Workload (incl. contact hours, self-study hours)	1 month field practice
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	-

Module objectives/intended learning outcomes	<p>CLOs051 - Able to understand the code of ethics in the use of data information in the design, implementation and use of a system</p> <p>CLOs052 - Able to apply a code of ethics in the use of data information in the design, implementation and use of a system</p> <p>CLOs081 - Able to analyze business processes for business sustainability in accordance with current developments</p> <p>CLOs082 - Able to design business processes for business sustainability in accordance with current developments</p> <p>CLOs083 - Able to evaluate business processes for business sustainability in accordance with current developments</p> <p>CLOs091 - Able to demonstrate an attitude of devotion to God Almighty in accordance with the values of Islamic teachings Rohmatan lil'alam (practicing Pancasila, based on law, love of others, tolerant and not radical)</p> <p>CLOs092 - Able to demonstrate an entrepreneurial spirit, independence and leadership based on norms and ethical values as well as being professional and responsible.</p>
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Content	Field Work Lectures (KKL) provides students with hands-on learning experiences by involving them directly in community settings that they may not encounter on campus. Additionally, it involves a learning process where students explore and understand the successes and challenges they encounter. Field Work Lectures are implemented by universities to enhance the quality of education and provide added value to higher education. Through these field work courses, students are expected to gain practical experience in understanding the professional world and recognizing what constitutes a positive work environment. This experience helps students learn effective and disciplined work practices, preparing them to become reliable professionals in their fields and to navigate the competitive job market successfully.
Examination forms	Dissemination of results
Study and examination requirements	Complete the internship report approved by the partner
Reading list	Internship guide

Module designation	<b>FKOM012 Professional Ethics</b>
Semester(s) in which the module is taught	7
Person responsible for the module	Yanuar Wicaksono, S.Kom., M.Kom.,
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Project Based Learning/PjBL Problem Based Learning/PBL Discovery Learning and Inquiry Self-Directed Learning/SDL Contextual Instruction/CI

Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 1 Sch x 14 Weeks = 700 Minutes</p> <p>Structured Assignments : 60 Minutes x 1 Sch x 14 Weeks = 840 Minutes</p> <p>Self-Study : 60 Minutes x 1 Sch x 14 Weeks = 840 Minutes</p> <p>Total : 2.380 Minutes</p> <p>2 weeks prcticum</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs051 - Able to understand the code of ethics in the use of data information in the design, implementation and use of a system</p> <p>CLOs052 - Able to apply a code of ethics in the use of data information in the design, implementation and use of a system</p> <p>CLOs091 - Able to demonstrate an attitude of devotion to God Almighty in accordance with the values of Islamic teachings Rohmatan lil'alamin (practicing Pancasila, based on law, love of others, tolerant and not radical)</p> <p>CLOs092 - Able to demonstrate an entrepreneurial spirit, independence and leadership based on norms and ethical values as well as being professional and responsible.</p>

Content	This course aims to enhance students' knowledge of ethics, raise ethical awareness, and foster professional ethical behavior in the field of information systems. The goal is to improve students' ability to make ethical decisions. Ethical decision-making involves not only rationality but also emotions and intuition. To enhance ethical knowledge, the course covers a broad range of ethical thinking, descriptions of ethics in the workplace, ethical issues within the profession, and the application and development of these principles in real-world professional practice in the field of information systems.
Examination forms	Dissemination of results
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	John L. Ward , Joe Peppard, “Straight Talk About Professional Ethics”, Wiley, 2002 Michael S. Pritchard, “Professional Integrity: Thinking Ethically”, University Press of Kansas, 2007

Module designation	<b>SI085 Customer Relationship Management</b>
Semester(s) in which the module is taught	7
Person responsible for the module	Asti Ratnasari, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Project Based Learning/PjBL Problem Based Learning/PBL Discovery Learning and Inquiry Self-Directed Learning/SDL Contextual Instruction/CI

Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 1 Sch x 14 Weeks = 700 Minutes</p> <p>Structured Assignments : 60 Minutes x 1 Sch x 14 Weeks = 840 Minutes</p> <p>Self-Study : 60 Minutes x 1 Sch x 14 Weeks = 840 Minutes</p> <p>Total : 2.380 Minutes</p> <p>2 weeks practicum</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs012 - Able to analyze organizational processes and systems</p> <p>CLOs061 - Able to plan organizational information systems to achieve long-term organizational goals and objectives</p> <p>CLOs062 - Able to apply information systems to achieve short-term organizational goals and objectives</p> <p>CLOs064 - Able to improve strategic information system services in the short term</p> <p>CLOs082 - Able to design business processes for business sustainability in accordance with current developments</p>
Content	<p>Explore various management strategy approaches aimed at creating, developing, and maintaining long-term, mutually beneficial relationships with customers, particularly potential ones. The focus is on maximizing customer value and corporate profitability, by emphasizing the use of information technology as a basis for relationship strategy.</p>
Examination forms	<p>Assignment, Mid-Semester Test, And End of Semester Test</p>

Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. CUSTOMER RELATIONSHIP MANAGEMENT Strategi Pengembangan Pelanggan. Abdurohim, dkk. 2022</p> <p>2. HANDBOOK OF CRM: Achieving Excellence in Customer Management. Adrian Payne. 2005</p> <p>3. Customer Relationship Management Concept, Strategy, and Tools Third Edition. V. Kumar Werner Reinartz. 2006</p> <p>4. Customer Relationship Management Concepts and Technologies. Francis Buttle. 2009</p>

Module designation	<b>SI086 Capita Selecta</b>
Semester(s) in which the module is taught	7
Person responsible for the module	Asti Ratnasari, S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	<p>Project Based Learning/PjBL</p> <p>Problem Based Learning/PBL</p> <p>Discovery Learning and Inquiry</p> <p>Self-Directed Learning/SDL</p> <p>Contextual Instruction/CI</p>
Workload (incl. contact hours, self-study hours)	<p>Learning In The Classroom : 50 Minutes x 1 Sch x 14 Weeks = 700 Minutes</p> <p>Structured Assignments : 60 Minutes x 1 Sch x 14 Weeks = 840 Minutes</p> <p>Self-Study : 60 Minutes x 1 Sch x 14 Weeks = 840 Minutes</p> <p>Total : 2.380 Minutes</p> <p>2 weeks practicum</p>
Credit points	<p>3 credits</p> <p>4.71 ECTS</p>



Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<p>CLOs011 - Able to understand the basic concepts of information systems</p> <p>CLOs012 - Able to analyze organizational processes and systems</p> <p>CLOs013 - Able to assess data management processes and systems in organizations</p> <p>CLOs014 - Able to assess the role of information systems in providing recommendations for decision making in organizations</p>
Content	This course is designed for final-year students preparing their thesis. It serves both as preparation and as a guide to help students develop their thesis more precisely and with greater focus. The course will include sessions with inspirational speakers who have experience in the field of Information Systems.
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<p>1. James O' Brien Introduction to Information system, ( New York, McGraw-Hill Irwin, 2013, 12nd Edition)</p> <p>2. Nurhayati, L., &amp; Setiadi, D. (2017). Pemodelan Proses Bisnis (Studi Kasus PD. Simpati Sumedang). -Ilmu Manajemen Dan Informatika, 11(1), 40 50</p> <p>3. Budi Rahardjo, "Keamanan Sistem Informasi Berbasis Internet"</p>
Module designation	<b>SI087 Business Communication</b>

Semester(s) in which the module is taught	7
Person responsible for the module	Yanuar Wicaksono,S.Kom., M.Kom.
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Project Based Learning/PjBL Problem Based Learning/PBL Discovery Learning and Inquiry Self-Directed Learning/SDL Contextual Instruction/CI
Workload (incl. contact hours, self-study hours)	Learning In The Classroom : 50 Minutes x 1 Sch x 14 Weeks = 700 Minutes  Structured Assignments : 60 Minutes x 1 Sch x 14 Weeks = 840 Minutes  Self-Study : 60 Minutes x 1 Sch x 14 Weeks = 840 Minutes Total : 2.380 Minutes  2 weeks practicum
Credit points	3 credits 4.71 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	CLOs082 - Able to design business processes for business sustainability in accordance with current developments  CLOs083 - Able to evaluate business processes for business sustainability in accordance with current developments

Content	<p>The business communication course is a course that studies the basics of business communication, the process of writing business messages, communication via letters, communication about work, communication via reports and communication via technology.</p> <p>This course analyzes concepts, patterns, communication channels in business, along with communication barriers. Apart from that, it also explores the stages of writing business messages and communication within organizations, intercultural communication, speaking skills in business, including practical application in the workplace.</p>
Examination forms	Assignment, Mid-Semester Test, And End of Semester Test
Study and examination requirements	Have attended not less than 75% class meetings
Reading list	<ol style="list-style-type: none"> <li>1. Budhiman, C. Hartati, dkk. 2011. Komunikasi Bisnis Efektif. Tangerang: Pustaka Mandiri</li> <li>2. Bovee, Courtland L. and John Thill V. 2005. Business Communication Today. Singapore: pearson Education.</li> <li>3. Prisgunanto, Ilham. 2014. Komunikasi Pemasaran Era Digital. Jakarta: Prisan Cendekia.</li> <li>4. Purwanto, Djoko. 2011. Komunikasi Bisnis. Edisi Keempat. Jakarta: Erlangga. Senjaya, Sasa Djuarsa. 2005. Teori Komunikasi. Jakarta: Universitas Terbuka</li> </ol>

# SEMESTER 8

Module designation	<b>SI089 Thesis</b>
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Semester(s) in which the module is taught	8
Person responsible for the module	Avrillaila Akbar Harahap, S.Kom., M.Kom.,
Language	Indonesian
Relation to curriculum	Compulsory
Teaching methods	Project Based Learning/PjBL Problem Based Learning/PBL Discovery Learning and Inquiry Self-Directed Learning/SDL
Workload (incl. contact hours, self-study hours)	1 semester
Credit points	6 credits 9.42 ECTS
Required and recommended prerequisites for joining the module	Research methodology
Module objectives/intended learning outcomes	<p>CLOs081 - Able to analyze business processes for business sustainability in accordance with current developments</p> <p>CLOs091 - Able to demonstrate an attitude of devotion to God Almighty in accordance with the values of Islamic teachings Rohmatan lil'alamin (practicing Pancasila, based on law, love of others, tolerant and not radical)</p> <p>CLOs092 - Able to demonstrate an entrepreneurial spirit, independence and leadership based on norms and ethical values as well as being professional and responsible.</p>
Content	A thesis is a scientific work based on research findings that discusses a problem or topic presented systematically and comprehensively, complete with literature study, and contains elements of analysis and synthesis, all under the guidance of a Supervisor.
Examination forms	Dissemination of results

Study and examination requirements	Conduct guidance for at least 14
Reading list	Thesis guide