

[FAKULTAS TEKNOLOGI INFORMASI]
[FACULTY OF INFORMATION TECHNOLOGY]

Program Studi <i>Department</i>	SISTEM INFORMASI <i>INFORMATION SYSTEM</i>
Jenjang Pendidikan <i>Programme</i>	SARJANA <i>UNDERGRADUATE</i>

Kompetensi Lulusan	<ul style="list-style-type: none"> • Kemampuan menjadi warganegara yang bermoral dan beretika serta mampu berkomunikasi dengan menggunakan multi bahasa. • Kemampuan mengelola aktifitas organisasi dan berwirausaha. • Kemampuan memfasilitasi pengambilan keputusan berbasis Sistem Informasi/Teknologi Informasi (SI/TI). • Kemampuan menumbuhkan perilaku akademis. • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim.
Graduate Competence	<ul style="list-style-type: none"> • <i>The ability of being a citizen with morals and ethics also can communicate using multi (foreign) languages.</i> • <i>The ability of managing organizational activities and being entrepreneur.</i> • <i>The ability of facilitating decision making based on Information System / Information Technology (IS/IT).</i> • <i>The ability of nurturing academic behaviors.</i> • <i>The ability of finishing IS/IT work either independently or by teamwork.</i>

STRUKTUR KURIKULUM/COURSE STRUCTURE

No.	Kode MK Code	Nama Mata Kuliah (MK) Course Title	sks Credits
SEMESTER I			
1	IG091301	Pendidikan Agama <i>Religion Studies</i>	2
2	IG091310	Pengantar Teknologi Informasi dan Komunikasi <i>Introduction to ICT</i>	2
3	KS091201	Matematika Diskrit <i>Discrete Mathematics</i>	3
4	KS091202	Algoritma dan Pemrograman I <i>Algorithms and Programming I</i>	4
5	KS091203	Ketrampilan Interpersonal <i>Interpersonal Skill</i>	4
6	KS091301	Sistem Fungsional Bisnis I <i>Business Functionalities System</i>	3
Jumlah sks/Total of credits			18
SEMESTER II			
1	IG091308	Bahasa Inggris <i>English</i>	2
2	KS091302	Pengantar Sistem Informasi <i>Introduction to Information System</i>	4
3	KS091204	Algoritma dan Pemrograman II <i>Algorithms and Programming II</i>	3
4	KS091303	Sistem Operasi <i>Operating System</i>	3
5	KS091205	Manajemen dan Organisasi <i>Management dan Organisation</i>	3
6	KS091304	Sistem Fungsional Bisnis II <i>Business Functionalities System II</i>	3
Jumlah sks/Total of credits			18
SEMESTER III			
1	KS091206	Kalkulus dan Aljabar Linier <i>Calculus and Linier Algebra</i>	4
2	KS091305	Pengembangan dan Implementasi Perangkat Lunak <i>Software Development and Implmentation</i>	3
3	KS091306	Manajemen Basis Data <i>Database Management</i>	5
4	KS091307	Desain dan Manajemen Jaringan <i>Network Design & Management</i>	3
5	KS091308	Pengelolaan Hubungan Pelanggan <i>Customer Relationship Management.</i>	3
Jumlah sks/Total of credits			18

SEMESTER IV			
1	KS091207	Statistika <i>Statistics</i>	3
2	KS091309	Perencanaan Sumber Daya Perusahaan <i>Enterprise Resource Planning</i>	4
3	KS091310	Rekayasa Kebutuhan Perangkat Lunak <i>Software Requirement Engineering</i>	3
4	KS091311	Manajemen Layanan SI/TI <i>IS/IT Service Management</i>	3
5	KS091312	Manajemen Proyek TI <i>IT Project Management</i>	6
Jumlah sks/ <i>Total of credits</i>			19

SEMESTER V			
1	IG091311	Pengantar Technopreneurship <i>Introduction Technopreneurship</i>	2
2	KS091313	Rancang Bangun Perangkat Lunak <i>Software Design and Development</i>	6
3	KS091314	Interaksi Manusia dan Komputer <i>Human and Computer Interaction</i>	3
4	KS091315	Manajemen Sains <i>Management Science</i>	5
5	KS091316	Manajemen Rantai Pasok <i>Supply Chain Management</i>	3
Jumlah sks/ <i>Total of credits</i>			19

SEMESTER VI			
1	KS091317	Kewirausahaan Teknologi Informasi <i>IT Driven Entrepreneurship</i>	3
2	KS091318	Manajemen Investasi TI <i>IT Investment Management</i>	3
3	KS091319	Data Mining dan Data Warehousing <i>Data Mining & Data Warehousing</i>	5
4	KS091320	Perencanaan Strategis SI/TI <i>Strategic IS/IT Plan</i>	3
5	IG091306	Pendidikan Kewarganegaraan <i>Citizenship Studies</i>	2
6	KS091321	Proteksi Aset Informasi <i>Information Asset Protection</i>	4
Jumlah sks/ <i>Total of credits</i>			20

SEMESTER VII			
1	IG091307	Bahasa Indonesia <i>Bahasa Indonesia</i>	2
2	KS091322	Tata Kelola dan Audit SI/TI <i>IS/IT Governance and Audit</i>	4
3	KS091323	Bisnis Cerdas <i>Business Intelligence</i>	4
4		Mata Kuliah Pilihan <i>Elective Courses</i>	8
Jumlah sks/ <i>Total of credits</i>			18

SEMESTER VIII			
1	KS091324	Etika Profesi <i>Professional Ethics</i>	3
2	KS091325	Pemantauan dan Evaluasi TI <i>IT Control and Evaluation</i>	3
3	KS091335	Kapita Selektta <i>Capita Selecta</i>	2
4	KS091336	Tugas Akhir <i>Final Project</i>	6
Jumlah sks/ <i>Total of credits</i>			14
ELECTIVE COURSES			
1	KS091326	Manajemen Kualitas TI <i>IT Quality Management</i>	4
2	KS091327	Manajemen Resiko TI <i>IT Risk Management</i>	4
3	KS091328	Manajemen Sains Lanjut <i>Advanced Management Science</i>	4
4	KS091329	Sistem Pendukung Keputusan <i>Decision Support System</i>	4
5	KS091330	Teknik Peramalan <i>Forecasting Techniques</i>	4
6	KS091331	Integrasi Aplikasi Korporasi <i>Enterprise Application Integration</i>	4
7	KS091332	Tren Teknologi & Open Source <i>Opensource and Emerging Technologies</i>	4
8	KS091333	E-Business <i>E-Business</i>	4
9	KS091334	Teknologi Bergerak Mobile Computing	4

SILABUS KURIKULUM/*COURSE SYLLABUS*

<p>MATA KULIAH/ COURSE TITLE</p>	<p>IG 091301 : Pendidikan Agama Islam IG 091301 : Islam Studies Credits: 2 Semester: I/II/III/IV/V/VI/VII/VIII</p>
<p>TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES</p>	<p>Mahasiswa akan memahami, meyakini, mengamalkan ajaran Islam dan mengaktualisasikan dalam kehidupan.</p> <p><i>Students are able to understand, believe, execute Islamic direction and put it their lives</i></p>
<p>KOMPETENSI/ COMPETENCY</p>	<ul style="list-style-type: none"> • Memiliki iman, taqwa, akhlak yang mulia • Memiliki penalaran yang baik, berpikir kritis, dan berwawasan luas • Menjadikan nilai-nilai Islam untuk mengenali berbagai masalah aktual dan mampu memecahkannya, mampu berkomunikasi dengan baik, bersikap mandiri dan toleran dalam mengembangkan kehidupan yang harmonis antar umat manusia. <p><i>• Having belief, taqwa, and good behavior.</i></p> <p><i>• Having delicate logics, critical thinking, and broad horizon</i></p> <p><i>• Applying Islamic values to identify various actual problems and solve them, having good communication skill, independent, tolerant, and encouraging to have harmonic life among humans</i></p>
<p>POKOK BAHASAN/ SUBJECTS</p>	<ul style="list-style-type: none"> • Konsep ketuhanan dalam Islam • Hakekat manusia menurut Islam • Hukum, ham, demokrasi dalam Islam • Etika, moral dan akhlak • Iptek dan seni dalam Islam <p><i>• Theology of Islam</i></p> <p><i>• Human existence in Islam</i></p> <p><i>• Law, Human rights, democracy in Islam</i></p> <p><i>• Ethics, Morale, and Behavior</i></p> <p><i>• Science and technology and art in Islam</i></p>

**PUSTAKA
UTAMA/
REFERENCES**

- Departemen Agama RI, Terjemah Al Qur-an, (Al Qur-an Translation)
- TIM PAI ITS, Kuliah Al Islam, (Al Islam Course)
- Departemen Agama RI Panduan Pendidikan Agama Islam di PTU, (Guidance of Islam Education in General Higher Education)
- Muslim Nurdin Moral dan kognis (Islam, Islam Morale and Cognition)
- Yusuf Qardawi, Karakteristik Islam, (Islam Characteristics)

MATA KULIAH/ COURSE TITLE	IG 091302 : Pendidikan Agama Kristen IG 091302 : Christian Studies Credits: 2 Semester: I/II
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	<p>Mahasiswa mampu menghayati cinta kasih Tuhan Allah sehingga dapat tumbuh sebagai pribadi yang utuh dan dapat membuktikan dirinya sebagai manusia yang dewasa, bertanggung jawab kepada Tuhan Allah, sesama manusia, lingkungan hidup dan bersedia mengabdikan hidup dan pekerjaannya demi kepentingan bangsa dan sesama manusia.</p> <p><i>Students are able to sense the love of God so that they become personally matured and complete as they have to take charge to their God, their surroundings, as well as their environment; they also have to be aware that they have to have a willingness to use their lives and their occupations for the sake of the nations and others.</i></p>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Hakekat manusia sebagai makhluk religius • Keberadaan Tuhan serta peranan penting agama dalam kehidupan manusia dan masyarakat. • Hubungan timbal balik antara iman dan IPTEKNI <p><i>The Essence of human beings as the religious creatures</i></p> <p><i>The existence of God and its important roles in the life of people and society</i></p> <p><i>Interrelationship between faith and Science and Technology.</i></p>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Manusia : Sebagai makhluk religius yang bermartabat, sebagai makhluk religius yang menjalani kehidupannya secara utuh dalam semua dimensi kehidupan • Tuhan : Konsep Tuhan Yang Maha Esa menurut Iman Kristen, Cinta Kasih Tuhan dalam kehidupan manusia, Agama Kristen dan peranannya dalam kehidupan manusia. • Etika dan Moral : Hubungan antara etika, moral dan Iman Kristen. Sikap etis terhadap nilai-nilai kehidupan • Ilmu Pengetahuan, Teknologi dan Seni (IPTEKNI): Hubungan timbal balik antara iman dan IPTEKNI, Landasan Iman Kristen untuk pengembangan IPTEKNI, Pengembangan IPTEKNI demi kesejahteraan umat manusia serta kelestarian alam

	<ul style="list-style-type: none"> • Masyarakat :Tanggung jawab umat Kristen dalam masyarakat, Partisipasi umat Kristen dalam mewujudkan HAM, Partisipasi umat Kristen dalam mewujudkan civil society. • <i>Human: As a religious creature who has high dignity, and as a religious creature who can carry out this life in in a complete and overall dimensions of life.</i> • <i>God : Concept of the Only God based on the Christianity, the love of God in the human life, Christianity and its roles in life.</i> • <i>Ettiquatte and Moral Values : Relationship between ettiquatte, moral value, Christianity. Ethical attitude towards the values of life</i> • <i>Science and Technology: Interrelationship between science and faith (i.e. Christianity), Christianity base to develop science and technology, development of science and technology for human and conservation of the nature.</i> • <i>Society: the responsibity of Christian people in society, Christian people involvement in fostering human right, Christian people participation in promoting civil society</i>
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Brownlee, M, "Tugas Manusia Dalam Dunia Milik Tuhan" (The Roles of People in The World of God), Jakarta: BPK Gunung Mulia, Jakarta.1987. • David Bergamini, "Alam Semesta", (the Universe) Jakarta: Tira Pustaka.1979, • Emanuel Gerrit Singgih, "Bergereja, Bertheologi dan Bermsyarakat" (Worshipize, theologize, and Socilize) Yojakarta:TPK. 1997 • F. Magnis Suseno, "Etika Politik". (The Etiquette of Politics). Jakarta: Gramedia 1994, • F. Magnis Suseno. "Kuasa dan Moral" (Power and Moral) Jakarta: Gramedia. 1995.

MATA KULIAH/ COURSE TITLE	IG 091303 : Pendidikan Agama Katholik IG 091303 : Catholic Studies Credits: 2 Semester: I/II
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	<p>Mahasiswa mampu mengatasi persoalan dasar yang dihadapi dalam usahanya membangun hidup yang bermartabat. Mahasiswa mampu mengaktualisasikan hidup dan karya Yesus yang diwartakan Gereja dalam kehidupan sehari-hari. Mahasiswa mampu menyikapi secara benar IPTEKS dalam terang iman bagi kehidupan manusia dengan segala dinamikanya.</p> <p><i>Students are able to solve fundamental problems encountered along the attempt to carryout life with dignity</i></p> <p><i>Students are able to actualize the life and teachings of Jesus Christ as they are dispersed by Church in daily life.</i></p> <p><i>Students are able to perceive any development in science and technology in the light of Catholic faith for life and its dynamic changes.</i></p>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Mahasiswa memahami dan menggumuli persoalan dasar yang dihadapi manusia dalam usahanya membangun hidup yang bermartabat. • Mahasiswa memahami dan menghayati konsep Tritunggal Yang Maha Kudus, hidup dan karya Yesus yang diwartakan Gereja dan mengaktualisasikannya dalam kehidupan sehari-hari. • Mahasiswa mampu memahami manfaat ilmu pengetahuan, teknologi, dan seni bagi manusia beriman; bagaimana tanggung jawab manusia dalam mengejar nilai-nilai hidupnya berdasarkan karunia yang diberikan Tuhan kepadanya; memahami bagaimana tanggung jawab terhadap lingkungan hidup. • <i>Students are able to understand and merge into the problems facing by every human being in their attempt to cultivate lives in dignity.</i>

	<ul style="list-style-type: none"> • <i>Students are able to perceive the Trinity doctrine, the life and teachings of Jesus Christ that Church has dispersed and then actualize them throughout the daily life.</i> • <i>Students are able to make use of science, technology, and art of the living of religious people to seek values in their lives and able to bring the Lord's blessing into their lives as the form of their responsibility towards their surroundings.</i>
<p>POKOK BAHASAN/ SUBJECTS</p>	<ul style="list-style-type: none"> • <i>Manusia dan Moral: Pengantar, pengertian manusia dan moral, hubungan antara manusia dan moral berkaitan dengan persoalan dasar manusia, Martabat manusia, Hakikat dan tanggung jawab manusia.</i> • <i>Ketuhanan yang Maha Esa: Pengantar, pengalaman religius dan pengalaman iman, pengertian Ketuhanan yang Maha Esa dalam kaitan dengan ke Tritungga-an, ke-Tritunggal-an dalam teladan Yesus Kristus</i> • <i>Agama dan Kerukunan: Pengantar, Masalah-masalah agama, Makna agama dalam kehidupan, Hubungan antar umat beragama.</i> • <i>Gereja: Pengantar, Sejarah, hakikat dan sifat-sifat Gereja dewasa ini, Gereja Katolik di Indonesia, Tugas-tugas Gereja</i> • <i>Iman yang memasyarakat: Pengantar, Situasi masyarakat masa kini: Globalisasi, Tanggung jawab sosial, Kapita Selekta</i> <ul style="list-style-type: none"> • <i>People and Moral: Introduction, Definitions, Definitions of human and moral, people and Moral in their relation to basic problems in human lives, people dignity, the essence and responsibility of a human being.</i> • <i>The oneness of God: Introduction, Religious and faith experiences, Definitions of the Oneness of God in relation to the Trinity Doctrine, Trinity in the life of Jesus Christ.</i> • <i>Religions and togetherness: Introduction, Problems in Religion, Meanings of Religion in life, relationships across religions.</i> • <i>Church: Introduction, History, The Essence and Natures of Churce in today's Era, Catholic Churches in Indonesia, the Roles of Church.</i> • <i>Faith that is socializing: Introduction, Situation of today society: Globalisation, Social responsibility, Iman yang memasyarakat: Pengantar, Situasi masyarakat masa kini: Globalisasi, Tanggung jawab sosial, Kapita Selekt</i>

**PUSTAKA
UTAMA/
REFERENCES**

- KWI. Iman Katolik, Buku informasi dan referensi. (*Catholic Faith, Books, Information, and References*) Jakarta, Obor dan Yogyakarta: Kanisius.1990.
- Dokumen Vatikan II. (*Vatican Document*) Jakarta: Penerbit Obor, 1993
- Kumpulan Dokumen Ajaran Sosial Gereja (*Compilations of the Church Social Teachings*) Jakarta: Dokpen KWI, 2001
- Bernard T. Adeney. Etika Sosial Lintas Budaya. (*Social Ettiquate Across Cultures*) Yogyakarta, Penerbit: Kanisius, 2000.
- Pedoman Gereja Katolik Indonesia, KWI (*Indonesia Catholic Church Guide*)

MATA KULIAH/ COURSE TITLE	IG 091304 : Pendidikan Agama Hindu IG 091304 : Hindu Studies Credits: 2 Semester: I/II
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	<p>Mahasiswa dapat memahami memahami tentang pengertian Ketuhanan, Tuhan YME yang Nirakara dan Akara, Catur Marga Yoga, sarana, tempat dan hari raya memujanya.</p> <p>Mahasiswa memiliki pengertian dan memahami konsepsi manusia dan martabat manusia, orang suci dan awatara aktualisasi etika dan moralitas dalam kehidupan, srada, jnana, karma sebagai kesatuan dalam yadnya, trihita karena dan tanggung jawab terhadap lingkungan.</p> <p>Mahasiswa memahami tentang hakekat kebersamaan dalam pluralitas beragama, peran umat Hindu dalam mewujudkan masyarakat sejahtera, sumber ajaran Hindu tentang politik, peran agama Hindu dalam perumusan dan penegakan hukum.</p> <p><i>Students are able to understand the meanings of God; the only God who is impersonal and personal; Four pathways to God; media, places and the days to praise the Gods.</i></p> <p><i>Students believe and perceive the conception about human and human dignity, sacret people and awatara and how to actualize the etiquate and moral value in daily life, srada, jnana, karma as a form of unity in yadnya, trihita karena and social responsibilities.</i></p> <p><i>Students understand the essence of togetherness in plurality in terms of living side by side with various faith, the roles of Hindi in promoting wellbeing societies, political view in Hindu, the roles of Hindu to formulating and upholding law.</i></p>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Mahasiswa dapat memahami dan menjelaskan konsep ke Tuhanan dalam Agama Hindu {Brahma Widya}, catur marga yoga. • Mahasiswa dapat memahami dan menjelaskan hakekat manusia Hindu, etika dan moralitas, IPTEKS dalam perspektif Hindu. • Mahasiswa dapat memahami dan menjelaskan konsep kerukunan hidup umat beragama dalam pandangan Hindu, sistem politik dalam pandangan Hindu dan refleksi nilai hukum Hindu dalam konteks masyarakat hukum Indonesia

	<ul style="list-style-type: none"> • <i>Students are able to state and describe the concept of God in Hindu, {Brahma Widya}, catur marga yoga</i> • <i>Students are able to state and describe the essence of being Hindi, etiquette and moral value, Science and Technology from perspective of Hindu.</i> • <i>Students are able to state and describe political system from the point of view of Hindu, and reflection of value of law in the context of Indonesia rule governed society.</i>
<p>POKOK BAHASAN/ SUBJECTS</p>	<ul style="list-style-type: none"> • Konsepsi Ketuhanan (Brahma Widya), Pengertian Ketuhanan Tuhan Yang Maha Esa yang nirakara (impersonal) dan akara (personal) • Catur Yoga Marga (empat jalan menuju kepada-Nya), Pengertian Catur Marga Yoga Sarana, tempat dan hari-hari raya memuja-Nya • Hakekat Manusia Hindu , Konsepsi manusia Hindu, Eksistensi dan martabat manusia Tanggung jawab manusia sebagai ciptaan-Nya, Orang suci dan awataranya. • Etika dan Moralitas, Konsepsi etika dalam perspektif Hindu, Aktualisasi etika dan moralitas dalam kehidupan, Misi untuk memperbaiki diri (manawa menuju madhawa). Implementasi kebenaran, kebijakan, kasih sayang, kedamaian, tanpa kekerasan. • Ilmu Pengetahuan teknologi dan seni dalam perspektif Hindu, Sradha, Jnana dan Karma sebagai kesatuan dalam yadnya, Kewajiban menuntut ilmu dan mengamalkan ilmu Tri Hita Karana dan tanggung jawab terhadap alam dan lingkungan ,Seni keagamaan <ul style="list-style-type: none"> • <i>Conception of God (Brahma Widya), Definitions of The Only God who is impersonal and personal.</i> • <i>Four Pathways to God, Definitions, the four pathways to God, media, place, and days to praise the Gods</i> • <i>The Essence of Hindi, the Conception of Hindi, existence and human dignity, human responsibility to God, the creator, Sacred people and their awatara</i> • <i>Ettiquate and Moral Values, Ettiquate Conception in the perspective of Hindu, Actuaisation of ettiquate and moral values in lives, missions for self reflection from manawa to madhawa, implementation of truth, kindness, love, and peace, without any violence</i>

	<ul style="list-style-type: none"> • <i>Science and Technology from the perspective of hindu, Sradha, Jnana and Karma as unity in yadnya, rights for learning and implementing studies on Tri Hita Karana and responsibilities towards nature and environment, the arts of religions</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Wiana,. 1994. <u>Bagaimana Hindu Menghayati Tuha(How to Understand God from the Points of Hindu)</u>,. Manikgeni. • Wiana, .1982. <u>Niti Sastra</u>, Ditjen Hindu dan Budha. • Atmaja, 1974. <u>Panca Sradha</u>,. PHDI Pusat . • Titib, 1996. <u>Veda Sabda Suci Pedoman Praktis Kehidupan (Veda Sabda Suci, Practical Guides for life)</u>, Paramita • Pudja, 1997, <u>Teologi Hindu (Theology of Hindu)</u>, Mayasari

MATA KULIAH/ COURSE TITLE	IG.091305 : Pendidikan Agama Budha IG.091305 : Budha Studies Credits: 2 Semester: I
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	<p>Mahasiswa memiliki pengertian dan menghayati Hakekat Tuhan Yang Maha Esa serta mengamalkan Sila Ketuhanan Yang Maha Esa</p> <p>Mahasiswa memiliki pengertian dan memahami adanya Dewa, Bodhisatva, Arhat dan Buddha sehingga mahasiswa mampu melaksanakan suri teladannya</p> <p>Mahasiswa memahami tentang Bodhisatva dan Buddha serta menghayati dan mengamalkan Dharma</p> <p>Mahasiswa dapat memahami dan mengerti tentang Hukum Ke – Sunyataan, sehingga mahasiswa dapat menyesuaikan diri dengan hukum Ke-Sunyataan tersebut</p> <p>Mahasiswa dapat memahami dan mengerti hukum Karma sehingga mahasiswa dapat menerima, menerapkan serta melaksanakan</p> <p><i>Students are able to understand the essence of the Oneness of God and bring the first principle of Pancasila into the real life implementation.</i></p> <p><i>Students believe and perceive the existance of God, Bodhisatva, Arhat and Buddha as a consequence they are able to follow the teachings.</i></p> <p><i>Students believe and perceive Bodhisatva and Budha so that they are able to bring their darma in their lives.</i></p> <p><i>Students understand the rules of Sunyataan, so that they are able to adapt themselves into the rules.</i></p> <p><i>Students understand Karma, so that they are able to implement the rule in their lives.</i></p>
KOMPETENSI/ COMPETENCY	<p>Mahasiswa dapat memahami dan melaksanakan ajaran agama Budha, sesuai ajaran yang dilaksanakan Sang Budha tentang pergaulan dalam masyarakat</p> <p><i>Students are able to understand as well as implement the Budha's teachings on how to live in a real life.</i></p>
POKOK BAHASAN/	<ul style="list-style-type: none"> • Sila Ketuhanan Yang Maha Esa: Catur Paramita, Catur Mara, Brahma Vihara, Bhavana.

SUBJECTS	<ul style="list-style-type: none"> • Riwayat Hidup Sang Buddha: Kelahiran Bodhisatva, Ramalan Pertapa Asita, Ramalan Para Brahmana, Masa Remaja, Masa Berumah Tangga, Masa Pertapa, Mencapai Buddha, Masa Pembabaran Dharma, Terbentuknya Sangha. • Tentang Bodhisatva: Dana Paramita • Tentang proses tercapainya tingkat Bodhisatva: Sila Paramita • Tentang Sad- Paramita: Viriya Paramita • <i>The First Principle of Pancasila, The Oneness of God: Catur Paramita, Catur Mara, Brahma Vihara, Bhavana.</i> • <i>Biography of Lord Budha: the born of Bodhisatva, Asita's Prediction, the predictions of Brahmana, adolescence or teen age, period of family hood, the Hermit period, Achieving Buddha's enlightenment, times for learning Buddhism together, Sangha achievement.</i> • <i>About Bodhisatva: Dana Paramita</i> • <i>About process of achieving Bodhisatva level: Paramita Principles</i> • <i>About Sad- Paramita: Viriya Paramita</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Dhamma Pada [Depag, 1904] • Dhamma Sari [Depag, 1904] • Kuliah Agama Budha [Depag 1903]

MATA KULIAH/ COURSE TITLE	IG091310 : Pengantar Teknologi Informasi dan Komunikasi IG091310 : <i>Introduction to ICT</i> Credits : 2 Semester : I
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	[Diisi tujuan pembelajaran dalam kalimat yang singkat dan padat dan penulisan tanpa bullet] [<i>Paragraf baru ditulis terjemahan bahasa Inggris tercetak miring</i>]
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • [Diisi 3 kompetensi tertinggi (maksimum) dan penulisan dengan bullet] • [<i>setelah 3 kompetensi dalam bahasa Indonesia, ditulis terjemahan dalam bahasa Inggris tercetak miring dengan bullet</i>]
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • [Diisi dalam bahasa inggris 5 pokok bahasan utama (maksimum) dan penulisan dengan bullet] • [<i>setelah 5 pokok bahasan dalam bahasa Indonesia, ditulis terjemahan dalam bahasa Inggris tercetak miring dengan bullet</i>]
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Efraim Turban , R. Kelly Rainer , Richard E. Potter, <u>Introduction to Information Technology</u>, Wiley,2004. • Brian Williams , Stacey Sawyer, <u>Using Information Technology: A Practical Introduction to Computers and Communications</u>,Career Education, 2006. • Brian Williams , Stacey Sawyer, <u>Using Information Technology</u>, Career Education, 2009. • Dr Harry Bouwman , Dr Bart van den Hooff , Dr Lidwien van de Wijngaert , Professor Jan A G M van Dijk, <u>Information and Communication Technology in Organizations: Adoption, Implementation, Use and Effects</u>.Sage Publications Ltd, 2005.

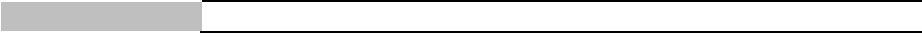
MATA KULIAH/ COURSE TITLE	KS091201 : Matematika Diskrit KS091201 : <i>Discrete Mathematics</i> Credits : 3 Semester : I
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan menerapkan logika matematika dalam penyelesaian suatu masalah. <i>Student have an ability of applying mahematical logics in problem solving.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan memahami konsep dasar aplikasi matematika khususnya untuk ilmu komputer. • Kemampuan memecahkan persolan matematis yang memiliki aplikasi untuk SI/TI. • Kemampuan untuk mengaplikasikan tool matematis untuk permasalahan SI/TI. • Kemampuan untuk mengapresiasi aplikasi dari teknik-teknik matematis tertentu. • Kemampuan memfasilitasi pengambilan keputusan berbasis SI/TI • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim <ul style="list-style-type: none"> • <i>The ability of understand the basic concepts of applied mathematics especially in computer science.</i> • <i>The ability of solving mathematical problems that have applications to IS/IT.</i> • <i>The ability of applying mathematical tools to IS/IT problems.</i> • <i>The ability of appreciating the variety of application of particular mathematical techniques.</i> • <i>The ability of facilitating IS/IT based decision making.</i> • <i>The ability of accomplishing IS/IT work either independently or in team.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Logika dan Pembuktian: Logika proposisi, ekivalensi proposisi, predicate dan quantifier. Quantifier bersarang, aturan-aturan penarikan kesimpulan. Pembuktian, metode dan strategi pembuktian. Struktur Dasar Diskrit: Himpunan, Operasi Himpunan, Fungsi, Deret dan Jumlah Deret. Konsep Algoritma, integer, dan matrik: Algoritma, Fungsi

pertumbuhan algoritma, kompleksitas algoritma, Integer dan pembagian. Bilangan Prima dan Bilangan pembagi terbesar bersama. Integer dan algoritma, aplikasi dari teori bilangan, Matrik. **Induksi dan Rekursi:** *Induksi matematis, Strong Induction and Well-Ordering. Definisi Rekursi dan Induksi struktural. Algoritma Rekursi. Kebenaran Program.* **Counting;** *Dasar-dasar countings. Pigeonhole Principle. Permutasi dan Kombinasi. Koefisien binomial. Permutasi dan Kombinasi yang digeneralisir. Membangkitkan permutasi dan kombinasi.* **Relasi :** *Relasi dan properti-propertinya. Relasi N-ary dan aplikasinya. Representasi aplikasi. Closures of Relations. Kesamaan Relasi. Partial ordering.* **Graph:** *Graph dan Graph model. Graph terminology dan special type of Graph.*

- **Kajian berkarya:** aplikasi graph & kombinatorik; merancang alur penyelesaian masalah. Pemrograman logika dengan PROLOG.
- **Conceptual and Skill studies: Logic and proof:** *Propotional logic. Propotional equivalences. Predicates and Quantifiers. Nested Quantifiers. Rules of inferences. Introduction to Proofs. Proof Methods and Strategy.* **Basic structures:** *Sets. Set operation. Functions. Sequences and Summations.* **The Fundamentals: Algorithms, the Integers, and Matrices:** *Algorithm. the growth of function. Complexity of Algorithm. The Integers and Division. Primes and Greatest Common Divisors. Integers and Algorithm. Integers and Algorithms. Applications of Number Theory. Matrices.* **Induction and Recursion;** *Mathematical Induction. Strong Induction and Well-Ordering. Recursive Definitions and Structural Induction. Recursive Algorithms. Program Correctness.* **Counting;** *The basics of Countings. The Pigeonhole Principle. Permutations and Combinations. Binomial Coefficients. Generalized Permutations and Combinations. Generating Permutations and Combinations.* **Relations :** *Relations and their properties. N-ary relations and Their Applications. Representing Applications. Closures of Relations. Equivalences Relations. Partial ordering.* **Graph:** *Graph and Graph model. Graph terminology and special type of Graph.*
- **Competency studies:** *Combinatoric and graph Application. Design of problem solving flowchart. Logic Programming using PROLOG.*

**PUSTAKA
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REFERENCES**

- Kenneth Rosen, Discrete Mathematics and Its Applications, McGraw-Hill Science, Engineering, Math, 2006.
- Richard Johnson baugh, Discrete Mathematics, Prentice Hall, 2008.
- Susanna S. Epp, Discrete Mathematics with Applications, Brooks Cole, 2003.



MATA KULIAH/ COURSE TITLE	KS091202 : Algoritma dan Pemrograman I KS091202 : <i>Algorithms and Programming I</i> Credits : 4 Semester : I
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa Mahasiswa memiliki kemampuan penguasaan algoritma & struktur data yang banyak digunakan dalam pemrograman. <i>Students have an ability of mastering algorithms and data structures most-used in programming.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Memiliki kemampuan memahami konsep algoritma dan struktur data, pandai memvisualisasikan dan bisa mengimplementasikannya dalam program sederhana. • <i>The ability understand the algorithm and data structure concepts, smart in visualizing and implementing them in simple program.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: pengenalan algoritma dan bahasa algoritmik (pseudocode); flowchart; struktur kontrol; logika pemrograman; fungsi dan prosedur; struktur data sederhana; pemrosesan file; bahasa pemrograman. • Kajian berkarya: studi kasus pembuatan flowchart; studi kasus pemrograman dengan memanfaatkan struktur control, logika, fungsi dan prosedur, struktur data sederhana, dan pemrosesan file. • Conceptual and Skill studies: <i>introduction to algorithm and pseudocode; flowchart; control structure, programming logic, functions and procedures; simple data structure; file processing; and programming languages.</i> • Competency studies : <i>flowchart case study; programming case study using control structure, logic, functions and procedures, simple data structure, and file processing.</i>
PUSTAKA UTAMA/	<ul style="list-style-type: none"> • Harvey M. Deitel , Paul J. Deitel, <u>Java How to Program: Early Objects Version</u>, Prentice Hall, 2009. • Richard E. Neapolitan , Kumarass Naimipour, <u>Foundations of</u>

REFERENCES

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- Algorithms Using Java Pseudocode, Jones & Bartlett Publishers, 2002.
- Thomas Cormen , Charles Leiserson, Ronald Rivest , Clifford Stein, Introduction to Algorithms, McGraw-Hill Science,Engineering,Math, 2003.
 - Anany V. Levitin, Introduction to the Design and Analysis of Algorithms, Addison Wesley, 2006.
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MATA KULIAH/ COURSE TITLE	KS091203 : Ketrampilan Interpersonal KS091203 : <i>Interpersonal Skill</i> Credits : 4 Semester : I
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan penguasaan ketrampilan interpersonal dan intrapersonal. <i>Students have an ability of mastering interpersonal and intra personal skill.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan terampil & pandai belajar, menggali dan menyampaikan gagasan, komunikasi dan negosiasi, bekerja secara tim, memimpin dan memiliki keterampilan intrapersonal. • <i>The ability of well-skilled and smart in learning, nurturing and communicating ideas, communication and negotiation, working in team, leadership and interpersonal skill.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Membaca efisien; teknik mencatat, belajar efektif, creative thinking; pencarian materi; teknik menulis; teknik diskusi; teknik presentasi; penggunaan alat peraga (HW/SW); teknik mendengarkan; public speaking; teknik negosiasi; music & dance; team building; ketrampilan relationship; leadership; ketrampilan supervisory; manajemen pengorganisasian; karakter transforming; kepribadian; manajemen waktu; manajemen stress; penetapan target & tujuan hidup. • Kajian berkarya: mencari ide dasar bacaan; penulisan artikel & blog; presentasi efektif; membuat pertanyaan; praktek diskusi; game pengembangan tim; kepemimpinan; negosiasi. • Kajian sikap & prilaku: kejujuran akademik; berpikir kritis & analitis; komunikatif; simpatik; orientasi pada audience; adaptif terhadap perubahan; sikap kepemimpinan; tim dinamik; menghargai waktu; empati; bercita-cita. • Conceptual and Skill studies: <i>Efficient reading; note taking; learning; searching writing material and discussing; presentation technique; using visual aids (HW/SW); Team building; relationship</i>

	<p><i>skill; organizational management; negotiation strategy; public speaking; leadership; supervisory skill; character transformation; time management; stress management; stating target and the aim of life; music and dance; listening technique, creative thinking.</i></p> <ul style="list-style-type: none"> • Competency Studies: <i>Finding main idea in passage, article and blog writing, effective presentation, making question, discussion, team development game, leadership, negotiation.</i> • Attitudes and Behaviour Studies: <i>academic honesty, critical and analitical thinking, comunicatif, simphatic, audience oriented; adaptif with changes, leadership behaviour, dynamic team, time efficienncy, emphatic, and passioned.</i>
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Joseph A Devito, <u>The Interpersonal Communication Book</u>, Allyn & Bacon , 2008. • Julia T. Wood, <u>Interpersonal Communication: Everyday Encounters</u>, Wadsworth Publishing, 2009.

MATA KULIAH/ COURSE TITLE	KS091301 : Sistem Fungsional Bisnis I KS091301 : <i>Business Functionalities System</i> Credits : 3 Semester : I
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mengelola aktifitas non-finansial dan finansial organisasi. <i>Students have an ability of managing non-financial and financial activities in organization.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai proses bisnis pemasaran, operasi dan sumberdaya manusia di organisasi. • Kemampuan berwirausaha • <i>The ability of understands the business processes of marketing, operation, and human resource in organization.</i> • <i>The ability of entrepreneurship.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Proses bisnis dalam: pemasaran interaktif, riset pasar, promosi & advertising, control proses, control mesin, computer aided manufacturing, staffing, pelatihan & pengembangan SDM, kompensasi & administrasi SDM • Kajian berkarya: pemanfaatan kasus-kasus pemasaran, operasi & SDM. • <i>Conceptual and Skill Studies:</i> <i>Business Processes in: effective marketing, market research, promotion and advertising, sales management, cash management, investment management, capital budgeting, general ledger, process control, machine control, computer aided manufacturing, staffing, training and HRD development, compensation and administration of HRD.</i> • <i>Competency Studies:</i> <i>Harnessing of marketing cases, operation, and human resources.</i>

**PUSTAKA UTAMA/
REFERENCES**

- Jeff Madura, Introduction to Business, South-Western College Pub, 2006.
- William G Nickels , James McHugh , Susan McHugh, Understanding Business, McGraw-Hill, 2004.

MATA KULIAH/ COURSE TITLE	IG091308 : Bahasa Inggris IG091308 : English Credits : 2 Semester : 1 or 2
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	<p>Mahasiswa dapat memahami isi sebuah artikel/ jurnal/ teks akademik mengenai sains dan teknologi yang ditulis dalam bahasa Inggris. Mahasiswa dapat mendiskripsikan informasi atau isi dari argumentatif teks lisan setelah menyimak teks tersebut. Mahasiswa dapat mengungkapkan argumentasi atau ide-ide logis secara lisan atau tulisan.</p> <p><i>Students are able to understand the content of various academic texts in Science and Technology. Students are able to describe any information perceived from spoken argumentative articles. Students are able to express either oral or written the logical ideas.</i></p>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Mahasiswa dapat menerapkan strategy membaca yang efektif untuk menafsirkan isi argumentatif teks berbahasa Inggris yang berbasis sains dan teknologi. • Mahasiswa dapat menafsirkan isi berbagai jenis teks lisan yang berbahasa Inggris. • Mahasiswa dapat menyampaikan secara lisan dan tulisan argumen-argumen atau ide-ide dalam bahasa Inggris. <p><i>Students are able to employ effective reading strategies to understand any argumentative texts in Science and Technology</i></p> <p><i>Students are able to interpret concisely any spoken texts.</i></p> <p><i>Students are able to present either oral or written the ideas or argument they have.</i></p>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Scanning: Scanning in everyday life; scanning tables; scanning academic articles/journals; scanning encyclopedia entri. • Previewing and Predicting: previewing and predicting book covers to foresee the contents; listen to spoken text and predict the suitable picture or figures; Say out loud the undelined reasons for predicting. • Vocabulary Knowledge for Effective Reading and listening: guessing meaning from context in sentences; using grammar to guess word meaning; recognizing words connecting ideas. • Topics: stating and recognizing topics from a paragraph or a text in written and spoken text; working with the topics, finding and writing the topic sentence.

	<ul style="list-style-type: none"> • Main Ideas: finding the main idea in the topic sentence, stating main ideas of a paragraph, develop topic to main ideas, develop supporting details for the main ideas, producing an outline.
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Mikulecky and Jeffries. "More Reading Power" Addison-Wesley publishing Company, 1996 • Supriyanto. "Critical Reading" ITB. 2007. • Rooks. " Paragraph Power: Communicating Ideas through Paragraphs. Prentice Hall Regents. 1999 • Hayden, R.E., Pilgrim, D.W, and Haggard, A.Q. "Mastering American English. Prentice Hall, Inc. 2000. • Thomson and Martinet. "A Practical English Grammar. Oxford University Press.1995.

MATA KULIAH/ COURSE TITLE	KS091302 : Pengantar Sistem Informasi KS091302 : Introduction to Information System Credits : 4 Semester : II
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan penguasaan berbagai isu SI terkini dalam bisnis. <i>Students have an ability of mastering emerging information system issues in business.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan memahami berbagai karakteristik SI beserta tren perkembangannya, serta cakap mengkonfigurasi & menggunakan SI yang banyak digunakan untuk membantu pekerjaan kantor. • Kecakapan penggunaan SI perkantoran yang sedang populer. • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim. <ul style="list-style-type: none"> • <i>The ability of understand any kinds of characteristics, components, roles and development trends of information system (IS). Students also able to configure and use IS most-used for helping office works.</i> • <i>The ability of using popular and most-used IS application for helping office work.</i> • <i>The ability of accomplishing IS/IT works either independently or in team.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Peran, komponen & model SI; SI untuk bisnis: e-commerce, Electronic Data Interchange (EDI), E-mail system, Post On Sale (POS), e-banking, e-finance, payment system, integrated manufacturing system, electronic fund transfer, integrated custome file, office automation, Automatic Teller Machine (ATM), cooperative processing system, voice response ordering system, purchase accounting system, image processing, AI & expert system, Business intelligent, Decision Support System (DSS), Supplier Relationship Management (SRM), Supply Chain Management (SCM). • Kajian berkarya: e-mail; browsing; wordprocessing; speadsheet; presentation; document management server; collaboration. • <i>Conceptual and Skill Studies: Component and model IS; IS for</i>

	<p><i>business; e-commerce; EDI; e-mail system, POS, VOIP, PBX, e-banking, e-finance, payment system, integrated manufacturing system, electronic fund transfer, integrated custom file, office automation, ATM, cooperative processing system, voice response ordering system, purchase accounting system, image processing, AI & expert system, Business intelligent, DSS, SRM, SCM; e-mail; browsing; word processing; spreadsheet.</i></p> <ul style="list-style-type: none"> • <i>Competency Studies : e-mail; browsing; wordprocessing; speadsheet; presentation; document management server; collaboration.</i>
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Kenneth C. Laudon , Jane P. Laudon, <u>Esentials of Business Information Systems</u>, Pearson PTR Interactive, 2006. • R. Kelly Rainer Jr. , Efraim Turban , Richard E. Potter, <u>Introduction to Information Systems: Supporting and Transforming Business</u>, Wiley, 2006. • Ralph Stair , George Reynolds, <u>principles of Information Systems</u>, Course Technology, 2007. • Barbara McNurlin, Ralph Sprague , Tung Bui, <u>Information Systems Management</u>, Prentice Hall, 2008.

MATA KULIAH/ COURSE TITLE	KS091204 : Algoritma dan Pemrograman II KS091204 : <i>Algorithms and Programming II</i> Credits : 3 Semester : II
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan penguasaan pemrograman berbasis obyek. <i>Students have an ability of mastering object-oriented programming.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan memahami bentuk-bentuk struktur data dan pemrograman berorientasi objek, pandai pemrograman user interface berbasis desktop & web, berdatabase, middleware & berbasis framework. • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim • Kemampuan menggunakan aplikasi populer beserta peralatan yang mendukungnya • <i>The ability of understand types of data structures and OO programming, mastering desktop-based programming, web-based programming, database programming, middleware, and framework based programming using GUI.</i> • <i>The ability of accomplishing IS/IT works either independently or in team.</i> • <i>The ability of using popular application including its supporting tools.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Jenis-jenis struktur data (list, linked list, stack, queue, dst); konsep OO (pewarisan, enkapsulasi, dst); pemrograman dengan konsep model-view-controller (MVC). • Kajian berkarya: kasus-kasus pemrograman dengan OO, MVC. • Conceptual and Skill Studies: <i>Type of data structure (list, linked list, stack, queue, etc.); OO concept (inheritance, encapsulation, etc), model-view-controller (MVC) programming.</i> • Competency Studies: <i>Programming Cases using OO and MVC.</i>
PUSTAKA UTAMA/	<ul style="list-style-type: none"> • C. Thomas Wu, <u>An Introduction to Object-oriented Programming with Java</u>, McGraw Hill Higher Education, 2005.

REFERENCES

- P. Radha Krishna, Object Oriented Programming Through Java, CRC,2007.
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MATA KULIAH/ COURSE TITLE	KS091303 : Sistem Operasi KS091303 : <i>Operating System</i> Credits : 3 Semester : II
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mendukung operasional sistem informasi melalui pengaturan sistem operasi. <i>Students have an ability of supporting operational information system by configuring operating systems.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai konsep dasar, komponen, teknologi dan fungsi sistem operasi serta pandai mengkonfigurasi dan menggunakannya. • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim • Kemampuan menggunakan aplikasi populer beserta peralatan yang mendukungnya <ul style="list-style-type: none"> • <i>The ability of mastering basic concepts, components, technologies, and functions of operating system. Students also able to configure and use it.</i> • <i>The ability of accomplishing IS/IT works either independently or in team.</i> • <i>The ability of using popular application including its supporting tools.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Mengatur proses SO, memori, & perangkat input-output; sistem manajemen file; program utilitas. • Kajian berkarya: contoh kasus pengelolaan operating sistem. <ul style="list-style-type: none"> • <i>Conceptual and Skill Studies:</i> <i>Configuring operating system processes, memory and input-output devices; file management system; utility program;</i> • <i>Competency Studies:</i> <i>Case of managing operating system.</i>
PUSTAKA UTAMA/	<ul style="list-style-type: none"> • Andrew S. Tanenbaum, <u>Modern Operating Systems</u>, Prentice Hall, 2007.

REFERENCES

- Abraham Silberschatz , Peter Baer Galvin, Greg Gagne, Operating System Concepts, Wiley, 2008.
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MATA KULIAH/ COURSE TITLE	KS091205 : Manajemen dan Organisasi KS091205 : <i>Management dan Organisation</i> Credits : 3 Semester : II
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mengatur dan mengorganisasi proses TI yang bertalian dengan pemenuhan kebutuhan bisnis beserta pengelolaan perubahan-perubahan organisasi yang terjadi. <i>Students have an ability of managing and organizing IT processes related with fulfilling business needs including managing changes in organization.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan memahami peran dan tanggung jawab organisasi SI/TI yang mengelola proses-proses TI, menguasai perilaku organisasi atas adanya TI, memiliki kepedulian sosial serta kecakapan kerja lintas budaya. • <i>The ability of understanding role and responsibilities of IS/IT organization that managing IT processes, mastering organization behaviours, and having social awareness and capability of working in cross-cultural environment.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Dasar perilaku organisasi; framework proses TI; fungsi & struktur organisasi SI/TI; committee SI/TI; staff & personel TI; kepemilikan data & sistem; kebijakan & prosedur kontrak staff; motivasi & sistem reward; perubahan & efeknya. • Kajian berkarya: struktur organisasi SI/TI; job description; tim & pengembangan tim TI; kontrak staff. • Kajian sikap & perilaku: perilaku individual & group; empowerment & partisipasi; kerja lintas budaya. • Kajian kehidupan bermasyarakat: sistem sosial & budaya perusahaan • Kajian landasan kepribadian: kepribadian diri. • Conceptual and Skill Studies: <i>Basic organization behavior; motivation and reward systems; change and its effect; team building; individual and group behavior; leadership; empowerment and participation; cross culture work; interpersonal; social system</i>

	<p><i>and organization culture; motivation and reward system, change and its effect.</i></p> <ul style="list-style-type: none"> • Competency Studies: <i>IS/IT organization structure, job description, team and IT team development, staff contracting.</i> • Attitudes and Behaviour Studies: <i>Individual and group behaviour, empowerment and participation; cross-culture work.</i> • Community Life Studies: <i>Enterprise social and culture system.</i> • Personality based Studies: <i>Personality.</i>
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Rich Schiesser, <u>IT Systems Management: Designing, Implementing, and Managing World-Class Infrastructure</u>, Prentice Hall PTR, 2001. • Carol V Brown, Daniel W. DeHayes, Jeffrey A. Hoffer, Wainright E. Martin , William C Perkin, <u>Managing Information Technology</u>, 2008. • CJ Rhoads, <u>The Entrepreneur's Guide to Managing Information Technology</u>, Praeger Publishers, 2008.

MATA KULIAH/ COURSE TITLE	KS091304 : Sistem Fungsional Bisnis II KS091304 : Business Functionalities System II Credits : 3 Semester : II
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mengelola aktifitas fungsional finansial organisasi. <i>Students have an ability of managing financial functionality activities in organization.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai proses bisnis akuntansi dan keuangan • Kemampuan mengelola aktifitas organisasi • Kemampuan berwirausaha • <i>The ability of master business processes accounting and finance</i> • <i>The ability of managing organization activities.</i> • <i>The ability of entrepreneurship.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Proses bisnis dalam: manajemen penjualan, manajemen cash, manajemen investasi, capital budgeting, perencanaan keuangan, transaksi penjualan, penerimaan uang & pembayaran, transaksi pembayaran, transaksi penggajian, general ledger & pelaporan akuntansi. • Kajian berkarya: pemanfaatan kasus-kasus keuangan & akuntansi; SIA; laporan akuntansi • Conceptual and Skill Studies: <i>Business processes in : selling management, cash management, investation management, capital budgeting, financial planning, sales transaction, money receipt and payment, payment transaction, salary transaction, general ledger and accounting report.</i> • Competency Studies: <i>Harnesing finance and accounting cases; Accounting Information System; Accounting Report.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • William M. Pride , Robert J. Hughes , Jack R. Kapoor, <u>Business</u>, South-Western College Pub, 2006. • William Nickels , James McHugh , Susan McHugh, <u>Understanding Business</u>, McGraw-Hill, 2006.

MATA KULIAH/ COURSE TITLE	KS091206 : Kalkulus dan Aljabar Linier KS091206 : <i>Calculus and Linier Algebra</i> Credits : 4 Semester : III
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa mampu menerapkan matematika dalam penyelesaian suatu masalah. <i>Student have an ability of applying mathematics in problem solving.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan memahami aplikasi matematika dalam kehidupan nyata • Kemampuan memfasilitasi pengambilan keputusan berbasis SI/TI • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim <ul style="list-style-type: none"> • <i>The ability of understand application of mathematics in real daily life</i> • <i>The ability of facilitating IS/IT based decision making.</i> • <i>The ability of accomplishing IS/IT work either independently or in team.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Konsep limit; turunan; integral; sistem persamaan linier; determinan; invers; vektor; eigen value; eigen vektor. • Kajian berkarya: aplikasi graph & kombinatorik; merancang alur penyelesaian masalah • Conceptual and Skill Studies: <i>Concept of limit, integral, deferential, example solution of real world problem using those concepts; linear equation system, determinant, inverse, vector, Eigen value and Eigen vector.</i> • Competency Studies: <i>Graph and Combinatoric application; designing flowchart for problem solving.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Ron Larson , Robert P. Hostetler , Bruce H. Edwards, <u>Calculus (With Analytic Geometry)</u>, Brooks Cole,2005. • James Stewart, <u>Calculus: Early Transcendentals</u>, Brooks Cole, 2007. • David C. Lay, <u>Linear Algebra and Its Applications</u>, Addison Wesley, 2005. • David Poole, <u>Linear Algebra: A Modern Introduction</u>, Brooks Cole, 2005.

MATA KULIAH/ COURSE TITLE	<p>KS091305 : Pengembangan dan Implementasi Perangkat Lunak</p> <p>KS091305 : <i>Software Development and Implementation</i></p> <p>Credits : 3</p> <p>Semester : III</p>
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	<p>Mahasiswa memiliki kemampuan mengatur siklus hidup pengembangan perangkat lunak beserta implementasinya.</p> <p><i>Students have an ability of managing software development life cycle and its implementation.</i></p>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menentukan dan mengelola secara tepat pendekatan, peningkatan and standarisasi proses pengembangan perangkat lunak serta pandai mempersiapkan implementasi perangkat lunak yang dikembangkan tersebut. • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim • Kemampuan mengelola perubahan organisasi <ul style="list-style-type: none"> • <i>The ability of correctly determining and managing approach, advancement, and standardization of software development process including preparing software implementation.</i> • <i>The ability of accomplishing IS/IT works either independently or in team.</i> • <i>The ability of managing organization changes.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Pendekatan SDLC & variasinya; proses manajemen perubahan perangkat lunak; manajemen konfigurasi perangkat lunak; pengendalian input, proses, output & jaminan pengendalian proses bisnis; pengendalian perubahan perangkat lunak; sistem kedewasaan proses pengembangan perangkat lunak; perencanaan implementasi perangkat lunak; manajemen dokumen pengembangan perangkat lunak; cut off sistem; prepare data; training; isu setelah implementasi perangkat lunak. • Kajian berkarya: dokumentasi perubahan SI; authorization, data validation & penanganan kesalahan laporan; ISO 9216 & ISO

15504; CMM & CMMI; pemanfaatan kasus implementasi SI.

- **Conceptual and Skill Studies:** *SDLC approach and its variety; software change management process; software configuration management; software development process maturity system; planning and implementation software; software development documents management; cut off system; data preparation; training; after software implementation issue; system testing. The final result will be the software change documentation; authorization, data validation and false report handling; ISO 9216 and ISO 15504; CMM and CMMI; use of implementation software cases.*

**PUSTAKA
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- Jim McCarthy, Dynamics of Software Development (Best Practices), Microsoft Press, 2006.
- Ramez Elmasri , Shamkant B. Navathe, Head First Software Development, O'Reilly Media, Inc, 2008.

MATA KULIAH/ COURSE TITLE	KS091306 : Manajemen Basis Data KS091306 : Database Management Credits : 5 Semester : III
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mendukung operasional SI melalui penyediaan basis data dan sistem yang terkelola dengan baik <i>Students have an ability to support the operational information system by providing a well managed database and database system.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai teori, komponen, teknologi, dan struktur di dalam basis data, serta pandai mengkonfigurasi dan menggunakan fungsi DBMS. • Kemampuan menyelesaikan pekerjaan SI/TI terkait dengan basis data secara mandiri ataupun bekerjasama dalam tim • Kemampuan memfasilitasi pengambilan keputusan berbasis SI/TI <ul style="list-style-type: none"> • <i>The ability of master the theories, components, technology, and structure in database, and also capable in configuring and using DBMS functions.</i> • <i>The ability to accomplish IS/IT works related to database either independently or in team.</i> • <i>The ability to facilitate IS/IT based decision making.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Konsep pengorganisasian data; Konsep DBMS; desain dan pemodelan basis data; basis data relasional; perbaikan desain basis data; normalisasi; SQL dan pemrograman basis data; pemrograman aplikasi dinamis dengan basis data; konsep penyimpanan data dan desain fisik; konsep dan manajemen transaksi; manajemen DBMS Oracle • Kajian berkarya: studi kasus desain basis data; studi kasus penyelesaian masalah dalam query data; studi kasus pembangunan aplikasi dengan basis data & pengelolaan basis data dengan Java dan DBMS Oracle • Conceptual and Skill Studies: <i>Data organization concept; DBMS concept; database design & modeling; relational database; database design tuning; normalization; SQL & database</i>

	<p><i>programming; dynamic application programming using database; data storage and physical design concept; transaction concept & management; Oracle DBMS management.</i></p> <ul style="list-style-type: none"> • Competency Studies: <i>Case study of database design; case study of problem solving in data query; case study of application development using database and database management with Java and Oracle DBMS.</i>
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Raghu Ramakrishnan, Johannes Gehrke, <u>Database Management Systems</u>, McGraw-Hill, Science/ Engineering/ Math, 2002. • Ramez Elmasri, Shamkant B. Navathe, <u>Fundamentals of Database Systems</u>, Addison Wesley, 2006. • Gerald V Post, <u>Database Management Systems-Designing & Building Business Applications</u>, McGraw-Hill/Irwin, 2004. • Mark L. Gillenson, <u>Fundamentals of Database Management Systems</u>, Wiley, 2004.

MATA KULIAH/ COURSE TITLE	KS091307 : Desain dan Manajemen Jaringan KS091307 : <i>Network Design & Management</i> Credits : 3 Semester : III
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mendukung operasional SI melalui penyediaan & pengaturan jaringan. <i>Students have an ability of supporting operational information system by providing and managing network.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai komponen, teknologi, dan arsitektur jaringan, serta pandai mengkonfigurasi dan menggunakan fungsi software jaringan. • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim • Kemampuan menggunakan aplikasi populer beserta peralatan yang mendukungnya <ul style="list-style-type: none"> • <i>The ability of mastering component, technologies, and network architecture and also have capability of configuring and using network software.</i> • <i>The ability of accomplishing IS/IT works either independently or in team.</i> • <i>The ability of using popular application including its supporting tools.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Infrastruktur & bentuk arsitektur jaringan; fungsi layanan jaringan; protocol & standart jaringan; penerapan model OSI. • Kajian berkarya: contoh kasus pengelolaan jaringan komputer. • Conceptual and Skill Studies: <i>Network infrastructure and architecture; network service functionality; network protocol and standard; OSI model implementation; LAN design.</i> • Competency Studies: <i>Cases in computer network management.</i>
PUSTAKA UTAMA/	<ul style="list-style-type: none"> • Alexander Clemm, <u>Network Management Fundamentals</u>, Cisco Press, 2006. • Steven Karris, <u>Networks: Design and Management</u>, Orchard

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- Publications, 2002.
- Shaun Hummel, Network Planning and Design Guide, Shaun Lloyd Hummel, 2006.
 - James D. McCabe, Network Analysis, Architecture, and Design, Morgan Kaufmann, 2007.
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MATA KULIAH/ COURSE TITLE	KS091308 : Pengelolaan Hubungan Pelanggan KS091308 : <i>Customer Relationship Management</i> Credits : 3 Semester : III
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mengelola aktifitas yang berhubungan dengan pelanggan (termasuk pemasok). <i>Students have an ability of managing activities related with customers (including suppliers).</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai proses bisnis yang berhubungan dengan pelanggan dan pandai mengaplikasikannya pada software CRM. • Kemampuan mengelola aktifitas organisasi • Kemampuan berwirausaha <ul style="list-style-type: none"> • <i>The ability of mastering business processes related with customer and capable of implementing them in CRM software.</i> • <i>The ability of managing organization activities.</i> • <i>The ability of entrepreneurship.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Marketing & pemenuhan kebutuhan; layanan & dukungan pelanggan; program loyalitas & retensi pelanggan; manajemen hubungan pelanggan; SFA; komponen, teknologi & fungsi software CRM • Kajian berkarya: pemanfaatan contoh kasus pengelolaan aktifitas rantai pasok; praktek software CRM. • Conceptual and Skill Studies: <i>Marketing and need fulfillment; customer service and supports; loyalty program and customer retention customer relationship management; SFA; component; technology and CRM software functionality.</i> • Competency Studies: <i>Harnessing cases of managing supply chain activities; practical works with SCM software.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • William Wagner , Michael Zubey, <u>Customer Relationship Management</u>, Course Technology, 2006. • Roger J. Baran , Robert Galka , Daniel P. Strunk, <u>Principles of Customer Relationship Management</u>, South-Western College Pub, 2007.

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- Wolfgang Buchholz, Supplier Relationship Management, Gabler, Betriebswirt.-Vlg, 2005.
 - Sachin Sethi, Enhancing Supplier Relationship Management with SAP SRM, SAP PRESS, 2007.
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MATA KULIAH/ COURSE TITLE	KS091207 : Statistika KS091207 : Statistics Credits : 3 Semester : IV
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan menggunakan statistik untuk pengolahan data & pengambilan kesimpulan. <i>Students have an ability of applying statistics for data processing and decision making.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan mengolah data dan menarik kesimpulan dari uji hipotesa • Kemampuan memfasilitasi pengambilan keputusan berbasis SI/TI • Kemampuan menumbuhkan perilaku akademis <ul style="list-style-type: none"> • <i>The ability of processing data and inference from hypothesis testing.</i> • <i>The ability of facilitating IS/IT based decision making.</i> • <i>The ability of nurturing academic behaviours.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Statistik deskriptif; populasi & sample; penaksiran parameter data; distribusi data; data time series; konsep uji hipotesis; teknik-teknik uji hipotesis; penggunaan tools pengolah data. • Kajian berkarya: kasus penarikan kesimpulan dengan menggunakan tools pengolah data. • Conceptual and Skill Studies: <i>Statistic descriptive; populations and samples; data parameter interpretation; data distribution; time series data; hypothesis' testing concept; hypothesis testing techniques.</i> • Competency Studies: <i>Cases of inferencing using spreadsheet tools.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • William Navidi, <u>Statistics for Engineers and Scientists</u>, McGraw-Hill Science/Engineering/Math, 2007. • Douglas C. Montgomery ,George C. Runger, <u>Applied Statistics and Probability for Engineers</u>, John Wiley & Sons, 2006.

MATA KULIAH/ COURSE TITLE	KS091309 : Perencanaan Sumber Daya Perusahaan KS091309 : <i>Enterprise Resource Planning</i> Credits : 4 Semester : IV
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mengelola aktifitas perencanaan sumberdaya organisasi. <i>Students have an ability of managing organization resource planning activities</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai proses bisnis pengelolaan sumberdaya organisasi dan pandai mengaplikasikannya pada software ERP • Kemampuan mengelola aktifitas organisasi • Kemampuan berwirausaha. • <i>The ability of mastering business processes of managing organization resources and capable to apply them in Enterprise Resource Planning (ERP) software.</i> • <i>The ability of managing organization activities.</i> • <i>The ability of entrepreneurship.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Proses bisnis dalam manajemen permintaan penjualan, manajemen SDM, akuntansi keuangan, manajemen akuntansi & procurement; komponen, teknologi & fungsi software ERP. • Kajian berkarya: pemanfaatan contoh kasus pengelolaan sumberdaya perusahaan; praktek software ERP • Conceptual and Skill Studies: <i>Business processes in: sales request management, HRD management, financial accounting, accounting management and procurement business processes; component, technology and software ERP functionality.</i> • Competency Studies : <i>Harnessing examples of cases in managing enterprise resources, practical work using ERP software.</i>
PUSTAKA UTAMA/	<ul style="list-style-type: none"> • Bret Wagner, Ellen Monk, <u>Enterprise Resource Planning</u>, Course Technology, 2008. • Daniel E. O'Leary, <u>Enterprise Resource Planning Systems: Systems,</u>

REFERENCES

- Life Cycle, Electronic Commerce, and Risk, Cambridge University Press, 2005.
- Cambridge University Press, ERP: Tools, Techniques, and Applications for Integrating the Supply Chain, CRC, 2003.
 - Daniel E. O'Leary , Why ERP? A Primer on SAP Implementation, McGraw-Hill/Irwin, 2000.

MATA KULIAH/ COURSE TITLE	KS091310 : Rekayasa Kebutuhan Perangkat Lunak KS091310 : Software Requirement Engineering Credits : 3 Semester : IV
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TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan menspesifikasikan kebutuhan perangkat lunak. <i>Students have an ability of specifying software requirement.</i>
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KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menggali informasi, menganalisa permasalahan, menspesifikasikan solusi dan mendokumentasikan kebutuhan perangkat lunak. • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim • Kemampuan bertindak selaku profesional SI/TI • <i>The ability of grasp information, analyze problem, specify solution and document software requirement.</i> • <i>The ability of accomplishing IS/IT works either independently or in team.</i> • <i>The ability to act as IS/IT professional.</i>
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POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Definisi & karakteristik kebutuhan; pendekatan rekayasa kebutuhan; teknik penggalan & validasi data/informasi, metode analisa kebutuhan; spesifikasi kebutuhan sistem & software; standar dokumen SKPL. • Kajian berkarya: pernyataan kebutuhan pengguna; pemilihan sumber informasi; jadwal penggalan data; materi & tes validasi pertanyaan; catatan penggalan data/informasi; kebutuhan fungsional & non fungsional; dokumen SKPL; validasi kebutuhan perangkat lunak. • Kajian sikap & prilaku: berpikir kritis & analitis; berorientasi pada pengguna; negotiable; komunikatif; bekerjasama tim. • Conceptual and Skill Studies: <i>Definition and characteristic of software requirement; requirement engineering approach; mining and validating data/information techniques; system and software requirement specification; document software specification</i>
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	<p><i>requirement (SSR) standard.</i></p> <ul style="list-style-type: none"> • Competency Studies: <i>User requirement specification; selecting information resources; data elicitation scheduling; material & question validation test; note in data/information elicitation; functional and non-functional requirement; Software requirement spesification document; software requirement validation.</i> • Attitudes and Behaviours Studies: <i>Critical and analytical thinking, user-oriented; negotiable; communicatif and team working.</i>
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Richard H. Thayer , Merlin Dorfman, <u>Software Requirements Engineering</u>, Wiley-IEEE Computer Society Pr, 2007. • Brian Berenbach , Daniel Paulish, Juergen Kazmeier , Arnold Rudorfer, <u>Software And Systems Requirements Engineering: In Practice</u>, McGraw-Hill Osborne Media, 2009. • David J. Gilmore , Russel L. Winder , Francoise Detienne, <u>User-Centred Requirements for Software Engineering Environments (NATO ASI Series / Computer and Systems Sciences)</u>, Springer, 1994. • John Mylopoulos , Eric Yu , Brian A. Nixon , Lawrence Chung, <u>Non-Functional Requirements in Software Engineering (THE KLUWER INTERNATIONAL SERIES IN SOFTWARE ENGINEERING Volume 5)</u>, Springer , 1999.

MATA KULIAH/ COURSE TITLE	KS091311 : Manajemen Layanan SI/TI KS091311 : IS/IT Service Management Credits : 3 Semester : IV
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	<p>Mahasiswa memiliki kemampuan mengelola layanan yang dapat mendukung operasi SI & proses TI sehingga SI/TI yang ada dapat berlangsung terus-menerus.</p> <p><i>Students have an ability of managing services supporting operation of IS and IT process as well. Thus, the continuity of existing IS/IT can be guaranteed.</i></p>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan mengatur operasi SI dan dukungan untuk proses, memiliki kesiagaan terhadap keberlangsungan layanan SI/TI, pandai menjaga dan memulihkan kembali layanan SI/TI dari insiden, menetapkan secara fair keuangan operasi SI/TI. • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim • Kemampuan mengelola perubahan organisasi • <i>The ability of manage operation of IS and support for process, have awareness for continuing IS/IT services, capable to guarantee and recover IS/IT service from incident, fairly determine the finance for IS/IT operation.</i> • <i>The ability of accomplishing IS/IT works either independently or in team.</i> • <i>The ability of managing organization changes.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Manajemen arsitektur SI, teknologi & infrastruktur; tingkat layanan; mengelola pihak ke 3; isu lesensi; program pemeliharaan & prosedur pengawasan HW; manajemen kapasitas, konfigurasi, data, lingkungan fisik &, masalah; monitoring sumberdaya; jaminan keberlangsungan layanan; jaminan keamanan sisem; meja layanan & insiden; manajemen operasi SI/TI; indentifikasi & pengalokasian biaya; pembelajaran pengguna; data recovery. • Kajian berkarya: pemanfaatan kasus arsitektur SI, teknologi & infrastruktur; SLAs & OLAs; katalog & resiko pihak ke 3; laporan

kinerja proses; catatan masalah; rencana kontigensi; kebutuhan layanan bencana; keuangan TI; laporan incident; permintaan layanan & perubahan layanan; log error; kebutuhan perbaikan dokumen.

- **Conceptual and Skill Studies:** *Managing IS architecture, technology and infrastructure management; service level; third party organizer; licensing issue; maintenance program and HW monitoring; capacity, configuration, data, physical and problems management; resource monitoring, service delivery assurance; system security assurance; helpdesk; IS/IT operational management; cost identification and allocations; IT financial; incident reporting; service request and service change; error log; document repair requirement, user training, and data recovery.*
- **Competency Studies:** *Harnessing information system architecture cases, technology and infrastructures; SLAs & OLAs; Catalog and third-party risk; performance process report; problem notes; contingency plans; requirement of disaster service; IT Finance; Incident report; Service demand and services changes; log error; requirement for document revision.*

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- Aileen Cater-steel, Information Technology Governance and Service Management: Frameworks and Adaptations (Premier Reference Source), Information Science Reference, 2008.
- James Fitzsimmons , Mona Fitzsimmons, Service Management: Operations, Strategy, Information Technology w/Student CD (Hardcover), McGraw-Hill/Irwin, 2007.

MATA KULIAH/ COURSE TITLE	KS091312 : Manajemen Proyek TI KS091312 : IT Project Management Credits : 6 Semester : IV
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mengelola proyek TI. <i>Students ability of managing IT project.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai konsep dan kerangka proyek, pandai merencanakan, mengeksekusi dan mengendalikan proyek Teknologi Informasi. • <i>The ability of mastering concepts and framework of IT Projects, capable to plan, execute and control IT project.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Konsep manajemen proyek & proyek TI; pengelolaan portofolio & program proyek; kerangka proyek; inisialisasi proyek; perencanaan proyek; eksekusi, pengendalian, pengawasan & penutupan proyek. • Kajian berkarya: pemilihan pendekatan pengembangan TI; pemilihan kerangka kerja proyek; tools manajemen proyek; estimasi proyek; rencana proyek; tim & pengembangan tim; aksi korektif; dokumentasi hasil proyek. • Kajian sikap & prilaku: berpikir kritis & analisis; interpersonal; partisipan. • Kajian kehidupan bermasyarakat: kepatuhan pada perundang-undangan pengadaan. • Kajian landasan kepribadian: berorientasi target. • Conceptual and Skill Studies: <i>Project management concept and IT Project study; portfolio management and project management; project framework; project initialization; project planning, execution, control and closing project.</i> • Competency Studies: <i>Choosing IT development approach; Choosing project framework; Project management tools;prpject estimation, project planning; team and team development;</i>

	<p><i>corrective action; Project documentation.</i></p> <ul style="list-style-type: none"> • Attitudes and Behaviours Studies: <i>Critical and analytical thinking; interpersonal; participant.</i> • Community Life Studies: <i>subservience to procurement regulations.</i> • Personality Studies: <i>Target-oriented.</i>
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Kathy Schwalbe, <u>Information Technology Project Management</u>, Fourth Edition, Course Technology, 2005. • Jack T. Marchewka, <u>Information Technology Project Management</u>, Wiley, 2009. • Kathy Schwalbe, <u>Information Technology Project Management (with Microsoft Project 2007 CD-ROM)</u>, Course Technology, 2009. • Jolyon Hallows, <u>Information Systems Project Management: How to Deliver Function and Value in Information Technology Projects</u>, AMACOM, 2005.

MATA KULIAH/ COURSE TITLE	KS091311 : Pengantar Technopreneurship KS091311 : Introduction Technopreneurship Credits : 2 Semester :
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki mindset sebagai seorang teknopreneurship <i>Students Have a technopreneur mindset</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan merubah <i>mindset</i> dari <i>job seeker</i> menjadi <i>job creator</i> serta memiliki kemampuan untuk menyusun sebuah rencana/proposal bisnis (<i>Business Plan</i>) • Mampu menyusun Rencana/Proposal Bisnis (<i>Business Plan</i>) yang baik. • <i>The ability of change their mindset from being job seekers to being job creators and are able to make a business plan</i> • <i>Being able to make business plan well</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Pendahuluan <ul style="list-style-type: none"> a. Defininsi, jenis, orientasi, spirit, dan perilaku enterpreneur dalam menghadapi resiko. b. Kecerdasan emosional menuju kesuksesan c. Perbedaan enterpreneur, teknopreneur, dan usaha kecil • Perubahan Mindset <ul style="list-style-type: none"> a. Pola pikir positif b. Mengubah perspektif dengan game c. Memunculkan alternatif solusi • Sukses Story membangun karir Teknopreneurship <ul style="list-style-type: none"> a. Alasan memilih bidang usaha b. Keuntungan sebagai teknopreneurship c. Soft skill faktor yang dibutuhkan d. Bagaimana membangun kompetensi dan jaringan • Peluang Usaha <ul style="list-style-type: none"> a. Teknik-teknik mengidentifikasi peluang usaha b. Kendala dan resiko produk atau usaha baru c. Identifikasi jenis usaha yang sedang trend • Pemasaran Usaha <ul style="list-style-type: none"> a. Proses pembentukan strategi pemasaran (STP dan 4P) b. Identifikasi persaingan c. Menerobos kendala persaingan

- *Introduction*
 - a. *Definition, types, orientation, spirit, and attitudes of entrepreneur in dealing with risks.*
 - a. *Emosional quotient towards success*
 - b. *The difference between entrepreneur, technopreneur, and small business.*
- *Changing Mindset*
 - a. *Positive mindset*
 - b. *Changing perspective through game*
 - c. *Generating alternative solution*
- *Success Story: Developing Technopreneurship Career*
 - a. *Reason for choosing business career*
 - b. *Advantages of being technopreneurship*
 - c. *Soft skill factor*
 - d. *How to develop competencies and network*
- *Business Opportunities*
 - a. *Business opportunity identification techniques*
 - b. *Problems and risks of new product or new business*
 - c. *Identifying booming business*
- *Marketing*
 - a. *Process of marketing strategy (STP and 4P)*
 - b. *Identifying competition*
 - c. *Break through competition problems*

**PUSTAKA
UTAMA/
REFERENCES**

- Tim Teknoprenersip ITS, Diklat “Teknoprenersip” (Technopreneurship, textbook)
- Yoseph Murphi, Membangkitkan Kekuatan Bawah Sadar (Arousing Subconscious Power), Pioner Jaya, 2002
- Carol Draeck, Change Your Mindset Change Your Life, Serambi, 2006

MATA KULIAH/ COURSE TITLE	KS091313 : Rancang Bangun Perangkat Lunak KS091313 : Software Design and Development Credits : 6 Semester : V
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan menciptakan rancangan & mengkontruksinya menjadi software. <i>Students have an ability of creating design and develop software.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai metode perancangan perangkat lunak, pandai mendesain dan mengkontruksi perangkat lunak; memahami dan bisa melakukan interoperabilitas berbasis arsitektur berorientasi service; cakap dalam menggunakan tools untuk mendesain dan mengkontruksi perangkat lunak. • <i>The ability of mastering software design method; capable to design and develop software, understand and conduct service-oriented, architecture-based interoperability; capable to use tools for designing and developing software.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Perancangan pemrograman struktural & berbasis object oriented; pemodelan fungsi, struktural & behavior; case tools; methods; namespace; inheritance; polymorphism; HTML; client side; scripting; server side scripting; web framework; array; list; ADT; data exchange; communication protocol. • Kajian berkarya: standar notasi desain; desain usecase, activity, sequential, class & metode, data management layer, physical architecture layer; kasus pembuatan class; kasus penyelesaian problem dengan struktur data; pembuatan aplikasi berbasis web sederhana; penggunaan framework terkini dalam membuat aplikasi berbasis web; penerapan web service pada aplikasi berbasis web; mashup product. • Kajian sikap & prilaku: kejelian/ketelitian dalam merancang kebutuhan perangkat lunak. • Conceptual and Skill Studies: <i>Structural programming planning and object oriented based; function modeling, structural and behavior case tools; notation design standard; use case design,</i>

	<p><i>activity, sequential, class and method, data management layer, physical architecture layer and accuracy in designing software requirements; namespace; inheritance; polymorphism; HTML; client side scripting; server side scripting; web framework; array; list; ADT; data exchange; communication protocol;</i></p> <ul style="list-style-type: none"> • Competency Studies: <i>Design notation standard; usecase, activity, sequential, class and method diagram; data management layer, physical architecture layer; creating class cases, problem solving using data structure cases; cases of simple web-based application development; using of emerging framework for web-based application development; implementing web service in web-based application; mashuo product.</i> • Attitudes and Behaviour Studies: <i>Carefulness in designing software requirement.</i>
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Carole Wilson, <u>Software Design and Development: The HSC Course (Cambridge Secondary IT)</u>, Cambridge University Press, 2002. • Ian Sommerville, <u>Software Engineering: (Update) (8th Edition) (International Computer Science Series)</u>, Addison Wesley, 2006.

MATA KULIAH/ COURSE TITLE	KS091314 : Interaksi Manusia dan Komputer KS091314 : <i>Human and Computer Interaction</i> Credits : 3 Semester : V
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan menciptakan rancangan interface yang memudahkan manusia berinteraksi dengan komputer. <i>Students have an ability of creating interface design that ease human to interact with computer.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan memahami peran karakteristik dari interaksi manusia-komputer (IMK), pandai mendesain interface agar kemudahan penggunaannya meningkat. • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim • Kemampuan menggunakan aplikasi populer beserta peralatan yang mendukungnya • <i>The ability of understanding roles of characteristics of human-computer interaction (HCI), capable to design interface that user friendly.</i> • <i>The ability of accomplishing IS/IT works either independently or in team.</i> • <i>The ability of using popular application including its supporting tools.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Komponen IMK; desain & pemrograman interface; desain dialog; kemudahan penggunaan; evaluasi interface. • Kajian berkarya: desain user interface • Conceptual and Skill Studies: <i>HCI component; interface design and programming; dialog design; user friendly; interface evaluation, and also user interface design.</i> • Competency Studies: <i>User interface design.</i>
PUSTAKA UTAMA/	<ul style="list-style-type: none"> • Andrew Sears , Julie A. Jacko, <u>The Human-Computer Interaction Handbook: Fundamentals, Evolving Technologies and Emerging Applications</u>, Second Edition (Human Factors and Ergonomics), CRC, 2007.

REFERENCES

- Helen Sharp , Yvonne Rogers , Jenny Preece, Interaction Design: Beyond Human-Computer Interaction, Wiley, 2007.
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MATA KULIAH/ COURSE TITLE	KS091315 : Manajemen Sains KS091315 : Management Science Credits : 5 Semester : V
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan memodelkan permasalahan bisnis. <i>Students have an ability of modelling business problem.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai pemodelan linier, non linier, simulasi dan peramalan permasalahan bisnis. • Kemampuan memfasilitasi pengambilan keputusan berbasis SI/TI • Kemampuan menerapkan matematika dan statistik • <i>The ability of mastering in mathematics modelling: linier, non linier and forecasting for business problem.</i> • <i>The ability of facilitating IS/IT based decision making.</i> • <i>The ability of applying mathematics and statistics.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Unsur, pembuatan, validasi, & teknik menyelesaikan model; tipe & karakteristik permasalahan simulasi; metodologi melakukan simulasi; teknik analisis input; teknik analisis output; data time series; teknik forecasting. • Kajian berkarya: membuat model & model konseptual; pemilihan metode & penggunaan tools penyelesaian model; menganalisis & menyimpulkan solusi model; membuat program simulasi; melakukan verifikasi & validasi; melakukan eksperimen simulasi; menganalisis & menyimpulkan hasil simulasi; memodelkan data; memilih teknik peramalan yang tepat; penggunaan tools penyelesaian model peramalan. • Kajian sikap & prilaku: jeli dalam menangkap unsur model; sensitifitas dalam model & pemahaman data; kritis & analitis; kreatif dalam memodelkan masalah. • Conceptual and Skill Studies: <i>Element, creation, validation, and modeling techniques; type and characteristic of simulation problem; simulation methodology; input analysis techniques; output analysis techniques; time series data; forecasting.</i>

	<ul style="list-style-type: none"> • Competency Studies: <i>Creating model and conceptual model; choosing method and using model solving tools. Analysing and concluding solution model; developing simulation program; verification and validation; conduct simulation experiment; analyzing and concluding from simulation result; data modelling; choosing right forecasting technique; using forecasting model solving tools.</i> • Attitudes and Behaviours Studies: <i>Carefully capture elements of model; high sencitivity in modeling and underatanding the data; critical and analytical; creative in modeling problem.</i>
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • David R. Anderson , Dennis J. Sweeney , Thomas A. Williams , R. Kipp Martin, <u>An Introduction to Management Science: Quantitative Approaches to Decision Making</u>, South-Western College Pub, 2007. • Bernard W. Taylor, <u>Introduction to Management Science</u>, Prentice Hall, 2006.

MATA KULIAH/ COURSE TITLE	KS091316 : Manajemen Rantai Pasok KS091316 : <i>Supply Chain Management</i> Credits : 3 Semester : V
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mengelola aktifitas rantai pasok. <i>Students have an ability of managing supply chain activities.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai proses bisnis pengelolaan rantai pasok dan pandai mengaplikasikannya pada software SCM. • Kemampuan mengelola aktifitas organisasi • Kemampuan berwirausaha • <i>The ability of mastering business process of supply chain management and capable to apply in SCM software.</i> • <i>The ability of managing organization activities.</i> • <i>The ability of entrepreneurship.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Perencanaan & pengaturan kebutuhan material; komponen, teknologi & fungsi software SCM. • Kajian berkarya: pemanfaatan contoh kasus pengelolaan aktifitas rantai pasok; praktek software SCM. • <i>Conceptual and Skill Studies:</i> <i>Planning and organizing material needs, component, technology and SCM software functionality.</i> • <i>Competency Studies:</i> <i>Harnessing examples of cases in managing supply chain activities; practical work using SCM software.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Sunil Chopra, Peter Meindl, <u>Supply Chain Management</u>, Prentice Hall, 2006. • Douglas M. Lambert, <u>Supply Chain Management: Processes, Partnerships, Performance (3rd edition)</u>, Supply Chain Management Institute, 2008. • Michael H. Hugos, <u>Essentials of Supply Chain Management</u>, Wiley, 2006. • David Blanchard, <u>Supply Chain Management Best Practices</u>, Wiley, 2006.

MATA KULIAH/ COURSE TITLE	KS091317 : Kewirausahaan Teknologi Informasi KS091317 : IT Driven Entrepreneurship Credits : 3 Semester : VI
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa mampu melakukan dan mengembangkan usaha TI <i>Students can conducting and fostering IT entrepreneurship.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menjalankan usaha • Kemampuan mengembangkan usaha • Kemampuan mengkomunikasikan kinerja usaha • Kemampuan mendongkrak kinerja usaha • <i>The ability of business skill</i> • <i>The ability of develop a business</i> • <i>The ability of communicate business performance</i> • <i>The ability of boost business performance</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Pengukuran kinerja usaha; ketrampilan komunikasi. • Kajian berkarya: memulai, menjalankan & mengembangkan usaha; laporan usaha yang terpadu. • Kajian sikap & prilaku: sistematis dalam menjalankan usaha; berorientasi pada kualitas produk/jasa; sistematis berkomunikasi; keberanian tampil. • Kajian kehidupan bermasyarakat: tanggung jawab sosial usahawan. • Kajian landasan kepribadian: berani mengambil resiko. • Conceptual and Skill Studies: <i>Performance measurement, communication skill.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Fang Zhao, <u>Information Technology Entrepreneurship and Innovation, Information Science Reference</u>, 2008. • Jose A. Medina-garrido , Salustiano Martinez-fierro , Jose Ruiz Navarro, <u>Cases on Information Technology Entrepreneurship</u>, IGI Publishing, 2007

MATA KULIAH/ COURSE TITLE	KS091318 : Manajemen Investasi TI KS091318 : IT Investment Management Credits : 3 Semester : VI
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mengatur program investasi SI/TI. <i>Students have an ability of managing IS/IT Investment program.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menganggarkan dan mengelola anggaran SI/TI • Kemampuan berwirausaha • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim • <i>The ability of budgeting and managing IS/IT budget.</i> • <i>The ability of entrepreneurship.</i> • <i>The ability of accomplishing IS/IT work either independently or in team.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Biaya, keuntungan & prioritas investasi; proses penganggaran & pengelolaannya; pengendalian total biaya & keuntungan beserta aksi koreksi yang diperlukan. • Kajian berkarya: cost-benefit; total cost of ownership; realisasi keuntungan bisnis; return of investment. • Kajian sikap & prilaku: efisien & efektif dalam penggunaan sumberdaya TI; transparan & accountable. • Conceptual and Skill studies: <i>Cost, benefit and investment priority, budget process and management, total cost and benefit control including correction.</i> • Competency Studies: cost-benefit; total cost of ownership; business profit realization; return of investment.
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Marc J. Schniederjans , Jamie L. Hamaker , Ashlyn M. Schniederjans, <u>Information Technology Investment: Decision-Making Methodology</u>, World Scientific Publishing Company, 2004. • Mo Adam Mahmood , Edward J. Szewczak, <u>Measuring Information Technology Investment Payoff: Contemporary Approaches (Series in Information Technology Management)</u>, IGI Global , 2008.

MATA KULIAH/ COURSE TITLE	KS091319 : Data Mining dan Data Warehousing KS091319 : <i>Data Mining & Data Warehousing</i> Credits : 5 Semester : VI
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan menggali & mempolakan data yang besar. <i>Students have an ability of mining and finding pattern and huge data.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai dan pandai mengali data, merancang gudang data dan mendapatkan pengetahuan melalui analisa data. • Kemampuan memfasilitasi pengambilan keputusan berbasis SI/TI • Kemampuan menggunakan aplikasi populer beserta peralatan yang mendukungnya • <i>The ability of mastering and capable to mine data, designing datawarehouse and extract knowledge from data analysis.</i> • <i>The ability of facilitating IS/IT based decision making.</i> • <i>The ability of using popular aplication including its supporting tools.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Querying; data warehousing; data mining; Online Analytical Processing (OLAP). • Kajian berkarya: penggunaan tools untuk menemukan pola suatu data; menyelesaikan kasus & menampilkan hasilnya. • Conceptual and Skill Studies: Querying; data warehousing; data mining; Online Analytical Processing (OLAP). • Competency Studies: <i>Using tools to find pattern in data; solving cases and visualizing its output.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • David Taniar, <u>Data Mining: Practical Machine Learning Tools and Techniques, Second Edition (Morgan Kaufmann Series in Data Management Systems)</u>, Morgan Kaufmann, 2005. • Pang-Ning Tan, Michael Steinbach , Vipin Kumar, <u>Introduction to Data Mining</u>, Addison Wesley, 2005. • David Taniar, <u>Data Mining and Knowledge Discovery Technologies</u>

(Advances in Data Warehousing and Mining), IGI Publishing, 2008.

- Paulraj Ponniah, Data Warehousing Fundamentals: A Comprehensive Guide for IT Professionals, Wiley-Interscience, 2001.
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MATA KULIAH/ COURSE TITLE	KS091320 : Perencanaan Strategis SI/TI KS091320 : Strategic IS/IT Planning Credits : 3 Semester : VI
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan menyelaraskan sumberdaya SI/TI dengan strategi & prioritas bisnis <i>Students have an ability of synchronizing between IS/IT resources and business strategy and priority.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan memahami kerangka kerja perencanaan strategis, pandai memformulasikan portofolio SI, ketersediaan TI and kebijakan layanan SI/TI. • Kemampuan berwirausaha. • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim. • <i>The ability of understanding strategic planning framework, capable to formulate IS portfolio, IT availability and IS/IT service policy.</i> • <i>The ability of entrepreneurship.</i> • <i>The ability of accomplishing IS/IT work either independently or in team.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Konsep perencanaan strategis; teknik analisa strategi; arsitektur informasi, SI, teknologi informasi dan infrastruktur; kebijakan & prosedur layanan SI/TI . • Kajian berkarya: inialisasi proses perencanaan strategis SI/TI; rencana strategis SI/TI; pemanfaatan kasus perencanaan strategis SI/TI. • Kajian sikap & prilaku: memenangkan persaingan; berpikir kreatif & analisis. • Conceptual and Skill studies: <i>Strategic planning concept; strategy analysis technique; information, IS, IT and infrastructure architecture; IS/IT strategic plan; IS/IT service policy and procedure.</i> • Competency Studies: <i>Initialization of IS/IT strategic planning concept; IS/IT strategic planning; harnessing cases of IS/IT strategic planning,</i>

	<ul style="list-style-type: none"> • <i>Attitudes and Behaviour Studies: winning a competition; creative and analytical thinking.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • John L. Ward , Joe Peppard, <u>Strategic Planning for Information Systems</u>, Wiley, 2002. • Helen Sharp , Yvonne Rogers , Jenny Preece, <u>A Practical Guide to Information Systems Strategic Planning</u>, Auerbach Publications, 2005.

**MATA KULIAH/
COURSE TITLE**

**IG091306 : Pendidikan Kewarganegaraan
IG091306 : *Citizenship Studies***

Credits : 2

Semester : I/II/III/IV/V/VI/VII/VIII

**TUJUAN
PEMBELAJARAN/
LEARNING
OBJECTIVES**

Membantu mahasiswa mengembangkan potensinya untuk menguasai ilmu pengetahuan, ketrampilan, dan sikap kewarganegaraan dan nilai-nilai yang diperlukan dalam rangka penerapan ilmu, profesi dan keahliannya serta berpartisipasi dalam kehidupan masyarakat dari komuniti setempat, bangsa dan dunia.. Menjadi warga Negara yang cerdas, demokratis dan berkeadaban, dan bertanggung jawab, menggalang kemampuan kompetitif bangsa di era globalisasi, yang efektif mencakup: Pemahaman dasar tentang cara kerja demokrasi dan lembaga-lembaganya. Pemahaman tentang “rule of law” dan HAM seperti tercermin dalam rumusan-rumusan perjanjian dan kesepakatan internasional dan local. Penguatan ketrampilan partisipatif yang akan memberdayakan peserta didik untuk merespons dan memecahkan masalah-masalah masyarakat secara demokratis. Pengembangan budaya demokrasi dan perdamaian pada lembaga-lembaga pendidikan dan seluruh aspek kehidupan masyarakat.

To help the students to develop their potencies in mastering sciences skills, and citizenship attitudes and values. Which are required in the applications / implementations of sciences, profession and proficiency, and also to participate in the local communities, nation and world. to help the students to be intelligent, democratic and civilized citizen, and to be citizens having respon sibilities, and capabilities in mobilizing the abilities, of national competitiveness in the globalization era that effectively cover: _Basic understanding with the working law/way of democracy and its institutions._ Understanding with the rule of low and human rights , such as they are reflected in the formula of agreements, and also in the local and international accords._ Improving participative skills which will strengthen participants to respond and solve social problems democratically._ Improving democratic and peaceful cultures in the institutions of education and all aspects of social life.

**KOMPETENSI/
COMPETENCY**

- Menjadi ilmuwan dan profesional yang memiliki rasa kebangsaan dan cinta tanah air, demokratis yang berkeadaban
- menjadi warga Negara yang memiliki daya saing; berdisiplin; dan berpartisipasi aktif dalam membangun kehidupan yang damai berdasarkan sistem nilai Pancasila.

	<ul style="list-style-type: none"> • <i>To become scientists and professionals having nationalism and patriotism spirits, democratic and civilized citizens ;</i> • <i>To become citizens having competitive powers, and disciplines, and taking part actively in the development of peaceful life based on the system of Pancasila values.</i>
<p>POKOK BAHASAN/ SUBJECTS</p>	<ul style="list-style-type: none"> • Filsafat Pancasila • Identitas Nasional • Hak dan Kewajiban warga negara • Negara dan Sistem Konstitusi • Demokrasi di Indonesia • <i>The Philosophy of Pancasila</i> • <i>National identity</i> • <i>Citizen's rights and obligation</i> • <i>State and system of constitution</i> • <i>Democracy in Indonesia</i>
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Armaidly Armawi, <u>Geostrategi Indonesia</u>, (<i>Indonesian Geostrategy</i>) Jakarta, Direktorat Jenderal Pendidikan Tinggi, 2006 • Azyumardi Azra, <u>Paradigma Baru Pendidikan Nasional dan Rekonstruksi dan Demokratisasi</u>, (<i>A new Paradigm of National Education and reconstruction and Democratization</i>) Penerbit Kompas, Jakarta, 2002 • Bahar, Dr. Saefrodin, <u>Konteks Kenegaraan, Hak Asasi Manusia</u>, (<i>State Context on Human Rights</i>) Pustaka Sinar Harapan, Jakarta, 2000. • Cassesse, Antonio, <u>Human Right In a Change Word, Hak-Hak Asasi Manusia Di dunia Yang Berubah</u> (terjemahan R.Zainudin), Yayasan Obor Indonesia, Jakarta, 1994. • Kaelan, <u>Pendidikan Kewarganegaraan</u>, (Citizenship Education) UGM Press, Yogyakarta 2005.

MATA KULIAH/ COURSE TITLE	KS091321 : Proteksi Aset Informasi KS091321 : Information Asset Protection Credits : 3 Semester : VI
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mengeksploitasi & mengamankan aset informasi. <i>Students have an ability of exploiting and securing information assets.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai pengaturan keamanan informasi, pengendalian logical access, keamanan infrastruktur jaringan, pengendalian lingkungan SI/TI, alat pengendali access & mobile computing. • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim. • Kemampuan menjadi warganegara yang bermoral dan beretika. • <i>The ability of mastering managing information security, logical access controlling, network infrastructure security, IS/IT environment controlling, access controlling tools and mobile computing.</i> • <i>The ability accomplishing IS/IT works either independently or in team.</i> • <i>The ability of being citizenship with high standard moral and ethic.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Elemen utama manajemen security information; aset informasi; system access permission; fleksibilitas access control; isu-isu privasi & peran auditor SI; peralatan pengendalian lingkungan; isu akses dengan peralatan; alat pengendali akses; mobile computing. • Kajian berkarya: pemanfaatan contoh kasus keamanan informasi, pengendalian logical access, keamanan infrastruktur jaringan, pengendalian lingkungan, alat pengendalian access & mobile computing. • Conceptual and Skill Studies: <i>Element of information security management; information asset; system access permission; access control flexibility; privacy issue and IS auditor role;, access control tools and mobile computing.</i>

	<ul style="list-style-type: none"> • Competency Studies: <i>Harnessing examples of information security cases, logical access control, network infrastructure security, environment control, access control tools, mobile computing.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • James Walsh, <u>Asset Protection and Security Management Handbook</u>, Auerbach Publications, 2002. • Chris Davis, Mike Schiller, Kevin Wheeler, <u>IT Auditing: Using Controls to Protect Information Assets</u>, McGraw-Hill Osborne Media, 2006.

MATA KULIAH/ COURSE TITLE	IG091307 : Bahasa Indonesia IG091307 : Indonesian Language Credits: 2 Semester: VII
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa mampu menggunakan bahasa Indonesia untuk mengungkapkan fakta, gagasan, metode, konsep, dan prinsip-prinsip ilmiah ke dalam karya ilmiah yang berkualitas (memenuhi syarat lugas, logis, sistematis, cendekia, efektif, efisien, dan menarik). <i>Students are able to use Indonesian Language to express fact, ideas, method, concept and scientific principles in a quality scientific work (simple, logic, systematic, educated, effective, efficient, and interesting).</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemahiran dalam menggunakan bahasa Indonesia untuk menguasai, menerapkan dan mengembangkan ilmu pengetahuan, teknologi dan seni dengan penuh rasa tanggung jawab sebagai warga negara yang berkepribadian mulia. • Mahasiswa mampu memanfaatkan kemahiran bahasa Indonesia untuk mengembangkan diri sepanjang hidupnya. • <i>gain skills to use Indonesian Language to acquire, apply and develop science, technology and art accountably as noble citizens.</i> • <i>Students are able to make use of their Indonesian Language skills for their own longlife self-development.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Pendahuluan: Pengantar, bahasa Indonesia ilmiah, analisis kesenjangan dalam karya ilmiah (gap analysis). • Komposisi Bahasa: komposisi kalimat efektif, syarat-syarat keefektifan, paragraf dan teknik pengembangan paragraf (komposisi paragraf). • Menulis Akademik: menulis pendahuluan, metodologi, tinjauan pustaka dan/atau analisis/ pembahasan, serta daftar pustaka. • Format penulisan karya ilmiah: proposal, makalah, dan atau laporan ilmiah. • Konsep Presentasi: teknik presentasi, penyiapan materi, kejelasan alur pikir, penyampaian materi. sikap berpresentasi, ringkasan dan jawaban berpresentasi. • <i>Introduction: Indonesian Language for scientific purposes, Language gap analysis of scientific article.</i>

	<ul style="list-style-type: none"> • <i>Language Composition: Effective sentence, paragraph and paragraph composition</i> • <i>Academic Writing: Introduction, methodology, literature review/analysis/discussion, bibliography.</i> • <i>Scientific Writing: Proposal, Article, Scientific writing report.</i> • <i>Presentation: Presentation techniques, outlining, delivery, attitude, summary, question-answer session.</i>
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Alwi, Hasan. 2000. <u>Tata Bahasa Baku Bahasa Indonesia (Indonesian Language Grammar)</u>. Jakarta: Balai Pustaka • Arifin, E. Zaenal. 1987. <u>Penulisan Karangan Ilmiah dengan Bahasa Indonesia yang Benar (Writing Scientific Article Using Correct Indonesian Language)</u>. Jakarta: Mediyatama Sarana Perkasa. • Brotowidjojo, Mukayat D. 1995. <u>Penulisan Karangan Ilmiah (Writing Scientific Article)</u>. Jakarta: Akademika Presindo. • Departemen Pendidikan dan Kebudayaan. 1998. <u>Pedoman Ejaan Bahasa Indonesia yang Disempurnakan (Guidance of Official Indonesian Spelling System)</u>. Jakarta: Balai Pustaka • Departemen Pendidikan dan Kebudayaan.1998. <u>Pedoman Umum Pembentukan Istilah (General Guidance of Terminology Formation)</u>. Jakarta: Balai Pustaka.

MATA KULIAH/ COURSE TITLE	KS091322 : Tata Kelola dan Audit SI/TI KS091322 : IS/IT Governance and Audit Credits: 4 Semester: VII
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan menata pengelolaan aktifitas dari implementasi rencana strategis SI/TI, memeriksa dan mencocokkan kembali hasil aktifitas tersebut dengan tata kelola yang ada <i>Students have an ability of organizing activity managements from IS/IT strategic planning implementation, checking and comparing activity result with provided governance.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • pandai menata pelaksanaan aktifitas • menguasai proses audit • menemukan control objective & ketidaksesuaian • membuat rekomendasi perbaikan <ul style="list-style-type: none"> • <i>know how to organize activity implementation</i> • <i>mastering audit process</i> • <i>capable in control objective and inappropriate finding</i> • <i>capable to propose refinement</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Prinsip & kerangka kerja tatakelola; kebijakan & prosedur aktifitas; penanggung jawab & pelaksana aktifitas; aktifitas/proses TI; standart & panduan audit; kerangka kerja audit; analisa resiko; pengendali internal; memunculkan perubahan dalam proses audit SI. • Kajian berkarya: tatakelola; tatalaksa; rencana audit; penggalian & verifikasi control objective; rekomendasi ketidaksesuaian. • Kajian sikap & prilaku: berpikir kritis & analitis; objective; sensitif pada ketidaksesuaian. • Kajian landasan kepribadian: integritas; independen. <ul style="list-style-type: none"> • Conceptual and Skill Studies: <i>Governance principle and framework; activity policy and procedure; activity manager and implementer; IT activity/process, audit standard and guideline; audit framework; risk analysis; internal control; emerging change in IS audit process.</i> • Competency Studies:

**PUSTAKA
UTAMA/
REFERENCES**

- Sandra Senft , Frederick Gallegos, Information Technology Control and Audit, Third Edition, Auerbach Publications, 2008
- Xenia Ley Parker, Information Technology Audits, CCH, Inc, 2008

MATA KULIAH/ COURSE TITLE	KS091323 : Bisnis Cerdas KS091323 : <i>Business Intelligence</i> Credits: 4 Semester: VII
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan memberi alternatif solusi bisnis secara cerdas. <i>Students have an ability of proposing alternative solution for business intelligently.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai konsep-konsep Bisnis Cerdas dan infrastruktur yang dibutuhkan dalam bisnis cerdas dalam rangka mendukung proses pengambilan keputusan • Kemampuan memahami kompleksitas lingkungan bisnis saat ini. • Kemampuan memahami dasar-dasar isu utama dalam pengambilan keputusan manajerial. • Kemampuan mengenali kesulitan-kesulitan dalam pengambilan keputusan manajerial saat ini. • Kemampuan memahami kerangka kerja Pendukung Keputusan Berbasis Komputer: Sistem Pendukung Keputusan dan Bisnis Cerdas. • Kemampuan memahami pendorong Inisiatif bisnis cerdas dalam organisasi modern. • Kemampuan memahami struktur, komponen, dan proses dari bisnis cerdas. • Kemampuan menguasai Data Warehouse dan Data Mart. • Kemampuan memahami model-model dari Bisnis Analitik. • Kemampuan untuk membiasakan diri dengan visualisasi dan Bisnis Cerdas. • Kemampuan memahami aplikasi analitik tingkat lanjut: data, text dan web mining dan penggunaanya. • Kemampuan memahami Business/Corporate Performance Management. • Memahami dasar-dasar kecerdasan buatan dan sistem berbasis pengetahuan. • Kemampuan memahami Jaringan Syaraf Tiruan, algoritma genetik, logika fuzzy, time series, dan bayesian network. • Kemampuan memfasilitasi pengambilan keputusan berbasis SI/TI. • Kemampuan menggunakan aplikasi populer beserta peralatan yang mendukungnya.

- *The ability of understanding of Business Intelligence (BI) systems and the infrastructure needed to support them in order to support decision making process.*
- *Understand the complexity of today's business environment.*
- *Understand the foundations and key issues of managerial decision making.*
- *Recognize the difficulties in managerial decision making today.*
- *Learn the major frameworks of computerized decision support: decision support system (DSS) and business intelligence (BI).*
- *Understand the drivers for BI initiatives in modern organizations.*
- *Understand the structure, components, and process of BI.*
- *Learn about data warehouses and data marts.*
- *Learn about the different models of business analytics (BA).*
- *Gain familiarity with data visualization in BI.*
- *Learn advanced analytic applications, including data, text, and Web Mining, and their current and potential uses.*
- *Gain familiarity with the techniques that are used in data mining.*
- *Learn about business performance management (BPM) / corporate performance management (CPM).*
- *Understand the foundations, definitions, and capabilities of artificial intelligence and knowledge-based system.*
- *Understand the process and tools for developing knowledge-based system.*
- *Understand how artificial neural networks (ANN) are used to develop intelligent system.*
- *Understand how genetic algorithms (GA) are used to develop intelligent system.*
- *Understand how fuzzy logic, time series, bayesian network can be used to develop intelligent system.*
- *Understand state-of-the art applications of intelligent agents and recommendation systems on the Internet.*
- *Having skill using business intelligence application such as: Oracle/SQL Server/SAS Business Intelligence.*
- *The ability of facilitating IS/IT based decision making.*
- *The ability of using popular application including its supporting tools.*

**POKOK
BAHASAN/
SUBJECTS**

- **Kajian ilmu & ketrampilan:** Sistem pendukung keputusan dan Bisnis Cerdas, Dasar-dasar bisnis cerdas, Datawarehouse, Bisnis Analitik, Visualisasi Data, Data, text, dan web mining. Jaringan syaraf tiruan, Business Performance Management, Kecerdasan Buatan dan Sistem Pakar. Sistem Inteligencia lanjutan: Fuzzy set; NN; GA; HMM; time series; bayessian network, Sistem Inteligencia

di Internet, Aplikasi-aplikasi bisnis cerdas.

- **Kajian berkarya:** aplikasi intelligent bisnis; menyelesaikan kasus bisnis cerdas.
- **Conceptual and Skill Studies: Decision Support Systems and Business Intelligence (BI):** Managerial Decision Making. The concept of Decision Support System. A Framework for Business Intelligence. Special Introductory Section: **The Essentials of Business Intelligence:** The Origins and Drivers of Business Intelligence. The General Process of Intelligence Creation and Use. The Major Characteristics of Business Intelligence. Towards Competitive Intelligence and Advantage. The Typical Data Warehouse and BI User Community. Successful BI Implementation. Structure and Components of BI. **Data Warehousing:** Data Warehousing Definitions and Concepts. Data Warehousing Process Overview. Data Warehousing Architectures. Data Integration, and the Extraction, Transformation, and Load (ETL) Process. Data Warehouse Development. Real-Time Data Warehouses. Data Warehouse Administration and Security Issues. **Business Analytics and Data Visualization:** The Business Analytics Field-An Overview. Online Analytical Processing (OLAP). Reporting and Queries. Multidimensionality. Advanced Business Analytics. Data Visualization. Geographic Information Systems. Real-Time Business Intelligence, Automated Decision Support, and Competitive Intelligence. Business Analytics and the Web: Web Intelligence and Web Analytics. Usage, Benefits, and Success of Business Analytics. **Data, Text, and Web Mining:** Opening Vignette: Highmark, Inc. Data Mining Concepts and Applications Mining Techniques and Tools Data Mining Project Process Text Mining. Web Mining. **Neural Networks for Data Mining:** Basic Concepts of Neural Networks. Learning in Artificial Neural Networks. Developing Neural Network Systems. A Sample Neural Network Project. Other Neural Networks Paradigms. Applications of Neural Networks. Neural Network Software Demonstration. **Business Performance Management:** Business Performance Management Overview. Strategize: Where Do We Want to Go. Plan: How Do We Get There?. Monitor: How are We Doing. Act and Adjust: What Do We Need to Do Differently. Performance Measurement. Bpm Methodologies. Bpm Architecture and Applications. Performance Dashboards. Business Activity Monitoring (BAM). **Artificial Intelligence and Expert Systems:** Concepts and Definition of Artificial Intelligence. The Artificial Intelligence Fields. Basic Concepts of Expert Systems. Applications of Expert Systems. Structure of Expert Systems. How Expert Systems Work- Inference Mechanisms. Problem Areas Suitable for Expert Systems. Development of Expert Systems. Benefits, Limitations and

	<p>Success Factors of Expert Systems. Expert Systems on the Web. Advanced Intelligent Systems: Machine Learning Techniques. Case-based Reasoning. Genetic Algorithms Fundamentals. Developing Genetic Algorithm Applications. Fuzzy Logic Fundamentals. Natural Language Processing. Voice Technologies. Developing Integrated Advanced System. Intelligent Systems over the Internet: Web-Based Intelligent Systems. Intelligent Agents: An Overview. Characteristics of Intelligent Agents. Why Use Intelligent Agents. Classification and Types of Intelligent Agents. Internet-Based Software Agents. DSS Agents and Multi-agents. Semantic Web: Representing Knowledge for Intelligent Agents. Web-Cased Recommendation Systems. Managerial Issues of Intelligent Agents. Business Intelligence Applications: Marketing Model. Logistic and Production Model. Data Envelopment Analysis. Fuzzy set; NN; GA; HMM; time series; Bayesian network.</p> <ul style="list-style-type: none"> • Competency Studies: Business Intelligence application using SAS/Oracle/SQL Server Business Intelligence; solving business intelligence cases.
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Chengying Xu , Yung C. Shin, <u>Intelligent Systems: Modeling, Optimization, and Control (Automation and Control Engineering Series)</u>, CRC, 2008 • Efraim Turban Ramesh Sharda Jay E. Aronson ,David King, <u>Business Intelligence</u>, Prentice Hall, 2007

MATA KULIAH/ COURSE TITLE	KS091324 : Etika Profesi KS091324 : Professional Ethics Credits: 3 Semester: VIII
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa mematuhi etika profesional SI/TI <i>Students obeying IS/IT</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan memahami berbagai isu etika, perundangan yang terkait dengan penggunaan TI & pemanfaatan informasi • <i>The ability of understanding professional ethics. understand many kind of ethics issue, legislation related to IT utilizing and information usage.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Etika personal & profesi; privasi & properti; tanggung jawab & legalitas; implikasi dari kemudahan akses informasi; UU paten-HAKI; UU TIK. • Kajian berkarya: kode etik; analisa dampak penerapan UU. • Kajian sikap & prilaku: tunduk & patuh terhadap peraturan perundang-undangan. • Kajian landasan kepribadian: tanggung jawab sosial kemasyarakatan. • Conceptual and Skill Studies: <i>Profession and personal ethics; privacy and property; responsibilities and legality; implication of information access easiness; UU Patent-intellectual property; UU ICT.</i> • Competency Skill: <i>code of ethics; analysis of rule and regulation implementation impacts.</i> • Personality Studies : <i>Social responsibility.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • John L. Ward , Joe Peppard, <u>Straight Talk About Professional Ethics</u>, Wiley, 2002 • Michael S. Pritchard, <u>Professional Integrity: Thinking Ethically</u>, University Press of Kansas, 2007

MATA KULIAH/ COURSE TITLE	KS091325 : Pemantauan dan Evaluasi TI KS091325 : IT Control and Evaluation Credits: 3 Semester: VIII
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan memantau seluruh proses TI agar sesuai dengan arahan yang harus diikuti <i>Students have an ability of controlling whole IT process in order to appropriate with the guideline.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan mengelola kinerja • Kemampuan memantau kendali internal • Kemampuan meregulasi pelaksanaan & tatakelola <ul style="list-style-type: none"> • <i>The ability of manage performance</i> • <i>The ability of controlling internal rein</i> • <i>The ability of regulating governance and implementation</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Usulan pemantauan; definisi & pengumpulan data untuk pemantauan; metode pemantauan; evaluasi kinerja TI; kerangka kerja pengendalian internal; memeriksa pengawasan; kendali pengecualian; penaksiran kendali; kepastian kendali internal; kendali internal pihak ke 3; identifikasi regulasi, legal & kontrak yang akan diikuti; optimalisasi respon & kepatuhan terhadap regulasi, legal & kontrak ; nilai yang diberikan ke bisnis; pengukuran kinerja TI. • Kajian berkarya: laporan kinerja proses; laporan & tindakan perbaikan; laporan keefektifitasan kendali TI; kejadian & tren resiko. • Kajian sikap & prilaku: efisien & efektif dalam penggunaan sumberdaya TI. • Kajian landasan kepribadian: independen. <ul style="list-style-type: none"> • Conceptual and Skill Studies: <i>Controlling proposal; data definition and collection for controlling; control method; IT performance evaluation; internal control framework; inspecting control; exception control; control evaluation; internal control certainty; 3rd-party internal control; intended regulation, legal and contract identification; response optimization toward regulation, legal and contract; value added to business; IT performance measurement.</i> • Competency Studies: <i>process performance report; report and</i>

	<p><i>improvement act, IT control effectiveness report; risk case and trends.</i></p> <ul style="list-style-type: none"> • Attitudes and Behaviours Studies: <i>Using IS/IT resources effectively and efficiently.</i>
<p>PUSTAKA UTAMA/ REFERENCES</p>	<ul style="list-style-type: none"> • Wim Van Grembergen, <u>Information Technology Evaluation Methods and Management</u>, Idea Group Publishing, 2001 • Zahir Irani , Peter Love, <u>Evaluating Information Systems: Public and Private Sector</u>, Butterworth-Heinemann, 2008

MATA KULIAH/ COURSE TITLE	KS091335 : Kapita Seleкта KS091335 : <i>Capita Selecta</i> Credits: 2 Semester: VIII
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Secara berkelompok, mahasiswa 1) melakukan problem solving & 2) menyelesaikan kasus di industri <i>As a group, students conducting problem solving and solved industrial cases</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menyelesaikan permasalahan real dalam industri • Kemampuan memfasilitasi pengambilan keputusan berbasis SI/TI • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim • <i>The ability of solving real problem in industries.</i> • <i>The ability of facilitating IS/IT based decision making.</i> • <i>The ability of accomplishing IS/IT works either independently or in team.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Problem solving kasus di industri • Kajian berkarya: Solusi kasus • Kajian sikap & prilaku: Sikap profesional TI • <i>Conceptual and Skill Studies:</i> Industrial cases problem solving • <i>Competency Studies:</i> Case solutions • <i>Attitudes and Behaviours Studies:</i> IT professional attitude
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Dependable on the respective cases.

MATA KULIAH/ COURSE TITLE	KS091336 : Tugas Akhir KS091336 : Final Project Credits: 6 Semester: VIII
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan membuat & menyelesaikan penelitian/proyek tertentu <i>Students have an ability of creating and solving research/project</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menguasai bagaimana permasalahan penelitian/proyek dibangun, cakap menyelesaikan penelitian/proyek • Kemampuan berkomunikasi dengan menggunakan multi bahasa • Kemampuan menumbuhkan perilaku akademis • <i>The ability of mastering how to build research/project problem and know how to pursue solve the problem</i> • <i>The ability of using multi language to communication</i> • <i>The ability of foster academic behavior</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian berkarya: dokumen tugas akhir. • Kajian sikap & prilaku: Kejujuran akademik; berpikir kritis & analitis; komunikatif; simpatik; adaptif terhadap perubahan. • Competency Studies: <i>Final Project documentation.</i> • Attitudes and Behaviours Studies: <i>Academic honesty; critical and analytic thinking; communicative; sympathy; adaptive toward changes</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • ITS Final Project Guideline.

MATA KULIAH/ COURSE TITLE	KS091326 : Manajemen Kualitas TI KS091326 : IT Quality Management Credits : 4 Semester : Elective Course
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mengelola pengembangan software yang berkualitas tinggi. <i>Students have an ability of managing high quality software development.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menjaga dan mengontrol proses pengembangan software yang menghasilkan produk berkualitas tinggi • <i>The ability of hold and control software development process which produce high quality product</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Konsep kualitas; faktor kualitas software; standart kualitas internasional; total quality management (TQM); tools of TQM; inspeksi; TQM dalam service. • Kajian berkarya: rencana kualitas; implementasi rencana kualitas; memonitor & mengevaluasi keberhasilan implementasi kualitas. • Conceptual and Skill Studies: <i>Quality concepts; software quality factor; international quality standard; total quality management (TQM); tools of TQM; inspections; TQM in service.</i> • Competency Studies: <i>Quality plan, implementation of quality plan, monitoring and evaluation the success of quality implementation.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • William E. Perry, <u>Quality Assurance for Information Systems: Methods Tools, and Techniques</u>, John Wiley & Sons, 1991 • Daniel Galin, <u>Software Quality Assurance: From Theory to Implementation</u>, Addison Wesley, 2003

MATA KULIAH/ COURSE TITLE	KS091327 : Manajemen Resiko TI KS091327 : IT Risk Management Credits : 4 Semester : Elective Course
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan mengelola resiko penggunaan TI. <i>Students have an ability of managing IT using risk.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan mengantisipasi dan merespon dampak penggunaan IT • <i>The ability of anticipate and response in impact of IT usage</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Model standar Framework manajemen resiko TI; identifikasi resiko; analisa resiko; response resiko; evaluasi resiko. • Kajian berkarya: CobIT; NIST SP 800-30; OCTAVE; pemanfaatan kasus pengelolaan resiko. • Conceptual and Skill Studies: Model IT risk management framework standard; risk identification; risk analysis; risk response; risk evaluation. • Competency Studies: CobIT; NIST SP 800-30; OCTAVE; harnessing risk management cases.
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Gerard Blokdijk ,Claire Engle ,Jackie Brewster, <u>IT Risk Management Guide - Risk Management Implementation Guide: Presentations, Blueprints, Templates; Complete Risk Management Toolkit Guide for Information Technology Processes and Systems</u>, Emereo Pty Ltd, 2008 • J. Slay , Andy Koronios, <u>Information Technology, Security and Risk Management</u>, John Wiley & Sons Ltd, 2005

MATA KULIAH/ COURSE TITLE	KS091328 : Manajemen Sains Lanjut KS091328 : <i>Advanced Management Science</i> Credits : 4 Semester : Elective Course
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memahami dan pandai menyelesaikan model-model non linier & jaringan <i>Students understand and know how to solve non linear and network models</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan menyelesaikan model yang bersifat non linier • Kemampuan berwirausaha • Kemampuan memfasilitasi pengambilan keputusan berbasis SI/TI • <i>The ability of solving nonlinear model.</i> • <i>The ability of entrepreneurship.</i> • <i>The ability of facilitating IS/IT based decision making.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Model jaringan, model non linier termasuk inventori, jumlah pemesanan ekonomis (EOQ), penjadwalan, algoritma-algoritma non linier. • Kajian berkarya: kasus pemecahan pemrogram non linier. • <i>Conceptual and Skill Studies:</i> <i>Network model, non linear model including inventory, economic order quantity (EOQ), scheduling, nonlinear algorithms.</i> • <i>Competency Studies:</i> <i>Non-Linear Programming cases.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • David R. Anderson , Dennis J. Sweeney , Thomas A. Williams , R. Kipp Martin, <u>An Introduction to Management Science: Quantitative Approaches to Decision Making</u>, South-Western College Pub, 2007 • Bernard W. Taylor, <u>Introduction to Management Science</u>, Prentice Hall, 2006

MATA KULIAH/ COURSE TITLE	KS091329 : Sistem Pendukung Keputusan KS091329 : <i>Decision Support System</i> Credits : 4 Semester : Elective Course
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan memanfaatkan teknologi untuk mendukung pengambilan keputusan <i>Students have an ability of using technology to support decision making</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan memahami konsep SPK • Kemampuan merancang bangun dan integrasi SPK • <i>The ability of understand DSS concept</i> • <i>The ability of know how to design and development and integrating DSS</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Jenis pengambilan keputusan di level manajerial, model-model jaringan, model non linier termasuk inventori, penjadwalan & algoritma, tools SPK. • Kajian berkarya: menyelesaikan kasus pengambilan keputusan dengan menggunakan tools SPK. • <i>Conceptual and Skill Studies:</i> <i>Kind of managerial level decision making, network models, non linear model including inventory, scheduling and algorithm, DSS tools.</i> • <i>Competency Studies:</i> <i>Solving decision making cases using Decision Support System Tools.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Efraim Turban , Jay E. Aronson , Ting-Peng Liang , Ramesh Sharda, <u>Decision Support and Business Intelligence Systems</u>, Prentice Hall, 2006 • J. Slay , Andy Koronios, <u>Decision Support Systems and Intelligent Systems</u>, John Wiley & Sons Ltd, 2005

MATA KULIAH/ COURSE TITLE	KS091330 : Teknik Peramalan KS091330 : <i>Forecasting Techniques</i> Credits : 4 Semester : Elective Course
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa mengenali karakteristik dan pandai memilih metode penyelesaian kasus pemrediksian data. <i>Students understand characteristics and know how to choose solving method for data prediction cases</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan memprediksi melalui data • Kemampuan berwirausaha • Kemampuan memfasilitasi pengambilan keputusan berbasis SI/TI <ul style="list-style-type: none"> • <i>The ability of predicting using historical data.</i> • <i>The ability of entrepreneurship.</i> • <i>The ability of facilitating IS/IT based decision making.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Moving average, smoothing, regresi, box-jenkins, jaringan syaraf tiruan, kolaborasi dari metode-metode sebelumnya. • Kajian berkarya: kasus-kasus prediksi data. <ul style="list-style-type: none"> • <i>Conceptual and Skill Studies:</i> <i>Moving average, smoothing, regression, box-jenkins, artificial neural network, available method collaboration.</i> • <i>Competency Studies:</i> <i>Cases of predicting data.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Hanke, Wichern, Reitsch, <u>Business Forecasting</u>, Prentice Hall, 2005 • Makridakis, Wheelwright, McGee, <u>Forecasting : Method and Applied</u>, John Wiley & Sons Ltd, 2005

MATA KULIAH/ COURSE TITLE	KS091331 : Integrasi Aplikasi Korporasi KS091331 : <i>Enterprise Application Integration</i> Credits : 4 Semester : Elective Course
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan penguasaan konsep & penerapan EAI <i>Students have an ability in concepts mastering and EAI implementation.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan memahami konsep, peran, komponen, proses & penerapan EAI • <i>The ability of understand Enterprise Application Integration concepts, role, components, process and implementation</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Mendefinisikan & membangun arsitektur korporasi, membangun bisnis sistem domain, Messaging Infrastructure, Manajemen Workflow, Web Based User Access, Integrasi dengan XML, Strategi Pemilihan Komponen, Teknologi Komponen, keamanan sistem. • Kajian berkarya: kasus-kasus penerapan EAI. • Conceptual and Skill Studies: <i>Define and build corporate architecture, building business system domain, Messaging Infrastructure, Workflow managements, Web Based User Access, integration with XML, components determining strategy, components technology, system security.</i> • Competency Studies: <i>Cases of Implementing EAI.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • David S. Linthicum, <u>Enterprise Application Integration</u>, Addison-Wesley Professional, 1999 • Waseem Roshen, <u>SOA-based Enterprise Integration: A Step-by-Step Guide to Services-based Application</u>, McGraw-Hill Osborne Media, 2009

MATA KULIAH/ COURSE TITLE	KS091332 : Tren Teknologi & Open Source KS091332 : <i>Opensource and Emerging Technologies</i> Credits : 4 Semester : Elective Course
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa mengetahui perkembangan dan membangun teknologi terkini. <i>Students understand recent technology development and building</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan penguasaan perkembangan teknologi terkini, termasuk open source • Kemampuan menyelesaikan pekerjaan SI/TI secara mandiri ataupun bekerjasama dalam tim • Kemampuan memprogram • <i>The ability of understanding recent technology development including open source.</i> • <i>The ability of accomplishing IS/IT works either independently or in team.</i> • <i>The ability of programming.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Open sources, lisensi open source, Model Bisnis Open Source, Pengembangan Open Source Software, Dokumentasi Software Open Source, Kontrol Versi, Manajemen Rilis, komunitas open software. • Kajian berkarya: pengembangan & dokumentasi bisnis model open source. • Conceptual and Skill Studies: <i>Open sources, open source licensing, Model business Open Source, Open Source Software development, Software Open Source documentation, versioning control, release management, open software community.</i> • Competency Studies: <i>Development and Documentation open source business model.</i>
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Marleen Wynants , Jan Cornelis, <u>How Open Is the Future?: Economic, Social & Cultural Scenarios Inspired by Free & Open-Source Software</u>, ASP-VUB Press, 2008 • Sulayman K. Sowe , Sulayman K. Sowe; Ioannis G. Stamelos;

Ioannis Samoladas, Emerging Free and Open Source Software Practices, IGI Publishing, 2007

MATA KULIAH/ COURSE TITLE	KS091333 : E-Business KS091333 : E-Business Credits : 4 Semester : Elective Course
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa memiliki kemampuan menjalankan bisnis secara elektronik <i>Students have an ability of initiating electronic business.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Kemampuan merencanakan, merancang, dan mengimplementasikan bisnis secara elektronik. • <i>The ability of plan, design, and implement business electronically</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Kajian ilmu & ketrampilan: Masalah etika, politik, social, hukum & kinerja e-business, B2B e-commerce, B2C e-commerce, C2C e-commerce, P2P e-commerce, e-government, e-community, e-Business Plan & modeling, Internet & Web Service Technology, mobile business, e-learning, knowledge management, CSFs & risiko e-business. • Kajian berkarya: kasus-kasus e-business. • Conceptual and Skill Studies: Ethics problems, politics, social, e-business law & performance, B2B e-commerce, B2C e-commerce, C2C e-commerce, P2P e-commerce, e-government, e-community, e-Business Plan & modeling, Internet & Web Service Technology, mobile business, e-learning, knowledge management, e-business CSFs & risk. • Competency Studies: E-Business Cases.
PUSTAKA UTAMA/ REFERENCES	<ul style="list-style-type: none"> • Dave Chaffey, <u>E-Business and E-Commerce Management</u>, Prentice Hall, 2008 • H. Albert Napier , Ollie N. Rivers , Stuart Wagner, <u>Creating a Winning E-Business</u>, Course Technology, 2005

MATA KULIAH/ COURSE TITLE	IG 091310 PENGANTAR TENOLOGI INFORMASI DAN KOMUNIKASI IG 091310 INTRODUCTION TO INFORMATION AND COMMUNICATION TECHNOLOGY Credits: 2 sks / credits unit Semester:
TUJUAN PEMBELAJARAN/ LEARNING OBJECTIVES	Mahasiswa mendapatkan pengetahuan untuk mampu menjelaskan dan menggunakan teknologi informasi dan komunikasi untuk berbagai aplikasi dan permasalahan. <i>Students gain knowledge so that they are able to explain and use information and communication technology for various applications and problems.</i>
KOMPETENSI/ COMPETENCY	<ul style="list-style-type: none"> • Mahasiswa mampu mendefinisikan teknologi informasi dan komunikasi; • Mahasiswa mampu menjelaskan batasan manfaat teknologi informasi dan komunikasi; • Mahasiswa mampu menyelesaikan masalah dengan bantuan teknologi informasi dan komunikasi; • Mahasiswa dapat menggunakan teknologi informasi dan komunikasi untuk berbagai aplikasi. <ul style="list-style-type: none"> • <i>Students are able to define information and communication technology;</i> • <i>Students are able to explain the benefits of limitations of information and communication technology;</i> • <i>Students are able to resolve the problem with the help of information and communication technology;</i> • <i>Students are able to use information and communication technology for various applications.</i>
POKOK BAHASAN/ SUBJECTS	<ul style="list-style-type: none"> • Pengenalan Teknologi Informasi dan Komunikasi: definisi, sejarah, karakteristik, dan manajemen teknologi informasi dan komunikasi; • Konten Teknologi Informasi dan Komunikasi: pengertian data dan informasi, representasi dan pengolahan data dan informasi, penggunaan informasi, multimedia (text, voice, video); • Peralatan Teknologi Informasi dan Komunikasi: Personal Computer, PDA, Handphone, Router, Modem, Access Point, Smart Card, RFID; • Jaringan Komputer dan Komunikasi Data: protokol (TCP/IP, SMTP, HTTP, WAP, POP3, IMAP), interface (RS-232, USB), Model OSI,

- jaringan nirkabel (Wi-Fi, Bluetooth, Inframerah, GSM, CDMA);
- **Layanan Teknologi Informasi dan Komunikasi:** internet dan intranet (email, dsb), perdagangan elektronik (e-commerce), fungsional dan sistem perusajaan, perangkat keras masa depan, kecerdasan buatan (menuju ke mesin pintar), emerging technology;
 - **Perangkat Lunak:** macam-macam sistem operasi dan pemakaiannya, basis data, aplikasi perkantoran, pengantar pemrograman;
 - **Pengamanan dan Etika dalam Teknologi Informasi dan Komunikasi:** pengamanan jaringan, pengamanan data, pengamanan dalam mengakses suatu situs, etika dalam melakukan transaksi teknologi informasi dan komunikasi;
 - **Aspek Sosial dan Budaya:** cakupan area pemanfaatan teknologi informasi dan komunikasi, perubahan perilaku masyarakat dalam pemanfaatan teknologi informasi dan komunikasi, munculnya bentuk budaya baru;
 - **Membangun Technopreneurship dengan Teknologi Informasi dan Komunikasi:** aspek-aspek bisnis di bidang teknologi informasi dan komunikasi, pemanfaatan internet untuk pengembangan usaha;
 - **Keterampilan Praktek:** arsitektur komputer, menginstall sistem operasi, pemrograman berbasis web, membuat blog dan facebook, menjalankan antivirus, membuat dan me-maintan milis.
- *Introduction to Information and Communication Technology*
 - *Content of Information and Communication Technology*
 - *Tools of Information and Communication Technology*
 - *Computer Network and Data Communication*
 - *Services of Information and Communication Technology*
 - *Software*
 - *Security and Ethics in Information and Communication Technology*
 - *Social and Culture Aspects*
 - *Build Technopreneurship with Information and Communication Technology*
 - *Skills Practice*

**PUSTAKA
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REFERENCES**

- Tannenbaum, Andrew, "Jaringan Komputer: Edisi Bahasa Indonesia Jilid 1", Prentice Hall, 1996
- Long, Larry and Sally Long, "Computers: Information Technology in Prespective", Pearson-Prentice Hall, 2005
- Williams, Brian and Stacey Sawyer, "Using Information Technology", McGraw Hill, 2005
- Turban, Elfrain, R.Kelly Rainer, and Richard E.Potter, "Introduction to Information Technology", Third Edition, John Wiley and Sons,

2005

- Sumber-sumber dari Internet