MODULE HANDBOOK

BUSINESS STATISTICS INOVATION

STATISTICS UNDERGRADUATE PROGRAM
DEPARTMENT OF STATISTICS
FACULTY OF SCIENCE AND DATA ANALYTICS
INSTITUT TEKNOLOGI SEPULUH NOPEMBER
SURABAYA

ENDORSEMENT PAGE

	MODULE HANDBOOK **BUSINESS STATISTICS INOVATION** **STATISTICS UNDERGRADUATE PROGRAM** **DEPARTMENT OF STATISTICS** **INSTITUT TEKNOLOGI SEPULUH NOPEMBER**

Proses *Process*	Penanggung Jawab *Person in Charge*			Tanggal *Date*
	Nama *Name*	Jabatan *Position*	Tanda tangan *Signature*	
Perumus *Preparation*	Prof. Dr. Drs. Muhammad Mashuri, M.T.	Dosen Lecturer		
Pemeriksa dan Pengendalian *Review and Control*	Prof. Dr. M. Mashuri; Dr. Agnes Tuti Rumiati; Dr. Sutikno; Dr. Santi Wulan; Dr. Kartika F	Tim kurikulum Curriculum team		
Persetujuan *Approval*	Santi Wulan P, M.Si, Ph.D	Koordinator RMK Course Cluster Coordinator		
Penetapan *Determination*	Dr. Kartika Fithriasari, M.Si	Kepala Departemen Head of Department		

MODULE HANDBOOK
BUSINESS STATISTICS INOVATION

Module name	BUSINESS STATISTICS INOVATION	
Module level	Undergraduate	
Code	SS234524	
Course (if applicable)	BUSINESS STATISTICS INOVATION	
Semester	5	
Person responsible for the module	Prof. Drs. Nur Iriawan, M.Ikom, Ph.D	
Lecturer	Prof. Drs. Nur Iriawan, M.Ikom, Ph.D ; Adatul Mukarromah, S.Si, M.Si; Dr. Hidayatul Khusna, S.Si.	
Language	Bahasa Indonesia and English	
Relation to curriculum	Undergradute degree program, mandatory, 5th semester.	
Type of teaching, contact hours		
Workload	1. Lectures[L]: 3 x 50 = 150 minutes per week. 2. Exercises and Assignments[EA]: 3 x 60 = 180 minutes (3 hours) per week. 3. Independent Learning [IL]: 3 x 60 = 180 minutes (3 hours) per week.	
Credit points	5 credit points (SKS) Equivalent to 8 ECTS	
Requirements according to the examination regulations	A student must have attended at least 80% of the lectures to sit in the exams.	
Mandatory prerequisites	-	
Learning outcomes and their corresponding PLOs	CLO.1 Apply knowledge of statistical and mathematical theory in the interpretation and presentation of data CLO.2 Identify, formulate and analyze data using appropriate statistical methods CLO.3 Evaluate problems according to hypothesis testing procedures CLO.4 Able to make the right decisions based on analysis of information and data, and able to communicate the results of the analysis both orally and in writing	PLO-1 PLO-2 PLO-3 PLO-4 PLO-5 PLO-6 PLO-7 PLO-8 PLO-9 PLO-10
Content	Statistical Business Innovation is a group capstone project course, which is given to statistics students in semester 5. This course is packaged in 5 credits with five main materials, namely: 1) The concept of business innovation, including methods for developing business innovation (products, processes production, service and distribution) according to	

	the needs of society and companies/institutions with the aim of expanding consumer reach), 2) Various methods of developing business innovation, 3) Various types of business innovation, 4) Innovation Management, 5) Business Planning and Digital Business. The implementation of this course consists of four activities, namely: face-to-face lectures, guest lectures from practitioners, business innovation planning project assignments in the form of statistical products and/or services, and a degree on the results of preparing business innovation planning in the field of statistics. In preparing business innovation plans in the field of statistics, guidance and presentation of results will be carried out
Assessment and its weight	
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom
Reading list	1. Smith, David (2010), Exploring Innovation, 2nd Ed. London: Mc.Graw-Hill Education (UK) Limited 2. Tidd, Joe., Bessant, John (2009), Managing Innovation: Integrating Technological, Market and Organizational Change, 4th Ed, London, John Willey& Sons, Ltd 3. Sundbo, Jon., Fugisan, Lars (2002), Innovation as Strategic Reflexing, London, Routledge. 4. Annabeth Aagaard, (2019), Digital Business Models, Driving Transformation and Innovation, Aarhus University Risskov, Denmark, ISBN 978-3-319-96901-5 ISBN 978-3-319-96902-2 (eBook) https://doi.org/10.1007/978-3-319-96902-2, Library of Congress Control Number: 2018959874. 5. Paul Jackson, Lisa Harris and Peter M. Eckersley (2003), e-Business Fundamentals, Taylor & Francis e-Library. 6. Hasibuan, A., Jamaludin, Yuliana, Y., Sudirman, A., Wirapraja, A., Kusuma, A. H. P., Hwee, T. S., Napitupulu, D., Afriany, J., & Simarmata, J. (2020). E-Business: Implementasi, Strategi dan Inovasinya. Yayasan Kita Menulis. https://majoo.id/solusi/detail/inovasi-bisnis

	INSTITUT TEKNOLOGI SEPULUH NOPEMBER **FAKULTAS SAINS DAN ANALITIKA DATA** **PROGRAM STUDI SARJANA STATISTIKA** **DEPARTEMEN STATISTIKA**	**Kode Dokumen**

RENCANA PEMBELAJARAN SEMESTER/
SEMESTER LEARNING PLAN

MATA KULIAH (MK)/ *Course*	**KODE/** *Code*	**Rumpun MK/** *Course Group*	**BOBOT (sks)/** *Weight (credit)*		**SEMESTER/** *Semester*	**Tgl Penyusunan/** *Drafting Date*
INOVASI BISNIS STATISTIK / *BUSINESS STATISTICS INOVATION*	SS234524	SBI	**T=5**	**P=0**	V	Agustus 2023

OTORISASI/ *AUTHORIZATION*	**Pengembang RPS/** *RPS Developer*	**Koordinator RMK/** *Course Group Coordinator*	**Ketua PRODI/** *Head of Department*
	Prof. Dr M. Mashuri	Santi Wulan P, M.Si, Ph.D	Santi Wulan P, M.Si, Ph.D

Capaian Pembelajaran (CP)/ *Learning Achievement*	**CPL-PRODI yang dibebankan pada MK/** *PLO*	
	CPL-2	Mampu mengkaji dan memanfaatkan ilmu pengetahuan dan teknologi dalam rangka mengaplikasikannya pada bidang Statistika, serta mampu mengambil keputusan secara tepat dari hasil kerja sendiri maupun kelompok dalam bentuk laporan tugas akhir atau bentuk kegiatan pembelajaran lain yang luarannya setara Tugas Akhir melalui pemikiran logis, kritis, sistematis dan inovatif
	CPL-3	Mampu mengelola pembelajaran diri sendiri dan mengembangkan diri sebagai pribadi pembelajar sepanjang hayat untuk bersaing di tingkat nasional maupun internasional dalam rangka berkontribusi nyata untuk menyelesaikan masalah dengan mengimplementasikan teknologi informasi dan komunikasi dan memperhatikan prinsip keberlanjutan serta memahami kewirausahaan berbasis teknologi
	CPL-4	Mampu menerapkan sains dan Matematika untuk mendukung pemahaman metode statistika
	CPL-5	Mampu menerapkan teori statistika pada metode statistika
	CPL-6	Mampu merancang, mengumpulkan, dan melakukan manajemen data dengan metodologi yang tepat
	CPL-7	Mampu menggunakan perangkat komputasi modern untuk menyelesaikan permasalahan statistik
	CPL-8	Mampu menggunakan teknik komputasi untuk menyelesaikan permasalahan statistik
	CPL-9	Mampu menerapkan metode statistika untuk menganalisis permasalahan teoritis dan rill
	CPL-10	Mampu menerapkan metode statistika Bisnis, Industri, Ekonomi, Sosial, Lingkungan atau Kesehatan pada permasalahan riil
	PLO-1	

	PLO-2	*Able to demonstrate attitudes and character that reflect: devotion to God Almighty, ethics and integrity, noble character, sensitive and concerned about social and environmental problems, respecting cultural differences and pluralism, upholding law enforcement prioritizing the interests of the nation and society broad, through creativity and innovation, excellence, strong leadership, synergy, and other potential to achieve maximum results.*
	PLO-3	*Able to study and utilize science and technology in order to apply them to certain areas of expertise, and able to make appropriate decisions from the results of one's own work or group work in the form of a final assignment report or other form of learning activity whose output is equivalent to the Final Assignment through thinking logical, critical, systematic and innovative.*
	PLO-4	*Able to manage one's own learning, and develop oneself as a lifelong learner to compete at national and international levels, in order to make a real contribution to solving problems by implementing information and communication technology and paying attention to the principles of sustainability and understanding technology-based entrepreneurship.*
	PLO-5	*Able to apply knowledge of Science and Mathematics to support understanding of Statistical methods*
	PLO-6	*Able to apply statistical theory to statistical methods*
	PLO-7	*Able to design, collect and manage data with the right methodology*
	PLO-8	*Able to use modern computing devices to solve statistical problems*
	PLO-9	*Able to use computational techniques to solve statistical problems*
	PLO-10	*Able to apply statistical methods to analyze theoretical and real problems*
		Able to apply business, industrial, economic, social, health or environmental statistical methods to real problems

Capaian Pembelajaran Mata Kuliah (CPMK)/
CLO

CPMK.1 Menerapkan pengetahuan teori statistika dan matematika dalam interpretasi dan penyajian data
CPMK.2 Mengindentifikasi, memformulasi, dan menganalisis data dengan metode statistika yang tepat
CPMK.3 Mengevaluasi masalah sesuai prosedur pengujian hipotesis
CPMK.4 Mampu mengambil keputusan yang tepat berdasarkan analisis informasi dan data, serta mampu mengkomunikasikan hasil analisis baik secara lisan maupun tertulis

CLO.1 Apply knowledge of statistical and mathematical theory in the interpretation and presentation of data
CLO.2 Identify, formulate and analyze data using appropriate statistical methods
CLO.3 Evaluate problems according to hypothesis testing procedures
CLO.4 Able to make the right decisions based on analysis of information and data, and able to communicate the results of the analysis both orally and in writing

Matrik CPL – CPMK
PLO-CLO Matrix

CPMK	CPL-4	CPL-5	CPL-7	CPL-9
CPMK.1				
CPMK.2				
CPMK.3				
CPMK.4				

Deskripsi Singkat MK/	Inovasi Bisnis Statistika merupakan mata kuliah *capstone project* yang bersifat kelompok, yang diberikan kepada mahasiswa statistika di semester 5. Mata kuliah ini dikemas dalam 5 SKS dengan lima materi utama, yaitu: 1)Konsep inovasi bisnis, meliputi metode pengembangan inovasi bisnis (produk, proses produksi, layanan dan distribusi) sesuai dengan kebutuhan masyarakat dan perusahaan/institusi dengan tujuan untuk memperbesar jangkauan konsumen), 2) Berbagai metode pengembangan inovasi bisnis,

Course Description	3) Berbagai jenis inovasi bisnis , 4) Manajemen Inovasi, 5) Perencanaan Bisnis dan Bisnis Digital. Pelaksanaan mata kuliah ini terdiri atas empat kegiatan, yaitu: kuliah tatap muka, kuliah tamu dari praktisi, tugas proyek perencanaan Inovasi Bisnis berupa produk dan/atau layanan Statistika, dan gelar hasil penyusunan perencanaan inovasi bisnis di bidang statistika. Dalam penyusunan perencanaan inovasi bisnis di bidang statistika akan dilakukan pembimbingan dan presentasi hasil *Statistical Business Innovation is a group capstone project course, which is given to statistics students in semester 5. This course is packaged in 5 credits with five main materials, namely: 1) The concept of business innovation, including methods for developing business innovation (products, processes production, service and distribution) according to the needs of society and companies/institutions with the aim of expanding consumer reach), 2) Various methods of developing business innovation, 3) Various types of business innovation, 4) Innovation Management, 5) Business Planning and Digital Business. The implementation of this course consists of four activities, namely: face-to-face lectures, guest lectures from practitioners, business innovation planning project assignments in the form of statistical products and/or services, and a degree on the results of preparing business innovation planning in the field of statistics. In preparing business innovation plans in the field of statistics, guidance and presentation of results will be carried out*
Bahan Kajian: Materi Pembelajaran/ ***Course Material***	Statistika Pemodelan
Pustaka/ ***References***	**Utama :** *1.* ..
	Pendukung : 1. Smith, David (2010), Exploring Innovation, 2nd Ed. London: Mc.Graw-Hill Education (UK) Limited 2. Tidd, Joe., Bessant, John (2009), Managing Innovation: Integrating Technological, Market and Organizational Change, 4th Ed, London, John Willey& Sons, Ltd 3. Sundbo, Jon., Fugisan, Lars (2002), Innovation as Strategic Reflexing, London, Routledge. 4. Annabeth Aagaard, (2019), Digital Business Models, Driving Transformation and Innovation, Aarhus University Risskov, Denmark, ISBN 978-3-319-96901-5 ISBN 978-3-319-96902-2 (eBook) https://doi.org/10.1007/978-3-319-96902-2, Library of Congress Control Number: 2018959874. 5. Paul Jackson, Lisa Harris and Peter M. Eckersley (2003), e-Business Fundamentals, Taylor & Francis e-Library. 6. Hasibuan, A., Jamaludin, Yuliana, Y., Sudirman, A., Wirapraja, A., Kusuma, A. H. P., Hwee, T. S., Napitupulu, D., Afriany, J., & Simarmata, J. (2020). E-Business: Implementasi, Strategi dan Inovasinya. Yayasan Kita Menulis. 7. https://majoo.id/solusi/detail/inovasi-bisnis
Dosen Pengampu/ ***Lecturers***	Prof. Dr. M. Mashuri; Dr. Agnes Tuti Rumiati; Dr. Sutikno; Dr. Santi Wulan; Dr. Kartika F
Matakuliah syarat/ ***Pre-requisite Course***	-

Mg Ke- ***Week***	**Kemampuan akhir tiap tahapan belajar (Sub-CPMK)**	**Penilaian** ***Evaluation***	**Bantuk Pembelajaran, Metode Pembelajaran, Penugasan Mahasiswa,**	**Materi Pembelajaran [Pustaka]** ***Learning Material***	**Bobot Penilaian (%)**

	Final capability for each learning step			[Estimasi Waktu] *Learning Format* *Learning Methods* *Assignment for Student* [Estimated Time]		*[References]*	*Evaluation Weight (%)*
		Indikator *Indicator*	**Kriteria & Bentuk** *Criteria and Format*	**Luring** *Offline*	**Daring** *Online*		
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
1-2	Mampu memahami dalam perencanaan bisnis dan contoh implementasinya *Able to understand in business planning and examples of its implementation*	a. Dapat menjelaskan definisi dan ruang lingkup perencanaan bisnis b. Dapat menjelaskan manfaat perencanaan bisnis c. Dapat menjelaskan tahapan dalam perencanaan bisnis d. Dapat memberikan contoh perencanaan bisnis secara umum dan dalam bidang statistika *a. Can explain the definition and scope of business planning* *b. Can explain the benefits of business planning* *c. Can explain the stages in business planning* *d. Can provide examples of business planning in general and in the field of statistics*	Observasi Aktifitas di kelas (OA) Tugas 2 *Observation of Classroom Activities (OA)* *Task 2*	Ceramah Interaktif Diskusi (CID) Interactive Lecture Discussion (CID) **TM: 3x50"** **PT: 3x60"** **BM: 3x60"**		1) Pengertian dan ruang lingkup perencanaan bisnis, 2) Analisis pasar, Perencanaan produksi barang/jasa, 3) Perencanaan pemasaran barang/jasa, 4) Perencanaan organisasi bisnis, 5) Perencanaan kolaborasi, 6) Perencanaan finansial, 7) Pengelolaan risiko bisnis *1) Understanding and scope of business planning,* *2) Market analysis, Production planning of goods/services,* *3) Marketing planning of goods/services,* *4) Business organization planning,* *5) Collaboration planning,* *6) Financial planning,* *7) Business risk management*	10%
3-4	Mampu memahami	a. Dapat menjelaskan	Observasi	Ceramah Interaktif		1) Konsep dasar e-bisnis,	10%

	konsep dasar e-bisnis, perencanaan bisnis digital (startup), digital marketing, teknologi *blockchain* dan contoh implemantasinya *Able to understand the basic concepts of e-business, digital business planning (startup), digital marketing, blockchain technology and examples of its implementation*	konsep dasar e-bisnis, perencanaan bisnis digital (*startup*), digital marketing, teknologi *blockchain* b. Dapat menjelaskan tahapan Perencanaan bisnis digital (startup), digital marketing. c. Dapat memberikan contoh perencanaan bisnis digital (startup), digital marketing, teknologi *blockchain* d. Dapat menjelaskan jenis dan manfaat perencanaan bisnis digital (startup), digital marketing, teknologi *blockchain* *a. Can explain the basic concepts of e-business, digital business planning (startup), digital marketing, blockchain technology* *b. Can explain the stages of digital business planning (startup), digital marketing.* *c. Can provide examples of digital business planning (startup), digital marketing, blockchain technology* *d. Can explain the types and benefits of digital business planning*	Aktifitas di kelas (OA) Tugas 1 *Observation of Classroom Activities (OA) Task 1*	Diskusi (CID) Interactive Lecture Discussion (CID) **TM: 3x50"** **PT: 3x60"** **BM: 3x60"**		2) Perencanaan bisnis digital (Startup), 3) Digital marketing, *4)* Teknologi *blockchain* *1) Basic concepts of e-business,* *2) Digital business planning (Startup),* *3) Digital marketing,* *4) Technology Blockchain*	

		(startup), digital marketing, blockchain technology					
5-6	Mampu memahami konsep dasar dan contoh implementasi inovasi bisnis statistika *Able to understand the basic concepts and examples of the implementation of statistical business innovation*	a. Dapat mendefinisikan inovasi bisnis secara umum dan dalam bidang statistika b. Dapat menjelaskan manfaat inovasi bisnis c. Dapat menjelaskan tipe inovasi bisnis d. Dapat menjelaskan metode dan tahapan (proses) inovasi bisnis e. Dapat memberikan beberapa contoh inovasi bisnis secara umum dan dalam bidang statistika *a. Can define business innovation in general and in the field of statistics* *b. Can explain the benefits of business innovation* *c. Can explain the type of business innovation* *d. Can explain the methods and stages (processes) of business innovation* *e. Can provide some examples of business innovation in general and in the field of statistics*	Observasi Aktifitas di kelas (OA) *Observation of Classroom Activities (OA)*	Ceramah Interaktif Diskusi (CID) Interactive Lecture Discussion (CID) **TM: 3x50"** **PT: 3x60"** **BM: 3x60"**		1) Pengertian konsep-definisi inovasi bisnis, jenis, manfaat, metode dan tahapan serta beberapa contoh dalam inovasi bisnis dan dalam bidang statistika 2) Teknik komunikasi Bisnis dan manajemen Proyek Bidang Statistika 3) *Entrepreuneurship, Innovation cashflow*. *1)* ***Understanding the concepts of business innovation, types, benefits, methods and stages as well as some examples in business innovation and in the field of statistics*** *2)* ***Business communication techniques and Project management Field of Statistics*** *3)* ***Entrepreuneurship, Innovation cashflow***	10%
7 - 8	Mampu memahami implementasi	a. Dapat menjelaskan dan memahami	Aktifitas di kelas (OA)	Ceramah Interaktif Diskusi (CID)		1) Teori dan implementasi	10%

	inovasi bisnis di bidang Statistika *Able to understand the implementation of business innovation in the field of Statistics*	perencanaan bisnis, bisnis digital dan inovasi bisnis dalam bidang statistika yang berkembang saat ini a. *Able to explain and understand business planning, digital business and business innovation in the field of statistics that is developing today*	Tugas 3 *Observation of Classroom Activities (OA)* *Task 3*	Kuliah tamu *Interactive Lecture Discussion (CID)* *Guest lectures* **TM: 3x50"** **PT: 3x60"** **BM: 3x60"**		perencanaan bisnis di berbagai bidang 2) Teori dan implementasi riset pemasaran di berbagai bidang *1) Theory and implementation of business planning in various fields* *2) Theory and implementation of marketing research in various fields*	
9 - 15	Mampu menyusun proposal inovasi bisnis statistika dan membuat proto tipe perencanaan bisnis dan inovasi bisnis bidang statistika *Able to compile statistical business innovation proposals and make proto-types of business planning and business innovation in the field of statistics*	a. Dapat menyusun proposal perencanaan dan inovasi bisnis dalam bidang statistika b. Dapat menyusun dan atau membuat produk proto type perencanaan dan inovasi bisnis bidang statistika *a. Able to compile proposals for business planning and innovation in the field of statistics* b. *Can compile and or create proto-type products for business planning and innovation in the field of statistics*	Aktifitas team Tugas (proyek akhir) *Team activity Task (Final Project)*	Pendampingan Diskusi Presentasi Produk prototype *Mentoring Discussion Presentation Product prototype* **TM: 3x50"** **PT: 3x60"** **BM: 3x60"**		Proposal perencanaan bisnis dan membuat produk prototype *Business planning proposals and making product prototypes*	60%
16	**Gelar hasil proyek/*Presentation of project results***						