

**MODULE HANDBOOK
TECHNOPRENEURSHIP**



**BACHELOR DEGREE PROGRAM
DEPARTMENT OF STATISTICS
FACULTY OF SCIENCE AND DATA ANALYTICS
INSTITUT TEKNOLOGI SEPULUH NOPEMBER
SURABAYA, INDONESIA**

ENDORSEMENT PAGE



MODULE HANDBOOK TECHNOPRENEURSHIP DEPARTMENT OF STATISTICS INSTITUT TEKNOLOGI SEPULUH NOPEMBER

Proses <i>Process</i>	Penanggung Jawab <i>Person in Charge</i>			Tanggal <i>Date</i>
	Nama <i>Name</i>	Jabatan <i>Position</i>	Tandatangan <i>Signature</i>	
Perumus <i>Preparation</i>	Arief Abdurrahman, ST.MT	Dosen <i>Lecturer</i>		March 28, 2019
Pemeriksa dan Pengendalian <i>Review and Control</i>	Achmad Ferdiansyah P, ST.MT; Alvida Mustika Rukmi, S.Si, M.Si; Deti Rahmawati, S.I.P., M.T; Dewanti Anggrahini, ST.MT; Dr. Ir. Bambang Sampurno; Dr. Soehardjoepri ; Dr.Ir. Achmad Affandi, DEA; Dr.Ir. Bustanul Arifin Nur; Dra. Harmami, M.S; Dra. Ita Ulfin, M.Si; Endarko, PhD; Gogor Arif Handiwibowo, ST.MMT; Hakun Wirawasista Aparamarta, ST,M.MT, PhD; Ir. Akhmad Yusuf Zuhdy, PG. Dipl, Plg.MRE.; Ir. Eko Nurmianto, M.Eng,Sc; Ir. Elly Agustiani, M.Eng; Ir. Lantip Trisunarno, MT; Ir. R.A. Triaswati M, M.Kes; Ir. Soewarno, M.Eng; Lienggar Rahadiantino, S.E., M.Sc; Lissa Rosdianna, ST.MT; Muchammad Nurif, SE.MT; Prof. Ridho Bayuaji, ST.MT, PhD; Yudha Prasetyawan, ST, M.Eng	Tim kurikulum <i>Curriculum team</i>		April 15, 2019
Persetujuan <i>Approval</i>		Koordinator RMK <i>Course Cluster Coordinator</i>		July 17, 2019
Penetapan <i>Determination</i>	Dr. Kartika Fithriasari, M.Si	Kepala Departemen <i>Head of Department</i>		July 30, 2019

MODULE HANDBOOK

TECHNOPRENEURSHIP

Module name	Technopreneurship	
Module level	Undergraduate	
Code	UG184915	
Course (if applicable)	Technopreneurship	
Semester	5 th or 7 th semester	
Person responsible for the module	Arief Abdurrahman, ST.MT	
Lecturer	Achmad Ferdiansyah P, ST.MT; Alvida Mustika Rukmi, S.Si, M.Si; Deti Rahmawati, S.I.P., M.T; Dewanti Anggrahini, ST.MT; Dr. Ir. Bambang Sampurno; Dr. Soehardjoepri ; Dr.Ir. Achmad Affandi, DEA; Dr.Ir. Bustanul Arifin Nur; Dra. Harmami, M.S; Dra. Ita Ulfin, M.Si; Endarko, PhD; Gogor Arif Handiwibowo, ST.MMT; Hakun Wirawasista Aparamarta, ST,M.MT, PhD; Ir. Akhmad Yusuf Zuhdy, PG. Dipl, Plg.MRE.; Ir. Eko Nurmianto, M.Eng,Sc; Ir. Elly Agustiani, M.Eng; Ir. Lantip Trisunarno, MT; Ir. R.A. Triaswati M, M.Kes; Ir. Soewarno, M.Eng; Lienggar Rahadiantino, S.E., M.Sc; Lissa Rosdianna, ST.MT; Muchammad Nurif, SE.MT; Prof. Ridho Bayuaji, ST.MT, PhD; Yudha Prasetyawan, ST, M.Eng	
Language	Bahasa Indonesia and English	
Relation to curriculum	Undergraduate degree program, mandatory , 5 th or 7 th semester.	
Type of teaching, contact hours	Lectures, <50 students	
Workload	1. Lectures: 3 x 50 = 150 minutes per week. 2. Exercises and Assignments: 3 x 60 = 180 minutes (3 hours) per week. 3. Private learning: 3 x 60 = 180 minutes (3 hours) per week.	
Credit points	3 credit points (sks)	
Requirements according to the examination regulations	A student must have attended at least 80% of the lectures to sit in the exams.	
Mandatory prerequisites	-	
Learning outcomes and their corresponding PLOs	CLO.1.Able to take business risks with the appropriate estimation CLO.2.Able to adapt in facing the situation and survive in uncertain condition	PLO.8
	CLO.3.Able to innovate and be creative to produce the technology based business/product design (prototype) depend on the orientation of the market and utilizing the Science and Technology	PLO.9

	CLO.4. Able to create the business plan proposal that proper be presented to investors CLO.5. Responsible for the project and the achievements of the teams with prioritizing business ethics	
Content	This course provides the understanding and skills of the students to identify and evaluate the technology-based business opportunities that are suitable with the expertise of the students and develop the business opportunities. This course combines the introduction theorem and integrated practice (Hands-on experience) in developing ideas and business opportunities. Afterward, the students are expected to transform the business opportunities into an effective business plan. The main subjects in this course namely: the concept of business and entrepreneurship, entrepreneurship mindset and self-evaluation, creativity and identification of the business opportunities, business model, analysis and evaluation of business opportunities, analysis and market planning, cost analysis and product pricing, team building and human resource planning, financial planning, capitalization, and business plan development.	
Study and examination requirements and forms of examination	• In-class exercises • Assignment • Mid-term exam • Final exam	
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom.	
Reading list	Main reference: 1. Tim Pengembangan Technopreneurship ITS. (2015). Technopreneurship. Surabaya: ITS Press. Supporting references: 2. Barringer, B. R., & Ireland, R. D. (2010). Entrepreneurship: Successfully launching new ventures. Upper Saddle River, N.J: Prentice Hall. 3. International Labor Organization, Generate Your Business Idea. 4. International Labor Organization, Memulai Bisnis. 5. Osterwalder, A., Pigneur, Y., & Clark, T. (2010). Business model generation: A handbook for visionaries, game changers, and challengers. Hoboken, NJ: Wiley. 6. William, B. K., Sawyer, S. C., Berston, S., (2013). Business: A Practical Introduction. Upper Saddle River, N.J: Prentice Hall.	

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RP-S1	Dosen Pengampu	

Bahan Kajian	
<i>Study Materials</i>	
CPL yang dibebankan MK	CPL-8 Memiliki tanggung jawab dan etika profesi CPL-9 Mampu memotivasi diri untuk berpikir kreatif dan belajar sepanjang hayat
<i>PLO</i>	<i>PLO-8 Have the responsibilities and professional ethics</i> <i>PLO-9 Able to motivate themselves to think creatively and life-long learning</i>
CP-MK	CPMK. 1 Mampu mengambil risiko bisnis dengan perhitungan yang tepat. CPMK.2 Mampu beradaptasi terhadap situasi yang dihadapi dan bertahan dalam kondisi yang tidak pasti CPMK.3 Mampu berinovasi dan berkreasi untuk menghasilkan rancangan bisnis/produk (prototype) berbasis teknologi yang berorientasi pasar dengan memanfaatkan IPTEKS. CPMK.4 Mampu menyusun proposal business plan yang siap diajukan kepada investor/penyandang dana. CPMK.5 Bertanggung jawab pada pekerjaan sendiri dan dapat diberi tanggung jawab atas pencapaian hasil kerja tim dengan mengedepankan etika bisnis.
<i>CLO</i>	<i>CLO.1. Able to take business risks with the appropriate estimation</i> <i>CLO.2. Able to adapt in facing the situation and survive in uncertain condition</i> <i>CLO.3. Able to innovate and be creative to produce the technology based business/product design (prototype) depend on the orientation of the market and utilizing the Science and Technology</i> <i>CLO.4. Able to create the business plan proposal that proper be presented to investors</i> <i>CLO.5. Responsible for the project and the achievements of the teams with prioritizing business ethics</i>

Perte-muan <i>Meeting</i>	Kemampuan Akhir Sub CP-MK <i>Final Ability</i>	Keluasan (materi pembelajaran) <i>Extent (learning material)</i>	Metode Pembelajaran <i>Learning methods</i>	Estimasi Waktu <i>Duration</i>	Bentuk Evaluasi <i>Evaluation Type</i>	Kriteria dan Indikator Penilaian <i>Assessment Criteria and Indicators</i>	Bobot Penilaian <i>Scoring</i>
1	S10, S12, KU2	Mampu menjelaskan prinsip Technoprenuer dan perannya.	- Penjelasan tentang kuliah, tugas dan kedisiplinan - Ceramah dikelas	100 menit <i>100 minutes</i>	Diskusi Analisis <i>Discussion and Analysis</i>	Penguasaan Ketepatan jawaban <i>The comprehension The correctness of the answers</i>	10

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Perte- muan <i>Meeting</i>	Kemampuan Akhir Sub CP-MK <i>Final Ability</i>	Keluasan (materi pembelajaran) <i>Extent (learning material)</i>	Metode Pembelajaran <i>Learning methods</i>	Estimasi Waktu <i>Duration</i>	Bentuk Evaluasi <i>Evaluation Type</i>	Kriteria dan Indikator Penilaian <i>Assessment Criteria and Indicators</i>	Bobot Penilaian <i>Scoring</i>
		- Mampu mengidentifikasi dan menjelaskan karakteristik successful Technopreneur - Mampu menjelaskan proses menjadi seorang Technopreneur. - Mampu menjelaskan peranan Technopreneurship dalam masyarakat <i>Able to explain the principle of technopreneur and its role</i> <i>Able to identify and explain the characteristics of the successful technopreneur</i> <i>Able to explain the role of technopreneurship in the society</i>	Penjelasan & Latihan: Analisis Lingkungan dan Stakeholder dari bisnis(*lihat penjelasan dibawah) <i>The explanation about the lecture, assignment, and discipline</i> <i>Lecture</i> <i>Explanation and Exercise: Environment analysis and Stakeholders of the business (*view the below notes)</i>				
2	KU13, KK1	- Mampu menjelaskan pentingnya memulai usaha baru - Mampu mengidentifikasi karakteristik personal yang diperlukan untuk mengidentifikasi peluang bisnis	Diskusi: Analisis Lingkungan dan Stakeholder dari bisnis - Ceramah dan diskusi di kelas - Mahasiswa diminta mempresentasikan PraTugas 1 (Problem dan Solusi) untuk dibahas bersama	100 menit <i>100 minutes</i>	Diskusi Analisis <i>Discussion and Analysis</i>	Penguasaan Ketepatan jawaban <i>The comprehension The correctness of the answers</i>	10

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RP-S1	Dosen Pengampu	

Perte- muan <i>Meeting</i>	Kemampuan Akhir Sub CP-MK <i>Final Ability</i>	Keluasan (materi pembelajaran) <i>Extent (learning material)</i>	Metode Pembelajaran <i>Learning methods</i>	Estimasi Waktu <i>Duration</i>	Bentuk Evaluasi <i>Evaluation Type</i>	Kriteria dan Indikator Penilaian <i>Assessment Criteria and Indicators</i>	Bobot Penilaian <i>Scoring</i>
		- Memahami langkah-langkah kreatif dalam mengidentifikasi peluang bisnis <i>Able to explain the importance of starting the new business</i> <i>Able to identify the personal characteristics required to identify the business opportunities</i> <i>Understand the creative procedure to identify the business opportunities</i>	<i>Discussion: Environment analysis and Stakeholders of the business</i> <i>Lecture and discussion</i> <i>The students present the pre-assignment (problems and solutions) to be discussed</i>				
3	KK1, KK3	- Mampu menjelaskan pentingnya analisis kelayakan ide bisnis - Mampu menjelaskan dan mengaplikasikan concept statement dan market feasibility. - Mampu mengevaluasi kelayakan ide bisnis <i>Able to explain the feasibility of the business idea</i> <i>Able to explain and apply the concept of statement and market feasibility</i>	- Ceramah dan diskusi di kelas <i>Lecture and discussion</i>	100 menit <i>100 minutes</i>	Diskusi Analisis <i>Discussion and Analysis</i>	Penguasaan Ketepatan jawaban <i>The comprehension The correctness of the answers</i>	10

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		Able to evaluate the feasibility of the business idea					
4-5	KK2	PRESENTASI TUGAS 1 <i>The Presentation of Assignment 1</i>	TUGAS 1 dikumpulkan dan dipresentasikan <i>The collection and of presentation of Assignment 1</i>	100 menit <i>100 minutes</i>	Survey Analisis Presentasi Diskusi <i>Survey Analysis Presentation Discussion</i>	Penguasaan Ketepatan jawaban Keterampilan analisis dan presentasi <i>The comprehension The correctness of the answers The presentation and analysis skills</i>	20
6	KK1, KK3	- Mampu menjelaskan inovasi model bisnis - Mampu menyusun dan merancang Business Model Canvas berdasarkan ide bisnis yang telah diusulkan. - Mampu mengevaluasi model bisnis <i>Able to explain the innovation of the business model</i> <i>Able to create and design the Business Model Canvas based on the proposed business idea</i>	- Ceramah dan diskusi di kelas - Latihan BMC <i>Lecture and discussion</i> <i>Exercising create the BMC</i>	100 menit <i>100 minutes</i>	Diskusi Analisis <i>Discussion and Analysis</i>	Penguasaan Ketepatan jawaban <i>The comprehension The correctness of the answers</i>	10
7	P1, S2, KK4,	- Pembicara: Dr.Ir. Hj. Sitti Rohmi Djalillah, M.Pd - Robotika 13 Oktober 2018	Setiap mahasiswa diminta untuk membuat resume	100 menit <i>100 minutes</i>		Penguasaan Ketepatan jawaban <i>The comprehension</i>	10

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		- The speaker: Dr.Ir. Hj. Sitti Rohmi Djalillah, M.Pd - At Robotics building, 13 October 2018	yang sekaligus berlaku sebagai absensi <i>The students make a resume and can be used as attendance</i>			<i>The correctness of the answers</i>	
8	KK2, KK3	- Mampu menjelaskan tujuan dari business plan - Mampu menulis business plan secara sistematis dan efektif <i>Able to explain the objectives of the business plan</i> <i>Able to create an effective and systematic business plan</i>	- Ceramah dan diskusi di kelas <i>- Lecture and discussion</i>	100 menit <i>100 minutes</i>	Diskusi Analisis <i>Discussion Analysis</i>	Penguasaan Ketepatan jawaban <i>The comprehension</i> <i>The correctness of the answers</i>	10
9-10	KK2	PRESENTASI TUGAS 2 <i>The Presentation of Assignment 2</i>	TUGAS 1 dikumpulkan dan dipresentasikan <i>The collection and presentation of Assignment 2</i>	200 menit <i>200 minutes</i>	Survey Analisis Presentasi Diskusi <i>Survey Analysis Presentation Discussion</i>	Penguasaan Ketepatan jawaban Keterampilan analisis dan presentasi <i>The comprehension</i> <i>The correctness of the answers</i> <i>The presentation and analysis skills</i>	20
11	KU7, KU13	- Mampu memahami aspek pasar secara keseluruhan - Memahami aspek pemasaran dan strategi pemasaran	- Ceramah dan diskusi di kelas - Latihan analisis pasar dan 4P <i>- Lecture and discussion</i>	100 menit <i>100 minutes</i>	Diskusi Analisis <i>Discussion Analysis</i>	Penguasaan Ketepatan jawaban <i>The comprehension</i> <i>The correctness of the answers</i>	10

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		- Memahami konsep 4P Place, Product, Price, Promotion - Mampu mengaplikasikan rencana pemasaran pada ide usaha <i>Able to understand the aspects of the market completely</i> <i>Understand the market aspects and market strategies</i> <i>Understand the concept of 4P: Place, Product, Price, Promotion</i> <i>Able to apply the marketing plan to the business idea</i>	<i>Exercise in market and 4P analyzing</i>				
12	KU7, KU13	- Mampu menjelaskan proses bisnis dari ide bisnis yang dirancang. - Mampu memahami bagaimana cara membuat struktur organisasi dan menyusun manajemen organisasi yang baik. <i>Able to explain the business process for the proposed business idea</i> <i>Able to understand the procedure in creating a great</i>	- Ceramah dan diskusi di kelas - Latihan membuat alur kegiatan operasional bisnis dan menyusun struktur organisasi <i>Lecture and discussion</i> <i>Exercise in creating the business operational procedure and compile the organization structure</i>	100 menit <i>100 minutes</i>	Diskusi Analisis <i>Discussion Analysis</i>	Penguasaan Ketepatan jawaban <i>The comprehension The correctness of the answers</i>	10

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		<i>organizational structure and management</i>					
13	KK3, KK5	- Mampu memahami fungsi aspek keuangan dari pembuatan business plan - Mampu menghitung break even point - Mampu menghitung kebutuhan modal kerja <i>Able to understand the function of financial aspect in creating the business plan</i> <i>Able to calculate the break even point</i> <i>Able to calculate the working capital requirements</i>	- Ceramah dan diskusi di kelas - Latihan membuat laporan keuangan sederhana <i>Lecture and discussion</i> <i>Exercise in creating a simple financial report</i>	100 menit <i>100 minutes</i>	Diskusi Analisis <i>Discussion Analysis</i>	Penguasaan Ketepatan jawaban <i>The comprehension</i> <i>The correctness of the answers</i>	10
14-15	KK2, KK3	PRESENTASI TUGAS 3 <i>The Presentation of Assignment 3</i>	TUGAS 3 dikumpulkan dan dipresentasikan <i>The collection and presentation of Assignment 3</i>	200 menit <i>200 minutes</i>	Survey Analisis Presentasi Diskusi <i>Survey Analysis Presentation Discussion</i>	Penguasaan Ketepatan jawaban Keterampilan analisis dan presentasi <i>The comprehension</i> <i>The correctness of the answers</i> <i>The presentation and analysis skills</i>	20
16		PAMERAN PRODUK TECHNOPRENEURSHIP	Tempat ditentukan kemudian	100 menit			10

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		TECHNOPRENEURSHIP PRODUCT EXHIBITION	The place was determined later	100 minutes			

PUSTAKA/*REFERENCES*: -

	RENCANA ASSESSMENT & EVALUASI Prodi Sarjana Statistika MK TECHNOPRENEURSHIP <i>ASSESSMENT AND EVALUATION PLAN</i> <i>STATISTICS BACHELOR PROGRAM</i> <i>TECHNOPRENEURSHIP COURSE</i>		RA&E
			SLK-68
Kode: UG184915 <i>Code : UG184915</i>	Bobot sks (T/P): 3 <i>Credit : 3</i>	Rumpun MK: Umum <i>Courses Group : General</i>	Smt: 5/7 <i>Semester : 5/7</i>
OTORISASI <i>AUTHORIZATION</i>	Penyusun RA & E <i>Author</i>	Koordinator RMK <i>Coordinator</i>	Kaprodi <i>Head of Department</i> Dr. Kartika Fithriasari, M.Si

PENILAIAN / *SCORING*

Mg ke <i>Week</i> (1)	Sub CP-MK <i>Sub CLO</i> (2)	Bentuk Asesmen (Penilaian) <i>Assesment Type</i> (3)	Bobot (%) <i>Weight</i> (4)
	Kemampuan akhir <i>Final Ability</i>		
1-16	Mendukung CPMK 5 <i>Support the CLO.5</i>	Keaktifan di kelas & tugas individu <i>Activity in class & individual assignments</i>	15%
4-5	Mendukung CPMK 1,3 <i>Support the CLO.1,3</i>	Tugas 1: Menciptakan Ide Bisnis <i>Assignments 1: Creating the business idea</i>	25%
9-10	Mendukung CPMK 1,2,3, <i>Support the CLO.1,2,3</i>	Tugas 2: Business Model, Rencana Pemasaran, dan Prototyping <i>Assignments 2: Business Model, Marketing plan, and prototyping</i>	30%
14-15	Mendukung CPMK 1,2,3,4,5 <i>Support the CLO.1,2,3,4,5</i>	Tugas 3: Business Plan <i>Assignments 3: Business Plan</i>	30%
Total bobot penilaian <i>Total Weight</i>			100%