

MODULE HANDBOOK

TECHNOPRENEUR

Module name	Technopreneur		
Module level	Undergraduate		
Code	UG184915		
Course (if applicable)	Technopreneur		
Semester	First and Second Semester		
Person responsible for the module	Lienggar Rahadiantino, S.E., M.Sc		
Lecturer	ITS Technopreneur Lecturer Team		
Language	Bahasa Indonesia		
Relation to curriculum	Undergraduate degree program, mandatory , 6 th semester.		
Type of teaching, contact hours	Lectures, <60 students		
Workload	1. Lectures : $2 \times 50 = 100$ minutes per week. 2. Exercises and Assignments : $2 \times 60 = 120$ minutes (2 hours) per week. 3. Private learning : $2 \times 60 = 120$ minutes (2 hours) per week.		
Credit points	2 credit points (skrs)		
Requirements according to the examination regulations	A student must have attended at least 75% of the lectures to sit in the exams.		
Mandatory prerequisites	-		
Learning outcomes and their corresponding PLOs	Course Learning Outcome (CLO) after completing this module, CLO 1: Able to adapt to situations at hand and survive in uncertain conditions by performing feasibility analysis calculations. CLO 2: Able to innovate and be creative to produce market-oriented technology-based business designs / products (prototypes) by utilizing science and technology. CLO 3: Able to recognize and formulate marketing models and formulate the needs for HR aspects through		PLO-KU2 PLO-KU1 PLO-KU9

	<p>a marketing strategy approach based on the stages which are manifested in simulations to build a sense of team responsibility that promotes business ethics.</p> <p>CLO 4: Able to compile a financial plan and formulate the needs for operational aspects which can be applied in a business proposal.</p> <p>CLO 5: Able to compile attractive business plan proposals and persuade investors</p>	PLO-S5 PLO-KU2
Content	<p>This course provides students with understanding and skills to identify and evaluate technology-based business opportunities in accordance with the student's area of expertise, as well as to develop these business opportunities. This course combines the theoretical introduction and hands-on experience in an integrated manner in developing business ideas and opportunities. In the end, students are expected to be able to pour business opportunities into an effective business plan.</p>	
Study and examination requirements and forms of examination	<ul style="list-style-type: none"> ● Group presentation ● Assignment 1, 2, 3, 4, 5, 6 ● Mid-term examination ● Final examination 	
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom.	
Reading list	<p>Main :</p> <ol style="list-style-type: none"> 1. ITS Technopreneurship Development Team. (2015). <i>Technopreneurship</i>. Surabaya: ITS Press. <p>Supporting :</p> <ol style="list-style-type: none"> 1. Barringer, B. R., & Ireland, R. D. (2010). <i>Entrepreneurship: Successfully launching new ventures</i>. Upper Saddle River, N.J: Prentice Hall. 2. International Labor Organization, <i>Generate Your Business Idea</i>. 3. International Labor Organization, <i>Starting Business</i>. 4. Osterwalder, A., Pigneur, Y., & Clark, T. (2010). <i>Business model generation: A handbook for visionaries, game changers, and challengers</i>. Hoboken, NJ: Wiley. 5. William, B. K., Sawyer, S. C., Berston, S., (2013). <i>Business: A Practical Introduction</i>. Upper Saddle River, N.J: Prentice Hall. 6. Kotler, Philips (2002). <i>Marketing Management</i>. Erlangga (Translated edition). 	

I. Rencana Pembelajaran Semester / Semester Learning Plan

	INSTITUT TEKNOLOGI SEPULUH NOPEMBER (ITS) FACULTY OF INTELLIGENT ELECTRICAL AND INFORMATICS TECHNOLOGY DEPARTMENT OF BIOMEDICAL ENGINEERING						Document Code					
	SEMESTER LEARNING PLAN											
MATA KULIAH (MK) <i>COURSE</i>	KODE <i>CODE</i>	Rumpun MK <i>Course Cluster</i>	BOBOT (skls) <i>Credits</i>		SEMESTER	Tgl Penyusunan <i>Compilation Date</i>						
Technopreneur <i>Technopreneur</i>	UG184915	ITS Compulsory	T=2	P=0	VI	July 11, 2020						
OTORISASI / PENGESAHAN <i>AUTHORIZATION / ENDORSEMENT</i>	Dosen Pengembang RPS <i>Developer Lecturer of Semester Learning Plan</i>			Koordinator RMK <i>Course Cluster Coordinator</i>		Ka DEPARTEMEN <i>Head of Department</i>						
	(Lienggar Rahadiantino, S.E., M.Sc)			(M. Hilman Fatoni, S.T., M.T.)		(Dr. Achmad Arifin, S.T., M.Eng.)						
Capaian Pembelajaran <i>Learning Outcomes</i>	CPL-PRODI yang dibebankan pada MK <i>PLO Program Charged to The Course</i>											
	CPL-S4 <i>PLO-S4</i>	Berperan sebagai warga negara yang bangga dan cinta tanah air, memiliki nasionalisme serta rasa tanggungjawab pada negara dan bangsa. <i>Acting as a citizen who is proud and loves the country, has nationalism and a sense of responsibility to the country and nation</i>										
	CPL-S10 <i>PLO-S10</i>	Semangat kemandirian, kejuangan, dan kewirausahaan. <i>Spirit of independence, struggle and entrepreneurship.</i>										
	CPL-S11 <i>PLO-S11</i>	Berusaha secara maksimal untuk mencapai hasil yang sempurna. <i>Strive for maximum effort to achieve perfect results.</i>										
	CPL-S12 <i>PLO-S12</i>	Bekerja sama untuk dapat memanfaatkan semaksimal mungkin potensi yang dimiliki. <i>Work together to be able to make the most of own's potential.</i>										
	CPL-KU2 <i>PLO-KU2</i>	Mampu menunjukkan kinerja mandiri, bermutu, dan terukur. <i>Able to demonstrate independent, quality and measurable performance.</i>										
	CPL-KU7	Mampu bertanggungjawab atas pencapaian hasil kerja kelompok dan melakukan supervisi dan evaluasi terhadap penyelesaian pekerjaan yang ditugaskan kepada pekerja yang berada di bawah tanggung jawabnya.										

	PLO-KU7	<i>Able to be responsible for the achievement of team work and supervise and evaluate the completion of work assigned to workers under their responsibility.</i>
	CPL-KU13	Mampu menerapkan kewirausahaan dan memahami kewirausahaan berbasis teknologi.
	PLO-KU13	<i>Able to apply entrepreneurship and understand technology-based entrepreneurship.</i>
	Capaian Pembelajaran Mata Kuliah (CPMK)	
		<i>Course Learning Outcome (CLO) - If CLO as description capability of each Learning Stage in the course, then CLO = LLO</i>
	CP MK 1	Mampu beradaptasi terhadap situasi yang dihadapi dan bertahan dalam kondisi yang tidak pasti dengan melakukan perhitungan analisa kelayakan.
	CLO 1	<i>Able to adapt to situations at hand and survive in uncertain conditions by performing feasibility analysis calculations.</i>
	CP MK 2	Mampu berinovasi dan berkreasi untuk menghasilkan rancangan bisnis/produk (prototype) berbasis teknologi yang berorientasi pasar dengan memanfaatkan IPTEKS.
	CLO 2	<i>Able to innovate and be creative to produce market-oriented technology-based business designs / products (prototypes) by utilizing science and technology.</i>
	CP MK 3	Mampu mengenali dan merumuskan model pemasaran dan merumuskan kebutuhan aspek SDM melalui pendekatan strategi pemasaran berdasarkan tahap-tahapnya yang diwujudkan dalam simulasi untuk dalam membangun rasa tanggung jawab tim yang mengedepankan etika bisnis.
	CLO 3	<i>Able to recognize and formulate marketing models and formulate the needs for HR aspects through a marketing strategy approach based on the stages which are manifested in simulations to build a sense of team responsibility that promotes business ethics.</i>
	CP MK 4	Mampu menyusun rencana keuangan dan merumuskan kebutuhan aspek operasi dapat aplikasikan dalam proposal bisnis.
	CLO 4	<i>Able to compile a financial plan and formulate the needs for operational aspects which can be applied in a business proposal.</i>
	CP MK 5	Mampu menyusun proposal business plan yang menarik dan mampu mempersuasif pihak investor.
	CLO 5	<i>able to compile attractive business plan proposals and persuade investors</i>

Peta CPL – CP MK <i>Map of PLO - CLO</i>		PLO-S5	PLO-S8	PLO-KU1	PLO-KU2	PLO-KU9	PLO-KU10
CPMK 1 <i>CLO 1</i>					✓		
CPMK 2 <i>CLO 2</i>				✓			
CPMK 3 <i>CLO 3</i>						✓	
CPMK 4 <i>CLO 4</i>	✓						
CPMK 5 <i>CLO 5</i>					✓		
Diskripsi Singkat MK <i>Short Description of Course</i>	Mata kuliah ini memberikan pemahaman dan skill kepada mahasiswa untuk mampu mengidentifikasi, dan mengevaluasi peluang usaha berbasis teknologi sesuai dengan bidang keahlian mahasiswa, serta mengembangkan peluang usaha tersebut. Mata kuliah ini menggabungkan pengenalan teori dan praktik langsung (hands-on experience) secara terintegrasi dalam mengembangkan ide dan peluang usaha. Pada akhirnya mahasiswa diharapkan mampu menuangkan peluang usaha kedalam business plan yang efektif. <i>This course provides students with understanding and skills to identify and evaluate technology-based business opportunities in accordance with the student's area of expertise, as well as to develop these business opportunities. This course combines the theoretical introduction and hands-on experience in an integrated manner in developing business ideas and opportunities. In the end, students are expected to be able to pour business opportunities into an effective business plan.</i>						
Bahan Kajian: Materi pembelajaran <i>Course Materials:</i>	<ol style="list-style-type: none"> 1. Pengantar Technopreneur dan Bisnis / Introduction to Technopreneur and Business 2. Mengenali Peluang dan Menciptakan Ide Bisnis / Recognizing Opportunities and Creating Business Ideas 3. Kelayakan Bisnis / Business Feasibility 4. Mengembangkan Business Model yang efektif / Developing an effective Business Model 5. Sistematika Penulisan Business Plan / Business Plan Writing Systematics 6. Manajemen Pemasaran / Marketing Management 7. Manajemen Operasional dan SDM / Operational and HR Management 8. Manajemen Keuangan / Financial Management 						

Pustaka References	Utama / Main:						
	<p>1. ITS Technopreneurship Development Team. (2015). <i>Technopreneurship</i>. Surabaya: ITS Press.</p>						
	Pendukung / Supporting:						
	<p>1. Barringer, B. R., & Ireland, R. D. (2010). <i>Entrepreneurship: Successfully launching new ventures</i>. Upper Saddle River, N.J: Prentice Hall.</p> <p>2. International Labor Organization, <i>Generate Your Business Idea</i>.</p> <p>3. International Labor Organization, <i>Starting Business</i>.</p> <p>4. Osterwalder, A., Pigneur, Y., & Clark, T. (2010). <i>Business model generation: A handbook for visionaries, game changers, and challengers</i>. Hoboken, NJ: Wiley.</p> <p>5. William, B. K., Sawyer, S. C., Berston, S., (2013). <i>Business: A Practical Introduction</i>. Upper Saddle River, N.J: Prentice Hall.</p> <p>6. Kotler, Philips (2002). <i>Marketing Management</i>. Erlangga (Translated edition).</p>						
Dosen Pengampu Lecturers	ITS Technopreneur Lecturer Team						
Matakuliah syarat Prerequisite	-						
Mg ke/ Week	Kemampuan akhir tiap tahapan belajar (Sub-CPMK) / Final ability of each learning stage (LLO)	Penilaian / Assessment		Bantuk Pembelajaran; Metode Pembelajaran; Penugasan Mahasiswa; [Estimasi Waktu] / <i>Form of Learning; Learning Method;</i> <i>Student Assignment;</i> [Estimated Time]	Materi Pembelajaran [Pustaka] / <i>Learning Material</i> [Reference]	Bobot Penilaian /Assess- ment Load (%)	
(1)	(2)	(3)	(4)	Tatap Muka / In-class (5)	Daring / Online (6)	(7)	(8)
1-2	Sub-CPMK1: Mampu beradaptasi dengan situasi yang tidak pasti dengan menyebutkan dan merumuskan macam dan ragam bisnis yang bertahan dalam situasi terkini sesuai	<ul style="list-style-type: none"> Ketepatan mencari sumber informasi yang relevan dalam menemukan kekuatan/ potensi entrepreneur dan menemukan macammacam bisnis 	Kriteria: Rubrik 1 Non-tes: Laporan hasil wawancara Tes: Presentasi kelompok.	<ul style="list-style-type: none"> Bentuk pembelajaran Kuliah (2x) [TM : 2 x 50'] Metode Pembelajaran: <i>Small group</i> 	<ul style="list-style-type: none"> Bentuk Pembelajaran Kuliah tatap muka maya MyITSClassroom: sinkron atau asinkron. 	<ul style="list-style-type: none"> Buku Technopreneur ITS Barringer <i>ITS Technopreneur Book</i> Barringer 	10

	<p>tren sebagai peluang usaha baru.</p> <p>LLO 1: <i>Able to adapt to uncertain situations by mentioning and formulating types and types of businesses that survive in the current situation according to trends as new business opportunities.</i></p>	<p>yang mampu bersaing dan resiliens (bertahan) dalam situasi terkini yang tidak pasti.</p> <ul style="list-style-type: none"> ● Ketepatan menemukan peluang ide bisnis berdasarkan masalah. ● <i>Accuracy of finding relevant information sources in finding the strengths / potential of entrepreneurs and finding kinds of businesses that are able to compete and be resilient in current uncertain situations.</i> ● <i>Accuracy in finding business idea opportunities based on problems.</i> 	<p>Criteria: <i>Rubric 1</i></p> <p>Non-test: <i>Interview report</i></p> <p>Test: <i>Group presentation</i></p>	<p><i>discussion, collaborative learning, presentasi.</i></p> <ul style="list-style-type: none"> ● Tugas 1a: analisa kekuatan/ potensi dari contoh entrepeneur sukses ● Tugas 1b: menyusun ide bisnis (presentasi kelompok). [BM : 2 x 60'] [PT : 2 x 60'] (2x) ● Learning format <i>Lecture (2x)</i> [FF : 2 x 50'] ● Learning Method <i>Small group discussion, collaborative learning, presentation.</i> 	<p>Metode Pembelajaran: <i>Small group discussion, collaborative learning, presentasi.</i></p> <ul style="list-style-type: none"> ● Tugas 1a: analisa kekuatan/ potensi dari contoh entrepeneur sukses dan analisis stakeholder ● Tugas 1b: menyusun ide bisnis (presentasi kelompok) [BM : 2 x 60'] [PT : 2 x 60'] (2x) ● Learning format <i>Online lecture via MyITSClassroom: synchronous or asynchronous.</i> (2x) [FF : 2 x 50'] ● Learning Method 	
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				<ul style="list-style-type: none"> • Assignment 1a: analysing the strengths/potentials of a successful entrepreneur. • Assignment 1b: drafting a business idea (group presentation). [SA : 1 x 60'] [SS : 1 x 60'] (2x) 	<p><i>Small group discussion, collaborative learning, presentation.</i></p> <ul style="list-style-type: none"> • Assignment 1a: analysing the strengths/potentials of a successful entrepreneur and stakeholder analysis. • Assignment 1b: drafting a business idea (group presentation). [SA : 1 x 60'] [SS : 1 x 60'] (2x) 		
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3-5	<p>Sub -CPMK1 :</p> <p>Mampu beradaptasi dengan situasi yang tidak pasti dengan menyebutkan dan merumuskan desain analisa kelayakan.</p> <p><i>LLO 1:</i> <i>Able to adapt to uncertain situations by mentioning and formulating a feasibility analysis design.</i></p>	<ul style="list-style-type: none"> ● Ketrampilan menyusun pertanyaan survei sebagai kegiatan analisa kelayakan bisnis. ● Mengintegrasikan data kualitatif atau kuantitatif sebagai problem untuk menentukan usulan peluang ide dalam menjawab kebutuhan calon pasar. ● <i>Skills in preparing survey questions as a business feasibility analysis activity.</i> ● <i>Integrating qualitative or quantitative data as a problem to determine proposed opportunities ideas in responding to the needs of potential markets.</i> 	<p>Kriteria: Rubrik 2</p> <p>Criteria: <i>Rubric 2.</i></p>	<ul style="list-style-type: none"> ● Bentuk pembelajaran Kuliah ● Metode Pembelajaran <i>Small group discussion, collaborative learning, presentation.</i> [TM : 2 x 50'] (2x) ● Tugas 2: Membuat analisa kelayakan melalui concept test. [BM : 2 x 60'] [PT : 2 x 60'] (2x) ● Learning format <i>Lecture</i> ● Learning Method <i>Small group discussion, collaborative learning, presentation.</i> 	<ul style="list-style-type: none"> ● Bentuk Pembelajaran Kuliah tatap muka maya MyITSClassroom: sinkron atau asinkron. [TM : 2 x 50'] (2x) ● Metode Pembelajaran: <i>Small group discussion, collaborative learning, presentation.</i> ● Tugas analisa kelayakan: Membuat analisa kelayakan melalui concept test. ● Presentasi Ide Bisnis [BM : 2 x 60'] [PT : 2 x 60'] (2x) ● Learning format <i>Online lecture via MyITSClassroom:</i> 	<ul style="list-style-type: none"> ● Buku Technopreneur ITS ● Barringer ● <i>ITS Technopreneur Book</i> ● <i>Barringer</i> 	15
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				<p>[FF : 2 x 50'] (2x)</p> <ul style="list-style-type: none"> ● Assignment 2: <i>Make a feasibility analysis through a concept test.</i> [SA : 2 x 60'] [SS : 2 x 60'] (2x) <p><i>synchronous or asynchronous.</i> (2x) [FF : 2 x 50']</p> <ul style="list-style-type: none"> ● Learning Method <i>Small group discussion, collaborative learning, presentation.</i> ● Feasibility analysis assignment: <i>Make a feasibility analysis through a concept test.</i> ● Business Idea Presentation [SA : 2 x 60'] [SS : 2 x 60'] (2x) 	
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6-8	<p>Sub-CPMK2:</p> <p>Mampu berinovasi dan berkreasi untuk menghasilkan rancangan bisnis berbasis teknologi yang berorientasi pasar dengan memanfaatkan IPTEKS melalui model bisnis.</p> <p><i>LLO 2:</i> <i>Able to innovate and be creative to produce market-oriented technology-based business designs by utilizing science and technology through a business model.</i></p>	<ul style="list-style-type: none"> • Ketepatan mengidentifikasi ide bisnis dalam bentuk pola model bisnis (BMC) • Ketepatan menguraikan masing-masing aspek model bisnis dan mengaitkan antar aspek dalam model bisnis yang disusun. • <i>Accuracy in identifying business ideas in the form of a business model pattern (BMC).</i> • <i>Accuracy in describing each aspect of the business model and linking between aspects in the compiled business model.</i> 	<p>Kriteria: Rubrik 3 Non-tes: Observasi & unjuk kerja; presentasi kelompok.</p> <p>Criteria: Rubric 3 Non-test: Observation & performance; group presentation.</p>	<ul style="list-style-type: none"> • Bentuk pembelajaran Kuliah • Metode Pembelajaran <i>Small group discussion, collaborative learning, presentasi.</i> [TM : 2 x 50'] (2x) • Tugas 3: <ul style="list-style-type: none"> - Presentasi kelompok membuat desain BMC. - Menyusun PPT <p>[BM : 2 x 60'] [PT : 2 x 60'] (2x)</p> • Learning format Lecture • Learning Method <i>Small group discussion, collaborative learning, presentation.</i> 	<ul style="list-style-type: none"> • Bentuk Pembelajaran Kuliah tatap muka maya MyITSClassroom: sinkron atau asinkron. [TM : 2 x 50'] (2x) • Metode Pembelajaran: <i>Small group discussion, collaborative learning, presentasi.</i> • Tugas Presentasi 2 BMC <ul style="list-style-type: none"> - Presentasi kelompok membuat desain BMC di minggu 8. - Menyusun ppt <p>[BM : 2 x 60'] [PT : 2 x 60'] (2x)</p> • Learning format Online lecture via MyITSClassroom: 	<ul style="list-style-type: none"> • Osterwalder • PPT Tim Technopreneur ITS • <i>Osterwalder</i> • <i>ITS Technopreneur Team's PPT</i> 	15
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				<p>[FF : 2 x 50'] (2x)</p> <ul style="list-style-type: none"> ● Assignment 3: <ul style="list-style-type: none"> - Group presentation making BMC design - Making PowerPoint Presentation <p>[SA : 2 x 60'] [SS : 2 x 60'] (2x)</p>	<p><i>synchronous or asynchronous.</i> (2x)</p> <p>[FF : 2 x 50']</p> <ul style="list-style-type: none"> ● Learning Method <i>Small group discussion, collaborative learning, presentation.</i> ● Presentation Assignment 2 BMC <ul style="list-style-type: none"> - Group presentation making BMC in week 8. - Making PowerPoint Presentation <p>[SA : 2 x 60'] [SS : 2 x 60'] (2x)</p>		
9-12	Sub-CPMK3: Mampu mengenali dan merumuskan model pemasaran melalui pendekatan strategi pemasaran berdasarkan tahap-tahapnya yang diwujudkan dalam simulasi untuk dalam membangun	<ul style="list-style-type: none"> ● Ketepatan mengenal pedoman penyusunan proposal bisnis dan memaparkan prototype ● Ketepatan melakukan analisa strategi pemasaran sesuai jenis produk 	<p>Kriteria: Rubrik 4</p> <p>Tes: Kuis (minggu 11)</p> <p>Materi marketing</p> <p>Nontes: Observasi, unjuk kerja, penelusuran contoh</p>	<ul style="list-style-type: none"> ● Bentuk pembelajaran Kuliah ● Metode Pembelajaran <i>Small group discussion, collaborative</i> 	<ul style="list-style-type: none"> ● Bentuk Pembelajaran Kuliah tatap muka maya MyITSClassroom: sinkron atau asinkron. [TM : 2 x 50'] (2x) 	<ul style="list-style-type: none"> ● Contoh PKM (K) dan proposal bisnis dari kompetisi ● Buku Technopreneur ITS ● PPT Tim Technopreneur ITS 	15

	<p>rasa tanggung jawab tim yang mengedepankan etika bisnis.</p> <p><i>LLO 3:</i> <i>Able to recognize and formulate marketing models through a marketing strategy approach based on the stages that are manifested in simulations to build a sense of team responsibility that promotes business ethics.</i></p>	<ul style="list-style-type: none"> Accuracy in recognizing guidelines for preparing business proposals and describing prototypes Accuracy of analyzing the marketing strategy according to the type of product <p>proposal, rancangan marketing, prototype.</p> <p>Criteria: Rubric 4</p> <p>Test: Quiz (week 11).</p> <p>Materials: marketing.</p> <p>Non-test Observation, performance, search of proposal example, marketing design, prototypes.</p>	<p><i>learning, presentasi.</i> [TM : 2 x 50'] (2x)</p> <ul style="list-style-type: none"> Tugas 4: <ul style="list-style-type: none"> Pemaparan prototype ide bisnis secara visual Rancangan analisa marketing Menyusun PPT <p>[BM : 2 x 60'] [PT : 2 x 60'] (2x)</p> <ul style="list-style-type: none"> Learning format Lecture Learning Method Small group discussion, collaborative learning, presentation. [FF : 2 x 50'] (2x) Assignment 4: <ul style="list-style-type: none"> Visual presentation 	<p>MyITSClassroom Tugas:</p> <ul style="list-style-type: none"> Tugas belajar mandiri (log book) Penelusuran contoh proposal: logbook dilaporkan di minggu ke-10. Kuis marketing di minggu ke-11 Tugas belajar mandiri marketing Tugas Presentasi Prototype di presentasikan di minggu 12. [BM : 2 x 60'] [PT : 2 x 60'] (2x) Learning format Online lecture via MyITSClassroom: synchronous or asynchronous discussion and Q&A. (2x) 	<ul style="list-style-type: none"> Manjemen pemasaran Philip Kotler <i>Example of PKM-K and business proposals from competitions</i> <i>ITS Technopreneur Book</i> <i>ITS Technopreneur Team's PPT</i> <i>Philip Kotler's Marketing Management</i> 	
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				<p><i>of a business idea prototype</i> - Marketing analysis design - Making PowerPoint Presentation <i>[SA : 2 x 60']</i> <i>[SS : 2 x 60']</i> (2x)</p>	<p><i>[FF : 2 x 50']</i></p> <ul style="list-style-type: none"> ● MyITSClassroom Assignment: <ul style="list-style-type: none"> - Self-study assignment (<i>log book</i>) Search of sample proposals: <i>logbook</i> reported in week 10. - Marketing Quiz in week 11 - Marketing self-study assignment - Prototype presentation assignment, presented in week 12. <p><i>[SA : 2 x 60']</i> <i>[SS : 2 x 60']</i> (2x)</p>		
13	Sub-CPMK-4: Mampu mengenali dan merumuskan aspek manajemen SDM berdasarkan tahap-tahapnya sebagai bagian penting dalam	<ul style="list-style-type: none"> ● Ketepatan menganalisa kebutuhan dan merumuskan sistem SDM yang sesuai jenis bisnis yang dikembangkan. 	Kriteria: Rubrik kerja kelompok tugas mandiri Non-Tes :	<ul style="list-style-type: none"> ● Bentuk pembelajaran Kuliah ● Metode Pembelajaran <i>Small group discussion,</i> 	<ul style="list-style-type: none"> ● Bentuk Pembelajaran Kuliah tatap muka maya MyITSClassroom: sinkron atau asinkron. 	<ul style="list-style-type: none"> ● Buku Technopreneur ITS ● PPT Tim Technopreneur ITS ● Tugas belajar mandiri: aspek manajemen SDM. 	7.5

	<p>mencapai bisnis yang resiliensi yang diwujudkan dalam simulasi untuk dalam membangun rasa tanggung jawab tim yang mengedepankan etika bisnis.</p> <p><i>LLO 4:</i> <i>Able to recognize and formulate aspects of HR management based on its stages as an important part of achieving a resilient business which is manifested in simulations to build a sense of team responsibility that prioritise business ethics.</i></p>	<ul style="list-style-type: none"> • Accuracy in analyzing needs and formulating HR systems according to the type of business being developed. 	<p>Observasi & unjuk kerja menyusun kebutuhan SDM</p> <p>Criteria: <i>Independent group assignment rubric</i></p> <p>Non-Test: <i>Observation & performance to compile HR needs</i></p>	<p><i>collaborative learning, presentasi.</i> [TM : 1 x 50']</p> <ul style="list-style-type: none"> • Learning format <i>Lecture</i> • Learning Method <i>Small group discussion, collaborative learning, presentation.</i> [FF : 1 x 50'] 	<p>[TM : 1 x 50']</p> <ul style="list-style-type: none"> • Metode Pembelajaran: <i>Small group discussion, collaborative learning, presentasi.</i> • Tugas 5: <ul style="list-style-type: none"> - Rancangan SDM - Menyusun PPT • Learning format <i>Online lecture via MyITSClassroom: synchronous or asynchronous.</i> [FF : 1 x 50'] • Learning Method <i>Small group discussion, collaborative learning, presentation.</i> • Assignment 5: <ul style="list-style-type: none"> - HR plan - Making PPT 	<ul style="list-style-type: none"> • <i>ITS Technopreneur Book</i> • <i>ITS Technopreneur Team's PPT</i> • <i>Self study assignment: HR management aspects.</i> 	
14	Sub-CPMK5: Mampu mengenali dan merumuskan aspek operasi dan mampu menyusun	<ul style="list-style-type: none"> • Ketepatan menganalisa dan merumuskan kebutuhan aspek 	<p>Kriteria: Rubrik kerja kelompok tugas mandiri</p>	<ul style="list-style-type: none"> • Bentuk pembelajaran Kuliah 	<ul style="list-style-type: none"> • Bentuk Pembelajaran Kuliah tatap muka maya 	<ul style="list-style-type: none"> • Buku Technopreneur ITS • PPT Tim Technopreneur ITS 	7.5

	<p>rencana keuangan dan melakukan perhitungan yang tepat dalam mengembangkan rencana bisnis yang dapat aplikasikan dalam proposal bisnis.</p> <p><i>LLO 5:</i> <i>Able to recognize and formulate aspects of operations and be able to compile financial plans and carry out appropriate calculations in developing business plans that can be applied in business proposals.</i></p>	<p>manajemen operasi sesuai jenis bisnis yang akan dikembangkan</p> <ul style="list-style-type: none"> ● Ketepatan menyusun rencana kebutuhan keuangan dan melakukan perhitungan keuntungan (profit usaha). ● <i>Accuracy in analyzing and formulating the needs for operational management aspects according to the type of business that is being developed.</i> ● <i>Accuracy in planning financial needs and calculating profit (business profit).</i> 	<p>Non-tes: Observasi & unjuk kerja; Menyusun kebutuhan operasi dan kebutuhan dan perencanaan keuangan serta pencatatannya.</p> <p>Criteria: <i>Independent group assignment rubric</i></p> <p>Non-test: <i>Observation & performance; Compiling operating requirements and needs and financial planning and records.</i></p>	<ul style="list-style-type: none"> ● Metode Pembelajaran <i>Small group discussion, collaborative learning, presentation.</i> [TM : 1 x 50'] [BM : 1 x 60'] [PT : 1 x 60'] ● Learning format <i>Lecture</i> ● Learning Method <i>Small group discussion, collaborative learning, presentation.</i> [FF : 1 x 50'] [SA : 1 x 60'] [SS : 1 x 60'] 	<p>MyITSClassroom: sinkron atau asinkron.</p> <ul style="list-style-type: none"> ● Metode Pembelajaran: <i>Small group discussion, collaborative learning, presentation.</i> ● Tugas Belajar Mandiri: aspek operasi dan keuangan. [TM : 1 x 50'] [BM : 1 x 60'] [PT : 1 x 60'] ● Learning format <i>Online lecture via MyITSClassroom: synchronous or asynchronous.</i> ● Learning Method <i>Small group discussion, collaborative learning, presentation.</i> ● Self-Study Assignment: 	<ul style="list-style-type: none"> ● Tugas belajar mandiri: aspek manajemen operasi dan keuangan. ● <i>ITS Technopreneur Book</i> ● <i>ITS Technopreneur Team's PPT</i> ● <i>Self study assignment:operational and financial management aspects.</i> 	
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					<i>operational and financial aspects.</i> [FF : 1 x 50'] [SA : 1 x 60'] [SS : 1 x 60']		
15-16	<p>Sub-CPMK6: Mampu menyusun proposal business plan yang menarik dan mampu mempersuasif pihak investor.</p> <p><i>LLO 6:</i> <i>Able to compile attractive business plan proposals and to persuade investors.</i></p>	<p>Ketepatan menyusun proposal bisnis plan yang mampu menarik perhatian pihak investor.</p> <p><i>The accuracy in preparing a business plan proposal that can attract the attention of investors</i></p>	<p>Kriteria: Rubrik 5: Proposal Bisnis (<i>Business Plan</i>)</p> <p>Non-tes: Observasi & unjuk kerja; Presentasi kelompok dengan mengedepankan prinsip komunikasi bisnis (efektif dan persuasi).</p> <p>Criteria: Rubric 5: Business Proposal.</p> <p>Non-test: Observation & performance; Group presentations emphasizing the principles of business communication (effective and persuasive).</p>	<ul style="list-style-type: none"> ● Bentuk pembelajaran Kuliah ● Metode Pembelajaran <i>Small group discussion, collaborative learning,</i> presentasi. [TM : 2 x 50'] [BM : 2 x 60'] [PT : 2 x 60'] ● Learning format Lecture ● Learning Method <i>Small group discussion, collaborative learning,</i> presentasi. [FF : 2 x 50'] [SA : 2 x 60'] [SS : 2 x 60'] 	<ul style="list-style-type: none"> ● Bentuk Pembelajaran Kuliah tatap muka maya MyITSClassroom: sinkron atau asinkron. ● Metode Pembelajaran: <i>Small group discussion, collaborative learning,</i> presentasi. [TM : 1 x 50'] ● Tugas 6: <ul style="list-style-type: none"> - Tugas presentasi akhir proposal bisnis - Menyusun PPT ● Learning format Online lecture via MyITSClassroom: 	<ul style="list-style-type: none"> ● Buku Technopreneur ITS ● PPT Tim Technopreneur ITS ● <i>ITS Technopreneur Book</i> ● <i>ITS Technopreneur Team's PPT</i> 	30

					<p><i>synchronous or asynchronous.</i></p> <ul style="list-style-type: none"> ● Learning Method <i>Small group discussion, collaborative learning, presentation.</i> [FF : 1 x 50'] ● Assignment 6: <ul style="list-style-type: none"> - <i>Final presentation of business proposal</i> - <i>Making PPT</i> [SA : 1 x 60'] [SS : 1 x 60'] 		
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TM=Tatap Muka, **PT**=Penugasan Terstruktur, **BM**=Belajar Mandiri.

FF = Face to Face, **SA** = Structured Assignment, **SS** = Self Study.

II. Rencana Asesmen & Evaluasi (RAE) / Assessment & Evaluation Plan

	ASSESSMENT & EVALUATION PLAN BACHELOR DEGREE PROGRAM OF BIOMEDICAL ENGINEERING - FTEIC ITS Course : Technopreneur		
RA& E <i>Write Doc Code</i>			
Kode/code: EB184302	Bobot sks/credits (T/P): 2/0	Rumpun MK: ITS Compulsory Course Cluster: ITS Compulsory	Smt: VI

Mg ke/ Wee k (1)	Sub CP-MK / <i>Lesson Learning Outcomes (LLO)</i> (2)	Bentuk Asesmen (Penilaian) <i>Form of Assessment</i> (3)	Bobot / <i>Load (%)</i> (4)
1-2	Sub -CPMK1 : Mampu beradaptasi dengan situasi yang tidak pasti dengan menyebutkan dan merumuskan desain analisa kelayakan. LLO 1: <i>Able to adapt to uncertain situations by mentioning and formulating a feasibility analysis design.</i>	Non-tes: Laporan hasil wawancara. <ul style="list-style-type: none"> Tugas 1a: analisa kekuatan/ potensi dari contoh entrepeneur sukses Tugas 1b: menyusun ide bisnis (presentasi kelompok). Tes: Presentasi kelompok. Non-test: <i>Interview report</i> <ul style="list-style-type: none"> <i>Assignment 1a: analysing the strengths/potentials of a successful entrepreneur.</i> <i>Assignment 1b: drafting a business idea (group presentation).</i> Test: <i>Group presentation</i>	10
3-5	Sub -CPMK1 : Mampu beradaptasi dengan situasi	Non-tes : Tugas 2: Membuat analisa kelayakan melalui concept test.	15

	<p>yang tidak pasti dengan menyebutkan dan merumuskan desain analisa kelayakan.</p> <p>LLO 1: <i>Able to adapt to uncertain situations by mentioning and formulating a feasibility analysis design.</i></p>	<p>Non-Test:</p> <ul style="list-style-type: none"> ● Assignment 2: <i>Make a feasibility analysis through a concept test.</i> 	
6-8	<p>Sub-CPMK2: Mampu berinovasi dan berkreasi untuk menghasilkan rancangan bisnis berbasis teknologi yang berorientasi pasar dengan memanfaatkan IPTEKS melalui model bisnis.</p> <p>LLO 2: <i>Able to innovate and be creative to produce market-oriented technology-based business designs by utilizing science and technology through a business model.</i></p>	<p>Non-tes: Observasi & unjuk kerja; presentasi kelompok.</p> <ul style="list-style-type: none"> ● Tugas 3: <ul style="list-style-type: none"> - Presentasi kelompok membuat desain BMC. - Menyusun PPT <p>Non-test: <i>Observation & performance; group presentation.</i></p> <ul style="list-style-type: none"> ● Assignment 3: <ul style="list-style-type: none"> - <i>Group presentation making BMC design</i> - <i>Making PowerPoint Presentation</i> 	15
9-12	<p>Sub-CPMK3: Mampu mengenali dan merumuskan model pemasaran melalui pendekatan</p>	<p>Tes: Kuis (minggu 11) Materi marketing</p> <p>Nontes: Observasi, unjuk kerja, penelusuran contoh proposal, rancangan marketing, prototype.</p> <ul style="list-style-type: none"> ● Tugas 4: <ul style="list-style-type: none"> - Pemaparan prototype ide bisnis secara visual 	15

	<p>strategi pemasaran berdasarkan tahap-tahapnya yang diwujudkan dalam simulasi untuk dalam membangun rasa tanggung jawab tim yang mengedepankan etika bisnis.</p> <p>LLO 3: <i>Able to recognize and formulate marketing models through a marketing strategy approach based on the stages that are manifested in simulations to build a sense of team responsibility that promotes business ethics.</i></p>	<ul style="list-style-type: none"> - Rancangan analisa marketing - Menyusun PPT <p>● MyITSClassroom</p> <p>Tugas:</p> <ul style="list-style-type: none"> - Tugas belajar mandiri (log book) Penelusuran contoh proposal: logbook dilaporkan di minggu ke-10. - Kuis marketing di minggu ke-11 - Tugas belajar mandiri marketing - Tugas Presentasi Prototype di presentasikan di minggu 12. <p>Test:</p> <p><i>Quiz (week 11). Materials: marketing.</i></p> <p>Non-test Observation, performance, search of proposal example, marketing design, prototypes.</p> <p>● Assignment 4:</p> <ul style="list-style-type: none"> - Visual presentation of a business idea prototype - Marketing analysis design - Making PowerPoint Presentation <p>● MyITSClassroom</p> <p>Assignment:</p> <ul style="list-style-type: none"> - Self-study assignment (log book) Search of sample proposals: logbook reported in week 10. - Marketing Quiz in week 11 - Marketing self-study assignment - Prototype presentation assignment, presented in week 12. 	
13	<p>Sub-CPMK-4:</p> <p>Mampu mengenali dan merumuskan aspek manajemen SDM berdasarkan tahap-tahapnya sebagai bagian penting dalam mencapai bisnis yang reseliens yang diwujudkan dalam simulasi untuk dalam membangun rasa tanggung jawab tim yang</p>	<p>Non-Tes :</p> <p>Observasi & unjuk kerja menyusun kebutuhan SDM.</p> <p>● Tugas 5:</p> <ul style="list-style-type: none"> - Rancangan SDM - Menyusun PPT <p>Non-Test:</p> <p><i>Observation & performance to compile HR needs.</i></p> <p>● Assignment 5:</p> <ul style="list-style-type: none"> - HR plan - Making PPT 	7.5

	<p>mengedepankan etika bisnis.</p> <p>LLO 4:</p> <p><i>Able to recognize and formulate aspects of HR management based on its stages as an important part of achieving a resilient business which is manifested in simulations to build a sense of team responsibility that prioritise business ethics.</i></p>		
14	<p>Sub-CPMK5:</p> <p>Mampu mengenali dan merumuskan aspek operasi dan mampu menyusun rencana keuangan dan melakukan perhitungan yang tepat dalam mengembangkan rencana bisnis yang dapat aplikasikan dalam proposal bisnis.</p> <p>LLO 5:</p> <p><i>Able to recognize and formulate aspects of operations and be able to compile financial plans and carry out appropriate calculations in developing business plans that</i></p>	<p>Non-tes:</p> <p>Observasi & unjuk kerja; Menyusun kebutuhan operasi dan kebutuhan dan perencanaan keuangan serta pencatatannya.</p> <ul style="list-style-type: none"> • Tugas Belajar Mandiri: aspek operasi dan keuangan. <p>Non-test:</p> <p><i>Observation & performance; Compiling operating requirements and needs and financial planning and records.</i></p> <ul style="list-style-type: none"> • Self-Study Assignment: operational and financial aspects. 	7.5

	<i>can be applied in business proposals.</i>		
15- 16	<p>Sub-CPMK6: Mampu menyusun proposal business plan yang menarik dan mampu mempersuasif pihak investor.</p> <p>LLO 6: <i>Able to compile attractive business plan proposals and to persuade investors.</i></p>	<p>Non-tes: Observasi & unjuk kerja; Presentasi kelompok dengan mengedepankan prinsip komunikasi bisnis (efektif dan persuasi).</p> <ul style="list-style-type: none"> ● Tugas 6: <ul style="list-style-type: none"> - Tugas presentasi akhir proposal bisnis - Menyusun PPT <p>Non-test: <i>Observation & performance; Group presentations emphasizing the principles of business communication (effective and persuasive).</i></p> <ul style="list-style-type: none"> ● Assignment 6: <ul style="list-style-type: none"> - Final presentation of business proposal - Making PPT 	30
Total bobot penilaian Total assessment load			100%

- Indikator Pencapaian CPL Pada MK / *Indicator of PLO achievement charged to the course*

CPL yang dibebankan pada MK / <i>PLO charged to the course</i>	CPMK / <i>Course Learning Outcome (CLO)</i>	Minggu ke / <i>Week</i>	Bentuk Asesmen / <i>Form of Assessment</i>	Bobot / <i>Load (%)</i>
CPL-S5 / <i>PLO-S5</i>	CPMK 4 / <i>CLO 4</i>	Week- 14	<i>Self Study Assignment</i>	7.5
CPL-KU1 / <i>PLO-KU1</i>	CPMK 2 / <i>CLO 2</i>	Week- 6-8	<i>Assignment 3</i>	15
CPL-KU2 / <i>PLO-KU2</i>	CPMK 1 / <i>CLO 1</i>	Week- 1-2	<i>Interview report (Assignment 1a,1b)</i>	5
			<i>Group Presentation</i>	5
		Week- 3-5	<i>Assignment 2</i>	15
	CPMK 5 / <i>CLO 5</i>	Week 15-16	<i>Assignment 6</i>	30
CPL-KU9 / <i>PLO-KU9</i>	CPMK 3 / <i>CLO 3</i>	Week- 9-12	<i>Assignment 4</i>	10
		Week 11	<i>Quiz</i>	5
		Week 13	<i>Assignment 5</i>	7.5
				Σ = 100%

No	<i>Form of Assessment</i>	<i>PLO-S5</i>	<i>PLO-S8</i>	<i>PLO-KU1</i>	<i>PLO-KU2</i>	<i>PLO-KU9</i>	<i>PLO-KU10</i>	Total
1	<i>Assignment 1</i>				0.05			0.05
2	<i>Assignment 2</i>				0.15			0.15
3	<i>Assignment 3</i>			0.15				0.15
4	<i>Assignment 4</i>					0.1		0.1
5	<i>Assignment 5</i>					0.075		0.075
6	<i>Assignment 6</i>				0.3			0.3
7	<i>Self Study Assignment</i>	0.075						0.075
8	<i>Group Presentation</i>				0.05			0.05
9	<i>Quiz</i>					0.05		0.05
	<i>Total</i>	0.075		0.15	0.55	0.225		1