


SEMESTER LEARNING PLAN

		INSTITUT TEKNOLOGI SEPULUH NOPEMBER (ITS) Sub-Directorate of Common Lectures Coordination (SKPB)					Document Code
Semester Learning Plan							
Course	Code	Cluster	Credit Hours		Semester	Compilation Date	
Technology Based Entrepreneurship (Technopreneurship)	UG 234915	SKPB	2	0	VI / VII	19 June 2023	
Authorization / Validation		Compiled by:		Course Cluster Coordinator	SKPB Subdirectorate		
		<ul style="list-style-type: none">– Muchammad Nurif, SE.MT– Yuni Setyaningsih, S.K.PM., M.SC.– Muhammad Ubaidillah Al Mustofa, M.SEI– Tim Dosen Kewirausahaan Berbasis Teknologi (Technopreneurship) ITS		Muchammad Nurif, SE.MT	Didik Khusnul Arif		
Learning Objectives (LO)	LO	LO descriptions					
	LO 1	Demonstrate attitudes and character that reflect devotion to God Almighty, ethics and integrity, noble character, sensitivity and care for social and environmental problems, respecting cultural differences and pluralism, upholding law enforcement, prioritizing the interests of the nation and broader community through creativity and innovation, excellence, strong leadership, synergy, and other potentials to achieve maximum results.					
	LO 3	Manage one's own learning and develop oneself as a lifelong learner to compete at national and international levels to make a real contribution to solving problems by implementing information and communication technology, paying attention to sustainability principles, and understanding technology-based entrepreneurship.					

	Course Learning Outcomes (CLO)																									
	CLO	Description																								
	CLO 1	Adapt to the situation and survive in uncertain conditions by conducting appropriate feasibility analysis calculations.																								
	CLO 2	Be innovative and creative to produce market-oriented, technology-based product designs (or prototypes) by utilizing Artificial Intelligence.																								
	CLO 3	Prepare business plan proposals that are attractive and persuasive to investors.																								
	CLO 4	Formulate Digital Marketing model and strategy.																								
	CLO 5	Formulate needs for HR aspects and operational aspects based on stages which are realized in simulations to build a sense of team responsibility that prioritizes business ethics.																								
	CLO 6	Prepare financial plans in business proposals.																								
	CLO 7	Create a simple web content and optimize simple web pages.																								
LO and CLO mapping	<table border="1"> <thead> <tr> <th></th><th>LO 1</th><th>LO 3</th></tr> </thead> <tbody> <tr> <td>CLO 1</td><td>√</td><td>√</td></tr> <tr> <td>CLO 2</td><td></td><td>√</td></tr> <tr> <td>CLO 3</td><td></td><td>√</td></tr> <tr> <td>CLO 4</td><td></td><td>√</td></tr> <tr> <td>CLO 5</td><td>√</td><td>√</td></tr> <tr> <td>CLO 6</td><td></td><td>√</td></tr> <tr> <td>CLO 7</td><td></td><td>√</td></tr> </tbody> </table>			LO 1	LO 3	CLO 1	√	√	CLO 2		√	CLO 3		√	CLO 4		√	CLO 5	√	√	CLO 6		√	CLO 7		√
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CLO 6		√																								
CLO 7		√																								
Short Course Description	This course provides students with the understanding and skills to identify and evaluate technology-based business opportunities according to the student's field of expertise and develop business opportunities using Digital Marketing (Artificial Intelligence). This course combines an integrated introduction to theory and direct practice (hands-on experience) in developing business ideas and opportunities. In the end, students are expected to be able to express business opportunities in the form of prototypes or products that are ready to be sold and effective business plans as a team to be exhibited at the end of the course.																									
Study Materials	<ol style="list-style-type: none"> 1. Technopreneur and Business 2. Recognizing Opportunities and Creating Business Ideas using Artificial Intelligence 3. Feasibility Analysis of Business Opportunities 																									

	<ol style="list-style-type: none"> 4. Develop an effective Business Model 5. Digital Marketing & Marketing Funnel 6. Create a Simple Google My Business Website 7. Operational and HR Management 8. Financial Management 	
References	Main References:	
	Main Reference	<ol style="list-style-type: none"> 1. Technopreneurship. Tim Pengembangan Technopreneurship ITS (2015). Surabaya: ITS Press.
	Supporting References:	
	Supporting references	<ol style="list-style-type: none"> 1. Barringer, B. R., & Ireland, R. D. (2010). Entrepreneurship: Successfully launching new ventures. Upper Saddle River, N.J: Prentice Hall. 2. Osterwalder, A., Pigneur, Y., & Clark, T. (2010). Business model generation: A handbook for visionaries, game changers, and challengers. Hoboken, NJ: Wiley. 3. William, B. K., Sawyer, S. C., Berston, S., (2013). Business: A Practical Introduction. Upper Saddle River, N.J: Prentice Hall 4. International Labor Organization., (2014) Start and Improve Your Business: Implemetation Guide. ISBN: 9789221288060; 9789221288077 (web pdf) 5. International Labor Organization., (2015). Generate Your Business Idea. ISBN: 9789221287575; 9789221287582 (web pdf) 6. Kotler, Philip. 2010. Manajemen Pemasaran. Edisi tiga belas Bahasa Indonesia.Jilid 1 dan 2.Jakarta : Erlangga.
Lecturers	<ul style="list-style-type: none"> - Muchammad Nurif, SE., MT - Yuni Setyaningsih, S.K.Pm., M.Sc. - Muhammad Ubaidillah Al Mustofa, M.SEI - ITS Technopreneurship Lecturer Team 	
Prerequisites	-	

Week	Course Learning Outcomes	Assessment		Forms of Learning, Learning Methods, and Assignments of Students [Estimated time]		Learning materials [References]	Assessment Weight (%)
		Assessment Indicators	Criteria and Forms of Assessment	Online	Offline		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	CLO 1: Adapt to the situation and survive in uncertain conditions by conducting appropriate feasibility analysis calculations.	Introduction to Technopreneurship and Business a. Explain Technopreneurship principles and their role. b. Identify and explain the characteristics of a successful Technopreneur. c. Explain the process of becoming a Technopreneur. d. Explain the role of Technopreneurship in society. e. Explain the economy and Business in the VUCA (Volatility, Uncertainty, Complexity and Ambiguity) era.	Criteria: Mastery and Accuracy of answers Assessment Form: Report the results of interviews.		√ Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50" minutes Structured assignments (PT): 2 credits x 50" minutes Independent learning (BM): 2 credits x 50" minutes Learning Method: Small group discussion, collaborative learning, group presentation Assignments & Exercises: Environmental and Stakeholder Analysis of the business (strength/development potential of examples of successful entrepreneurs).	1. ITS Technopreneurship Book 2. Barringer 3. Task: Interview entrepreneurs and stakeholder analysis	5%

2	CLO 2: Be innovative and creative to produce market-oriented, technology-based product designs (or prototypes) by utilizing Artificial Intelligence.	Recognizing Opportunities and Creating Business Ideas: <ol style="list-style-type: none"> Explain the importance of starting a new business. Identify the personal characteristics needed to identify business opportunities. 	Criteria: Mastery and Accuracy of answers Assessment Form: Group Presentation	<div> <div>√</div> <div> Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50" minutes Structured assignments (PT): 2 credits x 50" minutes Independent learning (BM): 2 credits x 50" minutes Learning Method: Small group discussion, collaborative learning, group presentation Assignments & Exercises: <ol style="list-style-type: none"> Develop a business idea (group presentation) Students are asked to present Pre-Assignment 1 (Problem and Solution) to be discussed together at the 3rd meeting. </div> </div>	<ol style="list-style-type: none"> ITS Technopreneurs hip Book Barringer Task: develop business ideas (ideation) – Problems and Solutions 	5%
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3	CLO 1 CLO 2	Business Feasibility: a. Explain the importance of business ideas, their feasibility and analysis. b. Explain and apply concept statements and market feasibility. c. Evaluate the feasibility of a business idea	Criteria: Mastery and Accuracy of answers Assessment Form: Group Presentation		√	1. ITS Technopreneurs hip Book 2. Barringer 3. Task: prepare a feasibility study	5%
				Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50” minutes Structured assignments (PT): 2 credits x 50” minutes Independent learning (BM): 2 credits x 50” minutes <i>Learning Method: Small group discussion, collaborative learning, group presentation</i> Assignments & Exercises: Prepare a feasibility study draft (focuses on creating a business idea)			

4	CLO 1 CLO 2	Guest Lecture: 1. Introduction to Artificial Intelligence (AI). 2. Understand creative steps in identifying business opportunities using AI. 3. Introduction to Digital Marketing	Criteria: Mastery and Accuracy of answers Assessment Form: Group Presentation	Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50" minutes Structured assignments (PT): 2 credits x 50" minutes Independent learning (BM): 2 credits x 50" minutes Learning Method: Guest Lecture	1. ITS Technopreneurs hip Book 2. Barringer 3. Assignment: Preparation of Presentation and Submission of Assignment 1	5%
5	CLO 1 CLO 2	PRESENTATION AND ASSIGNMENT 1: Creating a Business Idea	Criteria: Mastery and Accuracy of answers Assessment Form: Group Presentation A business idea must answer three fundamental questions: <ol style="list-style-type: none"> Problems Solutions Benefits 	<div> <div></div> <div>√</div> </div> Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50" minutes Structured assignments (PT): 2 credits x 50" minutes Independent learning (BM): 2 credits x 50" minutes Learning Method: Small group discussion, collaborative learning, group presentation Assignments & Exercises: Presentation Assignment 1	1. ITS Technopreneurs hip Book 2. Barringer 3. Presentation and Submission of Assignment 1	5%

6	CLO 3 Prepare business plan proposals that are attractive and persuasive to investors.	Developing an effective Business Model a. Explain business model innovation. b. Compile and design a Business Model Canvas (BMC) based on proposed business ideas. c. Evaluate business models.	Criteria: Mastery and Accuracy of answers Assessment Form: Group Presentation	<div>√</div> Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50" minutes Structured assignments (PT): 2 credits x 50" minutes Independent learning (BM): 2 credits x 50" minutes <i>Learning Method: Small group discussion, collaborative learning, group presentation</i> Assignments & Exercises: BMC	1. Osterwalder 2. PPT Tim Technopreneurship ITS	5%
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7	CLO 4 Formulate Digital Marketing model and strategy.	Marketing Management: a. Understand overall market aspects. b. Understand marketing aspects and marketing strategies. c. Understand the concept of 4P Place, Product, Price Promotion. d. Apply marketing plans to business ideas by utilizing digital marketing and marketplaces.	Criteria: Mastery and Accuracy of answers Assessment Form: Group Presentation	<table><tr><td></td><td>√</td></tr></table> Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50” minutes Structured assignments (PT): 2 credits x 50” minutes Independent learning (BM): 2 credits x 50” minutes <i>Learning Method: Small group discussion, collaborative learning, group presentation</i> Assignments & Exercises: - Market analysis and 4P exercises - Make a Digital Marketing plan		√	1. Philip Kotler Marketing Management 2. ITS Technopreneurs hip Team PPT	5%
	√							

8-9	CPMK 3 CPMK 4	ASSIGNMENT 2: Business Model, Marketing Plan, and Prototyping	Criteria: Mastery and Accuracy of answers Assessment Form: Group Presentation Task 2: 1. BMC 2. Digital marketing strategy and market plan (marketplace) 3. Show the design or prototype of the product/service created		√	1. Osterwalder 2. Kotler 3. PPT Tim Technopreneurship ITS	10%
				Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50” minutes Structured assignments (PT): 2 credits x 50” minutes Independent learning (BM): 2 credits x 50” minutes <i>Learning Method: Small group discussion, collaborative learning, group presentation</i> Assignments & Exercises: Task 2: Business Model, Marketing Plan, and Prototyping			

10	CLO 3	Writing a Business Plan a. Explain the purpose of the business plan. b. Explain the business process of the business idea being designed. c. Write a business plan systematically and effectively.	Criteria: Mastery and Accuracy of answers Assessment Form: <i>Analysis and Draft Business Plan</i>		√	1. Example of business proposals from the competition 2. ITS Technopreneurs hip Book 3. ITS Technopreneurs hip Team PPT	5%
				Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50” minutes Structured assignments (PT): 2 credits x 50” minutes Independent learning (BM): 2 credits x 50” minutes Learning Method: <i>Small group discussion, collaborative learning, group presentation</i> Assignments & Exercises: Practice preparing a Business Plan			

11	CLO 5: Formulate needs for HR aspects and operational aspects based on stages which are realized in simulations to build a sense of team responsibility that prioritizes business ethics.	Operational and HR Management: a. Understand how to create an organizational structure and develop good organizational management (HR Management). b. Understand business ethics and the concept of Company Shared Value (CSV)	Criteria: Mastery and Accuracy of answers Assessment Form: Group Presentation	Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50" minutes Structured assignments (PT): 2 credits x 50" minutes Independent learning (BM): 2 credits x 50" minutes Learning Method: Small group discussion, collaborative learning, group presentation Assignments & Exercises: <ul style="list-style-type: none"> - Creating a flow of business operational activities and developing an organizational structure - Establish Company Shared Values (CSV) 	a. ITS Technopreneurship Book b. ITS Technopreneurship Team PPT c. Independent learning assignments: HR management aspects	5%
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12	CLO 6: Prepare financial plans in business proposals.	Financial management a. Understand the function of the financial aspects in making a business plan. b. Calculate breakeven point. c. Calculate working capital requirements. d. Explain business feasibility using financial ratios (such as: Net Present Value, The Payback Rule, The Average Accounting Return, The Internal Rate of Return, The Profitability Index, etc.)	Criteria: Mastery and Accuracy of answers Assessment Form: Group Presentation	Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50" minutes Structured assignments (PT): 2 credits x 50" minutes Independent learning (BM): 2 credits x 50" minutes <i>Learning Method: Small group discussion, collaborative learning, group presentation</i> Assignments & Exercises: establish a business feasibility using a financial ratio approach.	a. ITS Technopreneurs hip Book b. ITS Technopreneurs hip Team PPT c. Independent learning assignment: Financial Management aspects	5%
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13	CLO 7 Create a simple web content and optimize simple web pages.	Creating Web Content a. Create simple web content. b. Understand the concept of Search Engine Optimization (SEO). c. Create business optimization plans on marketplace platforms, blogs and simple websites.	Criteria: Mastery and Accuracy of answers Assessment Form: Group Presentation	Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50" minutes Structured assignments (PT): 2 credits x 50" minutes Independent learning (BM): 2 credits x 50" minutes <i>Learning Method: Small group discussion, collaborative learning, group presentation</i> Assignments & Exercises: Creating Simple Web Content	a. ITS Technopreneurs hip Book b. ITS Technopreneurs hip Team PPT c. Independent learning assignment: SEO	5%
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14	CPMK 5 CPMK 6 CPMK 7	PRODUCT EXHIBITION	Criteria: Mastery and Accuracy of answers Assessment Form: Group Presentation	Form of Learning: Classical Lecture Face to Face Learning (TM): 2 credits x 50" minutes Structured assignments (PT): 2 credits x 50" minutes Independent learning (BM): 2 credits x 50" minutes <i>Learning Method: Small group discussion, collaborative learning, group presentation</i> Assignments & Exercises: Product Prototype Presentation	Technopreneurship Books and PPTs from the ITS Team	5%
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15-16	CPMK 5 CPMK 6 CPMK 7	ASSIGNMENT 3: Presentation of Business Plan	<p>Criteria: Mastery and Accuracy of answers</p> <p>Assessment Form: Group Presentation</p> <p>Assignment 3 – Business Plan:</p> <ol style="list-style-type: none"> 1. Conception and background of the business idea along with its justification (developed from task 1); 2. Business Model and Marketing Plan (developed from task 2); 3. Operational analysis and HR needs; 4. Financial analysis and start-up fund needs; 5. CSV; 6. Create simple web content and optimization strategies; 7. Collect product/service prototypes that have been created to the class lecturer. 	<p>Form of Learning: Classical Lecture</p> <p>Face to Face Learning (TM): 2 credits x 50" minutes</p> <p>Structured assignments (PT): 2 credits x 50" minutes</p> <p>Independent learning (BM): 2 credits x 50" minutes</p> <p>Learning Method: <i>Small group discussion, collaborative learning, group presentation</i></p> <p>Assignments & Exercises: Business Plan Proposal</p>	Technopreneurship Books and PPTs from the ITS Team	30%
TOTAL						100%

Rules and Discipline

- Arrive on time.
- Students are prohibited from using electronic equipment (cellphones, laptops and tablets) during lectures, unless requested by the lecturer/tutor.
- Plagiarism in any form will result in a zero score, it is very easy to detect writing that has been published on the internet.
- Assignments must be submitted on time. Late submission of assignments will result in a reduction in grades (25% per day).
- Absence from presentation/practice questions and discussions for any reason will result in the score component being zero.
- Students who commit attendance fraud, commit violations that are considered inappropriate during lectures, will automatically be given an E grade.
- Your activity in class will affect individual grades.
- Each form of question in each session will receive a value (75 – 90).
- Students ask by raising their hands.

Assessment & Evaluation Plan

Week (1)	CLO (2)	Assessment and Grading (3)	Weight (%) (4)
1-16	CLO 1-7	<ul style="list-style-type: none"> - Attendance - Individual Behavior and Attitudes - Individual task - Contribution to the Group 	10
1-5	CLO 1 CLO 2	<p>ASSIGNMENT 1: Create a Business Idea</p> <ul style="list-style-type: none"> - Each group must carry out field observations in the area around ITS or in the area where the students come from. - Identify essential problems faced by society and use accurate data to convey facts. Research through interviews, observations and discussions with experts is needed for this process. - Identify potential business opportunities to solve existing problems, using technological and AI based approach. - Evaluate the feasibility of the business idea, must be proven with facts and data. Carry out a market test through interviews or surveys with potential target markets. - A business idea must answer three fundamental questions: <ol style="list-style-type: none"> <u>The Problem</u> What is the problem or unmet need? Why does it exist / what is causing it? Who is affected / principal stakeholders? <i>How do you know that the problem exists / how have you been able to validate it?</i> How long will this exist and what is the scale of the problem/unmet need? <u>The Solution</u> How is this problem / unmet need currently being addressed? What is your technology and what makes it innovative and superior to existing options? What unique properties of the technology enable your solution to function in a superior way to existing solutions? Why can't others do the same as you / haven't been able to the same as you? <u>The Benefits</u> How will your product/service change the existing situation and how will it provide benefits? Which stakeholders will benefit most? How big will the impact be in terms of numbers affected; money saved/generated? Who is likely to be the main adopter of your solution and who will pay? - Reports are required to adhere to the appropriate guidelines for scientific and academic writing. - Submit in the form of Business Idea Proposals (PDF Format) and presentation materials (PPT Format) 	25

Week (1)	CLO (2)	Assessment and Grading (3)	Weight (%) (4)
9-10	CLO 3 CLO 4	Assignment 2: Business Model, Marketing, and Prototyping <ul style="list-style-type: none"> - From the business ideas identified in the previous assignment (Task 1), make the following analysis: <ul style="list-style-type: none"> • Business Model Canvas • Digital marketing strategies and plans (Digital Marketing and Marketplace). • Market analysis of business ideas plans and marketing strategies that will be implemented. • Show designs or prototypes of products/services using Artificial Intelligence. - Collected in the form of Progress Reports (PDF Format) and presentation materials (PPT Format) 	30
15-16	CLO 5 CLO 6 CLO 7	Assignment 3: Preparation of a Business Plan <ul style="list-style-type: none"> - Based on tasks 1 and 2, in Assignment 3 each group must prepare a complete Business Plan, which includes: <ul style="list-style-type: none"> • Conception and background of the business idea along with its justification (developed from task 1). • Business Model and Marketing Plan (developed from task 2). • Operational analysis and human resource needs. • Financial analysis and start-up fund needs. • Present CSV. • Creating simple web content and its optimization strategy. • Collect prototypes of products/services that have been created. - Business Proposals (PDF Format) and PPT are collected in soft files 	35
TOTAL WEIGHT			100