

STUDY PROGRAM INFORMATION

A.	Name of Study Program	:	Mechanical Engineering	
	Level of Study	:	Bachelor's Degree	
	Faculty	:	Engineering	
B.	Vision	:	Being an internationally recognized Mechanical Engineering program that excels in the development of technology and manufacturing engineering based on Islamic values for the benefit of society	
C.	Graduate Learning Outcomes	:	<ol style="list-style-type: none"> 1. Industrial Engineers/Practitioners/Researchers 2. Entrepreneurs 3. Lecturers 	
D.	Learning Outcomes	:	<ol style="list-style-type: none"> 1. Being able to identify, analyze, model, and solve real world problems in the industry, while demonstrating professional skills in the field of mechanical engineering 2. Being able to study issues related to technological development, solve problems associated with current technological advancements, and produce research that contributes to the progress of science and technology This research also aims to provide community service to realize the goals of Muhammadiyah. 3. Being able to work independently or collaborate with others to create goods or services related to mechanical engineering, contributing to technological innovation and the well-being of society 4. Developing and disseminating knowledge, technology, and research in the field of mechanical engineering through education, research, and community service 	
E.	Courses	:	Semester I	
			1. Faith and Humanity	1
			2. Introduction to Engineering	2
			3. Sustainable Development Insights	1
			4. Calculus I	4
			5. Physics I	4
			6. Chemistry	2
			7. Productive Skills of FLSP	2
			8. Indonesia Language	2
			9. Biology	2
			Semester II	
			1. Worship and Human Relations	1
			2. Engineering Materials	2
			3. Calculus II	4
			4. Physics II	3
			5. Structural Statics	2
			6. English Proficiency Test Preparation Course	2
			7. Physics Practicum	1
			8. Chemistry Practicum	1
			9. Drawing Machines	1
	10. Machine Drawing Practical	1		
	11. Information Technology and Computer Programming	2		
	Semester III			
	1. Muhammadiyah Studies	1		

		2. Basic Electronics	2
		3. Calculus III	3
		4. Kinematics	2
		5. Production Process I	2
		6. Production Process Practicum I	1
		7. Mechanics of Material Strength	2
		8. Thermodynamics I	2
		9. Physical metallurgy	2
		10. Computer-aided Drawing	1
		11. Statistics	2
		12. Measurement and Instrumentation	2
		Semester IV	
		1. Islam and Science and Technology	1
		2. Dynamics	2
		3. Machine Elements I	2
		4. Production Process II	2
		5. Production Process Practicum II	1
		6. Fluid Mechanics I	2
		7. Thermodynamics II	2
		8. Calculus IV	3
		9. Heat Transfer I	2
		10. Electrical Power Engineering	2
		11. Metal Testing Practical	1
		12. Numerical Analysis	2
		Semester V	
		1. Machine Elements II	2
		2. Research Method	2
		3. Fluid Mechanics II	2
		4. Basic Machine Phenomena Laboratory	1
		5. Mechanical Vibration	2
		6. Heat Transfer II	2
		7. Energy Conversion Systems	2
		8. Setting Techniques	2
		9. Metrology and Quality Control	2
		10. Entrepreneurship	2
		11. Mechatronics	2
		12. Pancasila	2
		Semester VI	
		1. Team Design Project I	2
		2. Machine Performance Practicum	1
		3. Programable Logic Control (PLC)	2
		4. Team Design Project Practicum I	1
		5. Occupational Health and Safety Environment	2
		6. Subject Area of Expertise 1	2
		7. Subject Area of Expertise 2	2
		8. Subject Area of Expertise 3	3
		9. Subject Area of Expertise 4	3
		10. Civics	2
		Semester VII	
		1. Team Design Project II	2
		2. Team Design Project Practicum II	1
		3. Internship	2
		4. Field Study and Community Service	4

			5. Project Management	2
			Semester VIII	
			1. Thesis	6
F.	Value Propositions	:	1. Center of Excellence (CoE) 2. International Classes 3. Professional Center of <i>Teknik Mesin</i> (PROCENTM)	