

## STUDY PROGRAM INFORMATION

<b>A.</b>	<b>Name of Study Program</b>	:	Industrial Engineering
	<b>Level of Study</b>	:	Bachelor's Degree
	<b>Faculty</b>	:	Engineering
<b>B.</b>	<b>Vision</b>	:	Becoming a leading industrial engineering department in the design, improvement, and management of sustainable industrial systems based on Islamic values
<b>C.</b>	<b>Graduate Learning Outcomes</b>	:	<ol style="list-style-type: none"> <li>1. Generating industrial engineering graduates who can work individually or collaboratively in teams to develop and design integrated industrial systems</li> <li>2. Generating industrial engineering graduates who can analyze problems and providing solutions in the form of engineering, manufacturing, and management, as well as evaluating industrial systems</li> <li>3. Being able to continue lifelong learning independently and professionally</li> </ol>
<b>D.</b>	<b>Learning Outcomes</b>	:	<ol style="list-style-type: none"> <li>1. Being able to comprehend theoretical concepts of natural sciences, applied engineering mathematics; engineering fundamentals, engineering sciences, and engineering design necessary for the analysis and design of integrated systems (LGO 10)</li> <li>2. Being able to design integrated systems that meet the necessary standards and various realistic multi-faceted constraints (e.g., technical, legal, economic, environmental, social, political, health and safety, sustainability) and involve various stakeholders and identify and/or utilize the potential of local and national resources with a global perspective in the field of industrial engineering (LGO 2)</li> <li>3. Being able to design and conduct laboratory and/or field experiments and analyze and interpret data to support industrial engineering decision-making processes (LGO 3)</li> <li>4. Being able to identify, formulate, analyze, and solve complex problems in the field of industrial engineering (LGO 4)</li> <li>5. Being able to apply modern engineering methods, skills, and tools required in industrial engineering practice (LGO 5)</li> <li>6. Being able to communicate effectively, both verbally and in writing (LGO 6)</li> <li>7. Being able to plan, complete, and evaluate tasks while considering the given constraints (LGO 7)</li> <li>8. Being able to work in multidisciplinary and multicultural teams (LGO 8)</li> <li>9. Being able to be responsible to society, accountable, and exercise professional ethics in solving industrial engineering problems (LGO 9)</li> <li>10. Being able to engage in lifelong learning, including access to relevant knowledge on current issues (LGO 10)</li> <li>11. Being able to demonstrate devotion to God Almighty and possess progressive character and attitude in national and state life, as well as a global and sustainable perspective based on the values of Progressive Islam and Pancasila (LGO 11)</li> </ol>

E.	Courses	:	Course Name	Total of Credit
			<b>Semester 1</b>	
			Indonesian Language	2
			Faith and Humanity	1
			Productive Skills of FLSP	2
			Physics I	3
			Calculus I	2
			Mathematics	2
			Engineering Materials	2
			Technical Drawing	3
			Introduction to Industrial Engineering	2
			Sustainable Development Insights	1
			AutoCAD Practicum	0
			<b>Semester 2</b>	
			Worship and Human Relations	1
			English Proficiency Test Preparation Course	2
			Physiology	3
			Physics II	3
			Calculus II	3
			Pancasila	2
			Physics Practicum	1
			Probability Theory	3
			Cost Analysis and Control	2
			Inventor Design Practicum	0
			<b>Semester 3</b>	
			Manufacturing Process	3
			Muhammadiyah Studies	1
			Linear Algebra	2
			Calculus III	2
			Engineering Mechanics	2
			Statistics	3
			Measurement and Work System Design	3
			Operations Research I	3
			Civics	2
			<b>Semester 4</b>	
			Chemistry	2
			Islam and Science, Technology, and Arts	1
			Organizational Behavior	2
			Operations Research II	3
			Ergonomics	3
			Production Planning & Control	3
			Programming Logic	3
			Quality Control and Assurance	3
			Industrial Ecology	2
			<b>Semester 5</b>	
			Information System Analysis and Design	3

			System Modeling	2	
			Sustainable Product Design and Development	3	
			Occupational Safety and Health	2	
			Integrated Practicum	2	
			Industrial Organization Design and Management	3	
			Facility Design	3	
			Technical Economics	2	
			Enterprise Resources Planning System Practicum	1	
			<b>Semester 6</b>		
			Sustainable Supply Chain System	3	
			Sustainable Manufacturing System	2	
			Data Analytics	3	
			Industrial System Simulation	3	
			Internship	3	
			Research Methodology	2	
			Multi-Criteria Decision Analysis for Sustainable Industrial Systems	3	
			Entrepreneurship	2	
			<b>Semester 7</b>		
			Integrated System Design	4	
			Elective Course 1	3	
			Elective Course 2	3	
			Community Service	4	
			<b>Semester 8</b>		
			Thesis	5	
			<b>Total</b>	<b>144</b>	
<b>F.</b>	<b>Value Propositions</b>	:	<ol style="list-style-type: none"> <li>1. Preparing students with Python programming</li> <li>2. Implementing intensive foreign language programs in the first academic year</li> <li>3. Providing international classes</li> <li>4. Providing the Centre of Excellence (CoE) program in palm oil industry</li> <li>5. Providing international student exchange and industrial internships</li> </ol>		