STUDY PROGRAM INFORMATION

A.	**Name of Study Program**	:	Informatics
	Level of Study	:	Bachelor's Degree
	Faculty	:	Engineering
B.	**Vision**	:	Becoming a leading computer science program based on Islamic values in the development of science, engineering, art, and smart technology innovation
C.	**Graduate Learning Outcomes**	:	1. Graduates can analyze problems in the field of informatics and apply computational principles and related disciplines to design innovative solutions that are intelligent and valuable to organizations 2. Graduates can design, develop, and evaluate innovative and intelligent computing-based solutions with an appropriate approach to meet user needs 3. Graduates can act professionally based on Islamic values and Pancasila and are committed to continuous self-development through lifelong learning, as well as possessing an entrepreneurial spirit 4. Graduates can utilize and disseminate knowledge in the field of informatics to solve real-world problems and master skills in evaluating work both independently and in a team
D.	**Learning Outcomes**	:	1. 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 outlook based on progressive Islamic values and Pancasila 2. Demonstrating independence, ethics, entrepreneurial spirit, and professional responsibility, as well as practice the concept of lifelong learning in the field of Informatics 3. Demonstrating a solid understanding of theoretical concepts in mathematics and algorithms as a foundation for knowledge development and problem solving in the field of Informatics 4. Analyzing complex computing problems and providing solutions based on the principles of computing and other relevant sciences, considering insights from the development of transdisciplinary science 5. Mastering self-management skills, team management skills, teamwork skills, and the ability to communicate professionally 6. Compiling and publishing scientific descriptions of research results, intellectual works, and ideas in the field of informatics 7. Mastering programming skills in efficient, secure, and further developable software development 8. Mastering management skills in developing multi-platform-based essential service systems 9. Mastering application development skills to solve specific problems oriented towards artificial intelligence

E.	**Courses**	:	**Semester I**	
			1. Faith and Humanity (AIK 1)	1 credit
			2. Productive Skills of Foreign Language for Specific Purposes (FLSP 1)	2 credits
			3. Pancasila Education	2 credits
			4. Fundamental Programming	3 credits
			5. Computer Architecture	2 credits
			6. Calculus	2 credits
			7. Linear Algebra and Matrices	2 credits
			8. Database Systems	3 credits
			9. Indonesian Language	2 credits
			10. Sustainable Development Insights	1 credit
			Semester II	
			1. Computer Organization	2 credits
			2. Worship and Human Relations (AIK 2)	1 credit
			3. Foreign Language for Specific Purposes 2 (FLSP 2)	2 credits
			4. Discrete Mathematics	3 credits
			5. Civics Education	2 credits
			6. Data Communication	2 credits
			7. Object-oriented Programming	3 credits
			8. Human-Computer Interaction	2 credits
			9. Operations Systems	3 credits
			Semester III	
			1. Programming Algorithms	3 credits
			2. Data Structures	3 credits
			3. Statistics and Probability	3 credits
			4. Numerical Methods	2 credits
			5. Muhammadiyah Studies (AIK 3)	1 credit
			6. Formal Languages and Automata Theory	2 credits
			7. Computer Networks	3 credits
			8. Computer Graphics	2 credits
			Semester IV	
			1. Advanced Programming Techniques	3 credits

			2. Cross-Platform Programming	4 credits
			3. Islam and Science, Technology, and Arts (AIK 4)	1 credit
			4. Team Collaboration	2 credits
			5. Requirements Engineering	3 credits
			6. Artificial Intelligence	3 credits
			7. Network Management	3 credits
			Semester V	
			1. Entrepreneurship	2 credits
			2. Software Architecture and Design	3 credits
			3. User Experience Design	3 credits
			4. Data Mining	3 credits
			5. Machine Learning	3 credits
			6. System Security	3 credits
			7. IoT Technology	3 credits
			Semester VI	
			1. Game Design and Programming	4 credits
			2. Software Quality Assurance	3 credits
			3. Software Development	3 credits
			4. Deep Learning	2 credits
			5. Digital Forensics	3 credits
			6. Parallel and Distributed Computing	3 credits
			7. Practical Work Experience	2 credits
			Semester VII	
			1. Natural Language Processing	3 credits
			2. Digital Image Processing and Computer Vision	3 credits
			3. Generative Artificial Intelligence	2 credits
			4. Professional Ethics	2 credits

			5. Research Methods and Scientific Writing	2 credits
			6. Internship	4 credits
			7. Capstone Project	4 credits
			Semester VIII	
			1. Thesis	6 credits
			Total	**144 credits**
F.	**Value Propositions**	:	1. Preparing students with Python programming 2. Implementing intensive foreign language program in the first academic year 3. Providing international classes	