

Undergraduate Informatics

Total credits that must be taken to be a Bachelor of Informatics Engineering is 144 credits. Rules of the curriculum and course prerequisite is made in such a way to help students finish college on time or even below the target time (8 semesters).

There are six concentration in this field. There are:

Network and computer security, Multimedia and computer vision, Computing and intelligent systems, Information systems, Software engineering, and Medical Informatics

1 st Semester	2 nd Semester
Religion Education	Ibadah and Akhlak
State Philosophy	Discrete Mathematics
English	Algorithms and Programming 2
Calculus	Computer Organization and Architectures
Logic and Mathematic	Operating Systems
Introduction to Information Technology	Lab. Work on Operating Systems
Algorithms and Programming 1	Database
Lab. Work on Algorithms and Programming 1	Lab. Work on Database
3 rd Semester	4 th Semester
Socialization	Islamic Leadership
Linear and Matrix Algebra	Statistics and Probability
Information Systems	Numerical Methods
Multimedia	Software Engineering
Object-Oriented Programming	Data Structures
Lab. Work on Object-Oriented Programming	Lab. Work on Data Structures
Computer Networks	Web Programming
Lab. Work on Computer Networks	Lab. Work on Web Programming

5 th Semester	6 th Semester
<p>Islamic Thought and Civilization</p> <p>Enterpreneurships</p> <p>Operation Research</p> <p>Computer Graphics</p> <p>Automata and Language Theory</p> <p>Artificial Intelligence</p> <p>Human and Computer Interaction</p>	<p>Civil Education</p> <p>Research Methodology</p> <p>Data Mining</p> <p>Information Technology Management</p> <p>Elective Course</p> <p>Elective Course</p> <p>Elective Course</p>
7 th Semester	8 th Semester
<p>Field Work</p> <p>Community Service</p> <p>Elective Course</p> <p>Elective Course</p> <p>Elective Course</p> <p>Elective Course</p>	<p>Professional Ethics</p> <p>Information Technology in Society</p> <p>Final Assignment</p>

Elective Course	
Network and Computer Security	Multimedia and Computer Vision
Distributed Systems Network Management Wireless Networks and Mobile Systems Parallel Processing Wide Area Networks Computer System Security Ethical Hacking Computer Forensics Cyber Law	Computer -Aided Learning 3D Computer Graphics Game Development Game Programming Computer Animation Image Processing Techniques Linear Transformations Pattern Recognition Techniques Machine Learning
Computing and Intelligent System	Information System
Fuzzy Logics Evolutionary Computation Artificial Neural Network Expert Systems Robotics Non-Procedural Programming Agent Programming Machine Learning Natural Language Processing	Decision Support Systems Geographical Information Systems Information System Audit Database Management Systems Database Administration Database Technologies Business Process Management Web Services Network Management Computer System Security Enterprise Information Systems
Software Engineering	Medical Informatics
Component-Oriented Programming Object-Oriented Design Patterns Agile Software Development XML Technologies Java Technology Web Services	Health Information Systems Decision Support Systems Telemedicine Medical Imaging

Semantic Web	
Web Engineering	