



# CURRICULUM

## INFORMATION TECHNOLOGY

Academic Year 2020/2021

SEMESTER 1	SKS	ECTS	SEMESTER 2	SKS	ECTS
English 1	2	3	English 2	2	3
Algorithms & Object-Oriented Programming	4	6	Data Structures & Algorithms	3	4
Data Science Programming Language	2	3	Server-side Web Programming	4	6
Relational Database Design & Lab	3	4	Web Development Life Cycle Project	2	3
Discrete Mathematics	2	3	Introduction to Entrepreneurship	2	6
Web Design Fundamental	2	4	Ethics & Religious Philosophy	2	3
Analytical & Creative Thinking	3	3	Linear Algebra for Data Science	2	3
Statistics for Data Science	2	3	Probability for Data Science	2	3
Linux Fundamental & Computer Network	2	3	System Admin & Maintenance	2	3
<b>TOTAL</b>	<b>22</b>	<b>32</b>	<b>TOTAL</b>	<b>21</b>	<b>34</b>

SEMESTER 3	SKS	ECTS	SEMESTER 4	SKS	ECTS
English 3	2	3	English 4	2	3
Client-side Front-End Web Development	2	4	Back-End Web Development & tools	3	4
Personal & Professional Development	4	4	Framework-based Web Programming	3	4
Non-Relational Database Design & Lab	3	4	Pancasila & Civic	3	4
Advanced Object-Oriented Programming	3	4	Back-end System Administration	3	4
Computer Security & Lab	3	4	Mobile Web Service & API (Middleware)	2	4
UI/UX Design & Evaluation	2	3	Streaming Subjects	5	7
Network Security & Lab	3	4			
<b>TOTAL</b>	<b>22</b>	<b>30</b>	<b>TOTAL</b>	<b>21</b>	<b>30</b>

Package of Streaming subject IT Technopreneurship		
Digital Marketing for Entrepreneurship	3	3
Applied Data Analytics for Business	2	3
Package of Streaming subject IT Data Science & AI		
Introduction to Artificial Intelligence and Laboratory	3	3
Math for Machine Learnings	2	4

<b>SEMESTER 5</b>	<b>SKS</b>	<b>ECTS</b>
Internship 1	2	6
Indonesian Language	2	3
Cross-Platform Mobile App Development I	2	3
Cross Study Program or Faculty Elective Course	2	3
Streaming Subjects	5	9
<b>TOTAL</b>	<b>13</b>	<b>24</b>
Package of Streaming subject IT Technopreneurship		
Business Creation	3	6
Business Intelligence & Data Visualization	2	3
Package of Streaming subject IT Data Science & AI		
Pattern Recognition & Image Processing	3	6
Big Data Infrastructure	2	3

<b>SEMESTER 7</b>	<b>SKS</b>	<b>ECTS</b>
English 5	2	3
Research Methodology	2	3
Data Mining	3	4
Native Mobile App Development	4	6
Secure Software Development Life Cycle	2	3
Streaming Subjects	7	10
<b>TOTAL</b>	<b>20</b>	<b>29</b>
Package of Streaming subject IT Technopreneurship		
Business Development	3	4
Full-stack Data Analytics Project in Business	2	3
Business Coaching II	2	3
Package of Streaming subject IT Data Science & AI		
Machine Learning & Deep Learning	4	6
Big Data Analytics	3	4

<b>SEMESTER 6</b>	<b>SKS</b>	<b>ECTS</b>
Intenship 2	6	20
ERP and Lab	2	3
Current Developments in Business IT	1	2
Challenges in Int. Management (Globalization and CSR)	1	2
Streaming Subjects	2	3
<b>TOTAL</b>	<b>12</b>	<b>30</b>
Package of Streaming subject IT Technopreneurship		
Business Coaching I	2	3
Package of Streaming subject IT Data Science & AI		
Data Science using Python	2	3

<b>SEMESTER 8</b>	<b>SKS</b>	<b>ECTS</b>
Thesis	6	20
Professional Competence Assessment (PCA)	3	4
Character and Professional Development Program (CPDP)	2	3
Cross-Platform Mobile App Development II	2	4
<b>TOTAL</b>	<b>13</b>	<b>31</b>

**Total Compulsory : 144 SKS**  
**Total ECTS : 240 ECTS**  
**SKS : Satuan Kredit Semester**  
**ECTS : European Credit Transfer System**