**A. Program Teknologi Informasi *Software Engineering* (TI SE)**

# Curriculum Contents

## Semester 1

| Modules | Credits |
|---|---|
| Introduction to Information Technology | 3 |
| Introduction to Information Technology Project | 1 |
| Algorithm and Programming | 2 |
| Algorithm and Programming Project | 1 |
| Relational Database Design | 2 |
| Implementing Database Design on MS SQL Server | 3 |
| Implementing Database Design on MS SQL Server Project | 1 |
| Tools and Technique for Analyzing Data | 3 |
| Tools and Technique for Analyzing Data Project | 1 |
| Operating System | 2 |
| Total Credits | 19 |

## Semester 2

| Modules | Credits |
|---|---|
| Object Oriented Programming | 3 |
| Object Oriented Programming Project | 1 |
| Java Programming | 3 |
| Java Programming Project | 1 |
| Introduction to Web Programming | 3 |
| Introduction to Web Programming Project | 1 |
| Web Application | 3 |
| Web Application Project | 1 |
| Leadership and Communication Skills | 2 |
| Algorithm and Data Structure | 2 |
| Total Credits | 20 |

## Semester 3

| Modules | Credits |
|---|---|
| Developing Enterprises Information System using Framework | 3 |
| Developing Enterprises Information System using Framework Project | 1 |
| Automated Software Testing | 3 |
| Automated Software Testing Project | 1 |
| Mobile Computing | 3 |
| Mobile Computing Project | 1 |
| Project Management using DevOps | 2 |
| Project Management using DevOps Project | 1 |
| Collaborative Development using Repository System | 2 |
| Information Systems Architecture and Technology | 2 |
| Total Credits | 19 |

| Semester 4 | |
|---|---|
| **Modules** | **Credits** |
| Human Computer Interaction | 3 |
| Human Computer Interaction Project | 1 |
| Web Programming for Mobile Devices | 3 |
| Web Programming for Mobile Devices Project | 1 |
| Cloud Computing | 3 |
| Cloud Computing Project | 1 |
| Security Concept | 2 |
| Software Engineering | 3 |
| Professional Ethics | 2 |
| Total Credits | 19 |