

# COURSES TAKEN IN INFORMATION TECHNOLOGY

Academic Year 2018/2019

# CENTER OF EXCELLENCE IN TEACHING

Welcome to President University, where tomorrow's leaders come together. You will be entering dynamic university environments where international students make up over 10% of the student population so your experience will be truly international. You will able to learn and share not only with your Indonesia peers but also those from other countries.

Our strong industry and professional partnership – with more than 1700 multinational companies from 30 countries [USA, Canada, UK, Germany, France, The Netherlands, China, Korea, Japan, Taiwan, Malaysia, Singapore, Australia] at JABABEKA INDUSTRIAL ESTATE, will ensure our graduates will leave with the skills and knowledge employment value most. The following is the key and brief courses will be taken for each study program.

## **COURSE GUIDELINE**

### 1. Introduction to IT

- 2. Programming Concept
- 3. Web Design
- 4. Discrete Mathematics
- 5. Database System
- 6. Client-Side Internet Programming
- 9. Matrix and Vector
- 10. Visual Programming
- 11. Server-side Internet Programming
- 12. Data Structure and Algorithm

# CORES

- 13. Database Management System
- 14. Digital System
- 15. Formal Language and Automation
- 16. Computer Network
- 17. Design and Analysis of Algorithms
- 18. Computer Graphics and Animation
- 19. Wireless Computing
- 20. Probability and Statistics
- 21. Computer Organization and Architecture
- 22. Visual Programming

- 23. Server-side Internet Programming
- 24. Computer Network
- 25. 3D Computer Graphics and Animation
- 26. Computing Network & Security
- 27. Network Socket Programming
- 28. Operating System Design
- 29. Software Engineering
- 30. IT Project Management
- 31. Artificial Intelligence
- 32. Mobile Programming

### **ELECTIVES COURSES**

- 1. Speech Recognition
- 2. Computer Vision
- 3. Robotics
- 4. Image Processing
- 5. Compiler Design
- 6. Cryptography
- 7. Web Semantic

- 8. Natural Language Processing
- 9. Assembler
- 10. 3D Game Design
- 11. Service Oriented System
- 12. Machine Learning
- 13. Micro Controller





