



# **COURSES TAKEN IN INDUSTRIAL ENGINEERING**

**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 be 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**

### **CORES**

- |   |  |  |
|---|--|--|
| 1. Entrepreneurship                       | 10. Work System Analysis and Design          | 19. Information System Analysis and Design |
| 2. Engineering Drawing                    | 11. Manufacturing Process                    | 20. Supply Chain Management                |
| 3. Introduction to Industrial Engineering | 12. Operational Research                     | 21. Product Planning and Inventory Control |
| 4. Calculus                               | 13. Engineering Mechanics                    | 22. Manufacturing System and Automation    |
| 5. Basic Physics                          | 14. Engineering Economics                    | 23. Product Design and Development         |
| 6. Computer Programming                   | 15. Start-Up (Initiating, Managing, Growing) | 24. Production System and ERP System       |
| 7. Material Engineering                   | 16. Quality Control                          | 25. Research Methodology                   |
| 8. Industrial Statistics I                | 17. System Simulation and Modelling          |  |
| 9. Integrated Business                    | 18. Facility Design                          |  |

### **ELECTIVES COURSES**

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| 1. Reliability and Preventive Maintenance Management | 9. Inventory Management                  | 17. Health, Safety, and Environmental        |
| 2. Quality Management                                | 10. Technology and Innovation Management | 18. Data mining and Knowledge Management     |
| 3. Project Management                                | 11. Human Resources and Management       | 19. Management of Technology                 |
| 4. Experimental Design                               | 12. Optimization Techniques              | 20. Risk and Change of Manufacturing Company |
| 5. Logistics and Distribution Management             | 13. CAD CAM                              | 21. Advance Production System                |
| 6. Multivariate Analysis                             | 14. Advanced Ergonomic                   | 22. Automation Production System             |
| 7. Service Industry Design                           | 15. Lean Manufacturing                   |  |
| 8. Scheduling Technique                              | 16. Flexible Manufacturing System        |  |

