

# BFI CURRICULUM STRUCTURE INTAKE 2024/2025 ONWARDS

## Sarjana Muda Kejuruteraan Pembuatan dengan Kepujian Bachelor of Manufacturing Engineering with Honours

| BACHELOR OF MANUFACTURING ENGINEERING WITH HONOURS        |  |   |   |  |   |                                |   |   |   |   |  |
|---|--|---|---|--|---|--------------------------------|---|---|---|---|--|
| FIRST YEAR  |  | SECOND YEAR                                 |   | THIRD YEAR                               |   | FOURTH YEAR                    |   | ELECTIVE COURSE                             |   |   |  |
| 17  | 16   | 17  | 17  | 17                                       | 17  | 5                              | 15  | 15  |   |   |  |
| BFI1711<br>Introduction to Engineering                    | BFI1113<br>Materials Science                   | BFI1233<br>Strength of Materials            | BFI2233<br>Thermodynamics                         | BFI3323<br>Mechanical Design             | BFI3103<br>Mechanical Vibration             | BFI3995<br>Industrial Training | BFI3523<br>Production Planning & Control    | BFI4533<br>Industrial Automation            | BFI4743<br>Advanced Quality Engineering     | BFI4753<br>Lean Production System               |  |
| BFI1213<br>Statics  | BFI2253<br>Fluid Mechanics                     | BFI1223<br>Dynamics                         | BFI2523<br>Quality Engineering                    | BFI3423<br>Measurement & Instrumentation | KUK3022<br>Engineers in Society             |                                | BFI4812<br>Undergraduate Research Project 1 | BFI4824<br>Undergraduate Research Project 2 | BFI4833<br>Sustainable Manufacturing System | BFI4853<br>Intelligent Engineering Optimization |  |
| BEL1113<br>Fund of Electrical Eng.                        | BFI1722<br>ME Engineering Lab 1                | BFI3753<br>Manufacturing Processes          | BFI2272<br>ME Engineering Lab 2                   | BFI3282<br>ME Engineering Lab 3          | BFI3762<br>ME Engineering Lab 4             |                                | KUK4412<br>Project Management               |   | BFI4863<br>Smart Manufacturing              | BFI4823<br>Industrial Simulation                |  |
| KUK1213/<br>BCI1103<br>Computer Programming for Engineers | BFI2313<br>Computer Aided Design               | KUK2433<br>Numerical Methods & Optimization | BFI3731<br>Introductory Six Sigma                 | BFI3741<br>Intermediate Six Sigma        | BFI4771<br>Advanced Six Sigma               |                                |   | *****3<br>Technical Elective 1              | *****<br>Technical Elective 2               | BFI4583<br>Ergonomics                           |  |
| BUM2413<br>Applied Statistics                             | BUM2133<br>Ordinary Differential Equation      | UHC1012<br>Falsafah dan Isu Semasa          | KUK2142<br>Engineering Economics                  | BMM3413<br>Automatic Control             | BFI2513<br>Manufacturing System             |                                | *****<br>Free Elective 1                    | *****<br>Free Elective 2                    |   |   |  |
| UQA2002<br>Co-curriculum                                  | UHL2422<br>English for Technical Communication | UHC1032<br>KIAR                             | BUM2123<br>Applied Calculus                       | BFI3331<br>Integrated Design Project 1   | BFI4343<br>Integrated Design Project 2      |                                | UGE2002<br>Techno-prenurship                | UHE3**2<br>Elective Social Science          | BFM4023<br>Artificial Intelligence          | BFM4633<br>Data Analytics                       |  |
| UHL2400<br>Fund of English Language                       |  | UHF1**1<br>Foreign Language Level 1         | UHL2432<br>English For Professional Communication | KUK3562<br>Occupational Safety & Health  | BFI2433<br>Advanced Manufacturing Processes |                                |   |   | BFM4523<br>Autonomous Robotic System        | BFM3303<br>Electrical Drive System              |  |
| UHL2412<br>English For Academic Communication             |  | UHF2**1<br>Foreign Language Level 2         | UHC2022<br>Penghayatan Etika dan Peradaban        |  |   |                                |   |   |   |   |  |
|   |  |   |   |  |   |                                | <b>136 CREDIT HR</b>                        |   |   |   |  |
| Matriculation / STPM / Diploma                            |  | <b>TECHNICAL ELECTIVE</b>                   |   |  |   |                                |   |   |   |   |  |
|   |  | <b>FREE ELECTIVE</b>                        |   |  |   |                                |   |   |   |   |  |
|   |  | <b>SUBJECT SERVICE</b>                      |   |  |   |                                |   |   |   |   |  |
|   |  | <b>UNIVERSITY</b>                           |   |  |   |                                |   |   |   |   |  |
|   |  | <b>FACULTY</b>                              |   |  |   |                                |   |   |   |   |  |
| <b>PROGRAMME</b>  |  |   |   |  |   |                                |   |   |   |   |  |
| <b>ELECTIVE</b>   |  |   |   |  |   |                                |   |   |   |   |  |
| Bachelor of Manufacturing Engineering with Honours        |  |   |   |  |   |                                |   |   |   |   |  |