

# Electrical and Electronics Engineering

The University of Manchester

## 1<sup>st</sup> Year

|    |     |   |
|----|-----|---|
| 01 | EEE | Microcontroller Engineering-1   |
| 02 | EEE | Electronic Materials  |
| 03 | EEE | Circuit Analysis  |
| 04 | EEE | Digital System Design-1   |
| 05 | EEE | Energy Transport and Conversion   |
| 06 | EEE | Electromagnetic Fields  |
| 07 | EEE | Electronic Circuit Design-1   |
| 08 | EEE | C Programming   |
| 09 | EEE | Measurements and Analytical Software  |
| 10 | MAT | Vector, Coordinate Systems, Complex Numbers, Hyperbolic Functions, Differentiation, Integration |
| 11 | MAT | Integration, Series, Multivariate Calculus, Differential Equations,                             |

## 2<sup>nd</sup> Year

|    |     |   |
|----|-----|---|
| 01 | EEE | Microcontroller Engineering-2                       |
| 02 | EEE | Machines, Drives, and Power Electronics             |
| 03 | EEE | Digital System Design-2                             |
| 04 | EEE | Electronic Circuit Design-2                         |
| 05 | EEE | Signals and Systems                                 |
| 06 | EEE | Generation and Transport of Electrical Energy       |
| 07 | EEE | Control Systems-1                                   |
| 08 | EEE | Analogue and Digital Communications                 |
| 09 | EEE | Engineering Management                              |
| 10 | EEE | Embedded Systems Project                            |
| 11 | MAT | Laplace Transforms, Vector Calculus, Linear Algebra |

## 3<sup>rd</sup> Year

|    |      |  |
|----|------|--|
| 01 | EEE  | Numerical Analysis                         |
| 02 | EEE  | Data Networking                            |
| 03 | EEE  | Digital Signal Processing                  |
| 04 | EEE  | Transmissions Lines and Optical Fibers     |
| 05 | EEE  | Computer Systems Architecture              |
| 06 | EEE  | Control Systems-2                          |
| 07 | EEE  | Power Electronics                          |
| 08 | EEE  | Sensors and Instrumentation                |
| 09 | EEE  | Power System Analysis                      |
| 10 | EEE  | Power System Plant and Protection          |
| 11 | EEE  | Concurrent Systems                         |
| 12 | EEE  | Digital Mobile Communications              |
| 13 | EEE  | Electrical Drive Systems                   |
| 14 | EEE  | High Speed Digital and Mixed Signal Design |
| 15 | MCEL | Commercial Technology Development          |