

**B.ENG (ELECTRICAL & ELECTRONIC ENGINEERING) AND BA (ECONOMICS)**  
(AY2019 Cohort)

| LIST OF COURSES THAT CONTRIBUTE TOWARDS B.ENG (ELECTRICAL & ELECTRONIC ENGINEERING) |          |   |  | AU LOAD           |  |
|---|----------|---|--|-------------------|--|
| DISCIPLINE REQUIREMENT  | CORE     | MH1810  | MATHEMATICS 1  | 3                 | 78 AUs<br>(PA OPTION)<br><br>83 AUs<br>(PI OPTION)   |
|   |          | MH1811  | MATHEMATICS 2  | 3                 |  |
|   |          | PH1011  | PHYSICS **   | 3                 |  |
|   |          | FE1073  | AN INTRODUCTION TO ENGINEERING & PRACTICES           | 1                 |  |
|   |          | EE1002  | PHYSICS FOUNDATION FOR ELECTRICAL & ELECTRONIC ENGRG | 4                 |  |
|   |          | EE1003  | INTRODUCTION TO MATERIALS FOR ELECTRONICS            | 3                 |  |
|   |          | EE1005  | FROM COMPUTATIONAL THINKING TO PROGRAMMING           | 3                 |  |
|   |          | EE1071  | EEE LABORATORY 1                                     | 1                 |  |
|   |          | EE2001  | CIRCUIT ANALYSIS                                     | 4                 |  |
|   |          | EE2002  | ANALOG ELECTRONICS                                   | 4                 |  |
|   |          | EE2003  | SEMICONDUCTOR FUNDAMENTALS                           | 4                 |  |
|   |          | EE2004  | DIGITAL ELECTRONICS                                  | 4                 |  |
|   |          | EE2006  | ENGINEERING MATHEMATICS I                            | 4                 |  |
|   |          | EE2007  | ENGINEERING MATHEMATICS II                           | 4                 |  |
|   |          | EE2008  | DATA STRUCTURES AND ALGORITHMS                       | 4                 |  |
|   |          | EE2010  | SIGNALS AND SYSTEMS                                  | 4                 |  |
|   |          | EE2073  | INTRODUCTION TO EEE DESIGN AND PROJECT               | 2                 |  |
|   |          | EE3001  | ENGINEERING ELECTROMAGNETICS                         | 4                 |  |
|   |          | EE3002  | MICROPROCESSORS                                      | 4                 |  |
|   |          | EE3276/<br>EE3279                                 | PROFESSIONAL ATTACHMENT /<br>PROFESSIONAL INTERNSHIP | 5/10              |  |
|   | EE3080   | DESIGN AND INNOVATION PROJECT                     | 2  |                   |  |
|   | EE4080   | FINAL YEAR PROJECT                                | 8  |                   |  |
|   | UE       | HE1001  | MICROECONOMIC PRINCIPLES                             | 3                 | 24 AUs<br>12 AUS from<br>compulsory Year 1<br>& 2 Economics<br>courses.<br>Remaining 12 AUS<br>from Year 3 & 4<br>Economics<br>courses that yield<br>the highest CGPA. |
|   |          | HE1002  | MACROECONOMIC PRINCIPLES                             | 3                 |  |
|   |          | HE1005  | INTRO TO PROBABILITY & STATISTICAL INFERENCE         | 3                 |  |
|   |          | HE2005  | PRINCIPLES OF ECONOMETRICS                           | 3                 |  |
|   |          | HEXXXX  | ECONOMICS COURSE 1                                   | 3                 |  |
|   |          | HEXXXX  | ECONOMICS COURSE 2                                   | 3                 |  |
|   |          | HEXXXX  | ECONOMICS COURSE 3                                   | 3                 |  |
|   |          | HEXXXX  | ECONOMICS COURSE 4                                   | 3                 |  |
|   | MAJOR PE | EE3XXX  | ELECTIVE 1   | 3                 | 19 AUs   |
| EE3XXX  |          | ELECTIVE 2  | 3  |                   |  |
| EE4XXX  |          | DESIGN ELECTIVE 1                                 | 2  |                   |  |
| EE4XXX  |          | DESIGN ELECTIVE 2                                 | 2  |                   |  |
| EE4XXX  |          | TECHNICAL ELECTIVE 1                              | 3  |                   |  |
| EE4XXX  |          | TECHNICAL ELECTIVE 2                              | 3  |                   |  |
| GER-CORE  | EG0001   | ENGINEERS AND SOCIETY                             | 3  | 14 AUs            |  |
|   | EE0005   | INTRO TO DATA SCIENCE AND ARTIFICIAL INTELLIGENCE | 3  |                   |  |
|   | GC0001   | SUSTAINABILITY: SEEING THROUGH THE HAZE           | 1  |                   |  |
|   | HY0001   | ETHICS AND MORAL REASONING                        | 1  |                   |  |
|   | ET0001   | ENTERPRISE AND INNOVATION                         | 1  |                   |  |
|   | HW0188   | ENGINEERING COMMUNICATION I                       | 2  |                   |  |
|   | HW0288   | ENGINEERING COMMUNICATION II                      | 2  |                   |  |
|   | ML0003   | KICKSTART YOUR CAREER SUCCESS                     | 1  |                   |  |
| GER-UE  |          | ELECTIVES   | 5  | 5 AUs (PA OPTION) |  |
| <b>TOTAL</b>  |          |   |  | <b>140 AUs</b>    |  |

\*\* Students without 'A' level Physics will take PH1012 (FE1012) Physics A (4AU)

**BEng (INFORMATION ENGINEERING & MEDIA) AND BA (ECONOMICS) (AY2019 Cohort)**

| List of courses that contribute towards BEng (Information Engineering & Media) |  |                   |   | AU Load                       |  |                          |   |   |
|--|--|-------------------|---|-------------------------------|--|--------------------------|---|---|
| <b>Discipline Requirement</b>  | Core   | MH1810            | Mathematics 1                                     | 3                             | 83 AU (PA Option)<br>88 AU (PI Option) |                          |   |   |
|  |  | MH1811            | Mathematics 2                                     | 3                             |  |                          |   |   |
|  |  | EE1005            | From Computational Thinking To Programming        | 3                             |  |                          |   |   |
|  |  | PH1011            | Physics **  | 3                             |  |                          |   |   |
|  |  | DA1000            | Thinking and Communicating Visually I             | 3                             |  |                          |   |   |
|  |  | DA2002            | Thinking and Communicating Visually II            | 3                             |  |                          |   |   |
|  |  | DA3000            | Thinking and Communicating Visually III           | 3                             |  |                          |   |   |
|  |  | IM1001            | Data Structures and Algorithms                    | 4                             |  |                          |   |   |
|  |  | IM1002            | Analog Electronics                                | 3                             |  |                          |   |   |
|  |  | IM1003            | Object-Oriented Programming                       | 3                             |  |                          |   |   |
|  |  | IM1004            | Digital Electronics                               | 4                             |  |                          |   |   |
|  |  | IM2001            | Software Engineering                              | 3                             |  |                          |   |   |
|  |  | IM2002            | Microprocessors                                   | 4                             |  |                          |   |   |
|  |  | IM2003            | Computer Communications                           | 3                             |  |                          |   |   |
|  |  | IM2004            | Signals and Systems                               | 4                             |  |                          |   |   |
|  |  | IM2006            | Engineering Mathematics I                         | 4                             |  |                          |   |   |
|  |  | IM2007            | Engineering Mathematics II                        | 4                             |  |                          |   |   |
|  |  | IM2073            | Introduction to Design and Project                | 2                             |  |                          |   |   |
|  |  | IM3001            | Digital Signal Processing                         | 3                             |  |                          |   |   |
|  |  | IM3002            | Communication Principles                          | 3                             |  |                          |   |   |
|  |  | IM3003            | Information Security                              | 3                             |  |                          |   |   |
|  |  | IM3276/<br>IM3279 | Professional Attachment / Professional Internship | 5/10                          |  |                          |   |   |
|  |  | IM3080            | Design and Innovation Project                     | 2                             |  |                          |   |   |
|  |  | IM4080            | Final Year Project                                | 8                             |  |                          |   |   |
|  |  |                   | UE  | HE1001                        |  | Microeconomic Principles | 3 | <b>21 AUs</b><br>12 AUs from compulsory Year 1 and 2 Economics courses.<br>Remaining 9 AUs from 3 <sup>rd</sup> and 4 <sup>th</sup> year Economics courses that yield the highest CGPA. |
|  |  |                   |   | HE1002                        |  | Macroeconomic Principles | 3 |   |
| HE1005   | Intro to Probability & Statistical Inference |                   |   | 3                             |  |                          |   |   |
| HE2005   | Principles of Econometrics                   |                   |   | 3                             |  |                          |   |   |
| HExxxx   | Economics Course 1                           |                   |   | 3                             |  |                          |   |   |
| HExxxx   | Economics Course 2                           |                   |   | 3                             |  |                          |   |   |
| HExxxx   | Economics Course 3                           |                   |   | 3                             |  |                          |   |   |
| Major PE   | EE4xxx                                       |                   | Design Elective 1                                 | 2                             | 13 AU                                  |                          |   |   |
|  | EE4xxx                                       |                   | Design Elective 2/Technical Elective 4            | 2                             |  |                          |   |   |
|  | EE4xxx                                       |                   | Technical Elective 1                              | 3                             |  |                          |   |   |
|  | EE4xxx                                       |                   | Technical Elective 2                              | 3                             |  |                          |   |   |
|  | EE4xxx                                       |                   | Technical Elective 3                              | 3                             |  |                          |   |   |
| <b>General Education Requirements (GER)</b>                                    | GER (Core)                                   |                   | ML0003  | Kickstart Your Career Success | 1                                      | 18 AU                    |   |   |
|  |  | EE0005            | Intro To Data Science & AI                        | 3                             |  |                          |   |   |
|  |  | GC0001            | Introduction to Sustainability                    | 1                             |  |                          |   |   |
|  |  | HY0001            | Ethics and Moral Reasoning                        | 1                             |  |                          |   |   |
|  |  | ET0001            | Entrepreneurship and Innovation                   | 1                             |  |                          |   |   |
|  |  | CS0205            | Basic Media Writing (SCI)                         | 3                             |  |                          |   |   |
|  |  | DV2008            | Interface Design (ADM) <sup>Δ</sup>               | 3                             |  |                          |   |   |
|  |  | EG0001            | Engineers and Society                             | 3                             |  |                          |   |   |
|  |  | HW0288            | Engineering Communication II                      | 2                             |  |                          |   |   |
|  | GER-UE                                       |                   | Elective  | 5                             | 5 AUs (PA Option)                      |                          |   |   |
| <b>TOTAL</b>   |  |                   |   | <b>140 AUs</b>                |  |                          |   |   |

\*\* Students without 'A' level Physics will take PH1012 (FE1012) Physics A (4AU)

<sup>Δ</sup> Students can either read CS2006 or DV2008 as GER-core