

**B.ENG (ELECTRICAL & ELECTRONIC ENGINEERING) AND BSOCSCI (ECONOMICS)  
(AY2020 Cohort)**

| LIST OF COURSES THAT CONTRIBUTE TOWARDS B.ENG (ELECTRICAL & ELECTRONIC ENGINEERING) |                               |   |   |                   | AU LOAD   |  |
|---|-------------------------------|---|---|-------------------|---|--|
| DISCIPLINE REQUIREMENT  | CORE                          | MH1810  | MATHEMATICS 1   | 3                 | 77 AUs<br>(PA OPTION)   |  |
|   |                               | MH1811  | MATHEMATICS 2   | 3                 |   |  |
|   |                               | PH1011  | PHYSICS **  | 3                 |   |  |
|   |                               | FE1073  | AN INTRODUCTION TO ENGINEERING & PRACTICES                                | 1                 |   |  |
|   |                               | EE1002  | PHYSICS FOUNDATION FOR ELECTRICAL & ELECTRONIC ENGRG                      | 4                 |   |  |
|   |                               | -   | ENGINEERING FUNDAMENTAL COURSE FROM COMPUTATIONAL THINKING TO PROGRAMMING | 3                 |   |  |
|   |                               | EE1005  | PROGRAMMING   | 3                 |   |  |
|   |                               | EE1071  | EEE LABORATORY 1  | 1                 |   |  |
|   |                               | EE2001  | CIRCUIT ANALYSIS  | 4                 |   |  |
|   |                               | EE2002  | ANALOG ELECTRONICS  | 4                 |   |  |
|   |                               | EE2003  | SEMICONDUCTOR FUNDAMENTALS  | 4                 |   |  |
|   |                               | EE2004  | DIGITAL ELECTRONICS   | 4                 |   |  |
|   |                               | EE2005  | ELECTRICAL DEVICES & MACHINES   | 3                 |   |  |
|   |                               | 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                 |   |  |
|   |                               | EE3276/   | PROFESSIONAL ATTACHMENT /   | 5/1               |   |  |
|   | EE3279                        | PROFESSIONAL INTERNSHIP                           | 0   |                   |   |  |
|   | EE3080                        | DESIGN AND INNOVATION PROJECT                     | 2   |                   |   |  |
|   | EE4080                        | FINAL YEAR PROJECT                                | 8   |                   |   |  |
|   | UE                            | HE1001  | MICROECONOMIC PRINCIPLES  | 3                 | 24 AUs<br>12 AUS from compulsory Year 1 & 2 Economics courses.<br>Remaining 12 AUS from Year 3 & 4 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                 |   |  |
|   |                               | HEXXXX  | ECONOMICS COURSE 4  | 3                 |   |  |
|   | MAJOR PE                      | EE3XXX  | ELECTIVE1   | 3                 |   |  |
|   |                               | EE3XXX  | ELECTIVE 2  | 3                 |   |  |
| EE4XXX  |                               | DESIGN ELECTIVE 1                                 | 2   |                   |   |  |
| EE4XXX  |                               | DESIGN ELECTIVE 2                                 | 2   |                   |   |  |
| EE4XXX  |                               | TECHNICAL ELECTIVE 1                              | 3   |                   |   |  |
| EE4XXX  |                               | TECHNICAL ELECTIVE 2                              | 3   |                   |   |  |
| EE4XXX  |                               | TECHNICAL ELECTIVE 3                              | 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                        | EFFECTIVE COMMUNICATION                           | 2   |                   |   |  |
|   | HW0288                        | ENGINEERING COMMUNICATION                         | 2   |                   |   |  |
| ML0003  | KICKSTART YOUR CAREER SUCCESS | 1   |   |                   |   |  |
| GER-UE  |                               | ELECTIVES   | 5   | 5 AUs (PA OPTION) |   |  |
| <b>TOTAL</b>  |                               |   |   |                   | <b>139 AUs</b>  |  |

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

**BEng (INFORMATION ENGINEERING & MEDIA) AND BSOCSCI (ECONOMICS) (wef AY2020)**

| List of courses that contribute towards BEng (Information Engineering & Media) |                   |   |  | AU Load           |  |
|--|-------------------|---|--|-------------------|--|
| <b>Discipline Requirement</b>  | Core              | MH1810  | Mathematics 1                              | 3                 | 86 AU (PA Option)<br>91 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                 |  |
|  |                   | XXXXXX  | Engineering Fundamental                    | 3                 |  |
|  |                   | 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                 | 21 AUs<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                 | 15 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                 |  |
|  |                   | EG0001  | Engineers and Society                      | 3                 |  |
|  | HW0288            | Engineering Communication                         | 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)