

## Electronic & Communication Engineering

| Prog.  | Year   | Course Code  | Course Name   | Prerequisites  | Category   |                  |                 |                 |   |   |   |   |   |
|--|--|--|---|--|--|------------------|-----------------|-----------------|---|---|---|---|---|
|  |  |  |   |  | X  | Y                | Z               | M               | J | K | L |   |   |
| Bachelor of Technology Honours in Engineering Degree | Higher Diploma in Technology   | 1  | MPZ3231   | Engineering Mathematics IA   | None   |                  |                 | 6               |   |   |   |   |   |
|  |  |  | MPZ3132   | Engineering Mathematics IB   | MPZ3231(CR)  |                  |                 | 3               |   |   |   |   |   |
|  |  |  | MEX3211   | Communicating Engineering Information  | None   | 6                |                 |                 |   |   |   |   |   |
|  |  |  | MEX3212   | Basic Thermo Fluids  | None   | 6                |                 |                 |   |   |   |   |   |
|  |  |  | ECX3210   | Electro Techniques   | MPZ3231(CR)  | 6                |                 |                 |   |   |   |   |   |
|  |  |  | ECX3150   | Electronics I  | ECX3210 (CR)   | 3                |                 |                 |   |   |   |   |   |
|  |  |  | ECX 3233  | Communication & IT   | ECX3210(CR)  | 6                |                 |                 |   |   |   |   |   |
|  |  | 2  | MPZ4230   | Engineering Mathematics II*  | MPZ3231(EL), MPZ3132(EL)   |                  |                 | 6               |   |   |   |   |   |
|  |  |  | ECX 3231  | Electrical Circuits & Measurements   | ECX3210(EL), MPZ3231(EL), MEX3211(EL)  | 6                |                 |                 |   |   |   |   |   |
|  |  |  | ECX 3232  | Electrical Power   | ECX3210(EL), MPZ3231(EL), MEX3211(EL)  | 6                |                 |                 |   |   |   |   |   |
|  |  |  | ECX4150   | Electronics II   | ECX3210(EL), ECX3150(EL), MPZ3231(EL), MEX3211(EL)   | 3                |                 |                 |   |   |   |   |   |
|  |  |  | ECX4230   | Fault Diagnosis in Electronic Circuits   | ECX3210(P), ECX3150(EL), ECX4150(CR), ECX3231(CR), MEX3211(P), MPZ3231(EL), MPZ3132 (EL)                             | 6                |                 |                 |   |   |   |   |   |
|  |  |  | ECX4233   | Communications   | ECX3210(P), MPZ3231(P), MPZ3132(EL), ECX3233(EL), MEX3211(P)   | 6                |                 |                 |   |   |   |   |   |
|  |  |  | ECX4236   | Microprocessors and Interfacing  | ECX3210(P), MPZ3231(P), MEX3211(P), [(ECX3233(EL) and {ECX3150(EL) and ECX4150(CR)}) or ECX3234(EL) or MEX3272(EL)]  | 6                |                 |                 |   |   |   |   |   |
|  |  |  | MEX4243   | Control Systems Engineering  | MPZ4230(CR), ECX3210(P), MEX3212(P) or MEX3235(P), MEX3211(P), MPZ3231(P), MPZ3132(P) and pass in further 18 credits | 6                |                 |                 |   |   |   |   |   |
|  |  | Minimum credits for the Higher Diploma in Technology               |   |  |  | 90               | 60 <sup>1</sup> | 0               | 9 | 0 | 0 | 0 | 0 |
|  |  | 3  | MPZ5230   | Engineering Mathematics III  | MPZ3231(P), MPZ3132(P), MPZ4230(EL)  |                  |                 | 6               |   |   |   |   |   |
|  |  |  | ECX5233   | Communication Theory & Systems   | ECX3233(P), MPZ3132(P), MPZ3231(P), MEX3211(P), ECX4233(EL), MPZ4230(EL)   | 6                |                 |                 |   |   |   |   |   |
|  | ECX5234  |  | Data Communications   | ECX3233(P), MPZ3231(P), MPZ3132(P), MEX3211(P)                                   | 6  |                  |                 |                 |   |   |   |   |   |
|  | ECX5243  |  | Physical & Opto electronics   | ECX3150(P), ECX4150(EL), MPZ3132(P), MEX3211(P), MPZ4230(EL)                     | 6  |                  |                 |                 |   |   |   |   |   |
|  | ECX6241  |  | Field theory  | MPZ4230(P), MPZ5230(CR)  | 6  |                  |                 |                 |   |   |   |   |   |
|  | 4  |  | ECX6151   | Digital Electronic systems   | ECX3150(P), ECX4150 (P), MPZ3231(P), MPZ3132(P), MEX3211(P), [ECX4236(EL) or ECX4230(EL)]                            | 3                |                 |                 |   |   |   |   |   |
|  |  |  | ECX6250   | Analogue Electronic systems  | ECX3150(P), ECX4150 (P), MPZ3231(P), MPZ3132(P), MEX3211(P), ECX4230(EL)   | 6                |                 |                 |   |   |   |   |   |
|  |  |  | ECX6243   | Microwave engineering & applications   | MPZ4230(P), MPZ5230(EL), ECX4233(P), ECX6241(EL)   | 6                |                 |                 |   |   |   |   |   |
|  |  |  | Select only one   |  |  |                  |                 |                 |   |   |   |   |   |
|  |  |  | ECY6595   | Individual project – Type B (Computer, Electrical, Electronic and Communication) | Pass in 18 credits at Level 5 or above from X category and Eligibility in additional 18 credits at Level 5 or above  |                  | 15              |                 |   |   |   |   |   |
|  | ECY6496  | Group project (Computer, Electrical, Electronic and Communication) | Pass in 18 credits at Level 5 or above from X category and Eligibility in additional 18 credits at Level 5 or above |  | 12   |                  |                 |                 |   |   |   |   |   |
|  | Minimum credits for the Bachelor of Technology Honours in Engineering Degree |  |   |  | 177 <sup>5</sup>   | 114 <sup>2</sup> | 12 <sup>3</sup> | 21 <sup>4</sup> | 9 | 9 | 0 | 0 |   |

<sup>1</sup> 60 credits of which at least 18 at level 4 or above

<sup>2</sup> subjected to a minimum of 45 at levels 5 and 6, of which at least 18 at level 6

<sup>3</sup> subjected to a minimum of 12 at level 6

<sup>4</sup> subjected to a minimum of 6 at level 6

<sup>5</sup> subjected to a minimum of 84 at levels 5 and 6, of which at least 36 from level 6

\* For the Higher Diploma this could be replaced with equal number of credits at Level 4 or above.