

CURRICULUM SUMMARY  
BACHELOR OF ELECTRONIC ENGINEERING (MECHATRONIC) WITH HONOURS

| YEAR | SEMESTER 1           |  |        | SEMESTER 2 |                                       |        | SEMESTER 3 |        |        |
|------|----------------------|--|--------|------------|---------------------------------------|--------|------------|--------|--------|
|      | CODE                 | COURSE   | CREDIT | CODE       | COURSE                                | CREDIT | CODE       | COURSE | CREDIT |
| 1    | UWS10103             | Nationhood and Current Development of Malaysia | 3      | UWS10202   | Ethnic Relations                      | 2      |            |        |        |
|      | UWA10102<br>UWA10202 | Islamic Studies/Moral Studies                  | 2      | UWB10202   | Effective Communication               | 2      |            |        |        |
|      | UQ* 1**01            | Co-Curriculum I                                | 1      | UQ* 1**01  | Co-Curriculum II                      | 1      |            |        |        |
|      | UWB10101             | *English for Academic Purposes                 | 1      | UWS 10303  | **Malaysian Studies and Culture       | 3      |            |        |        |
|      | UWB 1**02            | **Malay Language                               | 2      | BWM10303   | Engineering Mathematics IIE           | 3      |            |        |        |
|      | BWM10103             | Engineering Mathematics I                      | 3      | BEL10203   | Analog Electronics                    | 3      |            |        |        |
|      | BEC 10102            | Computer Programming                           | 2      | BEE 10403  | Electrical Technology                 | 3      |            |        |        |
|      | BEE 10202            | Engineers and Society                          | 2      | BEE 10501  | Engineering Practices                 | 1      |            |        |        |
|      | BEL 10103            | Electric Circuits                              | 3      |            |                                       |        |            |        |        |
|      |                      |  |        |            |                                       |        |            |        |        |
|      |                      | **International Student -16                    | 17     |            | **International Student - 16          | 15     |            |        |        |
| 2    | SEMESTER 1           |  |        | SEMESTER 2 |                                       |        | SEMESTER 3 |        |        |
|      | CODE                 | COURSE   | CREDIT | CODE       | COURSE                                | CREDIT | CODE       | COURSE | CREDIT |
|      | UWB20302             | Technical Writing                              | 2      | UWA10302   | Islamic and Asian Civilisation        | 2      |            |        |        |
|      | BWM20403             | Engineering Mathematics III                    | 3      | BWM30602   | Engineering Mathematics IV            | 2      |            |        |        |
|      | BPK20802             | Entrepreneurship                               | 2      | BPK30902   | Engineering Economics                 | 2      |            |        |        |
|      | BEL 20303            | Digital Electronics                            | 3      | BEB20303   | Electromagnetic Fields and Waves      | 3      |            |        |        |
|      | BEF 25503            | Power Systems                                  | 3      | BEC20202   | Multimedia Technology and Application | 2      |            |        |        |
|      | BEH 20101            | Mechatronic Engineering Laboratory I           | 1      | BEH 20403  | Instrumentation and Measurement       | 3      |            |        |        |
|      | BEH20201             | Mechatronic Engineering Practices              | 1      | BEH 20501  | Mechatronic Engineering Laboratory II | 1      |            |        |        |
|      | BEH 20302            | Industrial Automation Systems                  | 2      |            |                                       |        |            |        |        |
|      |                      |  |        |            |                                       |        |            |        |        |
|      |                      | 17   |        |            | 15                                    |        |            |        |        |

|                     | SEMESTER 1 |  |        | SEMESTER 2 |  |        | SEMESTER 3 |                               |            |
|---------------------|------------|--|--------|------------|--|--------|------------|-------------------------------|------------|
|                     | CODE       | COURSE                                 | CREDIT | CODE       | COURSE                                 | CREDIT | CODE       | COURSE                        | CREDIT     |
| 3                   | UWB1**02   | Foreign Language                       | 2      | BEE30103   | Engineering Management                 | 3      | BEE30304   | Industrial Training (8 weeks) | 4          |
|                     | BEE31202   | Creativity and Innovation              | 2      | BEB30503   | Digital Signal Processing              | 3      |            |                               |            |
|                     | BWM20502   | Engineering Statistics                 | 2      | BEC30303   | Computer Architecture and Organisation | 3      |            |                               |            |
|                     | BEB31803   | Electronic Communication Systems       | 3      | BEC30403   | Microprocessor and Microcontroller     | 3      |            |                               |            |
|                     | BEL30403   | Electronic Circuit Analysis and Design | 3      | BEH 30902  | Mechatronic Engineering Laboratory IV  | 2      |            |                               |            |
|                     | BEH 30702  | Mechatronic Engineering Laboratory III | 2      | BEH 30802  | Real Time Embedded Systems             | 2      |            |                               |            |
|                     | BEH 30603  | Control System Theory                  | 3      | BEH 31001  | Mechatronic Design Software            | 1      |            |                               |            |
|                     |            |  |        |            |  |        |            |                               |            |
|                     |            |  |        |            |  |        |            |                               |            |
|                     |            |  | 17     |            |  | 17     |            |                               | 4          |
|                     | SEMESTER 1 |  |        | SEMESTER 2 |  |        | SEMESTER 3 |                               |            |
|                     | CODE       | COURSE                                 | CREDIT | CODE       | COURSE                                 | CREDIT | CODE       | COURSE                        | CREDIT     |
| 4                   | BEE40602   | Final Year Project I                   | 2      | BEE40704   | Final Year Project II                  | 4      |            |                               |            |
|                     | BEH 41103  | Mechatronic Mechanism                  | 3      | BEH 41603  | Mechatronic System Design              | 3      |            |                               |            |
|                     | BEH 41202  | Motion Controls                        | 2      | BEH 41703  | Robotic Systems                        | 3      |            |                               |            |
|                     | BEH 41303  | Manufacturing Process                  | 3      | BEH 41803  | Intelligent Control Systems            | 3      |            |                               |            |
|                     | BEH 41401  | Mechatronic Engineering LaboratoryV    | 2      | BEH 41902  | Vision Systems                         | 2      |            |                               |            |
|                     | BEH 41503  | Digital Control Systems                | 3      |            |  |        |            |                               |            |
|                     |            |  |        |            |  |        |            |                               |            |
|                     |            |  |        |            |  |        |            |                               |            |
|                     |            |  | 15     |            |  | 15     |            |                               |            |
| <b>TOTAL CREDIT</b> |            |  |        |            |  |        |            |                               | <b>132</b> |

\*Exempted if MUET results more than or equal to band 3

\*\*International student only