# Undergraduate Part-Time Programme

# AY2022/23 to AY2024/25

# **Academic Unit Requirements**

| Core | Major PE | СС | FC | BDE | Total |
|------|----------|----|----|-----|-------|
| 72   | 6        | 15 | 5  | 0   | 98    |

# Mechanical Engineering (Part-Time) Year 1, Semester 1

| COURSE<br>CODE | COURSE TITLE                           | AU | COURSE<br>CATEGORY | PRE-REQUISITE                                 | COURSE<br>OFFERING IN |
|----------------|--|----|--------------------|---|-----------------------|
| EG2810         | Mathematics A                          | 4  | Core               | Nil   | Sem 1                 |
| PH1012         | Physics A                              | 4  | Core               | Nil   | Sem 1                 |
| MA2001         | Mechanics of Materials                 | 3  | Core               | Nil   | Sem 1                 |
| HW0001         | Introduction to Academic Communication | 0  | Core               | For students who fail Qualifying English Test | Sem 1                 |
|                | Total                                  | 11 |                    |   |                       |

# Mechanical Engineering (Part-Time) Year 1, Semester 2

| COURSE<br>CODE | COURSE TITLE                           | AU | COURSE<br>CATEGORY | PRE-REQUISITE                  | COURSE<br>OFFERING IN |
|----------------|--|----|--------------------|--------------------------------|-----------------------|
| MA1001         | Dynamics                               | 3  | Core               | Having read<br>PH1012 & EG2810 | Sem 2                 |
| MA1008         | Introduction to Computational Thinking | 3  | Core               | Nil                            | Sem 2                 |
| MA2006         | Engineering Mathematics                | 3  | Core               | MH2810                         | Sem 2                 |
| CC0005         | Healthy Living & Mental Wellbeing      | 3  | CC                 | Nil                            | Sem 2                 |
|                | Total                                  | 12 |                    |                                |                       |

# Mechanical Engineering (Part-Time) Year 2, Semester 1

| COURSE<br>CODE | COURSE TITLE                                    | AU | COURSE<br>CATEGORY | PRE-REQUISITE | COURSE<br>OFFERING IN |
|----------------|---|----|--------------------|---------------|-----------------------|
| MA2003         | Introduction to Thermo-fluids                   | 3  | Core               | Nil           | Sem 1                 |
| MA2024         | Engineering Materials & Manufacturing Processes | 3  | Core               | Nil           | Sem 1                 |
| MA2005         | Engineering Graphics                            | 3  | Core               | Nil           | Sem 1                 |
| CC0002         | Navigating the Digital World                    | 2  | CC                 | Nil           | Sem 1                 |
|                | Total   | 11 |                    |               |                       |

# Mechanical Engineering (Part-Time) Year 2, Semester 2

| COURSE<br>CODE | COURSE TITLE   | AU | COURSE<br>CATEGORY | PRE-REQUISITE | COURSE<br>OFFERING IN |
|----------------|--|----|--------------------|---------------|-----------------------|
| EG1001         | Engineers in Society                                     | 2  | Core               | Nil           | Sem 2                 |
| MA2002         | Theory of Mechanism                                      | 3  | Core               | MA1001        | Sem 2                 |
| MA2009         | Introduction to Electrical Circuits & Electronic Devices | 3  | Core               | Nil           | Sem 2                 |
| MA3002         | Solid Mechanics and<br>Vibration                         | 3  | Core               | MA2001        | Sem 2                 |
| CC0001         | Inquiry & Communication in the Interdisciplinary World   | 2  | CC                 | Nil           | Sem 2                 |
|                | Total  | 13 |                    |               |                       |

#### Mechanical Engineering (Part-Time) Year 2, Special Term

| COURSE<br>CODE | COURSE TITLE                | AU | COURSE<br>CATEGORY | PRE-REQUISITE | COURSE<br>OFFERING IN |
|----------------|-----------------------------|----|--------------------|---------------|-----------------------|
| MA2071         | Laboratory Experiments (ME) | 1  | Core               | Nil           | Special Term          |
|                | Total                       | 1  |                    |               |                       |

# Mechanical Engineering (Part-Time) Year 3, Semester 1

| COURSE<br>CODE | COURSE TITLE                                  | AU | COURSE<br>CATEGORY | PRE-REQUISITE                             | COURSE<br>OFFERING IN |
|----------------|---|----|--------------------|---|-----------------------|
| MA3001         | Machine Element Design                        | 3  | Core               | Having read<br>MA2001, MA2002<br>& MA2005 | Sem 1                 |
| MA3010         | Thermodynamics and Heat Transfer              | 3  | Core               | MA2003                                    | Sem 1                 |
| MA3005         | Control Theory                                | 3  | Core               | Having read<br>MA2006                     | Sem 1                 |
| CC0003         | Ethics & Civics in a Multi-<br>Cultural World | 2  | CC                 | Nil                                       | Sem 1                 |
|                | Total   | 11 |                    |   |                       |

# Mechanical Engineering (Part-Time) Year 3, Semester 2

| COURSE<br>CODE | COURSE TITLE   | AU | COURSE<br>CATEGORY | PRE-REQUISITE                      | COURSE<br>OFFERING IN      |
|----------------|--|----|--------------------|------------------------------------|----------------------------|
| MA4079         | Final Year Project <sup>1</sup>                        | 2  | Core               | Year 4 standing & Waiver of EID/PI | Sem 1 & 2,<br>Special Term |
| MA3004         | Mathematical Methods in<br>Engineering                 | 3  | Core               | EG2810                             | Sem 2                      |
| MA3006         | Fluid Mechanics  | 3  | Core               | MA2003                             | Sem 2                      |
| MA0218         | Introduction to Data Science & Artificial Intelligence | 3  | FC                 | MA1008                             | Sem 2                      |
| HW0288         | Engineering Communication                              | 2  | FC                 | CC0001                             | Sem 2                      |
|                | Total  | 13 |                    |                                    |                            |

# Mechanical Engineering (Part-Time) Year 3, Special Term

| COURSE<br>CODE | COURSE TITLE                    | AU | COURSE<br>CATEGORY | PRE-REQUISITE                      | COURSE<br>OFFERING IN      |
|----------------|---------------------------------|----|--------------------|------------------------------------|----------------------------|
| MA4079         | Final Year Project <sup>1</sup> | 2  | Core               | Year 4 standing & Waiver of EID/PI | Sem 1 & 2,<br>Special Term |
| MA3071         | Engineering Experiments (ME)    | 1  | Core               | Nil                                | Special Term               |
|                | Total                           | 3  |                    |                                    |                            |

# Mechanical Engineering (Part-Time) Year 4, Semester 1

| COURSE<br>CODE | COURSE TITLE                    | AU | COURSE<br>CATEGORY | PRE-REQUISITE                      | COURSE<br>OFFERING IN      |
|----------------|---------------------------------|----|--------------------|------------------------------------|----------------------------|
| MA4079         | Final Year Project <sup>1</sup> | 2  | Core               | Year 4 standing & Waiver of EID/PI | Sem 1 & 2,<br>Special Term |
| MA4001         | Engineering Design              | 4  | Core               | Having read<br>MA3001              | Sem 1                      |
| MA4002         | Fluid Dynamics                  | 3  | Core               | MA3006                             | Sem 1                      |
| MA48XX         | Major PE 1                      | 3  | Major PE           | Nil                                | Sem 1 & 2                  |
|                | Total                           | 12 |                    |                                    |                            |

# Mechanical Engineering (Part-Time) Year 4, Semester 2

| COURSE<br>CODE | COURSE TITLE                                      | AU | COURSE<br>CATEGORY | PRE-REQUISITE                      | COURSE<br>OFFERING IN      |
|----------------|---|----|--------------------|------------------------------------|----------------------------|
| MA4079         | Final Year Project <sup>1</sup>                   | 2  | Core               | Year 4 standing & Waiver of EID/PI | Sem 1 & 2,<br>Special Term |
| MA48XX         | Major PE 2  | 3  | Major PE           | Nil                                | Sem 1 & 2                  |
| CC0006         | Sustainability: Society,<br>Economy & Environment | 3  | CC                 | Nil                                | Sem 2                      |
| CC0007         | Science & Technology for Humanity                 | 3  | CC                 | Nil                                | Sem 2                      |
|                | Total   | 11 |                    |                                    |                            |

Course fees are payable by per AU basis.

<sup>&</sup>lt;sup>1</sup> Final Year Project is 8 AUs spread over 3 semesters and 1 special term.