

# **Bachelor Engineering (Hons)/Computer Science 3785 - Robotics & Mechatronics Eng- MTRNBH-T3 2026 Start**

**Program:** Engineering (Hons) / Comp Sci [3785]

## Year 1 Term 3

| Course or Activity                | Prerequisites | Credits |
|-----------------------------------|---------------|---------|
| COMP1511 Programming Fundamentals |               | 6       |
| MATH1131 or MATH1141              |               | 6       |
| PHYS1121 or PHSY1131              |               | 6       |

## Year 2 Term 1

| Course or Activity   | Prerequisites | Credits |
|--|---------------|---------|
| DESN1000 Introduction to Engineering Design and Innovation |               | 6       |
| ELEC1111 Electrical Circuit Fundamentals                   |               | 6       |
| MATH1231 or MATH1241                                       |               | 6       |

#### Year 2 Term 2

| Course or Activity                         | Prerequisites | Credits |
|--|---------------|---------|
| COMP1531 Software Engineering Fundamentals | COMP1511      | 6       |
| MMAN1130 Design and Manufacturing          |               | 6       |

## Year 2 Term 3

| Course or Activity                                    | Prerequisites                                    | Credits |
|---|--|---------|
| DESN2000 Engineering Design and Professional Practice | COMP2521, ELEC2141, DESN1000, COMP1511, MMAN1130 | 6       |
| ENGG1300 Engineering Mechanics                        |  | 6       |
| MTRN2500 Computing for Mechatronic Engineers          | COMP2521   | 6       |

## Year 3 Term 1

| Course or Activity                        | Prerequisites | Credits |
|---|---------------|---------|
| ELEC2141 Digital Circuit Design           |               | 6       |
| MATH2089 Numerical Methods and Statistics |               | 6       |
| MATH2018 or MATH2019                      |               | 6       |

## Year 3 Term 2

| Course or Activity Prerequisites   Cred | dits |
|---|------|
|---|------|

| MMAN2300 Engineering Mechanics 2 | ENGG1300 | 6 |
|----------------------------------|----------|---|
| ENGG2400 or ENGG2500 or MMAN2700 |          | 6 |

## Year 3 Term 3

| Course or Activity               | Prerequisites | Credits |
|----------------------------------|---------------|---------|
| Recommended Discipline Electives |               | 6       |
| COMP1521                         |               | 6       |

## Year 4 Term 1

| Course or Activity                      | Prerequisites      | Credits |
|---|--------------------|---------|
| COMP2521 Data Structures and Algorithms | COMP1511           | 6       |
| MTRN3210 Feedback Control Systems       | MMAN2300, ELEC1111 | 6       |
| Computing Electives                     |                    | 6       |

## Year 4 Term 2

| Course or Activity                              | Prerequisites      | Credits |
|---|--------------------|---------|
| COMP2511 Object-Oriented Design and Programming | COMP2521, COMP1531 | 6       |
| DESN3000 Strategic Design Innovation            | DESN1000, DESN2000 | 6       |
| Discipline Electives                            |                    | 6       |

## Year 4 Term 3

| Course or Activity                                      | Prerequisites | Credits |
|---|---------------|---------|
| MTRN3500 Computing Applications in Mechatronics Systems | MTRN2500      | 6       |
| COMP3121 or COMP3821                                    |               | 6       |
| Computing Electives                                     |               | 6       |

## Year 5 Term 1

| Course or Activity                                    | Prerequisites                          | Credits |
|---|--|---------|
| MTRN3020 Modelling and Control of Mechatronic Systems | MTRN3210                               | 6       |
| MTRN4010 Advanced Autonomous Systems                  | COMP2521, MTRN3210, MTRN2500, MATH2089 | 6       |

## Year 5 Term 2

| Course or Activity                | Prerequisites                | Credits |
|-----------------------------------|------------------------------|---------|
| COMP3900 Computer Science Project | COMP2521, COMP1531           | 6       |
| MTRN3100 Robot Design             | MTRN3210, MTRN2500, ELEC1111 | 6       |
| MTRN4230 Robotics                 | MTRN3210, MMAN2300, COMP1511 | 6       |

#### Year 5 Term 3

| Course or Activity   | Prerequisites | Credits |
|----------------------|---------------|---------|
| MMAN4951 Thesis A    |               | 4       |
| Computing Electives  |               | 6       |
| Discipline Electives |               | 6       |

## Year 6 Term 1

| Course or Activity  | Prerequisites | Credits |
|---|---------------|---------|
| COMP4920 Professional Issues and Ethics in Information Technology |               | 6       |
| MMAN4952 Thesis B   | MMAN4951      | 4       |
| Computing Electives   |               | 6       |

## Year 6 Term 2

| Course or Activity           | Prerequisites | Credits |
|------------------------------|---------------|---------|
| ENGG4999 Industrial Training |               | 0       |
| MMAN4953 Thesis C            | MMAN4952      | 4       |
| Discipline Electives         |               | 6       |
| Computing Electives          |               | 6       |