

Bachelor Eng (Honours) / Master Biomedical Eng -3768-Robotics & Mechatronic Eng-MTRNBH-T1 2026 Start

Program: Eng (Hons) / MBiomedE [3768]

Year 1 Term 1

| Course or Activity | Prerequisites | Credits |
|--|---------------|---------|
| DESN1000 Introduction to Engineering Design and Innovation | | 6 |
| <i>MATH1131 or MATH1141</i> | | 6 |
| <i>PHYS1121 or PHSY1131</i> | | 6 |

Year 1 Term 2

| Course or Activity | Prerequisites | Credits |
|--------------------------------|---------------|---------|
| ENGG1300 Engineering Mechanics | | 6 |
| <i>MATH1231 or MATH1241</i> | | 6 |

Year 1 Term 3

| Course or Activity | Prerequisites | Credits |
|--|---------------|---------|
| COMP1511 Programming Fundamentals | | 6 |
| ELEC1111 Electrical Circuit Fundamentals | | 6 |
| MMAN1130 Design and Manufacturing | | 6 |

Year 2 Term 1

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

Year 2 Term 2

| Course or Activity | Prerequisites | Credits |
|---|---------------|---------|
| COMP2521 Data Structures and Algorithms | COMP1511 | 6 |
| MMAN2300 Engineering Mechanics 2 | ENGG1300 | 6 |
| <i>ENGG2400 or ENGG2500 or MMAN2700</i> | | 6 |

Year 2 Term 3

| Course or Activity | Prerequisites | Credits |
|---|--|---------|
| DESN2000 Engineering Design and Professional Practice | COMP2521, ELEC2141, DESN1000, COMP1511, MMAN1130 | 6 |

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|--|----------|---|
| MTRN2500 Computing for Mechatronic Engineers | COMP2521 | 6 |
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Year 3 Term 1

| Course or Activity | Prerequisites | Credits |
|-------------------------------------|--------------------|---------|
| MTRN3210 Feedback Control Systems | MMAN2300, ELEC1111 | 6 |
| PHSL2121 Principles of Physiology A | | 6 |
| <i>Discipline Electives</i> | | 6 |

Year 3 Term 2

| Course or Activity | Prerequisites | Credits |
|--------------------------------------|------------------------------|---------|
| DESN3000 Strategic Design Innovation | DESN1000, DESN2000 | 6 |
| MTRN3100 Robot Design | MTRN3210, MTRN2500, ELEC1111 | 6 |
| <i>Free Elective</i> | | 6 |

Year 3 Term 3

| Course or Activity | Prerequisites | Credits |
|---|---------------|---------|
| ANAT2511 Fundamentals of Anatomy | | 6 |
| MTRN3500 Computing Applications in Mechatronics Systems | MTRN2500 | 6 |

Year 4 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 |
| <i>Recommended Discipline Electives</i> | | 6 |

Year 4 Term 2

| Course or Activity | Prerequisites | Credits |
|---------------------------------------|------------------------------|---------|
| MTRN4230 Robotics | MTRN3210, MMAN2300, COMP1511 | 6 |
| <i>Biomedical Engineering Courses</i> | | 6 |

Year 4 Term 3

| Course or Activity | Prerequisites | Credits |
|---------------------------------------|---------------|---------|
| <i>Biomedical Engineering Courses</i> | | 6 |
| <i>Biomedical Engineering Courses</i> | | 6 |
| <i>Biomedical Engineering Courses</i> | | 6 |

Year 5 Term 1

| Course or Activity | Prerequisites | Credits |
|---|---------------|---------|
| BIOM4951 Research Thesis A | | 4 |
| BIOM9410 Regulatory Requirements of Biomedical Technology | | 6 |
| <i>Biomedical Engineering Courses</i> | | 6 |

Year 5 Term 2

| Course or Activity | Prerequisites | Credits |
|--------------------------------------|---------------|---------|
| BIOM4952 Research Thesis B | BIOM4951 | 4 |
| BIOM9332 Biocompatibility | | 6 |
| BIOM9420 Clinical Laboratory Science | | 6 |

Year 5 Term 3

| Course or Activity | Prerequisites | Credits |
|---------------------------------------|---------------|---------|
| BIOM4953 Research Thesis C | BIOM4952 | 4 |
| ENGG4999 Industrial Training | | 0 |
| <i>Biomedical Engineering Courses</i> | | 6 |
| <i>Discipline Electives</i> | | 6 |