

## Bachelor Eng (Honours) / Master Biomedical Eng - 3768 - Bioinformatics Eng - BINFAH - 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>PHYS1111 or PHYS1121 or PHYS1131</i>                    |               | 6       |
| <i>MATH1131 or MATH1141</i>                                |               | 6       |

### Year 1 Term 2

| Course or Activity                | Prerequisites | Credits |
|-----------------------------------|---------------|---------|
| COMP1511 Programming Fundamentals |               | 6       |
| MATH1081 Discrete Mathematics     |               | 6       |
| <i>MATH1231 or MATH1241</i>       |               | 6       |

### Year 1 Term 3

| Course or Activity                     | Prerequisites | Credits |
|--|---------------|---------|
| BABS1201 Molecules, Cells and Genes    |               | 6       |
| COMP1521 Computer Systems Fundamentals | COMP1511      | 6       |

### Year 2 Term 1

| Course or Activity                         | Prerequisites | Credits |
|--|---------------|---------|
| COMP1531 Software Engineering Fundamentals | COMP1511      | 6       |
| COMP2521 Data Structures and Algorithms    | COMP1511      | 6       |
| <i>CHEM1011 or CHEM1031</i>                |               | 6       |

### Year 2 Term 2

| Course or Activity  | Prerequisites                          | Credits |
|---|--|---------|
| DESN2000 Engineering Design and Professional Practice           | COMP2521, DESN1000, COMP1511, COMP1521 | 6       |
| <i>BABS2264 or BABS2202 or BIOC2101 or MICR2011 or BABS2204</i> |  | 6       |

### Year 2 Term 3

| Course or Activity                      | Prerequisites | Credits |
|---|---------------|---------|
| BINF2010 Introduction to Bioinformatics | BABS1201      | 6       |

|   |                    |   |
|---|--------------------|---|
| BIOC2201 Principles of Molecular Biology (Advanced) | BABS1201           | 6 |
| COMP2511 Object-Oriented Design and Programming     | COMP2521, COMP1531 | 6 |

### Year 3 Term 1

| Course or Activity                          | Prerequisites      | Credits |
|---|--------------------|---------|
| BABS3121 Molecular Biology of Nucleic Acids | BIOC2201           | 6       |
| COMP3121 Algorithm Design and Analysis      | MATH1081, COMP2521 | 6       |
| PHSL2121 Principles of Physiology A         |                    | 6       |

### Year 3 Term 2

| Course or Activity                                   | Prerequisites | Credits |
|--|---------------|---------|
| BINF3010 Applied Bioinformatics                      | BIOC2201      | 6       |
| COMP2041 Software Construction: Techniques and Tools | COMP1511      | 6       |
| <i>MATH2801 or MATH2901</i>                          |               | 6       |

### Year 3 Term 3

| Course or Activity                    | Prerequisites      | Credits |
|---------------------------------------|--------------------|---------|
| BINF3020 Computational Bioinformatics | BINF2010, COMP2041 | 6       |
| <i>Free Elective</i>                  |                    | 6       |

### Year 4 Term 1

| Course or Activity          | Prerequisites | Credits |
|-----------------------------|---------------|---------|
| COMP3311 Database Systems   | COMP2521      | 6       |
| <i>Discipline Electives</i> |               | 6       |

### Year 4 Term 2

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

### Year 4 Term 3

| Course or Activity  | Prerequisites | Credits |
|---|---------------|---------|
| COMP4920 Professional Issues and Ethics in Information Technology |               | 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>Discipline Electives</i>               |               | 6       |
| <i>Biomedical Engineering (Dual Mode)</i> |               | 6       |