Engineering

# Engineering (Honours) / Biomedical Engineering (3768)

## Chemical Engineering (CEICAH)

## T1 Entry 2025 Sample Plan

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| Term 1 | **PHYS1121** Physics 1A OR **PHYS1131** Higher Physics 1A | **CEIC2000** Materials and Energy Systems | **CEIC3000** Process Modelling and Analysis | **CEIC4001** Process Design Project (12 UoC) | **BIOM4951** Research Thesis A (4 UoC) |
| | **CHEM1811** Engineering Chemistry 1A | **CEIC2001** Fluid and Particle Mechanics | **CEIC3005** Process Plant Design | **CEIC3004** Process Equipment and Design | **BIOM9410** Regulatory Requirements of Biomedical Technology |
| | **MATH1131** Mathematics 1A OR **MATH1141** Higher Mathematics 1A | **PHSL2121** Principles of Physiology A | **Biomedical Engineering Course** | | **Biomedical Engineering Course** |
| Term 2 | **ENGG1811** Computing for Engineers | **CEIC2002** Heat and Mass Transfer | **CEIC3006** Process Dynamics and Control | **CEIC4000** Environment & Sustainability | **BIOM4952** Research Thesis B (4 UoC) |
| | **CHEM1821** Engineering Chemistry 1B | **CEIC2005** Chemical Reaction Engineering | **CEIC3007** Chemical Engineering Lab B | **Biomedical Engineering Course** | **BIOM9420** Clinical Laboratory Science |
| | **MATH1231** Mathematics 1B OR **MATH1241** Higher Mathematics 1B | | | | **Biomedical Engineering Course** |
| Term 3 | **DESN1000** Engineering Design & Innovation | **CEIC2007** Chemical Engineering Lab A | **CEIC3001** Advanced Thermodynamics and Separation | **BIOM9311** Mass Transfer in Medicine | **BIOM4953** Research Thesis C (4 UoC) |
| | **MATH2018** Engineering Mathematics 2D | **DESN2000** Engineering Design and Practice | **Discipline Elective** | **Biomedical Engineering Course** | **Breadth Elective** |
| | | **MATH2089** Numerical Methods and Statistics | **Free Elective*** | **Biomedical Engineering Course** | **Biomedical Engineering Course** |

**NOTES**

Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999.

*CEIC1000 is suggested as the free elective

**This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.**

Engineering

# Engineering (Honours) / Biomedical Engineering (3768)

## Chemical Engineering (CEICAH)

## T2 Entry 2025 Sample Plan

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| Term 2 | **MATH1131** Mathematics 1A | **CHEM1821** Engineering Chemistry 1B | **CEIC2002** Heat and Mass Transfer | **CEIC3006** Process Dynamics and Control | **BIOM4951** Research Thesis A (4 UoC) |
| | **PHYS1121** Physics 1A OR **PHYS1131** Higher Physics 1A | **MATH2018** Engineering Mathematics 2D | **CEIC2005** Chemical Reaction Engineering | **CEIC3007** Chemical Engineering Lab B | **BIOM9420** Clinical Laboratory Science |
| | | | | **CEIC4000** Environment & Sustainability | **Biomedical Engineering Course** |
| Term 3 | **MATH1231** Mathematics 1B | **CEIC2007** Chemical Engineering Lab A | **CEIC3001** Advanced Thermodynamics and Separation | **BIOM9311** Mass Transfer in Medicine | **BIOM4952** Research Thesis B (4 UoC) |
| | **ENGG1811** Computing for Engineers | **DESN2000** Engineering Design and Practice | **Biomedical Engineering Course** | **Biomedical Engineering Course** | **Biomedical Engineering Course** |
| | **DESN1000** Engineering Design & Innovation | **MATH2089** Numerical Methods and Statistics | **Free Elective*** | **Biomedical Engineering Course** | **Biomedical Engineering Course** |
| Term 1 | **CEIC2000** Materials and Energy Systems | **PHSL2121** Principles of Physiology A | **CEIC3000** Process Modelling and Analysis | **CEIC4001** Process Design Project (12 UoC) | **BIOM4953** Research Thesis C (4 UoC) |
| | **CEIC2001** Fluid and Particle Mechanics | **Discipline Elective** | **CEIC3004** Process Equipment and Design | | **BIOM9410** Regulatory Requirements of Biomedical Technology |
| | **CHEM1811** Engineering Chemistry 1A | **Breadth Elective** | **CEIC3005** Process Plant Design | | **Biomedical Engineering Course** |

**NOTES**

Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999. *CEIC1000 is suggested as the free elective

Students who begin in Term 2 are permitted to enrol into CHEM1011 and CHEM1021 in place of CHEM1811/1821 or may take a combination of those courses with permission from their course convenor.

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Engineering

# Engineering (Honours) / Biomedical Engineering (3768)

## Chemical Engineering (CEICAH)

## T3 Entry 2025 Sample Plan

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| Term 3 | **ENGG1811** Computing for Engineers | **MATH2089** Numerical Methods and Statistics | **CEIC2007** Chemical Engineering Lab A | **CEIC4000** Environment & Sustainability | **BIOM4951** Research Thesis A (4 UoC) |
| | **MATH1131** Mathematics 1A OR **MATH1141** Higher Mathematics 1A | **Discipline Elective** | **DESN2000** Engineering Design and Practice | **Biomedical Engineering Course** | **BIOM9311** Mass Transfer in Medicine |
| | **PHYS1121** Physics 1A OR **PHYS1131** Higher Physics 1A | **Free Elective*** | **CEIC3001** Advanced Thermodynamics and Separation | **Biomedical Engineering Course** | **Biomedical Engineering Course** |
| Term 1 | **DESN1000** Engineering Design & Innovation | **CEIC2000** Materials and Energy Systems | **CEIC3000** Process Modelling and Analysis | **CEIC4001** Process Design Project (12 UoC) | **BIOM4952** Research Thesis B (4 UoC) |
| | **CHEM1811** Engineering Chemistry 1A | **CEIC2001** Fluid and Particle Mechanics | **CEIC3004** Process Equipment and Design | | **BIOM9410** Regulatory Requirements of Biomedical Technology |
| | **MATH1231** Mathematics 1B OR **MATH1241** Higher Mathematics 1B | **PHSL2121** Principles of Physiology A | **CEIC3005** Process Plant Design | | **Breadth Elective** |
| Term 2 | **CHEM1821** Engineering Chemistry 1B | **CEIC2002** Heat and Mass Transfer | **CEIC3006** Process Dynamics and Control | **Biomedical Engineering Course** | **BIOM4953** Research Thesis C (4 UoC) |
| | **MATH2018** Engineering Mathematics 2D | **CEIC2005** Chemical Reaction Engineering | **CEIC3007** Chemical Engineering Lab B | **Biomedical Engineering Course** | **BIOM9420** Clinical Laboratory Science |
| | | | | **Biomedical Engineering Course** | **Biomedical Engineering Course** |

**NOTES**

Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999.

*CEIC1000 is suggested as the free elective

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