

Bachelor Eng (Honours) / Master Biomedical Eng - 3768 - Chemical Engineering - CEICAH - T1 2026

Program: Eng (Hons) / MBiomedE [3768]

Year 1 Term 1

Course or Activity	Prerequisites	Credits
CHEM1811 Engineering Chemistry 1A		6
<i>MATH1131 or MATH1141</i>		6
<i>PHYS1121 or PHYS1131</i>		6

Year 1 Term 2

Course or Activity	Prerequisites	Credits
CHEM1821 Engineering Chemistry 1B	CHEM1811	6
ENGG1811 Computing for Engineers		6
<i>MATH1231 or MATH1241</i>		6

Year 1 Term 3

Course or Activity	Prerequisites	Credits
DESN1000 Introduction to Engineering Design and Innovation		6
<i>MATH2018 or MATH2019</i>		6

Year 2 Term 1

Course or Activity	Prerequisites	Credits
CEIC2000 Material and Energy Systems		6
CEIC2001 Fluid and Particle Mechanics		6
PHSL2121 Principles of Physiology A		6

Year 2 Term 2

Course or Activity	Prerequisites	Credits
CEIC2002 Heat and Mass Transfer	CEIC2001	6
CEIC2005 Chemical Reaction Engineering	CEIC2000, MATH2089	6

Year 2 Term 3

Course or Activity	Prerequisites	Credits
CEIC2007 Chemical Engineering Lab A	CEIC2002, CEIC2005	6
DESN2000 Engineering Design and Professional Practice	CEIC2000, DESN1000, CHEM1821, CEIC2001	6

MATH2089 Numerical Methods and Statistics		6
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Year 3 Term 1

Course or Activity	Prerequisites	Credits
CEIC3000 Process Modelling and Analysis	CEIC2002, CEIC2005, MATH2089	6
CEIC3005 Process Plant Design	CEIC2002, CEIC2000, CEIC2001	6
<i>Biomedical Engineering Courses</i>		6

Year 3 Term 2

Course or Activity	Prerequisites	Credits
CEIC3006 Process Dynamics and Control	CEIC2000, MATH2089	6
CEIC3007 Chemical Engineering Lab B	CEIC3001, CEIC2007, CEIC3005, MATH2089	6

Year 3 Term 3

Course or Activity	Prerequisites	Credits
CEIC3001 Advanced Thermodynamics and Separation	CEIC2002, CEIC2005, CEIC2000, CEIC2001	6
<i>Free Elective</i>		6
<i>Discipline (Depth) Electives</i>		6

Year 4 Term 1

Course or Activity	Prerequisites	Credits
CEIC3004 Process Equipment Design	CEIC3001, CEIC2002, CEIC2000, CEIC2001	6
CEIC4001 Process Design Project	CEIC3004, CEIC3006, CEIC3005	12

Year 4 Term 2

Course or Activity	Prerequisites	Credits
CEIC4000 Environment and Sustainability		6
<i>Biomedical Engineering Courses</i>		6

Year 4 Term 3

Course or Activity	Prerequisites	Credits
BIOM9311 Mass Transfer in Medicine		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
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BIOM4952 Research Thesis B	BIOM4951	4
BIOM9332 Biocompatibility		6
<i>Biomedical Engineering (Dual Mode)</i>		6

Year 5 Term 3

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