CHECKLIST Bachelor of Engineering (Honours) – Chemical & Biological Engineering (2342): Completion of pre-2021 program

| Full name: | _Student Number: | Date: |
|------------|------------------|-------|
| | | |

Points to note

- You need to ensure that you meet minimum program and major requirements (listed below)
- You cannot count the same course twice
- You need to ensure that you don't take courses that are incompatible with courses that you have already counted towards your program, and that any prerequisites have been met

You must complete for the BE(Hons) (Chemical & Biological Engineering Plan code: CHBIOW2342), 64 units comprising -

- (i) 60 units being all courses from part A compulsory (listed below), and
- (ii) 4 units from electives

PART A

| ✔ /X ompl. | Pre-2021 Part A list | # | Last опегео | ii NO1 completed – you can choose : | Sem offering | # | offered | com |
|---------------|--|---|-------------|--|-----------------|---|---------|-----|
| | 60 units, being all courses from: | | | | | | | + |
| | Part A - Compulsory | | | | | | | |
| | ENGG1100 Engineering Design (2) and | 2 | | ENGG1100 Professional Engineering | 1,2 | 2 | | |
| | ENGG1200 Engineering Modelling & Problem Solving (2) | 2 | 2/20 | and | | | | |
| | (discontinued) | | | * If you have not completed ENGG1200, please contact EAIT Student Admin | | 2 | | |
| | OR | 4 | 2/20 | for replacement | | | | |
| | ENGG1211 Engineering Design, Modelling & Problem Solving (4) (discontinued) | | | | | | | |
| | MATH1051 Calculus & Linear Algebra I | 2 | | MATH1051 Calculus & Linear Algebra I | 1,2 | 2 | | |
| | OR | | | OR | | | | |
| | MATH1071 Advanced Calculus & Linear Algebra I | | | MATH1071 Advanced Calculus & Linear Algebra I | | | | - |
| | MATH1052 Multivariate Calculus & Ordinary Differential Equations | 2 | | MATH1052 Multivariate Calculus & Ordinary Differential Equations | 1,2 | 2 | | |
| | OR MATH1072 Advanced Multivariate Calculus & Ordinary Differential Equations | | | OR | | | | |
| | , , | | | MATH1072 Advanced Multivariate Calculus & Ordinary Differential Equations CHEM1100 Chemistry 1 | 1.2 | | - | + |
| | CHEM1100 Chemistry 1 | 2 | | CHEMITIOU Chemistry 1 | 1,2 | 2 | | |
| | ENGG1500 Engineering Thermodynamics | 2 | | ENGG1500 Thermodynamics: Energy and the Environment | 1,2 | 2 | | |
| | CHEE1001 Principles of Biological Engineering (discontinued) | 2 | 1/20 | BIOE1001 Principles of Biomedical & Bioprocess Engineering | 1 | 2 | 1/21 | |
| | BIOC2000 Biochemistry & Molecular Biology | 2 | | BIOC2000 Biochemistry & Molecular Biology | 1 | 2 | | + |
| | CHEE2001 Process Principles | 2 | | CHEE2001 Process Principles | 1,2 | 2 | | |
| | CHEM1200 Chemistry 2 | 2 | | CHEM1200 Chemistry 2 | 1,2,S | 2 | | 1 |
| | MATH2000 Calculus & Linear Algebra II (discontinued) OR | 2 | 2/20 | MATH2001 Calculus & Linear Algebra II | 1,2,5 | 2 | | |
| | MATH2001 Advanced Calculus & Linear Algebra II | | | | | | | |
| | BIOL2202 Genetics | 2 | | BIOL2202 Genetics | 2 | 2 | | |
| | CHEE2003 Fluid & Particle Mechanics | 2 | | CHEE2003 Fluid & Particle Mechanics (will change to semester 1 in 2022) | 2 | 2 | | |
| | CHEE2010 Engineering Investigation & Statistical Analysis | 2 | | CHEE2010 Engineering Investigation & Statistical Analysis (will change to semester 1 in 2022) | 2 | 2 | | |
| | CHEM2056 Physical Chemistry for Engineering | 2 | | CHEM2056 Physical Chemistry for Engineering | 1 | 2 | | |

If NOT completed – you can choose*:

| CHEE3002 Heat & Mass Transfer (discontinued) | 2 | 1/22 | CHEE2040 Heat & Mass Transfer | 2 | 2 | 2/22 |
|---|---|------|---|-----|---|------|
| CHEE3003 Chemical Thermodynamics (discontinued) | 2 | 1/22 | CHEE2030 Chemical Thermodynamics | 2 | 2 | 2/22 |
| CHEE3020 Process Systems Analysis | 2 | | CHEE3020 Process Systems Analysis (will change to semester 2 in 2023) | 1 | 2 | |
| CHEE4020 Biomolecular Engineering | 2 | | CHEE4020 Bioprocess Engineering | 2 | 2 | |
| CHEE3004 Unit Operations | 2 | | CHEE3004 Unit Operations (will change to semester 1 in 2023) | 2 | 2 | |
| CHEE3005 Reaction Engineering | 2 | | CHEE3005 Reaction Engineering (will change to semester 1 in 2023) | 2 | 2 | |
| CHEE3007 Process Modelling & Dynamics | 2 | | CHEE3007 Process Modelling & Dynamics | 2 | 2 | |
| CHEE4305 Biomaterials: Materials in Medicine (discontinued) | 2 | 2/20 | BIOE4305 Biomaterials: Materials in Medicine | 2 | 2 | 2/21 |
| CHEE4002 Risk in Process Industries | 2 | | CHEE4002 Risk in Process Industries | 1 | 2 | |
| CHEE4009 Transport Phenomena | 2 | | CHEE4009 Transport Phenomena | 1 | 2 | |
| CHEE4034 Cell & Tissue Engineering (discontinued) | 2 | 1/20 | BIOE6034 Cell and Tissue Engineering | 1 | 2 | 1/21 |
| CHEE4060 Process & Control System Synthesis (discontinued) | 2 | 1/23 | CHEE2020 Process Equipment & Control Systems (NEW) | 2 | 2 | 2/22 |
| ENGG4900 Professional Practice and the Business Environment | 2 | | ENGG4900 Professional Practice and the Business Environment | 1,2 | 2 | |
| CHEE4001 Process Engineering Design Project | 4 | | CHEE4001 Process Engineering Design Project | 2 | 4 | |
| Part A units completed pre-2021: | | | Part A units to be substituted/completed: | | | |
| | | | Total – Part A (must add up to 60 units): | | | |

PART B

| √/X compl. | Part B0 - Preparatory Mathematics & Science Electives | # | Last offered | If NOT completed – you can choose*: | Sem offering | # | First offered | ✓/X compl. |
|---------------|---|---|--------------|---|-----------------|---|------------------|---------------|
| | CHEM1090 Introductory Chemistry | 2 | | CHEM1090 Introductory Chemistry | 1 | 2 | | |
| | MATH1050 Mathematical Foundations | 2 | | MATH1050 Mathematical Foundations | 1,2 | 2 | | |
| | PHYS1171 Physical Basis of Biological Systems | 2 | | PHYS1171 Physical Basis of Biological Systems | 1,2 | 2 | | |

| √/X compl. | Part B1 - Introductory Electives | # | Last offered | If NOT completed – you can choose*: | Sem offering | # | First offered | √/X compl. |
|---------------|--|---|-----------------|--|-----------------|---|------------------|---------------|
| | BIOL1040 Cells to Organisms | 2 | | BIOL1040 Cells to Organisms | 1,2 | 2 | | |
| | CSSE1001 Introduction to Software Engineering | 2 | | CSSE1001 Introduction to Software Engineering | 1,2 | 2 | | |
| | ENGG1300 Introduction to Electrical Systems | 2 | | ENGG1300 Introduction to Electrical Systems | 1,2 | 2 | | |
| | ENGG1400 Engineering Mechanics: Statics & Dynamics (discontinued) | 2 | 2/20 | ENGG1700 Statics and Materials | 1,2 | 2 | 1/21 | |
| | ENGG1600 Introduction to Research Practices - The Big Issues | 2 | | ENGG1600 Introduction to Research Practices - The Big Issues | 2 | 2 | | |
| | ENGG2000 Humanitarian Engineering | 2 | | ENGG2000 Humanitarian Engineering | 2 | 2 | | |
| | ENVM1522 Carbon and Energy Management | 2 | | ENVM1522 Carbon and Energy Management | 2 | 2 | | |
| | ERTH1501 Earth Processes & Geological Materials for Engineers | 2 | | ERTH1501 Earth Processes & Geological Materials for Engineers | 1 | 2 | | |
| | PHYS1002 Electromagnetism and Modern Physics | 2 | | PHYS1002 Electromagnetism and Modern Physics (semester 2 only from 2022) | 1,2 | 2 | | |
| √/X compl. | Part B2 - Electives | | | | | | | √/X compl. |
| | CHEE2501 Environmental Systems Engineering I: Processes (discontinued) | 2 | 2/20 | ENVE2501 Environmental Systems | 2 | 2 | 2/21 | |
| | CHEE3008 Special Topics C | 2 | | CHEE3008 Special Topics C | 1,2 | 2 | | |
| | CHEE3301 Polymer Engineering | 2 | | CHEE3301 Polymer Engineering | 1 | 2 | | |
| | CHEE4003 Special Topics A | 2 | | CHEE4003 Special Topics A | 2 | 2 | | |
| | CHEE4015 Special Topics VII (discontinued from 2/21) | 1 | | Any BE Elective | | | | |
| | CIVL3141 Hydrology and Hydrological Risk (discontinued) | 2 | 2/23 | CIVL3155 Hydrology & Free Surface Flows (NEW) | 2 | 2 | 2/22 | |
| | ENGG4103 Engineering Asset Management | 2 | | ENGG4103 Engineering Asset Management | 1 | 2 | | |
| | ENVM3103 Regulatory Frameworks for Environmental Management & Planning | 2 | | ENVM3103 Regulatory Frameworks for Environmental Management & Planning | 1 | 2 | | |
| | FOOD2000 Food Science | 2 | | FOOD2000 Food Science | 1 | 2 | | |
| | FOOD3007 Food Structure & Sensory Science | 2 | | FOOD3007 Food Structure & Sensory Science | 2 | 2 | | |
| | FOOD3008 Food Process Engineering II | 2 | | FOOD3008 Food Process Engineering II | 2 | 2 | | |
| | FOOD3011 Food Product Development | 2 | | FOOD3011 Food Product Development | 2 | 2 | | |
| | FOOD3017 Food Policy, Safety & Quality Management | 2 | | FOOD3017 Food Policy, Safety & Quality Management | 1 | 2 | | |
| | MECH2310 Science & Engineering of Metals | 2 | | MECH2310 Science & Engineering of Metals | 2 | 2 | | |
| | MICR2000 Microbiology & Immunology | 2 | | MICR2000 Microbiology & Immunology | 2 | 2 | | |

| | MICR2001 Food Microbiology I | 2 | | MICR2001 Food Microbiology I | 2 | 2 | | |
|---------------|--|---|-----------------|---|-----------------|---|------------------|---------------|
| | MINE2201 Physical & Chemical Processing of Minerals | 2 | | MINE2201 Metal Production and Recycling | 2 | 2 | | - |
| | MINE3211 Special Topics in Minerals Processing II (discontinued) | 2 | | Any BE Elective | | | | + |
| | MINE3212 Pyrometallurgy | 2 | | MINE3212 Pyrometallurgy | 2 | 2 | | - |
| | MINE3219 Process Mineralogy and Comminution | 2 | | MINE3219 Process Mineralogy and Comminution | 1 | 2 | | |
| | MINE4207 Special Topics in Minerals Processing I (discontinued) | 1 | | Any BE Elective | | | | + |
| √/X compl. | Part B4 - Advanced Electives | # | Last offered | If NOT completed – you can choose*: | Sem offering | # | First offered | √/X compl. |
| | CHEE4012 Industrial Wastewater & Solid Waste Management | 2 | | CHEE4012 Industrial Wastewater & Solid Waste Management | 2 | 2 | | |
| | CHEE4022 Principles of Adsorption | 2 | | CHEE4022 Principles of Adsorption | 2 | 2 | | 1 |
| | CHEE4301 Nanomaterials (discontinued) | 2 | 2/20 | MATE6301 Nanomaterials | 2 | 2 | 2/21 | + |
| | CHEE4302 Electrochemistry & Corrosion (discontinued) | 2 | 2/20 | MATE4302 Electrochemistry and Corrosion | 2 | 2 | 2/21 | + |
| | CHEE4303 Interface and Colloid Science and Engineering | 2 | | CHEE4303 Interface and Colloid Science and Engineering | 1 | 2 | | |
| | ENGG3500 Reservoir Engineering | 2 | | ENGG3500 Reservoir Engineering | 2 | 2 | | |
| | ENGY4000 Energy Systems | 2 | | ENGY4000 Energy Systems | 1 | 2 | | - |
| | MECH4304 Net Shape Manufacturing | 2 | | MECH4304 Net Shape Manufacturing | 1 | 2 | | |
| | MINE4203 Flotation | 2 | | MINE4203 Flotation | 1 | 2 | | + |
| | MINE4204 Aqueous Solution Processes | 2 | | MINE4204 Hydrometallurgy and Electrometallurgy | 1 | 2 | | 1 |