CHECKLIST Bachelor of Engineering (Honours)/Master of Engineering – Civil & Fire Safety Engineering (2350): Completion of pre-2021 program

IMPORTANT Notes:

- The information contained in this document is intended as general advice only. Students must follow the program rules & requirements listed on the Programs and Courses Website relevant to the year they commence. This planner must be used in conjunction with your program duration course list and program rules.
- Students need to check future course offerings, prerequisites, incompatibilities and restrictions for all courses as these are subject to change.
- Students cannot take courses that are incompatible with courses already counted towards their program, and cannot count the same course twice.

You must complete for the BE(Hons)/ME (Civil & Fire Safety Engineering Plan code: CIVFSX2350), 80 units comprising -

- 1. 68 units from part A compulsory, and
- 2. 6 units from the combination of part B2 electives; with
- 3. 4 units from electives, being courses on the BE(Hons)/ME list or other courses approved by the executive dean.
 - a. a minimum of 2 units from the combination of part B1 and B2; and
 - b. a minimum of 4 units of courses from part Part B0 Preparatory Mathematics & Science Electives B0

PART A

Tick the courses you have completed and nominate the alternative course you plan to choose (if required). Discontinued courses are coloured red

| √/X compl. | Pre-2021 Part A list | # | Last offered | If NOT completed – you can choose*: | Sem offering | # | First offered |
|---------------|--|-------------|--------------|---|-----------------|---|------------------|
| | 68 units from Part A - compulsory | | | | | | |
| | ENGG1100 Engineering Design (2) and ENGG1200 Engineering Modelling & Problem Solving (2) (discontinued) OR ENGG1211 Engineering Design, Modelling & Problem Solving (4) (discontinued) | 2 2 4 | 2/20 | ENGG1100 Professional Engineering and * If you have not completed ENGG1200, please contact EAIT Student Admin for replacement | 1,2 | 2 | |
| | MATH1051 Calculus & Linear Algebra I OR MATH1071 Advanced Calculus & Linear Algebra I | 2 | | MATH1051 Calculus & Linear Algebra I OR MATH1071 Advanced Calculus & Linear Algebra I | 1,2 | 2 | |
| | MATH1052 Multivariate Calculus & Ordinary Differential Equations OR MATH1072 Advanced Multivariate Calculus & Ordinary Differential Equations | 2 | | MATH1052 Multivariate Calculus & Ordinary Differential Equations OR MATH1072 Advanced Multivariate Calculus & Ordinary Differential Equations | 1,2 | 2 | |
| | ENGG1400 Engineering Mechanics: Statics & Dynamics (discontinued) | 2 | 2/20 | ENGG1700 Statics & Materials | 1,2 | 2 | |
| | CIVL2135 Environmental Issues and Sustainability in Engineering | 2 | | CIVL2135 Environmental Engineering: An Introduction for Civil Engineers | 1 | 2 | |
| | CIVL2330 Structural Mechanics | 2 | | CIVL2330 Structural Mechanics | 1 | 2 | |
| | CIVL2410 Sustainable Transport Engineering - Traffic Analysis (discontinued) | 2 | 1/21 | CIVL2420 Fundamental of Transport Engineering | 2 | 2 | 2/22 |
| | CIVL2530 Probability and Statistics in Engineering | 2 | | CIVL2530 Statistics and Data Analysis | 1 | 2 | |
| | CIVL2131 Environmental Fluid Mechanics | 2 | | CIVL2131 Environmental Fluid Mechanics (moves to semester 1 from 2022) | 1 | 2 | |
| | CIVL2210 Soil Mechanics | 2 | | CIVL2210 Soil Mechanics | 2 | 2 | |
| | CIVL2340 Design of Steel Structures (discontinued) | 2 | 2/22 | CIVL3380 Structural and Steel Design | 1 | 2 | 1/23 |

Once you have completed the BE(Hons)/ME Transition Plan – Civil & Fire Safety continuation checklist, you may either email your checklist to the Faculty on enquiries@eait.uq.edu.au or book an appointment with an Academic Advisor directly.

| CIVL2360 Design of Concrete Structures (discontinued) | 2 | 2/22 | CIVL3360 Reinforced Concrete Design | 1 | 2 | 2/23 |
|--|---|----------|--|-----|---|------|
| CIVL3140 Hydraulics of Engineered and Natural Waterways (discontinued) | 2 | 1/21 | CIVL3155 Hydrology and free surface flows | 2 | 2 | 2/22 |
| and | | and | plus | | | |
| CIVL3141 Hydrology and Hydrological Risk (discontinued) | | 2/21 | [CIVL6121 Environmental Hydraulics and Flood Management | 1 | 2 | 1/23 |
| | | | [or | | | |
| | | | [CIVL4145 Groundwater Modelling and Management | 2 | | 2/2 |
| CIVL3210 Geotechnical Engineering | 2 | | CIVL3210 Geotechnical Engineering | 1 | 2 | |
| CIVL3340 Structural Analysis | 2 | | CIVL3340 Structural Analysis | 2 | 2 | |
| FIRE3700 Introduction to Fire Safety Engineering | 2 | | FIRE3700 Introduction to Fire Safety Engineering | 2 | 4 | |
| CIVL3350 Integrated Structural Design | 2 | | CIVL3350 Integrated Structural Design | 2 | 2 | |
| CIVL3420 Sustainable Transport Engineering - Planning and Design | 2 | 1/23 | CIVL3420 Sustainable Transport Engineering (discontinued) | 2 | 2 | |
| (discontinued) | | | | | | |
| CIVL3510 Project Management with Building Information Modelling (discontinued) | 2 | 2/22 | CIVL3520 Project Management and Professional Practice | 2 | 2 | 2/2 |
| CIVL4514 Integrated Design (discontinued) | 2 | 1/23 | CIVL4514 Design in the Built Environment (discontinued) | 1 | 2 | |
| FIRE4610 Fire Engineering Design: Solutions for Implicit Safety | 2 | | FIRE4610 Fire Engineering Design: Solutions for Implicit Safety | 1 | 2 | |
| ENGG4900 Professional Practice and the Business Environment | 2 | 2/23 | ENGG4901 Professional Practice and the Business Environment A | 1,2 | 2 | 1/2 |
| (discontinued) | _ | -, | Or | -,- | _ | _,_ |
| (************************************** | | | ENGG4902 Professional Practice and the Business Environment B | | | |
| CIVL4516 Integrated Design for Environmental Management | 2 | | CIVL4516 Design for the Natural Environment | 2 | 2 | |
| FIRE7620 Fire Dynamics | 2 | | | | | |
| FIRE7500 Thesis (discontinued) | 8 | 2/21 | CIVL7500 Thesis | 1 | 8 | |
| OR | | | OR | | | |
| CIVL7501 Research Thesis | | <u> </u> | CIVL7501 Research Thesis | 2 | | |
| FIRE7640 Fire Dynamics Laboratory | 2 | | FIRE7640 Fire Dynamics Laboratory | 1 | 2 | |
| FIRE7660 Structural Fire Engineering | 2 | | | | | |
| ENGG7701 Engineering Grand Challenges | 2 | | ENGG7701 Engineering Grand Challenges | 2 | 2 | |
| FIRE7680 Fire Engineering Design: Explicit Quantification of Safety | 2 | | | | | |

PART B

| √/X compl. | Part B0 - Preparatory Mathematics & Science Electives | # | Last offered | If NOT completed — you can choose*: | Sem offering | # | First offered |
|---------------|---|---|--------------|---|-----------------|---|------------------|
| | 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 |
|---------------|---|---|--------------|--|-----------------|---|------------------|
| | CHEM1100 Chemistry 1 | 2 | | CHEM1100 Chemistry 1 | 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 | |
| | ENGG1500 Engineering Thermodynamics | 2 | | ENGG1500 Engineering Thermodynamics | 1,2 | 2 | |
| | 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 | |
| | ERTH1501 Earth Processes & Geological Materials for Engineers | 2 | | ERTH1501 Earth Processes & Geological Materials for Engineers | 1 | 2 | |
| | MATH2000 Calculus & Linear Algebra II (discontinued) | 2 | 2/20 | MATH2001 Calculus & Linear Algebra II | 1,2,5 | 2 | <u> </u> |
| | MATH2001 Advanced Calculus & Linear Algebra II | 2 | | MATH2001 Calculus & Linear Algebra II | 1,2,5 | 2 |] |
| | MINE2105 Introduction to Mining and Mineral Processing (discontinued) | 2 | 1/21 | Any B1 Elective | | 2 |] |
| | MINE3121 Mining Geomechanics (discontinued) | 2 | 1/22 | MINE3129 Applied Mining Geomechanics / CIVL3220 Rock Mechanics | 2 | 2 | 1/23 |
| | PHYS1002 Electromagnetism and Modern Physics | 2 | | PHYS1002 Electromagnetism and Modern Physics (semester 2 only from 2022) | 2 | 2 | |
| | REDE1300 Building Construction Management & Economics (discontinued) | 2 | 1/20 | Any B1 Elective | | 2 | |

| √/X compl. | Part B2 - Electives | # | Last offered | If NOT completed — you can choose*: | Sem offering | # | First offered |
|---------------|--|---|--------------|--|-----------------|---|------------------|
| | CHEE4012 Industrial Wastewater & Solid Waste Management (discontinued) | 2 | 2/22 | CHEE4012 Industrial Wastewater & Solid Waste Management (discontinued) | 2 | 2 | |
| | CIVL3150 Modelling of Environmental Systems (discontinued) | 2 | 2/20 | ENVE3150 Environmental System Dynamics and Modelling | 2 | 2 | 2/21 |
| | CIVL4110 Coastal & Estuarine Engineering (discontinued) | 2 | 2/22 | CIVL6111 Ocean, Coastal and Estuarine Engineering OR CIVL6112 Hydro– and Marine Power Renewable Energy Systems | 2 | 2 | 2/23 |
| | CIVL4120 Advanced Hydraulic Engineering and Structures (discontinued) | 2 | 2/22 | CIVL6121 Environmental Hydraulics and Flood Management | 1 | 2 | 1/23 |
| | CIVL4140 Contaminant Transport Modelling (discontinued) | 2 | 1/21 | CIVL4145 Groundwater Modelling and Management | 2 | 2 | 2/22 |
| | CIVL4170 Environmental Risk Assessment and Management | 2 | | CIVL4170 Environmental Risk Assessment and Management | 1 | 2 | |
| | CIVL4180 Sustainable Built Environment (discontinued) | 2 | 1/22 | CIVL4525 Sustainable Infrastructure Design | 1 | 2 | 1/23 |
| | CIVL4230 Advanced Soil Mechanics | 2 | | CIVL4230 Advanced Soil Mechanics | 2 | 2 | |
| | CIVL4270 Geotechnical Investigation & Testing | 2 | | CIVL4270 Geotechnical Investigation & Testing | 1 | 2 | |
| | CIVL4280 Advanced Rock Mechanics | 2 | | CIVL4280 Applied Rock Mechanics | 2 | 2 | |
| | CIVL4332 Advanced Structural Analysis (discontinued) | 2 | 2/22 | CIVL6360 Advanced Structural Analysis | 2 | 2 | 2/23 |
| | CIVL4333 Advanced Concrete Design | 2 | | CIVL4333 Advanced Concrete Design | 1 | 2 | |
| | CIVL4334 Design of Timber Structures | 2 | | CIVL4334 Design of Timber Structures | 2 | 2 | |
| | CIVL4340 Wind Engineering | 2 | | CIVL4340 Wind Engineering | 1 | 2 | |
| | CIVL4412 Travel Behaviour and Transport Modelling (discontinued) | 2 | 2/22 | CIVL6412 Traffic Behavioural Modelling (discontinued) | 2 | 2 | 2/23 |
| | CIVL4450 Traffic Flow Theory and Emerging Technologies | 2 | | CIVL4450 Traffic Flow Theory and Emerging Technologies | 2 | 2 | |
| | CIVL4460 Highway Geometric Design | 2 | | CIVL4460 Road Design | 2 | 2 | |
| | CIVL4522 Analytical Methods for the Design of Construction Operations | 2 | | CIVL4522 Analytical Methods for the Design of Construction Operations | 2 | 2 | |
| | MINE4000 Mine Waste Management & Landform Design (discontinued) | 2 | 1/22 | CIVL6220 Tailings Design | 1 | 2 | 1/23 |