

# CHECKLIST Bachelor of Engineering (Honours) – Mechanical & Materials Engineering (2342): 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) (Mechanical & Materials Engineering Plan code: MECMAW2342), 64 units comprising –

- 58 units, being all courses from [part A](#) – compulsory (listed below), and
- 2 units from [part B4](#) - advanced electives, and
- 4 units from electives

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
58 units from Part A - compulsory							
	<b>ENGG1100</b> Engineering Design (2) and <b>ENGG1200</b> Engineering Modelling & Problem Solving (2) (discontinued) OR <b>ENGG1211</b> Engineering Design, Modelling & Problem Solving (4) (discontinued)	2 2 4	2/20 2/20	<b>ENGG1100</b> Professional Engineering and * If you have not completed ENGG1200, please contact EAIT Student Admin for replacement	1,2	2	
	<b>MATH1051</b> Calculus & Linear Algebra I OR <b>MATH1071</b> Advanced Calculus & Linear Algebra I	2		<b>MATH1051</b> Calculus & Linear Algebra I OR <b>MATH1071</b> Advanced Calculus & Linear Algebra I	1,2	2	
	<b>MATH1052</b> Multivariate Calculus & Ordinary Differential Equations OR <b>MATH1072</b> Advanced Multivariate Calculus & Ordinary Differential Equations	2		<b>MATH1052</b> Multivariate Calculus & Ordinary Differential Equations OR <b>MATH1072</b> Advanced Multivariate Calculus & Ordinary Differential Equations	1,2	2	
	<b>ENGG1400</b> Engineering Mechanics: Statics & Dynamics (discontinued)	2	2/20	<b>ENGG1700</b> Statics & Materials	1,2	2	1/21
	<b>ENGG1500</b> Engineering Thermodynamics	2		<b>ENGG1500</b> Engineering Thermodynamics	1	2	
	<b>MATH2000</b> Calculus & Linear Algebra II (discontinued) or <b>MATH2001</b> Advanced Calculus & Linear Algebra II	2	2/21	<b>MATH2001</b> Calculus & Linear Algebra II	1,2,S	1,2	
	<b>MECH2300</b> Structures & Materials	2		<b>MECH2300</b> Structures & Materials	1,2	2	
	<b>MECH2305</b> Introduction to Engineering Design and Manufacturing	2		<b>MECH2305</b> Introduction to Engineering Design and Manufacturing	1	2	
	<b>MECH2410</b> Fundamentals of Fluid Mechanics	2		<b>MECH2410</b> Fundamentals of Fluid Mechanics	1	2	
	<b>ENGG1300</b> Introduction to Electrical Systems	2		<b>ENGG1300</b> Introduction to Electrical Systems	1	2	
	<b>MECH2100</b> Machine Element Design	2		<b>MECH2100</b> Machine Element Design	2	2	
	<b>MECH2210</b> Intermediate Mechanical & Space Dynamics	2		<b>MECH2210</b> Dynamics I	2	2	

Once you have completed the BE(Hons) Transition Plan – Mechanical & Material continuation checklist, you may either email your checklist to the Faculty on [enquiries@eait.uq.edu.au](mailto:enquiries@eait.uq.edu.au) or book an appointment with an Academic Advisor directly.

	<b>MECH2310</b> Science & Engineering of Metals	2		<b>MECH2310</b> Science & Engineering of Metals	2	2	
	<b>MATH2010</b> Analysis of Ordinary Differential Equations AND <b>STAT2201</b> Analysis of Engineering & Scientific Data	1 1		<b>MATH2010</b> Analysis of Ordinary Differential Equations AND <b>STAT2201</b> Analysis of Engineering & Scientific Data	1,2 1,2	1 1	
	<b>MECH3300</b> Finite Element Method & Fracture Mechanics (discontinued)	2	<b>1/22</b>	<b>MECH3780</b> Computational Mechanics	1	2	<b>1/23</b>
	<b>MECH3400</b> Thermodynamics & Heat Transfer	2		<b>MECH3400</b> Thermodynamics & Heat Transfer	1	2	
	<b>MECH3600</b> Engineering Management & Communication (discontinued)	2	<b>1/22</b>	<b>MECH3610</b> Systems Engineering Principles	1	2	<b>1/23</b>
	<b>MECH3100</b> Mechanical Systems Design	2		<b>MECH3100</b> Systems Engineering Practice	2	2	
	<b>MECH3200</b> Advanced Dynamics & Vibrations	2		<b>MECH3200</b> Advanced Dynamics & Vibrations	2	2	
	<b>MECH3301</b> Materials Selection	2		<b>MECH3301</b> Materials Selection	2	2	
	<b>MECH3410</b> Fluid Mechanics	2		<b>MECH3410</b> Fluid Mechanics	2	2	
	<b>CHEE3301</b> Polymer Engineering	2		<b>CHEE3301</b> Polymer Engineering	1	2	
	<b>CHEE4302</b> Electrochemistry & Corrosion (discontinued)	2	<b>2/20</b>	<b>MATE4302</b> Electrochemistry and Corrosion	2	2	<b>2/21</b>
	<b>ENGG4900</b> Professional Practice and the Business Environment (discontinued)	2	<b>2/23</b>	<b>ENGG4901</b> Professional Practice and the Business Environment A Or <b>ENGG4902</b> Professional Practice and the Business Environment B	1,2	2	<b>1/24</b>
	<b>MECH4304</b> Net Shape Manufacturing	2		<b>MECH4304</b> Net Shape Manufacturing	1	2	
	<b>METR4201</b> Control Engineering 1	2		<b>METR4201</b> Control Engineering 1	1	2	
	<b>MECH4500</b> Engineering Thesis (discontinued) <b>MECH4501</b> Engineering Thesis (discontinued) Or <b>MECH4552</b> Major Design Project (discontinued)	4	<b>2/20</b> <b>2/20</b>	<b>ENGG4600</b> Engineering Thesis <b>ENGG4601</b> Engineering Thesis or <b>ENGG4552</b> Major Design Project	1 2 1,2	4	<b>2/20</b> <b>2/20</b>

✓/X compl.	Part B0 - Preparatory Mathematics & Science Electives	#	Last offered	If NOT completed – you can choose*:	Sem offering	#	First offered
	<b>CHEM1090</b> Introductory Chemistry	2		<b>CHEM1090</b> Introductory Chemistry	1	2	
	<b>MATH1050</b> Mathematical Foundations	2		<b>MATH1050</b> Mathematical Foundations	1,2	2	
	<b>PHYS1171</b> Physical Basis of Biological Systems	2		<b>PHYS1171</b> 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
	<b>BIOL1040</b> Cells to Organisms	2		<b>BIOL1040</b> Cells to Organisms	2	2	
	<b>CHEE1001</b> Principles of Biological Engineering (discontinued)	2	1/20	<b>BIOE1001</b> Principles of Biomedical & Bioprocess Engineering	1	2	1/21
	<b>CHEM1100</b> Chemistry 1	2		<b>CHEM1100</b> Chemistry 1	1,2	2	
	<b>CSSE1001</b> Introduction to Software Engineering	2		<b>CSSE1001</b> Introduction to Software Engineering OR <b>ENGG1001</b> Programming for Engineers	1,2	2	1/21
	<b>ENGG1600</b> Introduction to Research Practices - The Big Issues	2		<b>ENGG1600</b> Introduction to Research Practices - The Big Issues	2	2	
	<b>ENGG2000</b> Humanitarian Engineering	2		<b>ENGG2000</b> Humanitarian Engineering	2	2	
	<b>ERTH1501</b> Earth Processes & Geological Materials for Engineers	2		<b>ERTH1501</b> Earth Processes & Geological Materials for Engineers	1	2	
	<b>PHYS1002</b> Electromagnetism and Modern Physics	2		<b>PHYS1002</b> Electromagnetism and Modern Physics (semester 2 only from 2022)	2	2	

✓/X compl.	Part B4 - Advanced Electives	#	Last offered	If NOT completed – you can choose*:	Sem offering	#	First offered
2 units from Part B4 - Advanced Electives							
	<b>AERO4300</b> Aerospace Composites	2		<b>AERO4300</b> Aerospace Composites	2	2	
	<b>CHEE4301</b> Nanomaterials (discontinued)	2	2/20	<b>MATE6301</b> Nanomaterials	2	2	2/21
	<b>CHEE4305</b> Biomaterials: Materials in Medicine (discontinued)	2	2/20	<b>BIOE4305</b> Biomaterials: Materials in Medicine	2	2	2/21

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