

# CHECKLIST Bachelor of Engineering (Honours) – Mechanical 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) (Mechanical Engineering) - a Single Major (Plan code: MECHAX2342) or Extended Major (Plan code: MECHAY2342), or Major & Minor; 64 units comprising -

- a major - 52 units, comprising-
  - 50 units, being all courses from part A (listed below); and
  - 2 units from part B3 – year 3 or 4 electives; and
- 12 units from electives
  - a minimum of 4 units from courses on the BE(Hons) list, other than courses on the Mechanical Engineering part B0 list, and
  - a maximum of 4 units from courses on the Mechanical Engineering part B0 list, and
  - a maximum of 4 units from level one courses not on the BE(Hons) list

OR

- an extended major - 60 units, comprising-
  - 50 units, being all courses from part A - compulsory; and
  - 2 units from part B3 – year 3 or 4 electives; and
  - 8 units from part B electives under Extended Major for courses not already counted in part B3; 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	✓/X compl.
	46 units, being all courses 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 2/20	ENGG1100 Professional Engineering and * if you have not completed ENGG1200, please contact EAIT Student Admin	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 (NEW)	1,2	2	1/21	
	ENGG1500 Engineering Thermodynamics	2		ENGG1500 Engineering Thermodynamics	1	2		
	ENGG1300 Introduction to Electrical Systems	2		ENGG1300 Introduction to Electrical Systems	1,2	2		
	MATH2000 Calculus & Linear Algebra II (discontinued) or MATH2001 Advanced Calculus & Linear Algebra II	2	2/21	MATH2001 Calculus & Linear Algebra II	1,2,S	2		

✓ - course already completed X – course to be undertaken

Checked by (Faculty: Name and Date): \_\_\_\_\_

	<b>MECH2300</b> Structures & Materials	2		<b>MECH2300</b> Structures & Materials	1	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>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		
	<b>MECH2700</b> Engineering Analysis I	2		<b>MECH2700</b> Engineering Analysis I	2	2		
	<b>MATH2010</b> Analysis of Ordinary Differential Equations AND <b>STAT2201</b> Analysis of Engineering & Scientific Data	2		<b>MATH2010</b> Analysis of Ordinary Differential Equations AND <b>STAT2201</b> Analysis of Engineering & Scientific Data	1,2 1,2	1 1		
	<b>MECH3400</b> Thermodynamics & Heat Transfer	2		<b>MECH3400</b> Thermodynamics & Heat Transfer	1	2		
	<b>MECH3600</b> Engineering Management & Communication (discontinued)	2	1/22	<b>MECH3610</b> Systems Engineering Principles (NEW)	1	2	1/23	
	<b>MECH3300</b> Finite Element Method & Fracture Mechanics (discontinued)	2	1/22	<b>MECH3780</b> Computational Mechanics, NEW	1	2	1/23	
	<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>MECH3410</b> Fluid Mechanics	2		<b>MECH3410</b> Fluid Mechanics	2	2		
	<b>METR4201</b> Control Engineering 1	2		<b>METR4201</b> Control Engineering 1	1	2		
	<b>ENGG4900</b> Professional Practice and the Business Environment	2		<b>ENGG4900</b> Professional Practice and the Business Environment	1,2	2		
	<b>MECH4500</b> Engineering Thesis (discontinued) <b>MECH4501</b> Engineering Thesis (discontinued) <b>ENGG4011</b> Professional Engineering Project (6) (discontinued) OR <b>MECH4552</b> Major Design Project (discontinued)	4 4 6 4	2/20 2/20 2/20	<b>ENGG4600</b> Engineering Thesis <b>ENGG4601</b> Engineering Thesis <b>ENGG4013</b> Professional Engineering Project (NEW) (4) OR <b>ENGG4552</b> Major Design Project	1 2 1,2 2	4	1/21 2/21 TBA 2/21	
<b>Part A units completed pre-2021:</b>				<b>Part A units to be substituted/completed:</b>				
				<b>Total Part A (must add up to 46 units):</b>				

#### Extended Major

If you are enrolled in the extended major, you must enrol in an additional 8 units from introductory or advanced electives from Part B1 or B2, including a minimum of 6 units from Part B2.

Once you have completed the checklist, you may either email your checklist to the Faculty on [enquiries@eit.uq.edu.au](mailto:enquiries@eit.uq.edu.au) or book an appointment with an Academic Advisor directly.

**BE(Hons) Transition Plan – Mechanical continuation**

**Checked by (Faculty: Name and Date):** \_\_\_\_\_

✓/X compl.	Part B1 - Introductory Electives	#	Last offered	If NOT completed – you can choose*:	Sem offering	#	First offered	✓/X compl.
	<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 <b>OR</b> <b>ENGG1001</b> Programming for Engineers (NEW)	1,2	2	<b>1/21</b>	
	<b>ENGG1600</b> Introduction to Research Practices - The Big Issues	2		<b>ENGG1600</b> Introduction to Research Practices - The Big Issues	2	2		
	<b>PHYS1002</b> Electromagnetism and Modern Physics	2		<b>PHYS1002</b> Electromagnetism and Modern Physics (semester 2 only from 2022)	1,2	2		
	<b>ENGG2000</b> Humanitarian Engineering	2		<b>ENGG2000</b> Humanitarian Engineering	1,2	2		

✓/X compl.	Part B2 – Advanced Electives	#	Last offered	If NOT completed – you can choose*:	Sem offering	#	First offered	✓/X compl.
	<b>AERO4300</b> Aerospace Composites	2		<b>AERO4300</b> Aerospace Composites	2	2		
	<b>AERO4450</b> Aerospace Propulsion	2		<b>AERO4450</b> Aerospace Propulsion	1	2		
	<b>AERO4470</b> Hypersonics	2		<b>AERO4470</b> Hypersonics	1	2		
	<b>AERO4800</b> Space Engineering	2		<b>AERO4800</b> Space 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>ELEC2003</b> Electromechanics & Electronics (discontinued)	2	<b>1/21</b>	<b>ELEC2300</b> Electromagnetism and Electromechanics (NEW)	1	2	<b>1/22</b>	
	<b>ENGG4103</b> Engineering Asset Management	2		<b>ENGG4103</b> Engineering Asset Management	1	2		
	<b>ENGY4000</b> Energy Systems	2		<b>ENGY4000</b> Energy Systems	1	2		
	<b>FIRE3700</b> Introduction to Fire Safety Engineering	2		<b>FIRE3700</b> Introduction to Fire Safety Engineering	1	2		
	<b>MECH2310</b> Science & Engineering of Metals	2		<b>MECH2310</b> Science & Engineering of Metals	2	2		
	<b>MECH3250</b> Engineering Acoustics	2		<b>MECH3250</b> Engineering Acoustics	2	2		

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	<b>MECH3301</b> Materials Selection	2		<b>MECH3301</b> Materials Selection	2	2		
	<b>MECH3750</b> Engineering Analysis II (discontinued)	2	2/22	If <b>MECH2700</b> & <b>MECH3780</b> completed, then exemption – <b>advanced Mech Eng elective to be taken in lieu</b>		2		
	<b>MECH4304</b> Net Shape Manufacturing	2		<b>MECH4304</b> Net Shape Manufacturing	1	2		
	<b>MECH4950</b> Advanced Manufacturing in Practice	2		<b>MECH4950</b> Advanced Manufacturing in Practice	2	2		
	<b>MECH4951</b> Special Topics D (discontinued)	1		<b>Any BE Elective</b>				
	<b>MECH6480</b> Computational Fluid Dynamics	2		<b>MECH6480</b> Computational Fluid Dynamics	2	2		
	<b>METR3100</b> Control System Implementation	2		<b>METR3100</b> Control System Implementation	1	2		
	<b>METR4202</b> Robotics & Automation	2		<b>METR4202</b> Robotics & Automation	2	2		
	<b>PHYS2082</b> Space Science & Stellar Astrophysics	2		<b>PHYS2082</b> Space Science & Stellar Astrophysics	2	2		
	<b>TIMS3309</b> Fundamentals of Technology and Innovation Management	2		<b>TIMS3309</b> Fundamentals of Technology and Innovation Management	2	2		

✓/X compl.	Part B3 - Electives	#	Last offered	If NOT completed – you can choose*:	Sem offering	#	First offered	✓/X compl.
	<b>ENGY4000</b> Energy Systems	2		<b>ENGY4000</b> Energy Systems	1	2		
	<b>MECH3250</b> Engineering Acoustics	2		<b>MECH3250</b> Engineering Acoustics	2	2		
	<b>MECH3750</b> Engineering Analysis II (discontinued)	2	2/22	If <b>MECH2700</b> & <b>MECH3780</b> completed, then exemption – <b>advanced Mech Eng elective to be taken in lieu</b>		2		
	<b>METR3100</b> Control System Implementation	2		<b>METR3100</b> Control System Implementation	1	2		

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