

## CHECKLIST Bachelor of Engineering (Honours) Civil Engineering Specialisation: Transition to new program (commencing 2024)

\* This checklist is for the BE(Hons) component for dual programs with Bachelor of Arts, Bachelor of Business Management, Bachelor of Commerce, Bachelor of Design, Bachelor of Economics, Bachelor of Information Technology

### 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.
- Please contact the relevant Faculty for information regarding the other component of your dual program

For the BE(Hons) component, with a specialisation in Civil Engineering:

(a) 56 units from the BE(Hons) component, comprising—

(i) 8 units for [BE\(Hons\) core courses](#), and

(ii) 36 units for a [BE\(Hons\) Civil Engineering specialisation](#), and

i. 28 units for all [Civil Engineering Compulsory Courses](#), and

ii. 2 to 4 units from [Civil Engineering Research Courses](#), and

iii. 2 to 4 units from [Civil Engineering Advanced Elective Courses](#), and

iv. 2 units from [BE\(Hons\) Program Elective Courses](#)

(iii) 8 to 12 units from [Civil Engineering Advanced Elective Courses](#), and

(iv) 0 to 4 units from [Civil Engineering Breadth Elective Courses](#)

✓/x compl.	BE(Hons) Core Courses (8 units)	Sem offering	#	First offered	Approved substitution	Last offered
8 units for all Core Courses						
	<b>ENGG1100</b> Professional Engineering	1,2	2		Course must be completed [ENGG1211 (4 units) will count as 2 units towards Part A in lieu of ENGG1100, and 2 units towards program electives]	
	<b>ENGG1001</b> Programming for Engineers or <b>CSSE1001</b> Introduction to Software Engineering	1,2	2		Course must be completed	
	<b>MATH1051</b> Calculus & Linear Algebra I or <b>MATH1071</b> Advanced Calculus & Linear Algebra I	1,2	2		Course must be completed	
	<b>MATH1052</b> Multivariate Calculus & Ordinary Differential Equations or <b>MATH1072</b> Advanced Multivariate Calculus & Ordinary Differential Equations	1,2	2		Course must be completed	

Once you have completed the BE(Hons)/Bxx Transition Plan – Civil Engineering NEW (Commencing 2024) 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.

### Specialisation in Civil Engineering

Complete 48 units comprising:

- i. 36 units for a BE(Hons) Civil Engineering specialisation, and
  - i. 28 units for all [Civil Engineering Compulsory Courses](#), and
  - ii. 2 to 4 units from [Civil Engineering Research Courses](#), and
  - iii. 2 to 4 units from [Civil Engineering Advanced Elective Courses](#), and
  - iv. 2 units from [BE\(Hons\) Program Elective Courses](#)
- ii. 8 to 12 units from [Civil Engineering Advanced Elective Courses](#), and
- iii. 0 to 4 units from [Civil Engineering Breadth Elective Courses](#)

✓/X compl.	Civil Engineering Specialisation (36 units)	Sem offering	#	First offered	Approved substitution	Last offered
28 units for all Compulsory Courses						
	ENGG1700 Statics & Materials	1,2	2		ENGG1400 Engineering Mechanics: Statics and Dynamics (discontinued)	2/20
	CIVL2131 Environmental Fluid Mechanics	1	2		Course must be completed	
	CIVL2135 Introduction to Environmental Engineering	1	2		CIVL2135 Environmental Issues and Sustainability in Engineering	
	CIVL2210 Soil Mechanics	2	2		Course must be completed	
	CIVL2330 Structural Mechanics	1	2		Course must be completed	
	CIVL2420 Fundamentals of Transport Engineering	2	2		CIVL2410 Sustainable Transport Engineering - Traffic Analysis (discontinued)	1/21
	CIVL2530 Statistics and Data Analysis	1	2		CIVL2530 Probability and Statistics in Engineering	
	CIVL3155 Hydrology and Free Surface Flows	2	2		CIVL3141 Hydrology and Hydrological Risk (discontinued) and CIVL3140 Hydraulics of Engineered and Natural Waterways (discontinued) [Both courses are required to have been completed to exempt students from CIVL3155; therefore 2 units will count as a Compulsory Course and 2 units will count towards Civil Engineering Advanced Electives]	2/21  1/21
	CIVL3210 Geotechnical Engineering	1	2		Course must be completed	
	CIVL3360 Reinforced Concrete Design	2	2		CIVL2360 Design of Concrete Structures (discontinued)	2/21
	CIVL3520 Project Management and Professional Practice	2	2		CIVL3510 Project Management with Building Information Modelling (discontinued)	2/22
	CIVL3530 Data Analytics in Civil Engineering	1	2		Course must be completed	
	CIVL4170 Risk Analysis and Assessment	1	2		Course must be completed	
	CIVL4514 Integrated Design or CIVL4516 Integrated Design for Environmental Environment	2 2	2 2	2/24	Course must be completed	

Once you have completed the BE(Hons)/Bxx Transition Plan – Civil Engineering NEW (Commencing 2024) 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.

2 to 4 units from Civil Engineering Research Courses						
	CIVL4600 Research Project	1,2	2		CIVL4560 Project (2) or CIVL4580 Research Thesis (4) (recode to CIVL4583 – 2/21) or CIVL4582 Research Thesis (4) (recode to CIVL4584 – 2/21)	2/22
	CIVL4604 Research Thesis	1	2		No substitution	
	CIVL4606 Research Thesis	2	4		No substitution	

2 to 4 units from Civil Engineering Advanced Elective Courses						
	CIVL3220 Rock Mechanics	1	2		No substitution	
	CIVL3340 Structural Analysis	1	2		No substitution	
	CIVL3380 Structural and Steel Design	1	2		CIVL2340 Design of Steel Structures (discontinued)	2/22
	CIVL3390 Integrated Structural Design	2	2		No substitution	
	CIVL3430 Sustainable Transport Engineering	1	2	1/24	No substitution	
	CIVL6111 Ocean, Coastal & Estuarine Engineering	2	2		CIVL4110 Coastal & Estuarine Engineering (discontinued) * CIVL4110 may only be used as approved substitution for CIVL6111 OR CIVL6112 – not both	2/22
	CIVL6112 Hydro- and Marine Power Renewable Energy Systems	2	2		CIVL4110 Coastal & Estuarine Engineering (discontinued) * CIVL4110 may only be used as approved substitution for CIVL6111 OR CIVL6112 – not both	2/22
	CIVL6121 Environmental Hydraulics and Flood Management	1	2		CIVL4120 Advanced Hydraulic Engineering and Structures (discontinued)	2/22
	CIVL4145 Groundwater Modelling and Management	2	2		CIVL4140 Contaminant Transport Modelling (discontinued)	1/21
	CIVL4230 Advanced Soil Mechanics	2	2		No substitution	
	CIVL4270 Geotechnical Investigation	1	2		No substitution	
	CIVL4280 Applied Rock Mechanics	2	2		No substitution	
	CIVL4333 Advanced Concrete Design	1	2		No substitution	
	CIVL4334 Design of Timber Structures	2	2		No substitution	
	CIVL4340 Wind Engineering	1	2		No substitution	
	CIVL4450 Traffic Flow Theory and Emerging Technologies	2	2		No substitution	

Once you have completed the BE(Hons)/Bxx Transition Plan – Civil Engineering NEW (Commencing 2024) 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>CIVL4460</b> Highway Geometric Design	2	2		No substitution	
	<b>CIVL4522</b> Analytical Methods for the Design of Construction Operations	2	2		No substitution	
	<b>CIVL4525</b> Sustainable Infrastructure Design	1	2		No substitution	
	<b>CIVL6210</b> Dam Engineering	2	2		No substitution	
	<b>CIVL6215</b> Ground Improvement	1	2		<b>CIVL7215</b> Ground Improvement & Remediation Technologies (discontinued)	<b>1/23</b>
	<b>CIVL6220</b> Mine Waste Management	1	2		No substitution	
	<b>CIVL6250</b> Underground Structures	2	2		No substitution	
	<b>CIVL6360</b> Advanced Structural Analysis	2	2		<b>CIVL4332</b> Advanced Structural Analysis (discontinued)	<b>2/22</b>
	<b>CIVL6410</b> Transport Network Modelling	1	2		No substitution	
	<b>CIVL6415</b> Traffic Analysis and Simulation	2	2		No substitution	
	<b>ENVE3150</b> Environmental System Dynamics and Modelling	2	2		<b>CIVL3150</b> Modelling of Environmental Systems (discontinued)	<b>2/20</b>
	<b>ENVE3160</b> Environmental Phenomena	1	2		No substitution	
	<b>ENVE4610</b> Engineering the Circular Economy	1	2		No substitution	
	<b>FIRE3700</b> Introduction to Fire Safety Engineering	1	2		No substitution	
	<b>FIRE4610</b> Fire Engineering Design: Solutions for Implicit Safety	1	2		No substitution	

2 units from BE(Hons) Program Elective Courses

8 to 12 units from Civil Engineering Advanced Electives

	<b>CIVL3220</b> Rock Mechanics	1	2		No substitution	
	<b>CIVL3340</b> Structural Analysis	1	2		No substitution	
	<b>CIVL3380</b> Structural and Steel Design	1	2		<b>CIVL2340</b> Design of Steel Structures (discontinued)	<b>2/23</b>
	<b>CIVL3390</b> Integrated Structural Design	2	2		No substitution	
	<b>CIVL3430</b> Sustainable Transport Engineering	1	2	<b>1/24</b>	No substitution	
	<b>CIVL3420</b> Sustainable Transport Engineering	2	2		No substitution	

Once you have completed the BE(Hons)/Bxx Transition Plan – Civil Engineering NEW (Commencing 2024) 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>CIVL6111</b> Ocean, Coastal & Estuarine Engineering	2	2		<b>CIVL4110</b> Coastal & Estuarine Engineering (discontinued)	<b>2/22</b>
	<b>CIVL6112</b> Hydro- and Marine Power Renewable Energy Systems	2	2		No substitution	
	<b>CIVL6121</b> Environmental Hydraulics and Flood Management	1	2		<b>CIVL4120</b> Advanced Hydraulic Engineering and Structures (discontinued)	<b>2/22</b>
	<b>CIVL4145</b> Groundwater Modelling and Management	2	2		<b>CIVL4140</b> Contaminant Transport Modelling (discontinued)	<b>1/21</b>
	<b>CIVL4230</b> Advanced Soil Mechanics	2	2		No substitution	
	<b>CIVL4270</b> Geotechnical Investigation	1	2		No substitution	
	<b>CIVL4280</b> Applied Rock Mechanics	2	2		<b>CIVL4280</b> Advanced Rock Mechanics	
	<b>CIVL4333</b> Advanced Concrete Design	1	2		No substitution	
	<b>CIVL4334</b> Design of Timber Structures	2	2		No substitution	
	<b>CIVL4340</b> Wind Engineering	1	2		No substitution	
	<b>CIVL4450</b> Traffic Flow Theory and Emerging Technologies	2	2		No substitution	
	<b>CIVL4460</b> Road Design	2	2		No substitution	
	<b>CIVL4522</b> Analytical Methods for the Design of Construction Operations	2	2		No substitution	
	<b>CIVL4525</b> Sustainable Infrastructure Design	1	2		No substitution	
	<b>CIVL6210</b> Dam Engineering	2	2		No substitution	
	<b>CIVL6215</b> Ground Improvement	1	2		<b>CIVL7215</b> Ground Improvement & Remediation Technologies (discontinued)	<b>1/23</b>
	<b>CIVL6220</b> Mine Waste Management	1	2		No substitution	
	<b>CIVL6250</b> Underground Structures	2	2		No substitution	
	<b>CIVL6360</b> Advanced Structural Analysis	2	2		<b>CIVL4332</b> Advanced Structural Analysis (discontinued)	<b>2/22</b>
	<b>CIVL6410</b> Transport Network Modelling	1	2		No substitution	
	<b>CIVL6415</b> Traffic Analysis and Simulation	2	2		No substitution	
	<b>ENVE3150</b> Environmental System Dynamics and Modelling	2	2		<b>CIVL3150</b> Modelling of Environmental Systems (discontinued)	<b>2/20</b>
	<b>ENVE3160</b> Environmental Phenomena	1	2		No substitution	
	<b>ENVE4610</b> Engineering the Circular Economy	1	2		No substitution	
	<b>FIRE3700</b> Introduction to Fire Safety Engineering	1	2		No substitution	
	<b>FIRE4610</b> Fire Engineering Design: Solutions for Implicit Safety	1	2		No substitution	

Once you have completed the BE(Hons)/Bxx Transition Plan – Civil Engineering NEW (Commencing 2024) 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.

0 to 4 units from Civil Engineering Breadth Electives					
	<b>MATH2001</b> Calculus & Linear Algebra II	1,2,S3	2		
	<p><b>Civil Engineering Breadth Electives</b> can also be chosen from course lists for the following majors:</p> <ul style="list-style-type: none"> <li>o Environmental Engineering</li> <li>o Geotechnical Engineering</li> <li>o Mining Engineering</li> <li>o Structural Engineering</li> <li>o Transport Engineering</li> <li>o Water and Marine Engineering</li> </ul> <p><i>Courses on this list may require pre-requisites. Please seek academic advice if required.</i></p>				