

## **BE (Hons) Construction Engineering (AK3751) Study Plan 2025**

This (old structure) Study Plan applies only to students who began the BE Hons programme <u>prior to 2024</u>. Please refer to the new (refreshed) Study Plan if you are a student who started 2024 onwards.

## Notes:

- Once you have made your selections, go to MyAUT to complete your enrolment.
- S1 = Semester 1, S2 = Semester 2, SS = Summer School
- Pre-requisite papers are shown in brackets after each paper. Please ensure you have completed all necessary pre-requisite courses before you enrol for a course.
- For enrolment queries or issues, please email your Academic Administrator (e: engineer@aut.ac.nz).
- Course level is the first digit of the numeric part of the alphanumerical code (E.g., ENGE 500 is a level 5 course).

YEAR 1 (for students who commenced BE Hons studies prior to 2024)						
ENGE500	Introduction to Sustainable Engineering Design	S1				
ENGE501	Engineering Mathematics I	S1				
ENME502	Engineering Materials I	S2				
ENSE504	Introduction to Computing	Discontinued Enrol in COMP500 Programming Concepts and Techniques (S1, S2, SS) instead if repeat is required				
ENEL515	Electrical Principles A	Discontinued ■ If failed ENEL515 or ENEL516, take ENGE504 Electrical Engineering  Fundamentals (54 an 53)				
ENEL516	Electrical Principles B	Fundamentals (S1 or S2)  ■ If failed both ENEL515 and ENEL516, take ENGE504 (S1) and ENEL500 Analogue Devices and Systems (S2)				
ENME510	Mechanical Principles A	Discontinued ■ If failed ENME510 or ENME511, take ENGE503 Engineering Mechanics (S1)				
ENME511	Mechanical Principles B	<ul> <li>If failed both ENME510 and ENME511, take ENGE503 (S1) and ENME500 Introduction to Thermofluids and Energy (S2)</li> </ul>				

YEAR 2						
ENGE601	Engineering Mathematics II (ENGE501)	S1				
ENBU600	Construction Materials (ENME502)	S1				
ENBU603	Introduction to Building Construction	S1				
ENME609	Solid Mechanics I	Discontinued Enrol in ENBU613 Mechanics of Construction Materials (S1) if repeat is required (ENGE501, ENME502, ENME510 or ENGE503)				
ENBU601	Introduction to Structural Engineering (ENME609 or ENBU613, ENBU600)	S2				
ENBU602	Quantity Surveying	S2				
ENBU604	Construction Engineering Management I	Discontinued Enrol in ENGE600 Engineering Management I (S2) if repeat is required				
ENME602	Engineering Design Methodology	S2				



YEAR 3 (students must have completed all Year 1 papers)								
ENBU700	Architectural Design and Sustainability (ENBU600, ENBU603)	S1	ENBU705	Concrete Structures (ENBU601)	S2			
ENBU701	Geotechnical Engineering (ENBU603)	S1	ENBU706	Steel Structures (ENBU601)	S2			
ENBU702	Structural Analysis (ENBU601, ENGE601)	S1	ENBU708	Construction Engineering Management II (ENGE600 or ENBU604)	S2			
ENBU707	Construction Planning	S1	ENGE702	Engineering Mathematics III (ENGE601)	S2			

YEAR 4 (students must have completed all Year 1 and Year 2 papers)								
ENBU893	Industrial Project Part A (ENBU700, ENBU705, ENBU707, ENBU708)	S1 or S2	ENBU894	Industrial Project Part B (ENBU700, ENBU705, ENBU707, ENBU708)	S1 or S2			
ENBU800	Structural Engineering Design (ENBU702)	S1	ENBU801	Structural Dynamics (ENBU702)	S2			
ENBU806	Off-Site Construction (ENBU603)	S1	Plus, one of the following papers:					
ENBU805	Foundation Engineering (ENBU701)	S1	ENBU807	Construction Equipment and Utilisation	S2			
General Elective*	any level 5 or above paper offered within the university	S1 or S2	ENBU808	Construction Technology (ENBU707)	S2			

Plus: completion of ENGE888 Engineering Work Experience (enrol in either S1 or S2)

- No fees or credits are attached to this course
- Must be completed in order to graduate
- Send the approval form to the Work Experience Coordinator (<u>dat.doan@aut.ac.nz</u>) for your work to be considered/approved prior to commencement of work
- Complete 800 hours of work
- Submit a 4500 5000 word report through Canvas (email <a href="mailto:engineer@aut.ac.nz">engineer@aut.ac.nz</a> when you are ready to submit the report so you can be enrolled or if you have any questions)

<sup>\*</sup> A **General Elective** is any Level 5 paper or above within the university. Students can choose a **General Elective** from this link and get approval from the respective school the course belongs to, before informing us to be enrolled. <a href="https://www.aut.ac.nz/study/study-options/Additional-majors-and-minors-for-bachelors-degrees">https://www.aut.ac.nz/study/study-options/Additional-majors-and-minors-for-bachelors-degrees</a>