

Course Title: **Advanced Built Environment**

Course Code: **ENBU814**

Descriptor Start Date: **01/01/2026**

POINTS: **15.00**

LEVEL: **8**

PREREQUISITE/S: **None**

COREQUISITE/S: **None**

RESTRICTION/S: **None**

LEARNING HOURS

Hours may include lectures, tutorials, online forums, laboratories. Refer to your timetable and course information in Canvas for detailed information.

Total learning hours: 150

PRESCRIPTOR

Develops an awareness of recent and ongoing technological developments in the construction sector including intelligent buildings, energy efficient design, environmental issues, innovative technologies, sustainability and lean construction.

LEARNING OUTCOMES

1. Appraise Lean Construction principles and methodologies.
2. Analyse Lean Construction implementation strategies and assess their impact in construction.
3. Evaluate innovative construction technologies and their applications in construction.
4. Critically assess the role of sustainable and advanced materials for resilient construction.
5. Integrate technology management principles throughout the lifecycle of a construction project.

CONTENT

- Principles, fundamentals, and methodologies of Lean Construction.
- Implementation strategies and industry applications of Lean Construction.
- Emerging technologies and digital tools in construction.
- Sustainable and advanced materials and technologies in construction.
- Managing technology integration across the construction lifecycle.

LEARNING & TEACHING STRATEGIES

Disclaimer: Course descriptors may be amended between teaching periods/semesters

Lectures and mentoring, group discussions, and case studies.

ASSESSMENT PLAN

Assessment Event	Weighting %	Learning Outcomes
Individual Oral Presentation	50.00	1,2,3
Group Project-Based Report	50.00	2,3,4,5

Grade Map

MAP1

A+ A A- Pass with Distinction

B+ B B- Pass with Merit

C+ C C- Pass

D Fail

Overall requirement/s to pass the course:

To pass this course, students must achieve a minimum overall grade of C-.

LEARNING RESOURCES

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For further information, contact: Te Ara Auaha - Faculty of Design & Creative Technologies

Principal Programme: AK1290, Master of Construction Management

Related Programme/s: ICE1
INEXCH1
SABRD1

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