

BLDG 1010 ENVIRONMENTAL BUILDING DESIGN (WSTC)

Credit Points 10

Legacy Code 700255

Coordinator Ramin Ebadi ([https://directory.westernsydney.edu.au/search/name/Ramin Ebadi/](https://directory.westernsydney.edu.au/search/name/Ramin%20Ebadi/))

Description This subject explores the important parameters that are used to facilitate sustainable change in the built environment. Building design is a tool to minimise the use of scarce resources and reduce the impact on the natural Australian landscape. Improving the standard of liveability in urban and peri-urban communities is addressed through the development of holistic building design solutions.

School Eng, Design & Built Env

Discipline Construction Engineering

Student Contribution Band HECS Band 2 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 1 subject

Equivalent Subjects BLDG 1009 - Environmental Building Design

Restrictions

Students must be enrolled at Western Sydney University, The College. Students enrolled in Extended Diplomas must pass 40 credit points from the preparatory subjects listed in the program structure prior to enrolling in this University level subject. Students enrolled in the combined Diploma/Bachelor programs listed below must pass all College Preparatory subjects listed in the program structure before progressing to the Year 2 subjects.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Recognise the importance of energy and water efficiency to the sustainability of our built environment
2. Review the available strategies that can be used to improve the life cycle performance of buildings
3. Identify the major common weaknesses in current residential building design
4. Prioritise environmental parameters for a specific building project
5. Integrate their knowledge of environmental design in the context of a medium density housing development

Subject Content

1. Sustainable building design
2. Environmentally friendly building materials and systems
3. Green rating schemes for buildings
4. Energy, water and waste management in buildings

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

| Type | Length | Percent | Threshold | Individual/ Group Task | Mandatory |
|-----------------|------------------------------|---------|-----------|------------------------|-----------|
| Quiz | 1 hour | 20 | N | Individual | N |
| Report | 1000 words | 30 | N | Individual | N |
| Applied Project | 3D CAD model and 2D drawings | 50 | N | Individual | N |

Teaching Periods

Term 1 (2025) Penrith (Kingswood)

On-site

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View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=BLDG1010_25-T1_KW_1#subjects)

Term 3 (2025) Penrith (Kingswood)

On-site

Subject Contact Ramin Ebadi ([https://directory.westernsydney.edu.au/search/name/Ramin Ebadi/](https://directory.westernsydney.edu.au/search/name/Ramin%20Ebadi/))

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=BLDG1010_25-T3_KW_1#subjects)