

MODULE DESCRIPTOR

Module Title

Tropical Climate Building Design

Reference	AC4009A	Version	3
Created	July 2021	SCQF Level	SCQF 10
Approved	July 2002	SCQF Points	15
Amended	September 2021	ECTS Points	7.5

Aims of Module

To provide the student with the skills and ability to design buildings for a tropical climate.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Research and evaluate appropriate building strategies for design in a Tropical Climate.
- 2 Apply appropriate environmental, structural and constructional strategies for design in a building for a tropical climate.
- 3 Demonstrate and integrated sustainable building solution for the design of a building in a Tropical Climate.

Indicative Module Content

The module provides practical guidance on the design of buildings and appropriate systems of environmental control for tropical climates.

Module Delivery

This module explores the theories, choices and integration of appropriate constructional and environmental aspects in building design for tropical climates. The concept of the building as a sustainable integrated system is emphasised.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	36	N/A
Non-Contact Hours	114	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type: Coursework Weighting: 100% Outcomes Assessed: 1, 2, 3
 Description: A report or presentation or application project.

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

The overall module grade is based on 100% weighting of Component 1 (Report/Presentation/Application Project). An overall minimum grade D is required to pass the module. Non-submission will result in an NS grade.

Module Grade	Minimum Requirements to achieve Module Grade:
A	A
B	B
C	C
D	D
E	E
F	F
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 Thomas, R., (ed), Environmental Design, 3rd ed Spon, 2006 O H Koenigsberger and T G Ingersoll, Manual of Tropical Housing and Building: Climate Design, 2014 Rohinton Emmanuel, Urban Approach To Climate Sensitive Design: Strategies for the Tropics: Design for the Urban Tropics, 2005 Richard Hyde, Climate Responsive Design: A Study of Buildings in Moderate and Hot Humid Climates, 2000 J. Paul Guyer, An Introduction to Tropical Engineering: Mechanical, Electrical, Miscellaneous, 2015
- 2 Energy Research Group, A Green Vitruvius: Principles and Practice of Sustainable Architectural Design, James & James, 1999
- 3 Nicholls, R., The Green Building Bible, Vols 1 & 2, Green Building Press, 2006
- 4 Szokolay, S V., Introduction to Architectural Science: the Basis of Sustainable Design, Architectural Press, 2004