

Glasgow School of Art Course Specification
Course Title: Architectural Technology 1

Please note that this course specification is correct on the date of publication but may be subject to amendment prior to the start of the 2023-24 Academic Year.

Course Code:	HECOS Code:	Academic Session:
UBAR102		2023-24

1. Course Title:
Architectural Technology 1

2. Date of Approval:	3. Lead School:	4. Other Schools:
Academic Council December 2023	Mackintosh School of Architecture	N/A

5. Credits:	6. SCQF Level:	7. Course Leader:
30	7	Virginia Rammou

8. Associated Programmes:
Bachelor of Architecture with Honours

9. When Taught:
Semester 1

10. Course Aims:
<p>The aim of Architectural Technology 1 is for all students to:</p> <ul style="list-style-type: none"> • Achieve a basic knowledge of the principles of building and construction and of the materials and processes employed, and begin to apply them in designing a simple building where the choice of construction and materials contributes to the quality and character of the design. • Achieve a sufficient knowledge of environmental science to understand the nature of human comfort in the environment and its consequences for architectural design. • Begin taking responsibility for learning and achieve the ability to set and self-manage a programme of study.

11. Intended Learning Outcomes of Course:
<p>At the end of the course each student should have the ability to demonstrate and/or work with:</p> <p>Category 1 Knowledge and Understanding</p> <ul style="list-style-type: none"> • An awareness, through observation, of the intellectual and aesthetic content of significant buildings. A basic knowledge of the briefing and performance of buildings. <p>Category 2 Practice: Applied knowledge and understanding</p>

- Sufficient knowledge of environmental science to understand the nature of human comfort in the environment and its consequences for architectural design.
- A basic knowledge of building construction, materials, structural design, and the ability to apply them in coherent design projects.

Category 3 Generic Cognitive Skills

- Present and evaluate arguments, information and ideas concerning the discipline of architecture.

Category 4 Communication, ICT and Numeracy skills

- Communicate ideas, information and work comprehensibly in visual, oral and written forms.
- Convey complex ideas in well-structured and coherent form to peers and staff.

Category 5 Accountability, Autonomy and Working with Others

- Exercise some autonomy, initiative and independence in carrying out set project briefs.
- Demonstrate reasonable ability to manage time and physical resources in relation to set project briefs as an individual and a group member.
- Take account of Health and Safety Regulations in studio practice, and adhere to safe working practices. A basic understanding of collaboration with peers to develop design ideas.

12. Indicative Content:

The study of environmental design, structural design and principles of building:

Environmental Design introduces the basic design principles of thermal comfort, lighting and acoustics.

Structural Design introduces the basic design principles used in buildings.

Principles of Building provides an overview of the basic design principles in the construction of buildings.

13. Description of Summative Assessment Methods:

Work assessed through programme work, practical examinations throughout the session and written examination.

Pass in ALL components required

Assessment Method	Description of Assessment Method	Weight %	Submission week (assignments)
Coursework	Environmental Design technical submission	33.3	Semester 1 week 13
Coursework	Principles of Building technical submission	33.3	Semester 1 week 13
Coursework	Structural Design technical submission	33.3	Semester 1 week 13

13.1 Please describe the Summative Assessment arrangements:

Learning level outcomes stated for the course must be achieved, and ability to fulfil these is graded against the marking scheme (see Code of Assessment).

14. Description of Formative Assessment Methods:
Formative feedback through review presentation
14.1 Please describe the Formative Assessment arrangements:
Students present interim work for formative feedback at a mid-point of the course

15. Learning and Teaching Methods:	
Formal Contact Hours	Notional Learning Hours
64	300
15.1 Description of Teaching and Learning Methods:	
Weekly lectures for environmental design, structural design and principles of building	

16. Pre-requisites:
N/A

17. Can this course be taken by Exchange/Study Abroad students?	Yes
18. Are all the students on the course taught wholly by distance learning?	No
19. Does this course represent a work placement or a year of study abroad?	No
20. Is this course collaborative with any other institutions?	No
20.1 If yes, then please enter the names of the other teaching institutions:	
N/A	

21. Additional Relevant Information:
N/A

22. Indicative Bibliography:
<p>McMullan, R. (2007), Environmental Science in Building (6th Edition), Basingstoke, UK: Palgrave Macmillan.</p> <p>Rasmussen, S. (1962), Experiencing Architecture, Boston, USA: MIT Press.</p> <p>Banham, R. (1984), The Architecture of the Well-Tempered Environment, (2nd Revised edition), Chicago, USA: University of Chicago Press</p> <p>Hensel, M. (2013), Performance-Oriented Architecture: Rethinking Architectural Design and the Built Environment (Architectural Design Primer), London: John Wiley & Sons.</p> <p>C. Porteous, (2002, 2003), The New eco-Architecture, alternatives from the modern movement, London: Spon Press.</p> <p>Grueneisen, P (2003), Soundspace: architecture for sound & vision, Basel: Birkhauser.</p> <p>Buttiker, U. (1993), Light & Space, Basel: Birkhauser.</p> <p>Reid, E (1984), Understanding Buildings, A multidisciplinary approach, (chapters 1-2), Harlow: Longman Scientific and Technical.</p> <p>Hunt T. (1999), Tony Hunt's Sketch Book, Oxford: Architectural Press.</p> <p>Silver, P., Evans, P., McLean, W. (2013), Structural Engineering for Architects: A Handbook, London: Laurence King.</p> <p>Beukers, A., van Hinte, E. (1998), Lightness: The Inevitable Renaissance of Minimum Energy Structures, Rotterdam: 010 Publishers.</p>

Ji, T., Bell, A. (2008), *Seeing and Touching Structural Concepts*, London & New York: Taylor & Francis.

Engel, H., (1997), *Structure Systems: Tragsysteme*, Ostfildern-Ruit: Verlag Gerd Hatje.

Deplazes, A. (2005), *Constructing Architecture: Materials Processes Structures*, Basel: Birkhauser.

Frampton, K. (1995), *Studies in Tectonic Cultures: The Poetics of Construction in Nineteenth and Twentieth Century Architecture*, Cambridge, Mass.: MIT Press.

Ford E. (2011), *The Architectural Detail*, New York: Princeton Architectural Press.

Detail Magazine, Munich: Institut für Internationale Architektur –Dokumentation.