

**Glasgow School of Art Course Specification**  
**Course Title: Architectural Technology 4**

*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.*

<b>Course Code:</b>	<b>HECOS Code:</b>	<b>Academic Session:</b>
UBAR502 / UDPF102		2023-24

<b>1. Course Title:</b>
Architectural Technology 4

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

<b>5. Credits:</b>	<b>6. SCQF Level:</b>	<b>7. Course Leader:</b>
20	10	Virginia Rammou

<b>8. Associated Programmes:</b>
Bachelor of Architecture (Hons) Diploma in Architecture

<b>9. When Taught:</b>
Semester 1 and Semester 2

<b>10. Course Aims:</b>
<p>The aim of the course is to extend design skills within a creative studio environment. It provides students with an opportunity to develop a coherent and rigorous approach to the technical design of their architectural projects. It requires students to:</p> <ul style="list-style-type: none"> <li>develop and integrate detailed strategies for construction, structural design, fire safety, environmental design, energy and resource management; in relation to their studio projects.</li> <li>consider the architectural and ethical implications of their technological choices as a means of developing and expanding a critical architectural practice.</li> </ul>

<b>11. Intended Learning Outcomes of Course:</b>
<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"> <li>Researched and critical evaluation of the briefing and performance of buildings.</li> </ul> <p>Category 2: Practice – Applied Knowledge and Understanding</p>

- The ability to define what type of research is relevant, what questions to ask, and which formats to record the findings to best serve as a springboard to design decisions.
- A sense of direction and the ability to develop and sustain a line of enquiry – being able to identify and develop design ideas thematically as well as undertaking sequential problem solving.
- Undertake strategic thinking – exploring options, setting parameters and objectives and testing design ideas against them and comparing likely outcomes in order to make critical judgments about the likely effect of design decisions.
- Research and critical evaluation of how a strategic choice of construction, materials and environmental approaches can determine the character of an architectural design project.

**Category 3: Generic Cognitive Skills**

- Critically identify, define, conceptualise and analyse complex problems and issues relevant to contemporary discipline of architecture.

**Category 4: Communication, ICT and Numeracy Skills**

- Communicate and articulate ideas and information fluently and work comprehensively in visual, oral and written forms to a professional level.
- Make formal presentations about specialist topics to informed audiences.

**Category 5: Autonomy, Accountability and Working with others**

- Exercise autonomy and initiative in carrying out set project briefs and self-directed programme of study.
- A developing critical position as an individual designer and contribute this to the on-going studio debate.
- Deal with complex ethical and professional issues.

**12. Indicative Content:**

A series of lectures/workshops and/or presentations investigating current issues of architectural technology and how the positive and creative aspects of such investigations infuse and inspire the design process.

**13. Description of Summative Assessment Methods:**

Submission through course work and examination through exhibition and portfolio submission.  
Pass in ALL components required

Assessment Method	Description of Assessment Method	Weight %	Submission week (assignments)
Course work	AT4–1: Technical Study: Precedent Study (group work)	40	Summative submission: Semester 1, week 12 .
Course work	AT4–2: Technical Study: Technical Integration	60	Summative submission: Semester 2, week 12

**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 Academic Regulations).

**14. Description of Formative Assessment Methods:**

Engagement with formative assessment is a mandatory requirement.  
Formative guidance given during both assignments.

**14.1 Please describe the Formative Assessment arrangements:**

AT4–1: Presentations (in groups) to take place Semester 1, week 8.  
Students will be provided with verbal feedback.  
AT4–2: Formative submission Semester 2, Week 5. Students will be provided with written feedback.

**15. Learning and Teaching Methods:**

Formal Contact Hours	Notional Learning Hours
20	200

**15.1 Description of Teaching and Learning Methods:**

Semester 1: General Introduction and Lectures,  
Mid Semester 1: Formative Assessment AT4–1 via presentation.  
End of semester 1: Summative Assessment AT4–1.

Mid Semester 2: Formative Assessment AT4–2 via submission.  
End of Semester 2: Summative Assessment: AT4–2.

**16. Pre-requisites:**

A pass in BArch Stage 3 or BArch (Hons) degree from external institution

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

**21. Additional Relevant Information:**

N/A

**22. Indicative Bibliography:**

Thomas, R. (Ed.). (2006). *Environmental design: an introduction for architects and engineers*. Taylor & Francis.  
Thomas, R., & Garnham, T. (2007). *The environments of architecture: Environmental design in context*. Taylor & Francis.  
Hawkes, D. (Ed.). (2008). *The environmental imagination: technics and poetics of the architectural environment*. Taylor & Francis.  
Silver, P., & McLean, W. (2013). *Introduction to architectural technology*. Laurence King.  
Smith, P. F. (2007). *Sustainability at the cutting edge: emerging technologies for low energy buildings*. Routledge.

Fitzgerald, E. (1999). *A green vitruvius: principles and practice of sustainable architectural design*. London: James & James(Science Publishers) Ltd.

Simmons, C., & Gilbert, B. (2008). *The ZEDbook: solutions for a shrinking world*. Taylor & Francis.

Porteous, C. (2005). *Solar architecture in cool climates*. Earthscan.

Goulding, J. R., Lewis, J. O., & Steemers, T. C. (Eds.). (1992). *Energy conscious design: a primer for architects*. Batsford for the Commission of the European Communities.

Littlefield, D. (Ed.). (2012). *Metric handbook: planning and design data*. Routledge.

Cowan, H. J., Smith, P. R., & Chow, W. K. (Eds.). (2004). *Dictionary of architectural and building technology*. Taylor & Francis.

Nicholls, R. (2006). *Green Building Bible: Volume 2: Low energy design technical reference (Vol. 2)*. Green Building Press.

Macdonald, A. J. (2013). *Structure and architecture*. Routledge.

Banham, R. (1984). *Architecture of the Well-tempered Environment*. University of Chicago Press.