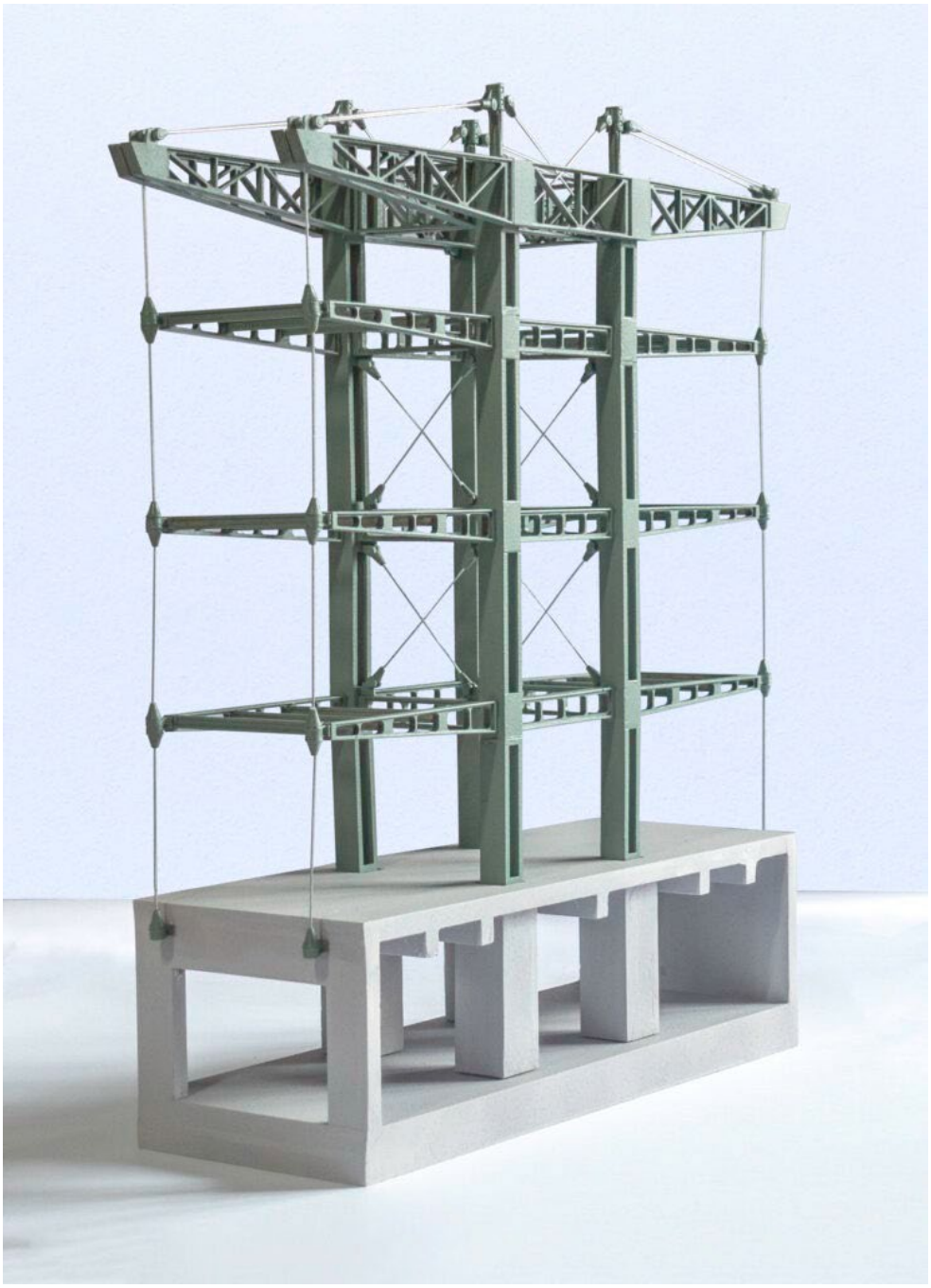
THE GLASGOW SCHOOL OF ART

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



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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 Academic Year.

Course Code	HECOS Code	Academic Session
	100121 (60%); 100120 (20%); 100147 (20%)	2026-27

Course Title	Architectural Technology 4
Course Contact	Virginia Rammou

Credits	30
SCQF Level	Level 10
When Taught	Semester 1 and 2

Associated Programmes	Bachelor of Architecture with Honours BSc in Environmental Architecture with Honours BSc in Interior Architecture with Honours Diploma in Architecture
Lead School	Mackintosh School of Architecture
Other Schools	N/A
Date of Approval	Programme Approval September 2025

Course Introduction

The Architectural Technology 4 course is designed to refine students' knowledge of architectural technology as utilised in contemporary architectural practice and investigates materiality and construction, building physics and systems, environmental strategies, and solutions as well as fire and life safety and structural design.

Architectural Technology over-sails and underpins the whole practice of architecture. It involves the making of things: small or large, ancient or modern, urban or rural, simple or complex. Structures are rarely formed without an appreciation for the technology, technique and skill to do so. The course supports students to explore traditional methods of construction for their straightforward use of natural materials – invariably low-carbon, as well as highly refined tectonic assemblies and cutting-edge innovations in material science.

Through this course, the practice of architecture can be demystified, broken down and made more accessible to students as they gain knowledge and develop their skills.

Students are taught through a combination of lectures, group and individual work, site visits, specialist input tutorials and workshops. The Studio Project in Semester 2 is the vehicle for weaving the information in the lectures with the students' own technological interests and culminates in a complex urban proposal. Students will be required to achieve a detailed resolution of their project which integrates strategies for construction, structure, energy and resource management, and the technologies associated with these strategies.

Through formative feedback, design reviews, specialised workshops and specialist input students shall apply their learning on the course across 2 semesters.

Throughout the course students are supported to develop and demonstrate the professional competencies and graduate attributes required to meet the standards for Exemption from the ARB and RIBA Part 2 Examination in Architecture.

Course Aims

The Architectural Technology 4 Course focuses on the architectonic impact, technical and ethical aspects of:

- construction and materials
- the building envelops
- structure design
- building performance
- fire and life safety design
- sustainable design principles

The aims of the course are to:

professional: refine a student's deployment of the principles and practices of the architectonic impact, technical and ethical aspects of architectural projects.

design/create: refine a student's deployment of the technical knowledge required to address the environmental, socio-economic, ethical, cultural, and aesthetic demands of architecture through design.

research: refine a student's deployment of the research skills, and tools that focus on the architectonic impact, technical and ethical aspects required to analyse, design, and construct architectural projects.

communication: refine a student's deployment of the visual and verbal conventions of the architectonic impact, technical and ethical aspects of architectural projects.

skills: refine a student's deployment of computer-aided design software to undertake basic environmental evaluation and analysis of building performance data.

knowledge: refine a student's deployment of technology that address the architectonic impact, technical and ethical aspects in the design of architectural projects.

Course Intended Learning Outcomes

On successful completion of the Course, students will be able to **appraise, integrate and articulate:**

professionalism: knowledge of the principles and practices of the architectonic impact, technical and ethical aspects of architectural projects in the context of the Studio 4 course.

design/ create: the technical knowledge required to address the environmental, socio-economic, ethical, cultural and aesthetic demands of architecture through design in the context of the Studio 4 course.

research: the research skills, and tools that focus on the architectonic impact, technical and ethical aspects required to analyse, design, and the construction of architectural projects in the context of the Studio 4 course.

communication: the visual and verbal conventions of the architectonic impact, technical and

ethical aspects of architectural projects in the context of the Studio 4 course.

skills: the ability to use computer-aided design software to undertake basic environmental evaluation and analysis of building performance data in the context of the Studio 4 course.

knowledge: the technologies that address the architectonic impact, technical and ethical aspects in the design of architectural projects in the context of the Studio 4 course.

Indicative Content

At Stage 4, students will be able to appraise, integrate and articulate their knowledge of technology to their studio course project. Through taught content and research students will develop and apply design and technical solutions to comply with current regulation and legislation.

During the AT4 course students will:

- explain and justify strategies and solutions pertinent to minimising energy consumption,
- consider material choices with regards to the use of natural materials which avoid energy intensive refining techniques
- understand embodied carbon (EC) and undertake basic EC calculations
- appraise, integrate, and articulate strategies and mechanisms to generate ideas and resolve the areas of:
  - construction and materials
  - the building envelope
  - structural design
  - building performance
  - fire and life safety design
  - sustainable design principles
  - post-occupancy evaluation
- collaborate with peers and staff to produce tangible design outputs
- present their design proposals at various stages of development to various audiences in a range of settings to evaluate and analyse their outputs
- examine the principles of retrofit adaptive re-use and circular economy

Description of Learning and Teaching Methods

Pedagogy:

The Architectural Technology Course 4 refines students' ability to develop and present technologically informed architectural solutions while refining their individual position as an architect and designer. Student learning is developed through lectures, site visits, group work and discussion.

Delivery:

The course is delivered through weekly lectures, using a range of learning, and teaching activities, including lectures, small-group work and plenary discussions, specialised workshops, and integration with Studio. Students are supported in preparing groupwork through briefings on strategies for collaboration and provided with example submissions.

Private study consists of both staff-directed study and independent student-directed study.

The course also includes site visits to specific buildings.

The course is delivered over two semesters. Lecture content is delivered during semester 1, specialist workshops are delivered during semester 2.

Students are expected to integrate their studio work and architectural technology knowledge during semester two and specifically via assignment AT4.2

Timetable:

Lectures are delivered on a weekly basis, with additional workshop activities, and site visits.

Canvas:

The virtual learning environment tool Canvas is used for the dissemination, discussion, and access to relevant course information, and to signpost students to other relevant teaching and learning platforms used by GSA.

Indicative Contact Hours	Notional Learning Hours
30	300

Description of Formative Assessment and Feedback Methods
Formative activities are provided during the course, offering students the opportunity to obtain ongoing staff and peer feedback through presentation, discussion, and reviews of the integration of architectural technology into the design project. This course is taught over two semesters and consists of two components. Formative feedback will be provided through a group workshop for the first component. For the second component, individual formative feedback will be provided. In general formative assessment and feedback provided throughout the course fosters reflective learning while supporting the Summative graded assessment and feedback process, which generally happens at the end of the course.

Description of Summative Assessment arrangements
Summative assessment is generally undertaken at the end of the course. Students' work is assessed against the Intended Learning Outcomes (ILOs) for each course which are aligned with the professional competencies required for architectural practice. The first component consists of groupwork, and students will be assessed on their collaborative output. The second component is an individual submission in the form of a technical study based on the studio design project. In general, coursework assignment submissions involve visual and text-based submissions utilising both digital and physical tools and formats. Written feedback is provided on all summative assessments.

All submissions will be assessed and moderated in line with the GSA Code of Assessment. Reassessment opportunities where a student has not passed the course are outlined in the GSA Code of Assessment.

Description of Summative Assessment Method	Weight %	Submission week
AT4.1 Precedent Study Students are required to submit a Precedent Study completed in groups. The Study will comprise a Portfolio of work which records and analyses the technical aspects of the exemplar. This assignment is a group submission. A pass mark (D3) is required in this component to pass the course.	33%	Semester 1 week 12
AT4.2 Technical Study Students are required to submit a Technical Study utilising the integrated Studio 4 Urban Building architectural project. This assignment is an individual submission. A pass mark (D3) is required in this component to pass the course.	67%	Semester 2 Week 12

Exchange/Study Abroad	
Can this course be taken by Exchange/Study Abroad students?	~~No~~ Yes
Are all the students on the course taught wholly by distance learning?	No
Does this course represent a work placement or a year of study abroad?	No

Is this course collaborative with any other institutions?	No
If yes, then please provide the names of the other teaching institutions	

Reading and On-line Resources
Supporting the course, an indicative reading and on-line resource list is accessible via Resource Lists. This list will be reviewed and updated annually. Supervisors, tutors and peers will provide further recommendations appropriate to student's chosen research subject.