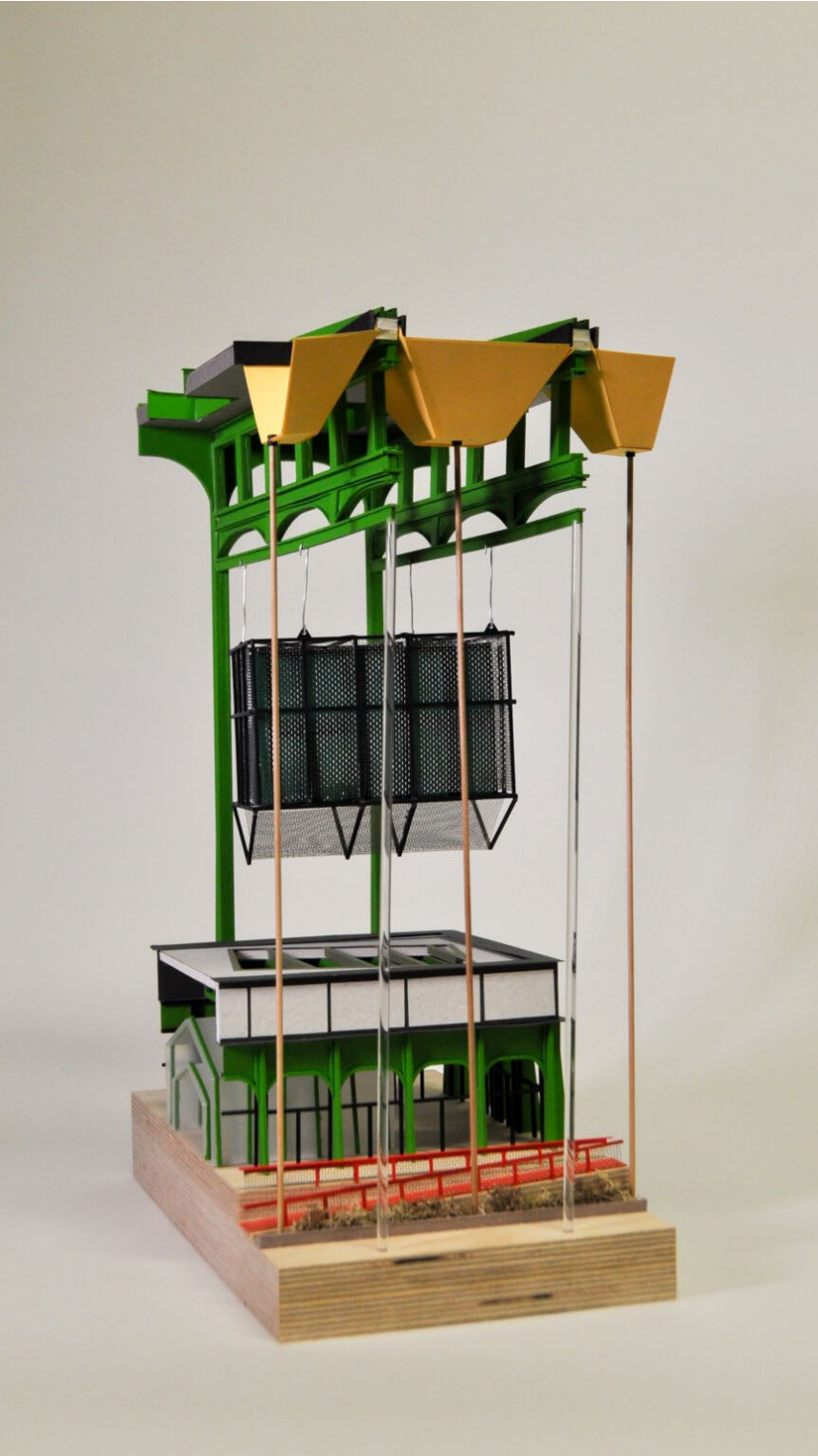


**Glasgow School of Art Course Specification
Course Title: Architectural Technology 5**



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 2024-25 Academic Year.

Course Code	HECOS Code	Academic Session
		2024-25

Course Title	Architectural Technology 5
Course Contact	Virginia Rammou

Credits	30
SCQF Level	Level 11
When Taught	Semester 1 and 2

Associated Programmes	Diploma in Architecture
Lead School	Mackintosh School of Architecture
Other Schools	N/A
Date of Approval	Programme Approval March 2024

Course Introduction

The Architectural Technology 5 course is designed to facilitate a student's command of architectural technology as utilised in contemporary architectural practice and support students to synthesise, speculate and articulate design processes and responses to complex architectural interventions with regards to the technological aspects of the design process. The Final Design Thesis is the vehicle for connecting the information from the lectures with the students' own technological interests and culminates in an integrated Final Design Thesis.

The course invites students to identify and investigate Architectural Technology as an integral part of their self-defined Final Design Thesis, in a meaningful, conceptual, resolved and holistic manner. The knowledge developed in the Architectural Technology 4 course which integrates strategies for construction, structure, fire and life safety design, energy and resource management, and the technologies associated with these strategies is used as a foundation to develop an in-depth investigation.

Based on self-directed study, thorough research and investigation, students' autonomy and direction are imperative, and they are expected to be pro-active in their efforts to engage and resolve the design challenges that arise through the Final Design Thesis.

Students are taught through a combination of lectures, group and individual tutorials, site visits, specialist input tutorials and workshops. Through formative feedback, design reviews, combined studio and technology tutorials 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 5 Course focuses on the resolution of the architectural technology challenges presented by a self-directed architectural design proposal based on:

- construction and materials
- the building envelope

- structural design
- building performance
- fire and life safety design
- sustainable design principles

The aim of the course is to:

professional: facilitate a student's command of the principles and practices of the architectonic impact, technical and ethical aspects of a self-directed architectural design proposal

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

research: facilitate a student's command of the research skills, and tools that focus on the architectonic impact, technical and ethical aspects required to analyse, design, and construct a self-directed architectural design proposal

communication: facilitate a student's command of the visual and verbal conventions of the architectonic impact, technical and ethical aspects of a self-directed architectural design proposal

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

knowledge: facilitate a student's command of technology that address the architectonic impact, technical and ethical aspects in the design of a self-directed architectural design proposal

Course Intended Learning Outcomes

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

professionalism: knowledge of the principles and practices of the architectonic impact, technical and ethical aspects that are integral to the Final Design Thesis

design/ create: the technical knowledge required to address the environmental, socio-economic, ethical, cultural, and aesthetic demands of architecture through design of the Final Design Thesis

research: the research skills, and tools that focus on the architectonic impact, technical and ethical aspects required to analyse, design, and the construction of a self-directed technology proposal that is integral to the Final Design Thesis

communication: the visual and verbal conventions of the architectonic impact, technical and ethical aspects of a self-directed technology proposal that is integral to the Final Design Thesis

skills: critical reflection through the use of computer-aided design software to undertake basic environmental evaluation and analysis of building performance data in a self-directed technology proposal that is integral to the Final Design Thesis

knowledge: the creative and innovative use of technologies that address the architectonic impact, technical and ethical aspects in the design of a self-directed technology proposal that is integral to the Final Design Thesis

Indicative Content

Students will be able to analyse, evaluate, critically reflect, synthesise and apply their technical knowledge to a complex self-directed Design Thesis Project. Students will develop and apply

design and technical solutions to comply with current regulation and legislation while they create a Design Thesis Project, addressing social, ethical and climate change challenges.

During the AT5 course students will:

- undertake research which enables the analysis and evaluation of technologies pertinent to their Final Design Thesis Project
- produce a coherent and competent technical design solution pertinent to their Final Design Thesis Project
- evaluate, synthesise and apply 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
- collaborate with peers and staff to produce design outputs
- present their design proposals at various stages of development to various audiences in a range of settings to evaluate and analyse their output

Description of Learning and Teaching Methods

Pedagogy:

The Architectural Technology 5 Course is intended to facilitate a student’s proficiency in developing and presenting technologically informed architectural solutions while consolidating their individual position as an architect and designer. Student learning is developed through lectures, specialist tutorials, specialist workshops, critical thinking, and discussion.

Delivery:

The course is delivered through lectures and specialist tutorials, specialised workshops, and studio integration.

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

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

Students are expected to integrate their Final Design Thesis work and architectural technology during semester two and specifically via assignment AT5.2

Timetable:

Lectures, specialised tutorials and workshops, and studio integration tutorials.

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 review of the Final Design Thesis.

This course is taught over two semesters, as such formative work will be marked with an indicative grade and feedback will be given at an appropriate mid-way point. Written feedback will be provided via Canvas.

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 undertaken at the end of the course and is designed and delivered to support student learning through evaluation of the Intended Learning Outcomes (ILOs) for each course, aligned with the professional competencies required for architectural practice. Summative assessment in this course is undertaken through coursework assignments in the form of technical research based on the studio design projects. 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.

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
AT5.1 Research Study Students are required to submit a Research Study supporting the Integrated Final Design Thesis. The Research Study requires students to select, develop and evaluate strategies and tactics to support further realisation of the Thesis proposal in Semester 2. A pass mark (D3) is required in each component to pass the course.	33%	Semester 1 week 13
AT5.2 Detailed Technical Study Students are required to submit a Detailed Technical Study utilising the integrated Final Design Thesis. A pass mark (D3) is required in each component to pass the course.	66%	Semester 2 Week 12

Exchange/Study Abroad

Can this course be taken by Exchange/Study Abroad students?

No

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 Keylinks. This list will be reviewed and updated annually. Supervisors, tutors and peers will provide further recommendations appropriate to student's chosen research subject.

Keylinks:

<https://gsa.keylinks.org/new-ui/hierarchy/list/880>