

**Glasgow School of Art Course Specification**

**Course Title: Independent Research Project – Advanced in Energy  
and Environment**



*Image Credit: Dag Von Decker*

*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 |
|-------------|----------------------------|------------------|
|             | 100583 (50%); 100962 (50%) | 2026-27          |

| Course Title   | Independent Research Project – Advanced in Energy and Environment |
|----------------|-------------------------------------------------------------------|
| Course Contact | Isabel Deakin                                                     |

| Credits     | 60         |
|-------------|------------|
| SCQF Level  | 11         |
| When Taught | Semester 3 |

| Associated Programmes | Master of Architectural Studies in Energy and Environment |
|-----------------------|-----------------------------------------------------------|
| Lead School           | Mackintosh School of Architecture                         |
| Other Schools         | N/A                                                       |
| Date of Approval      | Programme Approval October 2025                           |

### Course Introduction

The Independent Research Project- Advanced in Energy and Environment Course is the third course supporting the development and realisation of the student's Independent Research Project, which is delivered across PGT Stages 1, 2 and 3 through three interrelated courses.

This course is designed to give students the skills to create, develop, deliver and communicate the outcomes of their Independent Research Project in an area relating to Energy and Environment. The investigative studies, design strategies and outputs undertaken in Semesters 1 and 2 offer a foundation for the realisation and communication of the final output, and completion of the Independent Research Project.

Energy and Environment students will be required to evidence their critical understanding of the key theories and practices surrounding energy and the environment in relation to low energy, low carbon, and sustainable buildings, and the rapid changes in legislation, technology and systems. This course challenges students to synthesise, speculate and articulate their skills and practices for designing buildings and evaluating performance to meet contemporary targets for low energy, low carbon, health and comfortable environments, and usability to meet environmental, societal, and occupant needs.

As this is a supervised independent research project, students are expected to operate with professionalism, self-direction and manage their own time.

Students are taught through a combination of tutorials and reviews. Through formative feedback, peer sessions and interim and final reviews, students can apply their learning.

Through this self-directed project students highlight their command at a Post Graduate Level within their chosen discipline in anticipation of their future professional or academic career path.

### Course Aims

The aims of the course are to:

**professionalism:** facilitate a student's command of knowledge of professional ethics in terms of collaborative, inclusive, sustainable and safe design principles to respond to a refined research-based design problem and evidence this through an advanced design led research output within the field of Energy and Environment

**design/create:** facilitate a student's command of a creative design process in the production of an advanced design led research output within the field of Energy and Environment

**research:** facilitate a student's command of research skills to respond to a refined research-based design problem and evidence this through an advanced design led research output within the field of Energy and Environment

**communication:** facilitate a student's command of the integration of analogue and digital media to visually and verbally communicate structured thinking, a response to a refined research-based design problem and an advanced design led research output within the field of Energy and Environment

**skills:** facilitate a student's command of critical reflection, communication and a structured methodology, with digital and analogue tools, to respond to a research-based design problem through an advanced design led research output within the field of Energy and Environment

**knowledge:** facilitate a student's command of the creative use of advanced architectural theories, concepts, and analytical and performance evaluation techniques to address social, ethical and climate change challenges to respond to a research-based design problem through an advanced design led research output within the field of Energy and Environment

#### Course Intended Learning Outcomes

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

**professionalism:** knowledge of professional ethics in terms of collaborative, inclusive, sustainable and safe design principles to respond to a refined research-based design problem evidenced through an advanced design led research output within the field of Energy and Environment

**design/create:** a creative design process with a refined research-based design problem and evidence this through an advanced design led research output within the field of Energy and Environment

**research:** advanced research skills to a refined research-based design problem evidenced through an advanced design led research output within the field of Energy and Environment

**communication:** the integration of analogue and digital media to visually and verbally communicate structured thinking to a refined research-based design problem evidenced through an advanced design led research output within the field of Energy and Environment

**skills:** critical reflection, communication and a structured methodology, with digital and analogue tools, to a refined research-based design problem evidenced through an advanced design led research output within the field of Energy and Environment

**knowledge:** the creative use of advanced architectural theories, concepts, and analytical and performance evaluation techniques to address social, ethical and climate change challenges to a refined research-based design problem evidenced through an advanced design led research output within the field of Energy and Environment

### Indicative Content

The Independent Research Project Advanced in Energy and Environment course is designed to give students the opportunity to advance their individual architectural interests in the context of the field of Energy and Environment. Students prepare either a comprehensive design proposal or a written textual thesis. The work is undertaken on an individual basis.

During the course students will be supported to:

- produce a comprehensive design project which addresses and responds to the refined research-based design problem developed and explored in PGT Stages 1 and 2

OR

- produce a written textual thesis which addresses and responds to the refined research-based design problem developed and explored in PGT Stages 1 and 2

### Description of Learning and Teaching Methods

#### **Pedagogy:**

Studio is both a learning space and a form of reflective practice where knowledge, skills and attributes are transformed into design competencies. Integration of the six learning domains enables design work to be grounded in specialist knowledge relating to the student's chosen specialism and enacted through their independent research project. The course is intended to develop students' mastery of iterative and reflective design practices while deploying their critical, ethical and professional position. Student learning is developed through the course, supported by staff and student field trips, which enable students to address real-world issues in the context of specific communities and places. Groupwork and collaboration with other students are core to the student learning experience, enabling students to work productively with others while contextualising the role of the architect in relation to other disciplines and practices. Specialist staff along with visiting guests offer students insights into the constantly changing world of architectural practice. Independent learning is fostered throughout the year.

#### **Delivery:**

The course is delivered through regular studio sessions, using a range of learning and teaching activities, including individual and group tutorials and design reviews. In this course, there is a greater emphasis on independent study. Peer discussions offer the opportunity for critical discourse around issues raised by the studio project, enabling staff and students to enter into a dialogue around contemporary architectural issues. A hybrid approach to learning through in-person sessions and on-line support offers students access to flexible and inclusive learning. Private study consists of both staff-directed study and independent student-directed study.

#### **Timetable:**

Studio tutorials are delivered on a regular basis either in groups or individually with pin-up tutorials and design reviews at set points throughout the session concluding with a design forum at the end of the project.

#### **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                       | 600                     |

#### Description of Formative Assessment and Feedback Methods

Formative activities are provided during studio courses, offering students the opportunity to obtain ongoing staff and peer feedback through discussion and review in relation to the course.

As such Formative 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. Students' work is assessed against the Intended Learning Outcomes (ILOs) for each course. Summative assessment in studio courses is undertaken through coursework assignments in the form of 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.

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    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------|
| <b>Design Led Submission</b><br>Students are required to submit their work for the Advanced Independent Research Project for assessment through presentation of selected visual and physical artefacts such as drawings, text and/or models, supported by a digital portfolio with both submissions assessed together against the course ILO's with one final course grade awarded. | 100      | Semester 3 Week 12 |
| <b>OR</b>                                                                                                                                                                                                                                                                                                                                                                           |          |                    |
| <b>Written Submission</b><br>Students are required to submit their work for the Advanced Independent Research Project for assessment through presentation of a written dissertation (10,000 words) supported by a Summary Poster with both submissions assessed together against the course ILO's with one final course grade awarded.                                              | 100      | Semester 3 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 |

|                                                                                 |  |
|---------------------------------------------------------------------------------|--|
| <b>If yes, then please provide the names of the other teaching institutions</b> |  |
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| <b>Reading and On-line Resources</b> |
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| Supporting the course, an indicative reading and on-line resource list is accessible via <a href="#">Resource Lists</a> . This list will be reviewed and updated annually. Supervisors, tutors and peers will provide further recommendations appropriate to student's chosen research subject. |
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