



Programme Specification

Please note that this specification is subject to change, in line with the national guidance on the response to the Covid-19 pandemic.

1. General information

Awarding institution:	Royal College of Art
Programme title:	MA Environmental Architecture
Award:	Masters
Qualification framework level:	Level 7
School/Department or equivalent:	School of Architecture
Programme duration	15-months
Total UK credits:	240 credits
Mode of study:	Full time
Date valid from/to:	2020-21

2. Programme Philosophy

The Earth has been profoundly impacted by the intensity of our carbon economy. Both the behaviours of earth-systems and of local ecosystems have been radically transformed. Resource extraction, large scale agribusinesses and the construction industry are some of the key agents of change. Consequences are manifest in the form of climate change and the global increase in temperatures, but also in desertification, raising sea levels, soil contamination or air pollution. Mitigating the damage, and adapting to this new scenario requires drastic changes upon present forms of cohabitation - be it among humans or with other species, and most importantly with the Earth. At its core, environmental change poses a challenge for architecture, as design will be crucial to the imagination and the negotiation of alternative futures.

The MA Environmental Architecture programme proposes to explore the future of landscapes, environments and ecosystems. It will focus on the co-dependence of life forms and earth systems as well as the co-existence of alternative concepts of landscapes, environments and ecosystems as they are expressed by different societies.

MA Environmental Architecture is a field-focused, design-led, and project-based course. It proposes a unique, multi-scalar approach to environmental architecture education that unites anthropological and ethnographic research methods with new tools for measuring, classifying, and capturing data including computational sensing and imaging. The programme understands the above as essential components in re-imagining the design and management of cities, resources, landscapes and environments in the future. This structure allows cumulative research and a stronger societal impact.

Action-research is a core methodological characteristic of the programme. Students will be embedded in networks of academic and non-academic partners and they are expected to work in close proximity to local partners and organisations. In this context, design is seen not as the

final stage of the project but as a tool of research and of social exchange.

MA Environmental Architecture proposed a pedagogical model centered around the idea of case studies and the power of design practice to intervene within multiple scales and disputes. The distinctive studio based model offers students a rigorous and experimental platform to:

- learn to negotiate between a complex range of actors and their constituencies;
- develop and test spatial transformation within a broad range of international and local contexts;
- to cultivate approaches to the practice of environmental architecture grounded in existing and alternative scientific and design models.

MA Environmental Architecture aims to expand the scope and content of design-led research in the field of architecture, environmental science and territorial management. Possible areas of inquiry can include: biodiversity, carbon trading, desertification and its effect on migration and settlement patterns, impacts of resource extraction on ecosystems, the role of automation in agriculture, the potential of renewable energy sources, new forms of tourism and their relation to local economies, indigenous struggles and land rights, the role of financial instruments and concepts of natural capital, and many others.

Students of the MA Environmental Architecture will have the opportunity to pursue a degree within a world leading art and design institution, and to access the rich culture of radical and experimental interdisciplinary work at the Royal College of Art. Moreover, the programme will help students to establish a network of colleagues and mentors by offering them the opportunity of connecting to leading figures in Environmental Architecture.

3. Educational Aims and Outcomes of the Programme

Programme Aims

The MA Environmental Architecture programme aims to:

- redefine environmental architecture practice and become a leading programme of environmental design, contributing to the radical re-invention of contemporary knowledge, research and practice of environmental science and architecture;
- provide a unique social and working environment that encourages students to demonstrate and develop their research, technical and design skills, while advancing their professional practice and academic abilities;
- maintain a working and research ethos where students develop their individual skills while learning to work with others in a multi-disciplinary collaborative environment;
- create an outstanding academic platform that provides students with systematic and in-depth knowledge and understanding of environmental science and environmental design practices, architectural research and practice informed by contemporary debates, scholarship and technological innovations;
- provide students with research skills that allows them to pursue independent research and to apply advanced, practice-based knowledge to the field of environmental architecture and design;
- provide students with critical skills that allows them to position their own design practice within the field and to evaluate and critically frame current environmental design knowledge, scholarship, theoretical and practice-based research;
- initiate design-led experimentation that incorporates science, technology and visualisation in the re-definition of city making, landscape and environmental models;

- propose a pedagogical model based on the synthesis of written and design research in the formulation of new research hypotheses, design briefs and city making, landscape and environmental models;
- to provide students with the social, academic and technical skills to operate in a competitive, multi-disciplinary, professional environment.

What will I be expected to achieve?

By the end of their studies we expect students to have gained a wide range of design and intellectual competencies for re-imagining the future of landscapes and environments.

Programme-Specific Learning Outcomes

Able to:	A. Intellectual Engagement
A1.	Demonstrate an advanced understanding of the principles and methods required to formulate innovative research and design in the field of environmental architecture.
A2.	Formulate original research and design questions that contribute to knowledge in environmental architecture and to address practice-based problems.
A3.	Demonstrate an advanced and comprehensive understanding of the historical and theoretical framework of environmental design practice and scholarship.
A4.	Conduct independent research and produce applied knowledge that combines to the theory and practice of environmental design and architecture.
A5.	Develop innovative and transformative environmental design models that respond to site-specific conditions and problems, capable of reaching different audiences and stakeholders.

Able to:	B. Technical Skills
B1.	Develop individual and group based design and discursive skills in the production and presentation of design reports, policy documents, design briefs and academic papers.
B2.	Acquire expertise in analogue and digital media used for representation, visualisation, data processing and modelling relevant to environmental design and architectural practice.
B3.	Acquire oral presentation skills that enable the successful presentation and dissemination of work to different audiences such as academia, professional groups, government and the general public.
B4.	Master different forms of collaborative knowledge production and lead or Participate in interdisciplinary projects, while acknowledging and respecting expertise in complementary to environmental architecture disciplines.

Able to:	C. Professional Development
C1.	Initiate and lead independent research and practice-based projects.
C2.	Participate in collaborative, interdisciplinary projects with confidence and with a clear

	understanding of expertise in professional fields that are complementary to environmental architecture.
C3.	Develop frameworks for assessing the success of design practice both including and beyond the conditions defined by the private sector and public institutions
C4.	Have the ability to continue learning and researching independently or in collaboration within other academic institutions.

4. What will I learn?

Live Project-based studio work forms the core of activity for the first three terms of the MA Environmental Architecture programme, with complementary technical, historical, theoretical and case study seminars occurring in parallel. Group work is encouraged and considered an important introduction to the inherently collaborative process of architecture and environmental design. These may take place online or as part of a blended mode of delivery, according to government guideline and College policy.

In the fourth and final term, students will complete an Independent Research Project as an individual submission, which will offer the opportunity to work on a detailed design proposal or thesis with support and feedback from urban and environmental architecture practitioners.

Workshops focus on new spatial epistemologies, especially systems of representation, visualisation and calculation. History theory subjects examine alternative environmental models throughout history, focusing on the way social and political ambitions have become spatialized. Shared modules at programme, School and College level encourage different scales of collaboration with related disciplines and across the College.

Programme Units and Credit Weightings

- Studio (T1, T2, T3), 60 credits
- Seminar (T1, T2, T3), 60 credits
- Critical and Historical Studies (CHS), 40 credits
- Media Studies (T1, T2), 20 credits
- Independent Research Project (IRP) (T4), 60 credits

Critical and Historical Studies

Critical & Historical Studies is the cross-College platform that delivers teaching and activities aimed at enabling critical engagement to take place within, and between, the different disciplines at the RCA.

All studio-based first year MA students have a CHS unit as a core part of their programme of study, designed to enable this critical dialogue and enhance each student's development. Led by a team of dedicated, highly skilled and deeply engaged staff, CHS delivers a programme of lectures, seminars, workshops and tutorials (both small group and one-to-one). Students will be encouraged to engage with vital and challenging ideas that relate to their practices. This both enriches and provides a broader intellectual framework within which to establish a coherent inter-relationship between theoretical and practice-based approaches to art and design.

As a team, our disciplinary interests span the fine and applied arts, architecture, design (including

fashion, graphics, interior and product design), craft, communication, film, humanities, photography, digital media, science and technology.

CHS provides:

- contemporary, thought-provoking lectures by CHS staff and visiting tutors
- the opportunity for students to explore the theoretical background of their chosen discipline through a taught dissertation process
- individual and group tutorial support from our Programme's team of expert tutors

The CHS Handbook sets out the broad principles of CHS at the RCA. It outlines what you can expect of us and what we require of you to engage and produce work to your best ability. On the Moodle pages you will find details of the scheduled programme and the broad areas to be covered in each term, details about the tuition and assessment of your CHS dissertation, and information on resources that will help you during your studies.

Your main points of contact for CHS will be your group tutor and your School Liaison Tutor for your School. You will be assigned your group tutor at start of the Autumn Term.

Curriculum Map

TERM 1	TERM 2	TERM 3
BRIEF (20 CP)	STRATEGY (20 CP)	CONCEPT (20 CP)
CASE STUDIES (20 CP)	HISTORY THEORY (20 CP)	SCITECH (20 CP)
MEDIA STUDIES (SCHOOLWIDE) (20 CP)		
CRITICAL AND HISTORICAL STUDIES (40 CP)		
TERM 4		
IRP (60 CP)		

5. How will I learn?

Please note that these are subject to change, in line with the national guidance on the Covid-19 response.

Design Studio

The weekly, design studio is the core of the new MA programme. Work in the studio is organised in small student groups (2-4 students), and teaching is conducted during weekly group tutorials and pin-up presentations. Work produced in the studio is assessed in mid-term, end-of-term presentations and end-of-term submissions. The submissions follow distinct stages of environmental architecture defined in practice: 'Brief' (T1), 'Strategy' (T2), 'Concept Design' (T3).

The three design studios introduce the pedagogy of the programme, provide students with design skills and research methodologies to analyse case studies, while assisting students with the formulation of research and design proposals. The teaching model combines written and design components since both are considered essential practices in the generation of disciplinary

questions, in the clarification of site-specific design problems and in the proposition of new environmental and architectural models.

The design studio is led by the Senior Tutor and the Programme Tutor who are responsible for material preparation, weekly feedback, assessments and pastoral care. Additional time has been allocated for invited guests. This could include experts, technical assistants and invited lecturers. Visiting academics will also act as advisers to the design studio, conducting workshops and providing feedback to students as agreed.

Seminars

There are three seminars organised across the first three terms. The seminars require constant engagement and involvement by students in course material selection and preparation, collective discussions and oral presentations.

Typically, weekly 2-hour seminar presentations by tutors will be followed by a 2-hour roundtable forum organised and prepared by students with regular participation by relevant professionals. In the first term, seminar 1: 'History and Theory, will introduce students to important precedents and theories of environmental architecture, landscape and ecology; Seminar 2: 'Case Studies' is aligned with Studio 2 and introduces students to distinct cases of environmental design problems and disputes that become the basis for students to identify their own site and to develop their research approach and design briefs. In term 3, seminar 3: 'Science and Technology' explores ways in which technical and scientific aspects of design could be theorized and applied in student design work. Submissions in the three seminars vary: oral presentation (T1 and T2), and a technical portfolio, including a 5000-word essay (T3).

Independent Research Project (IRP)

The Independent Research Project consists of a detailed design proposal completed individually by each student and based on the earlier group work. Students will be asked to develop a unique design proposition that responds to the preliminary brief, and reacts to the parameters set by strategic and concept design developed in the first three terms. The proposals might vary in scale; the individual contributions should address different site-specific problems and disputes that have been identified by the team. The definition of the scope of the IRP and its relation to the group work will occur in collaboration with the IRP supervisor. The report should include all exercises and projects completed in historical, theoretical and technical workshop units. A written component (10,000 words) is included in the final submission.

An essential part of the IRP and the teaching during term 4 is the proposed professional mentor scheme. In addition to regular tutorials, students will be connected to and will receive feedback from leading figures in the field of environmental architecture.

Desk Crits and Tutorials

The Programme's main teaching method is individual and group tutorial. For both Studio and Seminar units, a combination of one-to-one and small group tutorials will be conducted regularly between students and the programme team. Specialists, invited experts and the programme's visiting academics will also contribute, depending on research interests and sites.

Roundtable Forums

This is an essential teaching method for the seminar course that aims to reconfigure history and theory learning processes. This seminar works according to a model where students will have to lead

at least one seminar as members of groups or individually, select and prepare course material, organise and moderate collective discussions, presentations and debates between themselves and invited specialists from academia or practice.

This structure emphasises rapid comprehension of complex site conditions and stakeholder disputes while providing students with the tools to engage with debates around selected case studies in a live and performative manner. These may be conducted online, in line with government guidance and College policy.

Lecture/Presentations

This includes lectures and presentations prepared by programme staff, School of Architecture staff, invited academics and practitioners. In addition to events organised by MA Environmental Architecture, students will be encouraged to follow the School of Architecture's international lecture series, across school symposia and interdisciplinary forums organised by the SoA, in collaboration with other academic institutions.

Work-in-Progress presentations and reviews

In Studio units, students will have to present their work to programme staff and invited critics multiple times each term. Panels will include School of Architecture staff, experts and specialists involved in the selected case studies or student project sites, UK-based and international academic and practitioners with a distinguished track record in environmental architecture and related fields, as well as the programme's visiting academics and professional mentors.

For Term 1 and 2, there is one interim and one end- of-term presentation, while in Term 3, two interim reviews and one final before the summer break. In each review students, in group or individually if required, will present the evolution of their work according to the unit's brief and submission requirements.

Regular reviews and more informal crits will provide valuable opportunities for students to get feedback and to develop and improve their skills in verbal presentation.

Field Trips

International field trips are an essential component of the programme's pedagogical model. The MA Environmental Architecture focuses on case studies and organises individual and group student research and projects around site-specific environmental questions and spatial problems. The field trips will allow the students to study and learn from local experts about specific cases in the UK, Europe and other contexts, such as South East Asia, the Middle East and South America. There will be at least one field trip planned in the academic calendar, in the beginning of Term 2.

Please note field trips are subject to Covid-19 response restrictions.

You may get the opportunity to participate in an exhibition of your student work, either during or at the conclusion of your studies. Your Programme Handbook should provide more information on the nature of this participation.

6. Assessment and feedback

Unit assessment

Summative Assessment

Students will be required to present work at specified feedback points each term, in crit panels that will include Programme and School staff, as well as invited specialists and where possible programme's visiting academics and mentors. These regular crits are essential to the programme's pedagogical model.

Students should learn to organise, edit, and present their work both discursively and visually as an indispensable part of their academic and professional development. During these presentations, students should refer to each unit's assessment criteria and their performance will be evaluated according to relevant learning outcomes.

Individual assessment is continuous and consists of an on-going process of tutorials, submissions and presentation of design and written work, that culminates in the programme's final examination. The final examination synthesises learning outcomes from all previous units in the form of a design proposal, written submission and oral presentation.

There are three distinct categories of continuous assessment of student work, either individually or in groups: (1) internal crits and student presentations, (2) mid-term and end-of term reviews, and (3) end-of-term submissions.

Internal Crits and student presentations

In studio units, students will be asked to present their work every two weeks in front of their peers and tutors. Students should print material and prepare a 5 to 10-minute oral presentations of their in-progress work, and they will receive oral feedback from unit tutors. At the conclusion of internal crits, there will be a collective discussion where students will be asked to comment upon and discuss the work of their peers alongside their own.

In seminar units, students will be required to participate in the weekly lectures and roundtable forums. Their active participation and contribution will be taken into consideration on their assessment. They will be asked to present at least once each term either individually or in groups. The theme of their presentation might vary depending on the content of the unit each term.

In both cases, unit tutors will give oral feedback to the students, and if required, written notes.

Mid-Term and End-of-Term Reviews

Studio units will schedule end-of-term reviews (T1, T2 and T3) and at least one mid-term review per term. Students will be asked to prepare a 10 to 15-minute presentation of their group or individual work that will be assessed by a review panel. Required work and assessment criteria are clearly outlined in unit descriptors.

Students will receive written feedback from unit tutors that will indicate the present position, future objectives, overall progress, level of fulfilment of the unit brief, and any concerns with progress.

End-of-term submissions

Each term, students will have to submit work in all Studio and Seminar units in order to successfully pass the unit. Submission requirements and assessment criteria are described in unit descriptors and vary according to the content, learning outcomes and teaching method of each unit. Students will receive written feedback from unit tutors that will indicate the present position, future objectives, overall progress, level of fulfilment of the unit brief, and any concerns with progress.

If submission is marked as incomplete, students will have to discuss with their tutors and re-submit work in an agreed time, no more than two weeks after initial submission.

Final Examination

The Final Examination is the culmination of the studies in the MA Environmental Architecture programme. The Final Examination is in two parts:

- viva-voce, which take place in the end of Term 4;
- a Final Examination Board, chaired by the Dean of School, or Head of Programme, will be held to recommend results to the Academic Board for Concessions & Discipline for ratification.

The Final Examination takes approximately 45mins. Students are required to attend, and the schedule of their examination date, time and location will be circulated at least a month in advance. They will be allowed a minimum of 15 minutes to present their work. The Board will then ask questions about the work for a further 15 minutes. Students should present the structure, synopsis, findings and final design proposal of their Independent Research Project (IRP), which they will have to submit in printed form a week prior the Final Examination.

Students should clearly indicate their individual contribution to both text and visual material where there is group work. The final report should also include all exercises and projects completed in historical, theoretical and technical workshop units.

Students should discuss the content and structure of their final report and presentation during the tutorials in Term 4 by the Senior Tutor, and with their practice mentor. Apart from presenting their individual design proposal, students should curate and edit the group work in order to frame their own project with respect to the group work aspect. Students should also submit a draft of their presentation to their Personal Tutor a week prior to examination, and schedule at least one rehearsal ahead of the exam. The work will be assessed according to the programme's aims, objectives and assessment criteria as outlined in the Student Handbook and Unit Descriptors.

7. What award can I get?

To be awarded an RCA MA degree you need to gain 240 credits at level 7 of the Framework for Higher Education Qualifications (FHEQ). This will involve successfully completing all units.

If you fail a unit at the first attempt, you will be offered an opportunity to resit the unit. If you are successful you will be awarded the credits for that unit. If you are unsuccessful, you can not progress further in your programme.

Exit awards:

If you have gained at least 120 credits at level 7 of the FHEQ, you may be eligible for the exit award of Postgraduate Diploma. An exit award is a final award from the College and cannot be rescinded.

For more detailed information about the College's assessment, progression and awards policies see the Regulations.

8. Admissions

Cross-College requirements

Academic Entry Requirements

Candidates must normally have obtained a good relevant undergraduate degree or an equivalent qualification. The College recognises as an equivalent qualification any degree, diploma, certificate or other evidence of formal qualification awarded by a university or other higher education establishment where the award is made following the successful completion of a course of at least three years' study, the programme of study being open, as a general rule, only to persons holding a certificate awarded on the successful completion of a full course of upper secondary education.

Other qualifications may be approved, providing that the College's Academic Board for Concessions and Discipline (ABCD) is satisfied that the applicant has the ability to pursue the programme of study successfully. The ABCD is empowered to make judgements about the extent to which qualifications or experience gained elsewhere may be accepted in partial fulfilment of its requirements.

Portfolio

All applicants are required to submit a portfolio as part of the application process. A portfolio is a showcase of an applicant's work as an artist or designer and can be made up of images, videos or writing examples. The portfolio helps us to better understand the applicant and allows them to show evidence of their ability and motivation to undertake a given programme.

Each programme is looking for different things in a portfolio; each Head of Programme provides specific advice on portfolio requirements in the online application system. We advise prospective students to consider these requirements carefully before submitting their application.

Applicant Qualities

Generally, we are looking for applicants to demonstrate their:

- creativity, imagination and innovation;
- ability to articulate the intentions of the work;
- intellectual engagement in areas relevant to the work;
- technical skills appropriate to the work;
- potential to benefit from the programme and achieve MA standards overall.

English Language

Applicants who are not a national of a majority English-speaking country will need to demonstrate their English language proficiency. The College accepts a range of English language qualifications. The full list can be seen at <https://www.rca.ac.uk/studying-at-the-rca/apply/entrance-requirements/english-language-requirements/>

Applicants are exempt from this requirement if they have received a 2.1 degree or above from a university in a majority English-speaking nation within the last two years.

If a student would need a Tier 4 visa to study at the RCA, they will also need to meet the Home Office's minimum requirements for entry clearance.

Admission Process

Applications must be made directly to the College through our online application portal: <https://www.rca.ac.uk/studying-at-the-rca/apply/application-process/ma-application-process/>

Upon completion of that first stage of the application process, candidates will be invited to submit a portfolio of their work, a 300-word statement of intent and a video communicating clearly their motivations, personal interests and why they are pursuing a Masters degree at the Royal College of

Art. These materials are reviewed by members of the programme team who will communicate an academic decision to the College Registry, who manage the process of offer-making in line with the College's recruitment targets. In some cases, where the programme team is not able to make an admission decision based solely upon the work submitted by the applicant, we may invite the candidate to undertake an interview with us.

Applications are considered chronologically by date and time of final portfolio submission. Whilst a programme still has vacancies, successful candidates will be made an offer of a place. Once a programme becomes full, subsequent successful applicants will be placed on a waiting list, and may be made a firm offer should a place become available for them.

Programme-Specific requirements

Specific advice on programme portfolio requirements is provided by the Head of Programme in the online application system. Please consult the College website for further information on programme-specific admission and portfolio requirements:

<https://www.rca.ac.uk/study/schools/school-of-architecture/environmental-architecture/ma-entrance-requirements/>