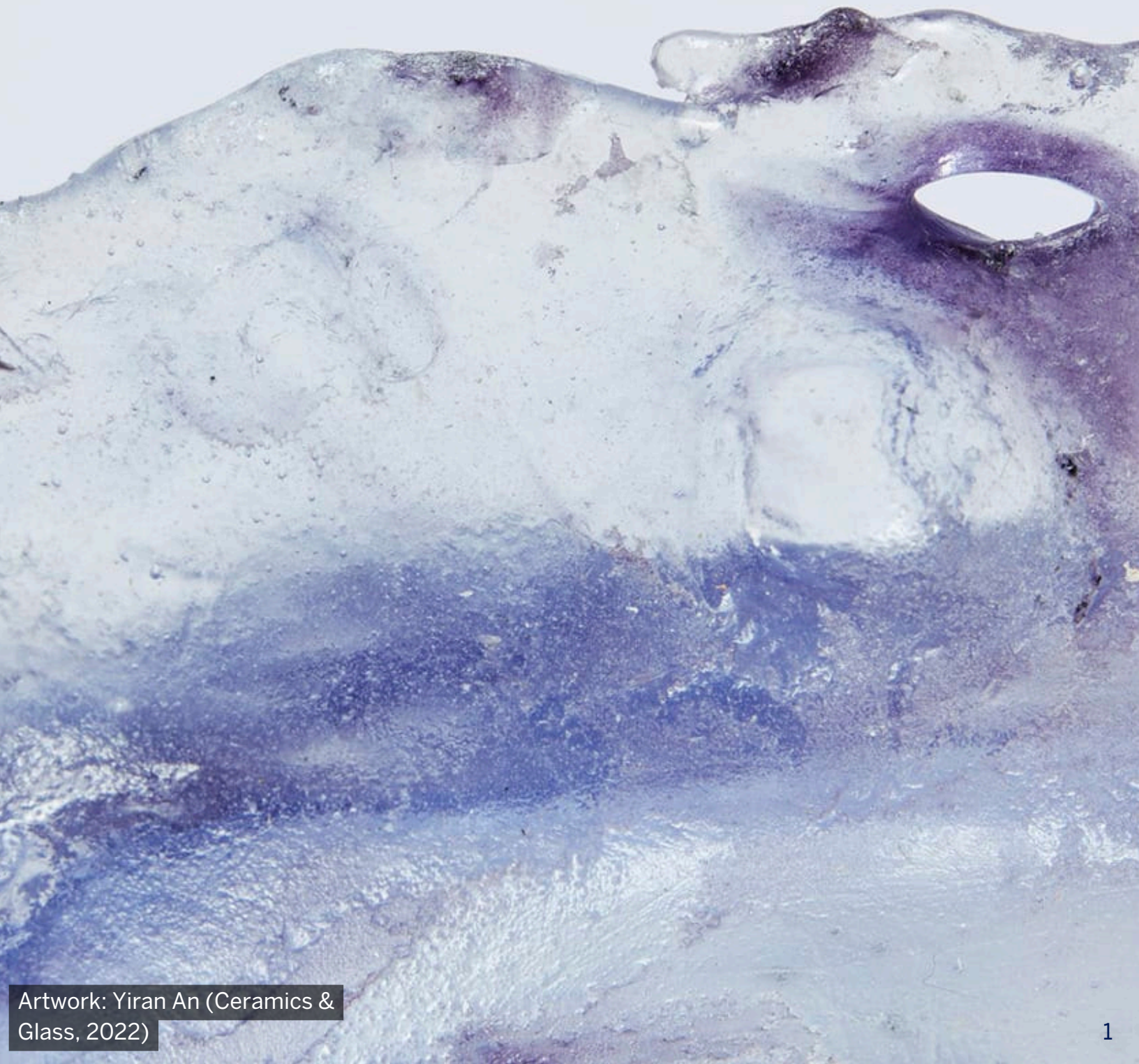


# RCA

## Senior Research Associate (Automotive Interior/UX Designer) April 2024



Artwork: Yiran An (Ceramics & Glass, 2022)

# CONTENTS



Photo: Richard Haughton

3	<b><u>About RCA</u></b>
4	<b><u>Our Strategy</u></b>
5	<b><u>Our People</u></b>
6	<b><u>Our Values</u></b>
7	<b><u>About the Role</u></b>
11	<b><u>Person Specification</u></b>
12	<b><u>Pay and Benefits</u></b>

# WELCOME TO THE RCA

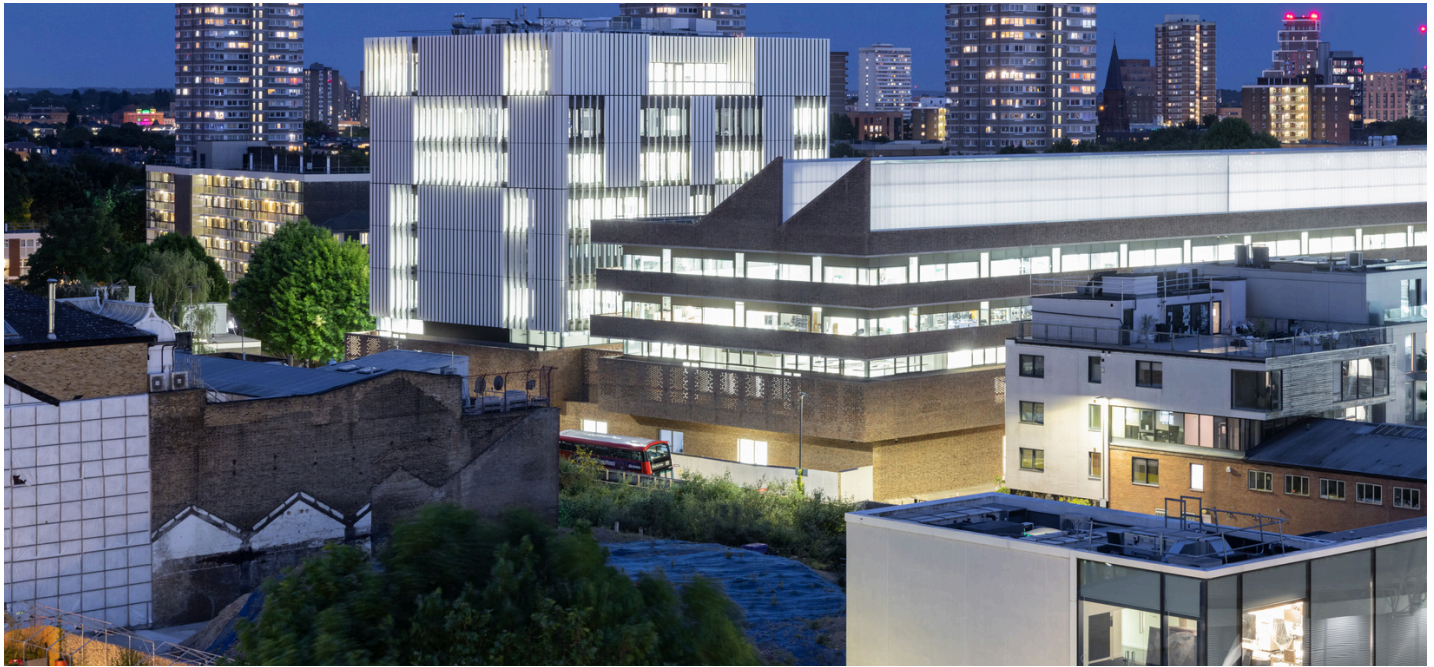


Photo: Iwan Baan

Founded in 1837, the Royal College of Art is the world's largest community of postgraduate art and design students. It is also the oldest art and design university in continuous operation and has been ranked as the world's number one art and design university for a remarkable ten consecutive years, according to the QS World University Rankings by Subject 2024 – the worldwide survey of academic and industry opinion.

The RCA is research-led, and recognised in the UK-wide REF (Research Excellence Framework) as the UK's most research-intensive institution – with an increased proportion of the College's outputs classed as 'internationally excellent' and 'world-leading' in the most recent REF assessment of 2022.

Studying at the RCA is the starting point for the world's creative leaders. With more than 20,000 RCA alumni across the globe, the RCA's graduates form a unique international network of artists, designers, creators and innovators. Every year, RCA alumni are recognised as leaders in their discipline, making national and international headlines for their work, which shapes the world we live in. Its graduate start-up incubator, InnovationRCA, is one of the most successful in the country with a high proportion of female start-up founders and a high 'survival' percentage after five years of trading.

More than 2,700 students are spread across four schools and research and academic departments, studying at Graduate Diploma, MA, MFA, MDes, MArch, MEd, MRes, MPhil and PhD levels, with plans for this to rise to 3,300 by 2027. The College's mix of professionalism and creative freedom, together with its renowned academic community and rigorous academic framework provides the ecosystem in which students flourish and achieve their highest potential.



Photo: Richard Haughton

In addition, the RCA has a number of established and planned research centres: the Helen Hamlyn Centre for Design; the Material Science Research Centre (which includes the Materials Futures Research Group and the Textiles Circularity Centre); the Intelligent Mobility Design Centre, Computer Science Research Centre, and a future centre in Drawing. The RCA is also home to one of the UK's most successful university incubators, InnovationRCA.

The RCA espouses a hybrid approach, supporting 'traditional' making and technical skills in fine and applied art and design alongside the foundational sciences, engineering and technology which underpin designers' ability to solve today's global challenges. The RCA champions the value of interdisciplinary learning and was the first art and design university in the world to implement a STEAM (Science, Technology, Engineering, Art and Design and Mathematics) academic vision, with investment in new faculty posts in Materials Science; Computer Science and Robotics alongside art and design disciplines. By applying creative insights to evidence-based science, its staff, students, researchers and start-ups are addressing major global challenges such as rapid urbanisation and transport; loss of biodiversity; ageing populations; unsustainable consumption and production; and the rise of AI.

### Our Strategy

The RCA's strategic vision is to increase its influence on the world stage of globally ranked universities, punching significantly above its weight, and attracting, supporting and convening the world's most talented faculty, students, artists, designers and creative leaders. For more information on The RCA's Strategic Plan 2022–27, please click on this link: [Strategic Plan 2022–27](#).

# Our People



Photo: Richard Haughton

The RCA's Chancellor is Sir Jony Ive, and the Pro-Chancellor and Chair of Council is Sir Peter Bazalgette (please see link to Council independent members' biographies). The RCA's President and Vice-Chancellor – the CEO of the institution – is Dr Paul Thompson, who joined the College in 2009, but will be leaving in May 2024. The incoming President and Vice-Chancellor is Professor Christoph Lindner, who joined the RCA in April 2024.

The RCA's academic faculty bring world-leading expertise and industry knowledge to the practice-based model of teaching. There is a core academic and research workforce of 196 FTE, supported by around 215 Associate Lecturers and a wide range of Guest Lecturers who bring 'live' industry experience into the taught curriculum – for example, Amin Taha of GrantOn design, whose work was twice shortlisted for the RIBA Stirling Prize, in 2017 and 2021, teaches in the School of Architecture; and Yao Yingjia, who is Vice President and Chief Designer at Lenovo teaches in the School of Design.

The RCA combines contemporary and industry-focused teaching perspectives. It also employs a team of 95 highly skilled technicians, many of whom themselves have postgraduate qualifications in their fields of specialism, which range from rapid prototyping and subtractive manufacturing to film and sound engineering, and from digital modelling to metal fabrication and jewellery making.

# Our Values



Photo: Shaun James

The RCA community operates in line with four agreed values:

## **Curiosity**

We have a tenacious commitment to innovation and openness to change. We positively interrogate ideas, assumptions and plans and welcome the honest scrutiny that is alive in a learning community.

## **Inclusion**

We celebrate diversity and embrace difference as a source of strength. We strive for an inclusive RCA community, removing barriers and challenging exclusionary and discriminatory practices.

## **Collaboration**

We value what happens together and we help and support each other to achieve our collective goals. We work in partnership with our students, staff, alumni, institutions and communities across the globe to make a lasting difference.

## **Integrity**

We are always willing to listen, we offer constructive feedback and we promote accountability, building relationships of mutual trust and respect. We are resilient in the face of challenges, pursuing outcomes with individual, cultural, societal and economic impact.

# Intelligent Mobility Design Centre (IMDC)



Photo: Richard Haughton

## Intelligent Mobility Design Centre (IMDC)

The Intelligent Mobility Design Centre (IMDC) leads research at the intersection of people, mobility and technology within a complex and changing urban and global environment. The IMDC is an interdisciplinary centre exploring, experimenting, prototyping and evaluating new mobility and automotive transitions via the synthesis of design and research methods. It integrates design and technology with insights into people and the social, environmental and economic context to enable a 360 view on the design of future mobility. The IMDC has a dedicated Studio space and visualisation lab to (co)develop, build and evaluate (full scale) vehicles and mobility services using a range of methods and tools including physical mock-ups, experiential prototypes, high fidelity visualisations and Extended Reality (XR) technologies.

## About AI-Design Lab

The AI-Design Lab is a major collaboration between the Hong Kong Polytechnic University (HKPU) and the RCA, funded by the 'InnoHK' programme to support collaborations between Hong Kong universities and world-leading universities around the world. Building on the research and innovation expertise of the two institutions, the AI-Design (AiD) Lab will explore how artificial intelligence and design can address some of the major challenges of the 21st century.

The AiDLab is built around three programmes of research, all with an interdisciplinary and industry-facing focus and opportunities for commercialising the project outcomes:

1. Using AI and 3D modelling to improve fit, customisation and performance in clothing manufacture
2. Using AI and robotics to explore customising products and services in healthcare, ageing and wellbeing and in future transport systems
3. Using AI and machine learning to improve efficiency, quality control and sustainability in the fashion industry.

The RCA will lead 7 projects across these three programmes, involving staff from across the RCA's research centres and academic schools, working in collaboration with HKPU colleagues.

# Senior Research Associate (Automotive Interior/UX Designer)



## About the project:

As part of the AiDLab, the IMDC-led project “AI design for autonomous mobility” focuses on the experience of Artificial Intelligence (AI) as embodied in Autonomous Vehicles (AV). AVs are expected to lead to disruptive and eventually transformative changes in mobility. There is however also a public sense of distrust and apprehension and purposeful design for trust and acceptance is critical. Furthermore, AV journey experiences that are inclusive, intuitive, and joyful will not only become key commercial differentiators for mobility providers, but also key drivers shifting the public towards more sustainable transport choices. Based on an understanding of people’s needs and desires, the aim of the project is to explore and experiment and develop novel and innovative AV design directions in response to these challenges and opportunities. There are two areas of focus designed to create a complete exterior and interior interactive solution. The passenger experience is key to the project and its development. Despite the fact that the vehicle itself can be thought of as the physical embodiment of AI, forming the first and foremost interface establishing the relationship between people and AVs, the role of vehicle design (i.e. architecture, form, and graphics) remains largely unexplored. The project is expected to lead to novel design concepts for future AVs and passenger experiences.

## Purpose of the post:

The IMDC is looking for highly creative designers with a desire to work on autonomous vehicle projects, shaping the future of mobility. The overall objective of the project is to create and produce prototypes and demonstrators of new vehicles and interactions for evaluation as part of a broader research project. This could be in the form of animations, interior mock-ups, design models, Extended Reality experiences, and other media for testing and evaluation. This will require outputs of different fidelities for staged research and iterative design cycles. The project requires close collaboration between two complementary roles: For the vehicle designer this is to explore new vehicle architecture, form, and detail and produce prototypes and demonstrators at various fidelities through to finished design solutions. For the automotive interior/UX designer this is to explore the potential for new forms of interactions and experiences and use multimedia to create demonstrations and experiences for trialling and evaluation within the vehicle space. We anticipate that the project will produce a high-fidelity solution suitable for understanding real experiences of future autonomous mobility.



## Main Duties and Responsibilities:

### Project Development & Management

- To coordinate and deliver project activities for “AI in Autonomous Mobility”, developing a day-to-day plan for project activity within the framework of the agreed programme, coordinating with the project lead to ensure alignment with overall goals and avoid project conflict or duplication of effort.
- Develop design proposals and use them as part of the design process (Research through Design)
- Physical and digital prototyping using a range of tools
- To support research on behalf of the project: this may include preparing, setting up, and conducting field work or user research, running workshops, stakeholder analysis, user journey mapping or other activities as appropriate to the project methods such as exhibitions.
- To record and document the outcomes of the project, providing specific outputs as agreed with the project partner. These may include providing design exemplars, digital and physical media, reports, presentations, or academic outputs.
- To coordinate (with the project lead/team) the management of the project, ensuring execution of the proposed project, efficient management of resources, and effective delivery of project outcomes and impacts.
- To support engagement with the project partner, contributing to working relationships to maintain a productive partnership.
- Where appropriate and relevant, to assist the project lead in supervision of junior project workers: ensure they are equipped to deliver outputs within agreed timescales and are undertaking work at an appropriate level.
- To coordinate casual workers on a project under direction from the project lead.



## Main Duties and Responsibilities (cont):

### Communication and Dissemination

- To coordinate and communicate and/or disseminate the project outputs as agreed with the project partner, tailoring the content to different audiences. These could include written, verbal, visual or other agreed output modes.
- To present information on project progress and outcomes to internal colleagues and external parties as agreed with the project lead. This may include at Centre events or partner meetings.
- To support and participate in project and Centre team meetings and activities, events and workshops, contributing ideas for development, delivery and promotion of projects.
- To communicate with project partners and other external contacts (which may include academic, industry, government and policy networks) in a professional manner, developing relationships for future collaboration.

### Developmental Activities

- To use and develop local (IMDC) research techniques and methods and contribute ideas from the project into the Centre's portfolio of methods and projects.
- To support the delivery of Executive Education courses and workshops as appropriate.
- Where appropriate, to prepare and submit project proposals in collaboration with Centre team members: analysing partner needs, identifying project delivery methods, writing/editing proposal text, and identifying project resource requirements.



# Person Specification

## Essential characteristics of the postholder:

- Masters/Doctoral degree level qualification in automotive / mobility / interaction / communications / gaming design or equivalent experience.
- Experience of design methods and techniques.
- Evidenced experience of coordinating and delivering design projects, either within an academic or commercial/industrial setting.
- Evidence of producing high-quality design outputs.
- Evidenced experience of contributing to and reporting on projects.
- Demonstrable ability to be a collaborative member of a broader team, working constructively with senior staff and supporting the work of less experienced staff or students involved in projects.
- Evidenced flexibility and confidence to tackle a wide range of tasks, with an open, proactive, creative and problem-solving approach.
- Strong interpersonal and team-working skills
- Genuine commitment to the aims of the Centre

## Desirable characteristics of the postholder:

- Ability to be creative in your thinking and adopt an explorative and experimental approach, developing multiple solutions
- Knowledge or experience of automotive or vehicle design
- Digital Craftsmanship to design for aesthetic qualities of passenger-vehicle interaction/interiors
- Design experience in the area of Tangible, Embedded and Embodied Interaction (e.g. shape-changing interfaces or soft robotics, new multimodal interaction styles)
- Skills in making and prototyping for experiential designs and in-situ evaluation
- Design for User Experience: Skilled in Research through Design (RtD) processes
- Design and exploration of new directions of user experiences in future mobility
- Excellent communication and presentation skills, able to adopt an appropriate style for a range of specialist and non-specialist audiences.

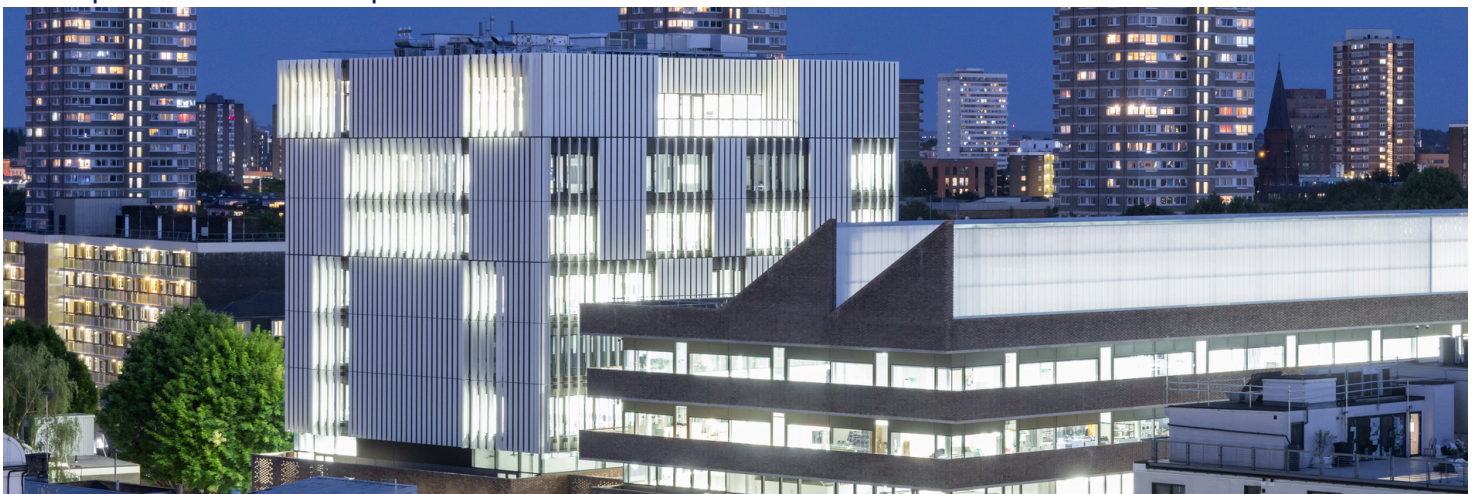


Photo: Iwan Baan

# Pay & Benefits

## Additional Information:

- Responsible to: Prof Dale Harrow
- Full time salary: Grade 7- £42,205 - £45,732 per annum including London Allowance
- FTE: 1 (35 hours per week), 9.30 - 17.30 with an hour for lunch. We will accept applications from 0.6fte (21 hours per week)
- 25 days annual leave plus extended breaks at Christmas and Easter, at the discretion of the College. Pro rata for part time employees. NB Holiday is increasing to 27 days per annum from the next holiday year - October 2024.
- A contributory defined benefit pension scheme and interest-free season ticket loan are available
- Location: Battersea
- Department: Intelligent Mobility Design Centre (IMDC)



Photo: Philip Vale

### Pension

The Royal College of Art is a member of the Superannuation Arrangements of the University of London (SAUL) which is a contributory defined benefit pension scheme. The college will contribute a sum equal to 16% of your salary while you pay 6%.

### Holiday

25 days paid leave a year plus bank and public holidays normally observed in England and Wales. In addition, the college is normally closed for six days a year, one day on either side of Easter and the remainder between Christmas and New Year. Part-time staff will be entitled to the pro rata equivalent. Increasing to 27 days a year from October 2024.

### Season ticket loans

Interest-free loans are available for staff to purchase annual season tickets.

### Enhanced maternity and adoption pay

Qualifying employees are entitled to enhanced maternity/adoption pay: 26 weeks' full pay, 13 weeks Statutory Maternity/Adoption Pay. This compares to the statutory provision of 90% of average pay for 6 weeks followed by Statutory Maternity/Adoption Pay for 33 weeks.

### Enhanced paternity pay

Qualifying employees are entitled to two weeks' paternity leave entitlement at full pay. This compares to the statutory provision of two weeks' pay at the statutory rate.

### Enhanced sick pay

Occupational sick pay after three months' service is three months full pay/three months half pay.

### 24/7 confidential support

Staff and family members in their household have access to a free, external confidential support service for work, financial, legal, family and personal problems 24 hours a day, 365 days a year.

### Occupational health

Occupational Health support for the College is provided by Imperial College's occupational health service at their South Kensington Campus.

### Life Cover

Active members of the SAUL pension scheme automatically receive life cover. A lump sum of four times your salary together with a refund of your contributions and a 2/3 pension for your dependent/spouse is payable should you die whilst in employment.

### Library

All staff are welcome to join the college library.

### Events

All staff are welcome to attend exhibitions, lectures and private views held by academic schools and programmes.



**10 YEARS**

as the world's N°1  
University for Art & Design

QS World University Rankings by Subject 2015-24