

Space Syntax: Architecture and Cities MRes

2018-19

This programme information sheet includes details of the structure and content of the course.



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Space Syntax: Architecture and Cities MRes

Programme Director: Dr Kayvan Karimi

OVERVIEW

This programme is centred on furthering your understanding of architecture and urban design as instruments in the development of society. Our course offers you a self-directed route of study, concentrating on research skills, whether you're looking to take your existing architecture and urban design experience to a higher level or are considering a PhD. Using the theoretical and analytical framework of space syntax, our programme involves the study of architecture from the scale of buildings to small-scale urban design through to planning entire cities.

You will develop in-depth theoretical and practical knowledge of the built environment and its functions considered as spatial, physical and human systems, and acquire a high level of skills in research and analysis of the built environment and its functions in support of better and more humane design.

Our course aims to provide you with a stimulating programme focused on the research and analysis of buildings and cities as patterns of space inhabited by individuals, communities and organisations. Instead of confining architecture to the role of designing iconic buildings - and the city to economic development and policy, our course takes a combined theoretical and analytical approach to architecture, urban design and planning in the service of constructing a better-built environment for society and an improved public realm.

Our course aims to maintain a relevance to the contemporary world's challenges of inter-disciplinary knowledge, sustainable urbanism, social inclusion and exclusion, informal settlements, architecture and computing, spatial cognition and the physical and immaterial dimensions of social networks.

STRUCTURE

The MRes programme offers selected components with an emphasis on research methods and additional transferable skills. The course runs for twelve months, from September to September, and links to other courses at The Bartlett via shared modules and collaborative group research projects.

The programme is delivered through a combination of seminars, lectures, tutorials, field work, independent project work and workshops. Assessment is through coursework, written and take-home examinations, projects and presentations with an extended dissertation.

Course components are as follows:

1. **A 'transferable skills' component** comprising two modules (total of 30 credits, mandatory, terms 1)
2. **A mandatory 'taught' component** comprising one module – Spatial Cultures (15 credits, mandatory, terms 2)
3. **Two alternative 'taught' routes** comprising one compulsory and one choice from two options (students may audit the other option that they don't choose to take for credit).
4. **A 'research' component** comprising two modules (total of 120 credits, mandatory, terms 1 -4)

The outline of the structure of the programme can be seen in the table below:

Term 1 45 credits	Communication Skills 15 credits BENVED7	Design as Knowledge-Based Process 15 credits BENGAAD	Principles of Analytic Design 15/30 credits BENGAAF Group Project
Term 2 45 credits	Spatial Justice 15 credits BENGAAH	Spatial Cultures 15 credits BENGAAG	Principles of Analytic Design 15/30 credits BENGAAF Individual Project
Terms 3 & 4 90 credits	Dissertation 90 credits BENGAAL		

Alongside initial training by world leaders in space syntax research, students will be able to specialise in one of several streams: buildings and organisations; urban, suburban, planned and unplanned settlements; spatial modelling and evidence-based design. If desired, students will be able to develop a research project relevant to the research interests of their company or practice.

CONTENT

Transferable Skills (total of 30 credits, term 1)

BENVGAAD Communications Skills This transferable skills module is the only module that the students have to do outside the Bartlett School of Architecture. The module is offered by UCL Energy Institute and is part of their MRes Energy Demand Studies programme. Communication Skills will provide an introduction to academic writing, giving presentations and interpersonal communication skills. The course will review a wide range of appropriate skills for research students. Including: writing in academia, giving presentations: working with others and networking and communication with the public.

BENVGAAD Design as a Knowledge-Based Process introduces theories of design as a knowledge-based or evidence-based process and provides a range of concepts that suggest how the nature of design may itself become the object of research. The course explores contrasting perspectives in architecture, theories of scientific knowledge, linguistics, social theory and theories of technology via student debate on issues of design practice, the nature of collaboration, machine intelligence and creativity. The module is intended to get students reflecting on what they do as practitioners by asking them to consider design as a knowledge domain with a particular knowledge base - rather than simply in terms of a tacit community of practice.

Taught elements (total of 30 credits, terms 1 & 2)

BENVGAAG Spatial Cultures introduces a series of important concepts intended to provide students with the theoretical basis for researching the relationship between space and society - with an emphasis on the urban scale. It draws on theoretical perspectives from a range of disciplinary domains and explains the contribution each has to make. The module investigates the theoretical possibility of developing a distinctive spatial ontology of society through a range of case studies of different spatial cultures.

AND

BENVGAAH Spatial Justice examines the interface between urban form and social outcomes. To explore these issues, the module offers an overview of the key factors in social exclusion and presents research into the relationship between urban design and crime, poverty, health and other issues of 'disurban' space.

OR

BENVGAAI Architectural Phenomena addresses theoretical ideas in buildings and cities related to the experiential, social, political and economic dimensions of architecture and architectural design. It is organised around a series of themes such as 'space', 'form', 'function', 'cognition', 'perception', 'consumption', 'power', 'narrative' and 'cultural meaning' developed from a

range of contrasting or complementary theoretical perspectives, historical and contemporary examples, live research and design projects. Supported by a programme of site visits, the module links evidence-based approaches such as space syntax with architectural theory, design intuition and design logic. More than addressing what constitutes successful designs; the module engages students in thinking how to redefine the discourse of architecture and urban design.

Research elements (total of 120 credits, terms 1 -4)

BENVGAAF Principles of Analytical Design provides a well-defined methodology for the description and analysis of form-function relations in architecture at all scales from the individual dwelling to the urban region. It introduces 'space syntax' research methods aimed at investigating spatial morphology and its social implications by a practical, hands-on programme of lectures and workshops. A series of lectures based on case-study examples will show how these methods have been deployed in architectural practice. The curriculum combines grounded qualitative methods with quantitative descriptive methods of spatial and configurational analysis and observation. Research methods from allied disciplines, such as geographic information systems (GIS), social anthropology and sociology are also introduced.

BENVGAAL Dissertation Students following the MRes SDAC are required to submit a 15,000 word dissertation on a subject agreed with the Course Director. Dissertations will be supervised by the most appropriate member of staff for the topic in question. Teaching will include: research methods, research structure and approach, guidance on data gathering and writing seminars. There will be a formal (non-assessed) presentation of research question and data at the end of March by each student to their peers, in front of an audience that will include the teaching team and associated researchers.

STAFF

Students are taught by members of the Space Syntax Laboratory, one of the world's leading architecture research groups and from Space Syntax Limited, an architectural and urban design consultancy that applies space syntax theories and methods into practice on internationally renowned projects.

The Space Syntax Laboratory is the international centre of the theory and methodology known as 'space syntax'. It studies the effects of spatial design on aspects of social, organisational and economic performance of buildings and urban areas. Its theoretical and methodological innovation intersects with a variety of disciplines, including anthropology, archaeology, geography, computer science, psychology, sociology, medicine, mathematical modelling and physics.

The course is led by Dr Kayvan Karimi, who alongside his academic work, is

active in research and design consultancy through Space Syntax Limited.

Other core staff include:

Dr Sam Griffiths, Lecturer in the MSc SDAC. His research focuses on settlement history and the relationship of the built environment to social organization.

Professor Bill Hillier, Professor of Architectural and Urban Morphology and the original pioneer of the field of space syntax.

Professor Alan Penn, Dean of the Bartlett, whose research focuses on understanding the way that the design of the built environment affects the patterns of social and economic behaviour of organisations and communities.

Dr Sophia Psarra, Course Director, whose research interests are in the area of conceptual and perceptual spatial characteristics and their relationship with patterns of movement, use and cultural content.

Dr Kerstin Sailer, whose research interests include complex buildings and workplace environments, organisational theory and organisational behaviour, Social Network Analysis, and evidence-based design practices.

Professor Laura Vaughan, Professor of Urban Form and Society, who studies the relationship between micro- and macro- scales of urban form and society in order to investigate issues of urbanism, such as immigrant settlement patterns and suburban town centres.

OPPORTUNITIES

Graduates of this programme are likely to employ their transferable skills and enter the specialism for the first time, return to their workplace with fresh focus or specialise in the burgeoning spheres of expertise that this research field has developed in recent years. First destinations of recent graduates of the sister programme MRes Space Syntax: Architecture & Cities is either top international universities, or top urban and Architectural consultancy firms, such as: Foster and Partners, Richard Rogers Partnership, Aecom, Buro Happold, Arop, Qatar Foundation, Cube Design, Portland Design Associates, Levitt Bernstein, Paul Drew Design, Manu Chugh Architects and Ouzounowpounou & Papataristou Architects.

A large number of SDAC graduates have formed an international community and an open-ended laboratory that debate regularly in the biennial space syntax symposia, international events and workshops.