
MSc/PgDip/PgCert Urban Design

2009 / 2010




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Introduction



INTRODUCTION

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1 Introduction

Ombretta Romice, Sergio Porta and Tutors

High quality urban design is a basic requirement for the successful development of our built environment and of our society in general. Urban design as "the art of making places for people" is back on the agenda after a period of neglect and it is now a systematic and comprehensive field of research and practice, including aspects like appropriate mixed use, pedestrian oriented civic spaces, neighbourhood friendly circulation patterns or context respecting design. Our course aims to teach urban design in a multidisciplinary manner that reflects its inherent complexities. It promotes a general and intricate understanding of the city by examining the various factors that generate urban form. It focuses on physical planning and the design of urban spaces and their enclosure. Moreover, it aims at understanding how to create a democratically organised, socially inclusive, economically prospering, environmentally sustainable, architecturally beautiful and culturally vibrant city.

The topic addressed in the course is the urbanity of places within the context of globalisation. It focuses on the metropolis or city region. The main task of the course is to develop appropriate strategies for sustainable urban development, encompassing social, political, economic, environmental, architectural, aesthetic and psychological aspects. The course is delivered through studio work, special projects, lectures and seminars.

To achieve these results, the course structure is delivered through a vibrant interdisciplinary learning environment, where modules are shared between the Department of Architecture at the University of Strathclyde and other Departments and Universities. In particular, students will be offered modules and classes from the following institutions:

- Department of Urban Studies at the University of Glasgow
- Civil Engineering at the University of Strathclyde
- Sustainable Engineering Postgraduate Programme by the Faculty of Engineering at the University of Strathclyde.

1 Course Structure

The PgDip is a nine months full-time or 18 months part-time course for a total of 120 credits; subject to approval by the Course Director and the satisfactory completion of all diploma work students are given the opportunity to extend their PgDip course of study for an additional three months so as to convert their diploma into an MSc. The MSc in Urban Design is a twelve months course full-time or a 24 months part-time for a total of 180 credits. The PgCert corresponds to the accumulation of a total of 60 credits and can also be taken in part time or full-time mode. The PgDip/MSc/PgCert degree provides an open and creative learning environment embracing theory and practice where students have the opportunity to explore urbanism in a broad manner.

The award of the PgDip/MSc signals the academic culmination of a design-centred professionally orientated education in urban issues. Studies, which call for theoretical, experimental and practical exemplification, are predominantly project-based and demand a high level of commitment.

The MSc in Urban Design is accredited as a Specialist Course by the Royal Town Planning Institute.

As part of the course, students will acquire a vast and complex range of disciplines and skills, and learn how to manage them as part of meaningful and sustainable design scenarios. As such, the course includes as compulsory parts of its structure the majority of subjects that will form a student as a competent urban designer; at the same time, it nourishes special interests and reserves for its third part (the Dissertation that after the Diploma leads to the Masters) the possibility for students to develop in detail a particular interest related to urban design.

The course is design based but strongly relies on theoretical input. The design studio is the core element of the course and runs throughout the first two semesters. In parallel, the various aspects of urban design theory and practice are explored in taught classes. In their third semester, students can decide to develop the theme of the studio as an advanced design project or to concentrate on other areas of interest in a theoretical manner as a written dissertation.

During the year, students will be invited to attend lecture series by prominent practitioners and scholars in the field of urbanism presenting their recent work, theories and discussing contemporary directions in planning and urban design will take place during the year. Details on these lectures are normally announced during the year.

Over three semesters, the course is structured as follows:

- Theory and practice: Exploring concepts and tools of urban design
- Theory in practice: Developing a realistic project
- Practice in theory: Reflecting upon issues of urban design

1 Curriculum

Taught classes will normally run as 2.5 days modules (unless specified otherwise, please check timetable towards the end of the handbook) to allow for flexible booking by CPD and part time students. Some of these classes are delivered by other Departments:

- US = Department of Urban Studies at the University of Glasgow
- CE = Civil Engineering at the University of Strathclyde
- SE = Sustainable Engineering Postgraduate Training by the Faculty of Engineering at the University of Strathclyde.

1. Theory and practice: Exploring concepts and tools of urban design

Compulsory Classes

Credits

AB 931 Design Studio 1a - Analysis: investigation of project area in its metropolitan setting	10
AB 932 Design Studio 1b - Programme: strategic concepts for the development and management of transformation at macro and micro level	10
AB 933 Design Studio 1c - Framework: realisation of a part or theme of the programme at urban design level	10
AB 936 Urban Design History*	10
AB 939 Urban Theory*	10
<i>Or: EV 929 Principles of sustainable development (GSES)</i>	12
<i>Or: EF 912 Environmental Impact and Sustainability (SE)</i>	12
AB 943 Real Estate Development (US)	10
AB 946 Urban Design Policy & Practice (US)	10

2. Theory in practice: Developing a realistic project

From the total of 60 credits, the 30 studio credits are compulsory. Moreover students are requested to select 3 optional classes from the list published below (for a total of 30 credits).

Compulsory Classes

Credits

AB 934 UD Design studio 2	30
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Optional Classes

(No fewer than 20 credits have to be chosen from the following):

Credits

AB 935 Urban landscape design* **	10
AB 938 Urban design representation* ** +	10
AB 940 Urban transport planning (CE)	12
EF 902 Project work and project management (SE)	12
EF 909 Finance (SE)	12
AB 937 Management and Implementation Methods	

* Classes also offered to students of the diverse Master Courses from the Department of Urban Studies at the University of Glasgow.

** Classes strongly recommended for all students.

+ This class is linked to the studio project.

Part 3 Practice in theory: Reflecting upon issues of urban design

For students invited to pursue the MSc only:

Compulsory Classes

Students who successfully completed their PgDipl, upon invitation from the course director and submission of a viable research proposal, are requested to complete a Dissertation for completion of the Masters.

Credits

AB 947 Dissertation Project	60
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1 Guest Lecture Series

Guest lectures will take place on a regular basis during the year and will address current debate in Urban Design, Architecture, Technology and the Environment.

A list of Guest Lectures will be announced during the course of the year.

1 Teaching Philosophy

Overall, the course is delivered pursuing the following teaching and learning methods:

The design studio will comprise both **local planning tasks and one international planning study**, in order to bring new successful ideas to urban design in Scotland. The international planning study will be located in a European city where high-quality historic spaces as well as outstanding contemporary developments and regeneration projects can be studied, and which therefore can stimulate students' design ideas for their planning task in Scotland. Only through a strong international outlook the level of urban design in Scotland can be raised to a competitive level. This study will be undertaken as part of the field trip. The students not attending the field trip, as part of their studio project, should produce an assessment and appraisal of international case studies of relevance to their own design project.

To overcome the persistent dichotomy between existing successful urban situations and contemporary planning failures, **history of urban design** will be taught in a theoretical way as well as explored in practical surveys where students will visit and record in detail selected urban spaces in Glasgow and other cities. The results of these surveys (plans, sections, perspectives, sketches) will form a base for the students' own design and also become a stock for a future manual on good urban design, comparable to Allan Jacobs compendium on Great Streets.

To enable an understanding of the wider **sustainability** issues, students will look at how sustainable development has resulted in the widespread adoption of urban compaction policies that promote urban regeneration, the revitalisation of town centres, restraint on development in rural areas, higher densities, mixed use development, promotion of public transport, and the concentration of urban development at public transport nodes. Emphasis will be placed on understanding how city centre locations can cater for a diversity of activities which, because they take place at different times, ensure safety within the urban environment. Students will also look at how proposals to increase the mix of uses within a city can include the juxtaposition of residential and commercial uses within new developments and the siting of new development, retail, and leisure facilities close to existing housing areas. A further discussion on urban sustainability will look at the sustainable city region and at the relationships between transport and sustainability with particular reference to decentralised concentration.

To enable the realistic understanding of **social issues**, projects and classes will study repercussions of propositions in reality. Where possible, this degree of realism will be introduced at each scale during the year, from the regional to the local, through the involvement of stakeholders in both discussions and project development.

To enable the possible realisation of ambitious high-quality urban design projects within a realistic financial context, **economic strategies** will be taught and developed in close relation to the students' design projects. Here the aim is not to prevent ambitious urban design by a restricted financial budget, but to enable the possible realisation of high-quality design by advanced economic strategies. This includes the investigation of scenarios of long-term feasibility, the development of creative financial methods and the consideration of economic benefits resulting from good urban design.

To establish an internationally recognisable profile of the course as well as to develop appropriate means to communicate design ideas, the students will be asked to produce (aside all other documents) at least one outstanding and iconic **visualisation** of their final project. These may include bird's-eye-views, street or square elevations, detailed sections of urban spaces etc., and may be produced in traditional graphical manner or using innovative approaches and new medias. As urban design finally results in visually perceivable spaces, a high quality image is an essential part of urban design.

To realise an **interdisciplinary learning approach**, two compulsory modules will be delivered by the Department of Urban Studies at the University of Glasgow. This will not only ensure the high quality of specialist classes through teaching by experts, but also engender an interdisciplinary learning environment with students from other Master Courses of Glasgow University. An exchange of staff and visits of students during the year will enrich our understanding of the relationship between the built environment and people. Further links to international universities will be used to establish the exchange of urban design ideas; students will be exposed to the work and projects done in IAPS (International Association for People-Environment Studies), of which Dr Romice is the President and in particular cases, the best students' work will be disseminated through IAPS membership.

1 Learning Outcomes

This course promotes a comprehensive and complex understanding of the city by examining the various influencing factors of the resulting urban form. It focuses on physical planning and the design of urban spaces and their enclosure. In particular, the learning outcomes of the course, which is designed for both practitioners and students, are the following:

- Develop a knowledge of the fundamentals of urban design, including its theoretical principles, historical development and examples, practicalities and techniques, in relation to current and future challenges.
- Develop an understanding of the economic, legislative, societal issues that affect the processes of urban change, quality of life and sustainability, and a capacity to discern how these will have different effects on the spatial arrangement of cities.
- Develop an understanding of the transitional nature of our cities, and an ability to formulate visions for their long-term transformation, as well as practical solutions for their present legibility and design.
- Develop an ability to formulate imaginative and realistic scenarios for the transformation of our cities, recognising and taking into account contradicting forces and interests, and appreciating the past and present development of our cities.
- Develop design skills at both the strategic and detailed scales, to support ideas, scenarios, and development with a complete design representation of urban change.
- Develop an intellectual and practical vocabulary of ideas, examples, programmes and techniques to judge the aesthetic quality of urban spaces and enclosures, enrich the formulation of ideas, scenarios and design ideas.
- Develop the capacity to learn independently, master new ideas and techniques, and conduct research, make judgements and recommendations.
- Develop an ability to communicate and work with others – individually and in teams, with colleagues and stakeholders – through an understanding of negotiative, meditative and advocacy skills.

1 Review and Assessment

There are few formal examinations in classes run by the Architecture Department. Assessments of performance are typically based on continuous assessment of written submissions of assignments based on coursework. Assessments for Design Studio classes include periodic reviews of student presentations of project work. Written dissertations are double-marked.

The terms *awareness*, *knowledge*, *understanding* and *ability* are used in the criteria to indicate the level of achievement required in each theme and student progression through the course of study. The following guidance is given on the definition of these four terms:

- Awareness acquaintance with general concepts, topics, rules, methods or procedures, without necessarily being able to paraphrase or summarise information. Students should be able to identify the limits of their awareness and be able to refer to source material for more in depth knowledge.
- Knowledge familiarity with specific information, including facts, definitions, rules, methods, process or settings, without necessarily being able to see its fullest implication or application.
- Understanding identification, assimilation and comprehension of information. Students can correctly paraphrase or summarise information and can relate it to other material, including its practical application.
- Ability skill in relating specific information to the accomplishment of tasks. Students can correctly select information that is appropriate to a situation and apply it to the solution of specific problems.

The assessment of taught classes is specific to each class; please refer to each module descriptor for details. It is normally carried out through written assignments, presentations and discussions, and the production of drawings/representations.

The assessment of design work cannot be reduced to the quantitative accumulation of points. There will always be aspects of creative activity which involve work of an exploratory and unpredictable nature which cannot be quantified through checklists. Nevertheless, within each project there are general criteria irrespective of the project with regards to presentation, development of the brief, of form, of space, of technology, by which the project will be evaluated. The final awarding of a grade is arrived at in four stages.

Stage 1 - The Interim Credit Review

This is where the student will present the interim progress of her or his work to the studio tutors, full time members of staff and other invited experts. As a project progresses a student may be asked to present work done in a previous credit as well as that in the current credit. Credit reviews take place periodically throughout the semester. At the end of the review a consensus mark is tabled for the final credit review.

Stage 2 – The Final Credit Review

This is where the student will present his or her work to the studio tutors, full time members of staff and other invited experts. As a project progresses, a student may be asked to present work done in a previous credit as well as that in the current credit. The final credit reviews take place at the end of each semester (wk 14/15).

Stage 3 - The Internal Examination/Professor's Panel

The marks agreed upon in the Credit Review are transferred to a panel of professors and year convenors who then re-examine the student work in his or her absence. The internal examination usually follows directly on from the final credit review.

Stage 4 – The External Examination

Students are interviewed by a selected panel of external examiners representing practice and other courses in urban design from the UK invited by the Department. They will interview students over their year-long work, and assess the quality of their learning progress. The external examination will take place to award PgDip and MSc.

1 Submission Deadlines and Attendance

Deadlines for all project work will be rigidly applied and extensions of time given only on medical or other exceptional grounds. A medical certificate must be submitted as evidence of illness to the Administrative Officer as soon as possible after its occurrence. The Year Convenor must also be advised of all illnesses, absences, medical certificates, etc.

There will be opportunity for resubmission of project work, submitted to the Final Credit Review at the end of Semester 1 and deemed unsatisfactory, at the Internal Examination held at the end of Semester 2 (i.e. First Examination Diet). Project work, submitted at the end of Semester 2 and deemed unsatisfactory, can be resubmitted in August/September, i.e. at the Second Examination Diet.

The Convenor and Director of Postgraduate Studies may meet with each student from time to time to discuss progress and to give an opportunity to ask questions, and express opinions. A student whose progress or attendance proves to be unsatisfactory may be given written notice and required to attend an interview with the Chairman of the Department.

Attendance at Design Tutorials – University Regulations

The MSc/PgDip/PgCert in Urban Design is a design course.

The design portion of the course will be delivered once a week, during a day-long session. Students are required to work in the studio on the studio day when full-time and part-time staff will be available for tutorials.

Studio days are meant to be moments of exchange and debate between staff and students and students and their peers. As such, students are expected to work in the studio for the whole day unless otherwise communicated.

Taught classes take place during the week according to the published timetable.

The following University Regulations relate to attendance and performance:

“Every candidate for a degree is required to attend regularly each class in the curriculum and to perform satisfactorily the work of that class. A candidate who, in the opinion of the Head of the Department offering the class, does not satisfy the requirements concerning attendance and performance will not be entitled to be examined in that class and will be informed accordingly. The names of such candidates will be reported to the relevant Board of Study.”

Note that students who consistently fail to attend the weekly design tutorials and workshops will be reported to the Head of Department and may lose the entitlement to examination in that credit.

There are examination periods in January and May/June of each year for the assessment of class and design project submissions from Semester 1 and Semester 2 respectively.

There is a further examination period in August at which students may, with the permission of the Board of Examiners, resit failed classes.

Masters submissions will also take place at the end of August.

1 Examinations and Progress

The first two semesters comprise the Post Graduate Diploma in Urban Design. This award is commensurate with the accumulation of 120 PG credits. Subject to approval by the Course Director and the satisfactory completion of all diploma work students are given the opportunity to extend their course of study for an additional three months so as to convert their diploma into an MSc. This is undertaken over the third summer semester and is centred on the additional requirement of a dissertation or other project based work to the value of 60 PG credits.

1 Course Regulations

Admission

- 19.41.141 Notwithstanding Regulation 19.1.1, applicants shall possess
- (i) an Honours degree in Architecture or a discipline related to the built environment of a university in the United Kingdom; or
 - (ii) a qualification deemed by the head of Department acting on behalf of Senate to be equivalent to the above.
- Applicants applying in terms of appropriate professional experience may be required to register initially for the Postgraduate Diploma.

Duration of Study

- 19.41.142 Regulations 19.1.4 and 19.1.5 shall apply. The normal duration of study will be
- for the degree of MSc by full-time study – 12 months
 - for the Postgraduate Diploma by full-time study – 9 months
 - for the Postgraduate Certificate by full-time study – 9 months
- for the degree of MSc by part-time study – 24 months
 - for the Postgraduate Diploma by part-time study – 18 months
 - for the Postgraduate Certificate by part-time study – 18 months

Mode of Study

- 19.41.143 The courses are available by full-time and part-time study.

Curriculum

- 19.41.144 All students shall undertake an approved curriculum as follows:
- for the Postgraduate Certificate - no fewer than 60 credits
 - for the Postgraduate Diploma - no fewer than 120 credits including those for all the classes in List A
 - for the degree of MSc no fewer than 180 credits including a dissertation project

Classes	Level	Credits
List A		
AB 931 Urban Design Studio 1a: Analysis	5	10
AB 932 Urban Design Studio 1b: Programme	5	10
AB 933 Urban Design Studio 1c: Framework	5	10
AB 934 Urban Design Studio 2	5	30
AB 936 Urban Design History	5	10
either		
AB 939 Urban Theory	5	10
or		
EV 929 Principles of Sustainable Development	5	12
or		
EF 912 Environmental Impact and Sustainability	5	12
AB 943 Real Estate Development	5 10	
AB 946 Urban Design Policy and Practice	5	10
List B		
No fewer than 20 credits chosen from:		
AB 935 Urban Landscape Design	5	10
AB 937 Management and Implementation Methods	5	10
AB 938 Urban Design Representation	5	10
AB 940 Urban Transport Planning	5	12
EF 902 Project Work and Project Management	5	12
EF 909 Finance	5	12
Students for the degree of MSc only:		
AB 947 Dissertation Project	5	60

Examination, Progress and Final Assessment

- 19.41.145 Regulations 19.1.18 and 19.1.19 shall apply.
- 19.41.146 The final assessment will be based on performance in the examinations, coursework, the Dissertation Project where undertaken and, if required, in an oral examination.

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- Award**
- 19.41.147 **Degree of MSc:** In order to qualify for the award of the degree of MSc in Urban Design, a candidate must have performed to the satisfaction of the Board of Examiners and must normally have accumulated no fewer than 180 credits, of which 60 must have been awarded in respect of the Dissertation Project.
- 19.41.148 **Postgraduate Diploma:** In order to qualify for the award of the Postgraduate Diploma in Urban Design, a candidate must normally have accumulated no fewer than 120 credits from the taught classes of the course.
- 19.41.149 **Postgraduate Certificate:** In order to qualify for the award of the Postgraduate Certificate in Urban Design, a candidate must normally have accumulated no fewer than 60 credits from the taught classes of the course.

1 Marking Chart for Postgraduate Courses

Department of Architecture, University of Strathclyde
 Department of Urban Studies, University of Glasgow

Non-honours Courses		Aggregation Scores		Primary verbal descriptors for attainment of Intended Learning Outcomes
Primary Grade	Gloss	Percentage Scale (Strathclyde)	Aggregation Score (Glasgow)	
A	Excellent	85 (85-100)	22	<i>Truly Exceptional/Outstanding demonstration of learning outcomes.</i> Exemplary range and depth of attainment of intended learning outcomes, secured by discriminating command of a comprehensive range of relevant materials & analyses, & by deployment of considered judgment relating to key issues, concepts & procedures.
		82 (82-84)	21	
		78 (78-81)	20	
		75 (75-77)	19	
B	Very Good	72 (72-74)	18	<i>Exceptional/Outstanding demonstration of learning outcomes.</i> Conclusive attainment of virtually all intended learning outcomes, clearly grounded on a close familiarity with a wide range of supporting evidence, constructively utilised to reveal appreciable depth of understanding.
		68 (68-71)	17	
		65 (65-67)	16	
		62 (62-64)	15	
C	Good	60 (60-61)	14	<i>Comprehensively Good demonstration of learning outcomes.</i> Clear attainment of most of the intended learning outcomes, some more securely grasped than others, resting on a circumscribed range of evidence & displaying a variable depth of understanding.
		58 (58-59)	13	
		56 (56-57)	12	
D	Satisfactory	54 (54-55)	11	<i>Satisfactory demonstration of learning outcomes.</i> Acceptable attainment of intended learning outcomes, displaying a qualified familiarity with a minimally sufficient range of relevant materials, & a grasp of the analytical issues & concepts that is generally reasonable, albeit insecure.
		52 (52-53)	10	
		50 (50-51)	9	
E	Weak	48 (48-49)	8	<i>Weak/Poor Performance in learning outcomes.</i> Attainment deficient in respect of specific intended learning outcomes, with mixed evidence as to the depth of knowledge & weak deployment of arguments or deficient manipulations.
		45 (45-47)	7	
		42 (42-44)	6	
F	Poor	38 (38-41)	5	<i>Major Weaknesses in learning outcomes.</i> Attainment of intended learning outcomes appreciably deficient in critical respects, lacking secure basis in relevant factual & analytical dimensions.
		35 (35-37)	4	
		25 (25-34)	3	
G	Very Poor	15 (15-24)	2	<i>Major Weaknesses in learning outcomes.</i> Attainment of intended learning outcomes markedly deficient in respect of nearly all intended learning outcomes, with irrelevant use of materials and incomplete and flawed explanation.
		5 (1-14)	1	
H		0	0	<i>No relevant work submitted for assessment.</i> No convincing evidence of attainment of intended learning outcomes, such treatment of the subject as is in evidence being directionless and fragmentary.
CR	CREDIT REFUSED			Failure to comply, in the absence of good cause, with the published requirements of the course or programme; and/or serious breach of regulations.

1 The Department of Architecture Library

The ethos of postgraduate study is firmly centred on the students' pursuit of their own architectural interests and as such there is an expectation that there will be intensive use of Library resources. The Library provides printed sources (books, journals etc) and access to online resources and the services of the Librarian who can offer professional support and guidance.

The Library is primarily a reference resource used by the students and staff in the Department during the day, although some items are available for loan after 16:30 for return before 11:00 the following morning. Students can also access the main University Library catalogue, the Internet and all the electronic information services available to them at Strathclyde. The resources in the Department of Architecture Library are offered in addition to those provided by the University (Andersonian) Library.

An introductory tour of the Andersonian Library is offered as induction to new students at the beginning of the year.

For further studies students have also access to the University Library of the University of Glasgow.



STUDIO

STUDIO PROJECT

URBAN DESIGN STUDIO – 1A

URBAN DESIGN STUDIO – 1B

URBAN DESIGN STUDIO – 1C

URBAN DESIGN STUDIO – 2

DISSERTATION PROJECT





2 Studio

Each year the Department selects a particularly challenging setting for the fifth year design studio that will require thorough investigative, interpretative, judgemental and creative responses by all students, but also commitment and hard work, insight, passion and bright ideas. The response to complex urban problems encompasses furthermore a coordinated and integrated response to physical, social, economic and environmental strengths and weaknesses of the selected study area that necessitates not only the design of spatial and formal structures but also the development of programmes for the improvement of the socio-economic profile of the area and its environmental quality. The studio is the area for students to formulate a regeneration and development framework and investigate its social acceptability, economic viability and environmental benefits.

This year we will work to create these spaces in a set area in Glasgow in strict collaboration with local community groups, Glasgow City Council and other relevant stakeholders. The project will run live with their contribution and advice. Robert Adam from Winchester will be our guest Professor, contributing to the illustration and definition of urban design codes as well as to the review of students' work on masterplanning and coding. The tutoring team also includes: a landscape architect, an urban designer, a planner and the visit of a traffic engineer, to respect the multidisciplinary of urban design. Regular visits from the parties interested in the project will help students keep their investigation and creative work real.

The nature of the urban design studio

The view on urban design held in this Department is that it is not large scale architecture, but involves a series of planning and design steps at different scales:

- the strategic planning and design of spatial structures at city region and city level;
- the planning and design of the spatial/organisational structure and the volumetric form at urban district, quarter and neighbourhood level;
- the detailed planning and design at public space level.

The overriding objective of theoretical investigation and design projects on all these levels is to search for development frameworks and design concepts that lead to sustainable urban development and living.

What is sought is:

- to maintain and develop cultural identity;
- to achieve social inclusion and community involvement;
- to maintain and further economic development and an equitable distribution of wealth;
- to protect the local, regional and global environment;
- and to achieve and maintain a balance between ecological/environmental requirements and human needs and aspirations.

The studio is design based; weekly tutorial with the tutor team will guide student work through the year. Aside the studio, students will benefit from a number of lectures which are offered to the entire 5th Year.

This group will learn the principles of place making and apply them to a city-based site, working in collaboration with Glasgow City Council and other relevant stakeholders.

We will study and master all scales of urban design – strategic, detailed and all the in-betweens - and use them to regenerate perhaps the most challenging sites in Glasgow: Govan and the Clyde waterfront.

Working on a substantial portion of the city, strategic, historic, derelict but loaded with identity and potential, is for inquisitive and creative students prepared to engage in varied subjects and with many different parties. Design will be informed by such engagement and will ultimately demonstrate that quality spaces don't just happen by chance.

The task will be new – at least in its magnitude – for most students.

Semester one can be seen as a strategic research project intended to provoke a discussion about the city using as a vehicle the site selected and generate visions. In semester two students will develop a personal approach in response to the critical and strategic analysis of the site, contributing to the public debate on the future of the city and its parts.

In particular, this year students will carry out their work in 4 phases:

1. Case analysis. Students will work in Govan as part of a larger urban sector of Glasgow along the Clyde, getting to know intimately this area, its links potentials and pitfalls (Studio 1a);
2. Urban Design Strategy. Students will propose a Strategic Plan and a concept plan, together forming the Urban Design Strategy (UDS) for the improvement of this area envisaging actions and projects that deal with services, mobility, housing, and public realm provision (Studio 1b);
3. Block analysis and coding. Students will be requested to work out a complete morphological analysis of three urban blocks that are assigned by staff. The block analysis is carried out by drawing each urban block in two boards and by the quantitative analysis of morphological aspects as they appear on drawing. Once all sample blocks have been worked out and all data is available, students and staff derive from that a synthetic urban design code (Studio 1c).
4. Masterplanning and place design. Students are led to the production of a masterplan for sub-areas of Govan district. Students will learn how to take action for subdivision of large blocks, a correct management of density as related to transport and land use, how to design safe and livable streets and how to the existent urban fabric of public and private buildings in relation to streets, land uses, density and transport. Finally, students will be asked to deepen their masterplan and coding by experimentally developing the design of streets and buildings in a small part of it (Studio 2).

Students will work on the understanding that cities are not just places to work and consume - people have a psychological and social relationship with their urban space as well. This means that cities are places of social organisation and human behaviour.

The studio is to be intended as a continuous project running through the year – where aims and goals, related briefs and agenda are devised by students for the pursuit of an evidence-based regeneration strategy. The studio work will formally assign individual credits for each step of the project, but it is the underlying logic behind the whole process – analysis, strategy, coding and design – which will demonstrate the success of the work at the end the year. The outcome of the studio project is a journey of understanding and action, not a series of disjointed steps.

2 AB 931 - Urban Design Studio 1a

Ombretta Romice, Sergio Porta and Tutors

Focus

Building evidence about problems, values, opportunities and challenges that frame the problem of urban regeneration in Govan district by means of a coherent set of analytical application (“package”).

Project Description

The studio is designed to take the Clyde Waterfront and Govan as both its focus and locus. As part of a semester-long investigation into the social, political, economic, environmental and professional context guiding urban change, this module aims to assist students’ in their critical appraisal of the town. In particular, students will produce a comprehensive, detailed and illustrated analysis of the formal, social and economic characteristics of the context selected which will form the basis for the formulation of a regeneration programme and a strategic urban design framework for it. The critical assessment of the development pattern and current condition of the district will reflect both historical and current perspectives of urban development.

This module involves students in group work. On the first day, they will form teams of 3 to maximum 4 people. Teams should be multidisciplinary, as is the nature of urban design, so students from the MSc in Urban Design will work with students from the MArch in Advanced Architectural design. This will be an extraordinary learning experience for all.

Each group will be assigned a specific analysis “package”: the completion of the package will be due in about one month time, which means a very challenging endeavour for students who have never practiced urban analysis. Students will understand how important is the foundation of any initiative at the urban scale on evidence produced by both professional and interactive analytical approaches. Such evidence will be fundamental for addressing the public discourse on urban change in a clear and participated manner.

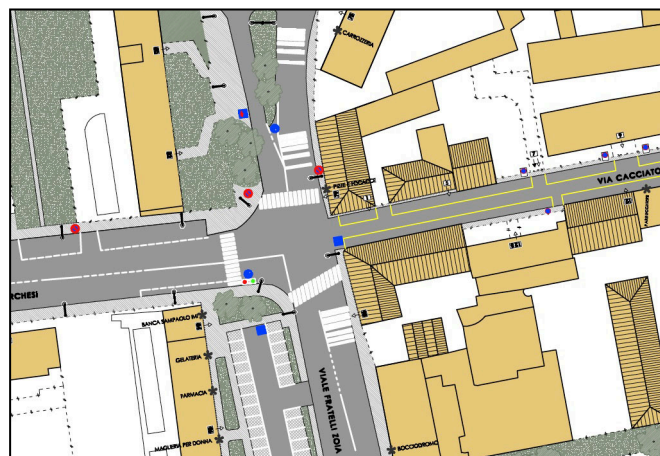
Methodology

In a studio environment, students will receive instruction on how to:

- investigate the urban character of the selected area (landscape and topography, buildings of the public and private realm; spatial structure and the hierarchy and quality of public spaces; permeability, legibility and imageability of the area; public parks etc.);
- analyse (with the help of direct – indirect observation) land use patterns and the use of space;
- identify and gather socio-economic and environmental information;
- identify and approach stakeholders;
- identify stakeholders for consultation (i.e. strengths and weaknesses, opportunities or threats);

In particular, students will be grouped in 6 analysis teams (Analytical Groups) that will address specific “package” of urban analysis, each of which has its own methodology and scope.

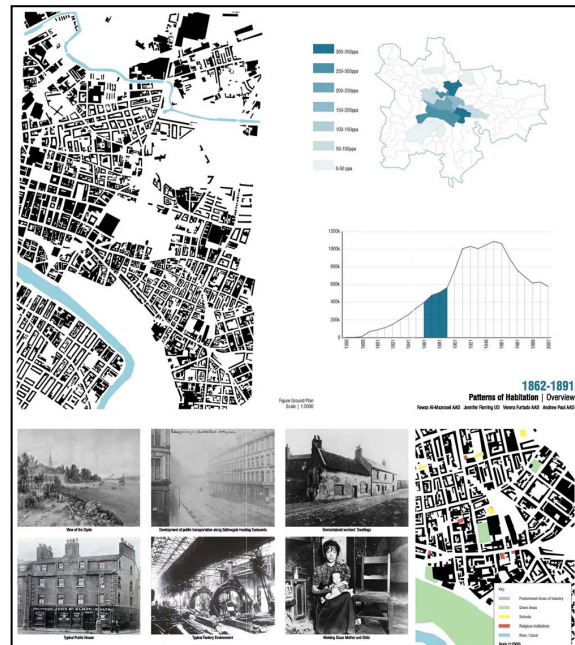
1. Drawing the existing city. It is surprising how often entire projects are presented without the slightest appraisal of what is in place *before* the project is done. That tells a lot on how low is the consideration of most designers for the endless complexity of layered values and memories that are *always* embedded even in the poorest urban setting. We want our students to learn that a good urban project is based on knowledge and respect for what is in place, even if it challenges our own values and ways of thinking. The first step to do that is to represent the place. Students of this group will be led to *draw* the entire urban district of Govan



Drawing the existent city: drawing is a very selective activity; information must be accurately chosen to give relevance to what is fundamental and leave the rest untold. Students will be led to represent the existent city in terms of several fundamental characteristics of the built environment.

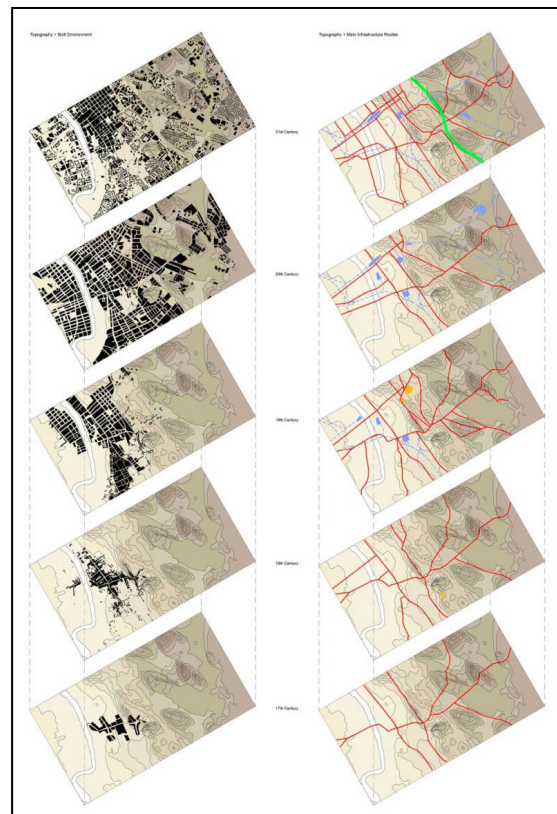
in a 1:1000 scaled plan, following a legend that covers structural aspects of the built environment such as pavement, fences, entrances, vegetation, traffic signs (vertical and horizontal), and ground floor uses. The representation of the existing city will therefore constitute the basis for the successive phase of masterplanning and place design.

2. **History and stories.** This is the historical analytical package. Somehow “classically”, students will be suggested to represent the history of urbanisation with a sequence of images that illustrate how changes happened in the urban structure in time, as well as the social and economical historical context that has determined what we currently find in place. In addition to these two analysis, students will then focus on the “stories”, which means memories of local facts, places and people as they emerge through interview, literature and old photographs; this third application is aimed at “inject life” into the story of the place, giving a sense of what still these stones and bricks have witnessed in their lifespan to our days. Places will therefore achieve at least the flavour of how the ecological relationship with human lives has been developing so far.



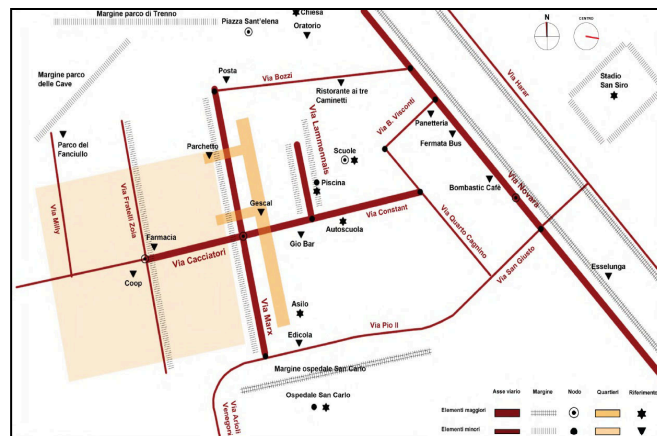
The analysis of changes in urban form and lifestyles is just one part of the historical site analysis. The social and economical history and the history of urbanization are investigated as well.

3. **Planning framework.** Students will examine the stratification of documents, projects and visions that have dealt with the Govan district in recent times. They will therefore build the planning context and portrait how the decision making process has been happening in terms of themes (problems and opportunities), stakeholders and processes. Students will summarise results in one general annotated map and several thematic maps regarding for example land ownership, soil condition, demographic and socio-economic characters and patterns of movement. The focus of this package is on the present condition of the area in its constituent factors, as well as highlighting the decision making background against which we are operating in the area. Students will be encouraged to interact with relevant external subjects such as the City Council or Glasgow Housing Association, who will be invited to give lectures in the course for the benefit of all students.



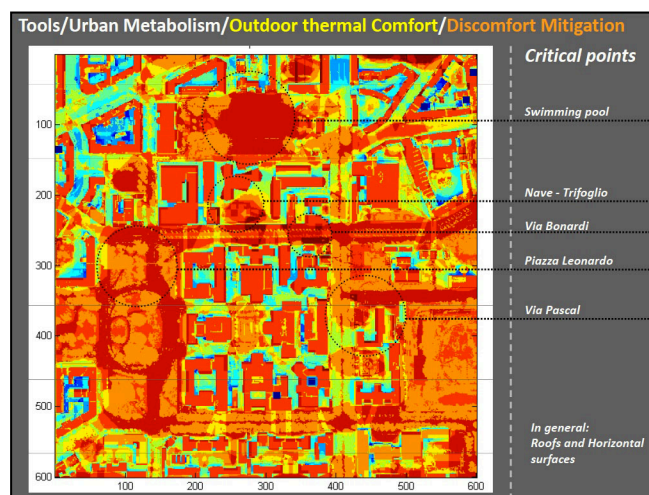
Understanding the environmental conditions such as soil, wind, and landscape is fundamental in order to plan development in accordance to policy ambitions. In this case the relationships between landscape and urban form shows how development has evolved to the present conditions,

4. *Experiencing Govan.* Applications in this package are aimed at investigate the perception of both the urban environment and the dynamics that take place in it, confronting the point of view of students – as professionals – and inhabitants. The package initiates with a “Lynchan” analysis of the site that will lead to the identification of “character areas”. For each character area the group will then carry out analysis such as fear mapping, perception of accessibility, legibility and maintenance. The overall result of this package is a deeper knowledge of how problems, opportunities and the environment are perceived by different groups of people, which is very often a challenging understanding for professionals and in any case a fundamental source of information for decision makers.



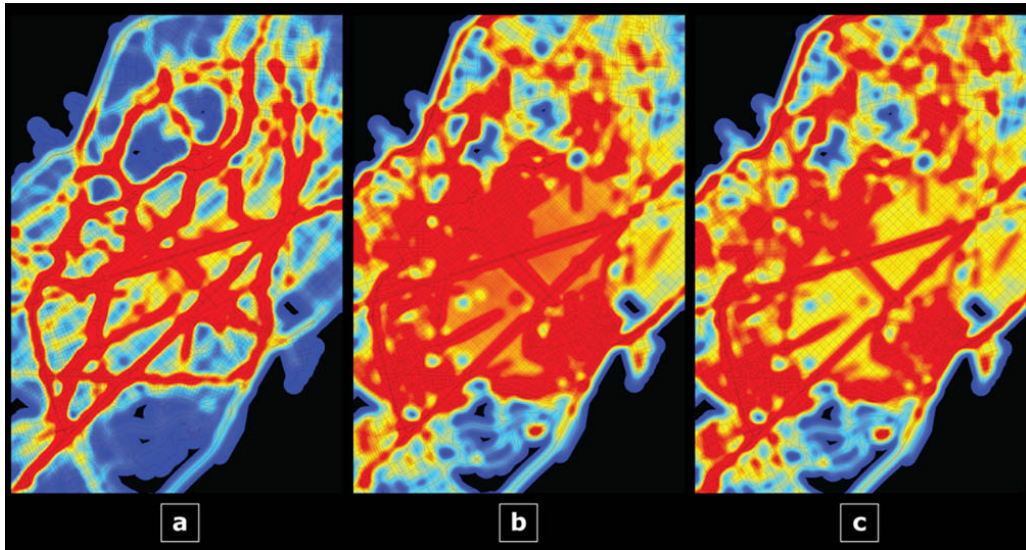
The “Lynchan” analysis, after the seminal work of Kevin Lynch “the image of the city”, is aimed at understanding how places are legible and what structures the perception that different groups of people form of their living environment.

5. *Urban fabric comparative analysis.* The ordinary places where people live in their everyday life in cities constitute what we call “urban fabric”. The fundamental structure of what builds urban fabric in time and its impact on how it is used by all urbanities is the focus of this analytical “package”. Student will in particular develop assessments of street permeability, street front quality, and the overall environmental performance of different urban fabrics including, but not limited to, that of Govan district in Glasgow. Cases to be compared will be selected in order to make clear how fabrics developed in different historical ages differ not just in terms of “style”, but in terms of the fundamental determinants of their spatial structure. The comparison between cases will then be deepened as for their environmental performance by means of the application of a “Raster City” analysis based on the construction of Digital Elevation Models (DEM) of selected cases: students will develop 3D models of the fabrics, and then will process them by means of a MathLab based model of analysis to extract indicators such as the sky view factor, the amount of solar accessibility, solar envelop, wind penetration, visibility and other basic indicators such as density or amount of street surface. At the end of the work, students will achieve a clear and very practical understanding of how urban fabrics have evolved in different manners across history and how that has informed, for good or for bad, contemporary built environment.



Outdoor thermal comfort as assessed by the “Raster City” model of analysis. The model is based on a 3D representation of the built environment then processed by in MathLab. This model will be used, along with others, to compare urban fabrics that originated in different historical ages, including Govan.

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6. *Network analysis of streets.* Centrality is fundamental in understanding the potential of places in every urban environment. Centrality can be defined in different ways, each of which determines a different geography. The Multiple Centrality Assessment analysis allows an accurate mapping of these geographies by means of specific algorithms developed in a GIS environment. Students in this package will run the model over the street network of Glasgow and focus on the Govan area in the context of the whole metropolitan region. After the completion of the analysis of the current city, students will be driven to shaping alternative scenarios of development by creating new connections in the street system or modifying existing connections. All scenarios will then be modelled again and conclusion will be built on advantages and disadvantages of each scenario. The package will lead students to a deeper understanding of how centrality influences many fundamental urban dynamics such as crime, traffic and land use, that are strictly linked to the formation of sustainable and liveable neighbourhoods and urban districts.



Multiple Centrality Assessment (MCA) allows mapping to what extent every street is central with reference to every other street in the street system of entire urban regions. In this case, density of centrality in central Barcelona is portrayed according to three different measures of centrality. Centrality holds a crucial role in determining the popularity of urban places and the way they are likely to evolve in time.

Students will support the area analysis with the production of a variety of communication tools to use for stakeholder consultation.

By the end of this first studio project, students will demonstrate:

- awareness of the contradicting interests that revolve around the urban transformation and change of the study area, be they related to economic, natural, human resources, and an ability to balance the discrepancies and points of conflict as well as synergies;
- awareness of the professional context that guides urban development;
- knowledge of the social, physical, political, and economic context that guides urban development;
- understanding of urban design and planning issues characteristic of the area;
- ability to research, identify, select and combine information from a variety of sources and compile them into a report;
- ability to work as a team sharing tasks and information, in particular: to plan research (information required, sources to contact, mode of data collection and analysis); to distribute a balanced number of tasks amongst students; to communicate research outcomes effectively to fellow students; to share, familiarise with and interpret research gathered by others;
- ability to collate information on physical conditions [at macro scale: the location of the selected urban area and its immediate environment, the major linkages with surrounding areas, the central services and facilities; at micro scale: the degree, continuity and type of differentiation of public, semi-public / semi-private and private space; the order of the spatial configuration; the degree of (physical and visual) permeability for traffic and pedestrian movement] as well as demographic and economic information into a comprehensive report and presentation, highlighting links between different levels of analysis;

-
- ability to illustrate the development of the study area from a historical perspective making references to the taught classes delivered;
 - ability to compare the study area with publicised urban design and planning developments, by regularly reading at least two urban design and planning magazines, selecting relevant articles and including them in the research report;

Format

Students are expected to work in the studio environment, where tutors, guest lecturers and staff of the Department of Urban Studies will offer guidance and advice.

Each team is expected to record and document each stage of the process. This work will culminate in the production of a dossier which summarises the aims, objectives and outcomes of the investigation; it will moreover critically assess the current situation and identify areas/themes the students consider in need of further strategic work. This document should support the range of media introduced in the course of the workshops and demonstrate a good range of graphic skills.

Assessment

Student teams are required to collect and collate data from the area appraisal. Then they are asked to demonstrate an understanding of the urban context of the problem showing an appreciation of relevant theory and practice. The resulting work will reveal the current position of the area, highlighting discrepancies between its potentials and the current reality. Students will comment upon the integration of strategic social, economic, environmental and urban issues, formulate an initial critique and indicate first reactions to support the improvement of the problems identified. These reactions should tackle strategic and detailed issues and answer to questions such as: What is the future of Govan and the waterfront in the city as an urban resource? What is its relationship to its immediately surrounding areas and Glasgow? Is this area offering a high quality of life? Etc.

Analysis, criticism, reactions and comparisons with target values introduced during tutorials (from literature) are to be collated and presented as both a dossier to be updated during the year and a graphic wall display. An additional A1 board should illustrate, with annotated diagrams, the ambitions and goals to be pursued in the next project stage called the "programme of intervention". Appropriate reductions of all A1 boards are to be included in the dossier. Students are encouraged to explore other media to present their findings – videos and movies are a particular welcome commentary tool and teams will be encouraged to produce them.

All work will be reviewed at interim crits, presented at the end of semester exhibition and recorded in the student portfolio. The choice of method and media is left to the individual but should be appropriate to the context and expected audience.

2 AB 932 - Urban Design Studio 1b

Ombretta Romice, Sergio Porta and Tutors

Focus

the generation of strategic programmes for the development and management of transformation at macro and micro level

Project description

This module aims to assist students in developing realistic urban regeneration programmes for the transformation of Govan and the riverfront in the larger urban context. In particular, on the basis of the information gathered in the first module, students will formulate imaginative but at the same time realistic scenarios for the overall transformation of the site and the 'making of place and mediation of space', recognising and taking into account often contradictory forces and interests.

Students will compare emerging ideas for change and transformation and combine them to form a holistic strategy for the study area that takes into account formal, social, economic and environmental aspects of sustainable urban development.

Throughout this process, students are requested to relate their strategy to the current urban design and planning debate.

Methodology

In this phase the group organization set up in the previous analytical phase is totally reframed. Students form 4 Strategic Groups of 6-8 persons, each coming from a different former Analytical Group. This is to ensure that every Strategic Group will benefit of the complete set of knowledge developed in all analytical "packages" during the first phase. Such Strategic Groups elaborate the Urban Design Strategy (UDS) with reference to the greater Govan urban area.

Constituent parts of UDS are:

- Strategic plan:
 - Annotated map showing relevant themes, challenges and opportunities for urban regeneration.

- Concept plan (developed for both the existing city and one proposed scenario):
 - Developed land boundary
 - Specialized urban areas
 - Street hierarchy;
 - Activity nodes;
 - Urban density
 - Districts
 - Neighbourhoods
 - Ecological network

In the studio, students will receive instruction on how to develop a **Strategic Plan** for the regeneration programme for the study area, highlighting individual interventions and projects, the players/partners to be involved in the process and the phasing of development stages. This will be presented in the form of designed vision of how the area will be in 25 years, to illustrate it through main strategic moves and projects (urban form, population changes, employment, transport, environment...). Such vision will be grounded on a clear spatial framework, that we name **Concept Plan**, that will define the long-range interwoven objectives of transport, density, urban centres location, land use and street hierarchy.



In the Strategic Plan section of the Urban Design Strategy students will carry out a graphically illustrated synthesis of all themes, challenges and opportunities that are considered relevant for framing the successive phase of masterplanning.

Students will therefore develop an understanding of the economic, legislative, societal and time-related issues that affect the processes of urban change, the quality of life and the level of sustainability of the study area, as related with space and land use, as well as a capacity to discern how these will affect different societal groups. This will be presented in the form of a timescale of events where each strategic move and project needs indicated.

Format

Students are expected to work, in the studio environment, where tutors, guest lecturers and staff of the Department of Urban Studies will offer guidance and advice.

Students will represent their development and regeneration programmes graphically, with the support of written pieces (i.e. social, economic strategies). Programmes should be backed up by precedent studies, put in critical relationship with the project under development.

This will be group work, although groups will be different from 1a. Strategic Groups are formed by members of the Analysis Groups in order to maximise knowledge and breadth of scope.



In the Concept Plan the spatial framework is investigated for the existing city that links together public transport, street hierarchy, density, land uses and ecological networks. The same is then the content of a proposed scenario (below). The latter will be the ground for the successive phase of masterplanning.

Assessment

Student work will be assessed through reviews and against the following learning outcomes:

- Awareness of the importance of negotiation, mediation and advocacy skills and of team working, especially in inter-disciplinary teams.
- Understanding of the contradicting interests that revolve around the urban transformation and change of the study area in relationship to economic, natural, human resources and the research material gathered, and use them to support the argument behind the proposed regeneration programme.
- Understanding of briefs and how to critically appraise them to ensure that the design response is appropriate to site and context, sustainability targets and budget.
- Understanding of the research topics highlighted in Module 1a and the ability to keep the research that informs the project constantly updated.
- Ability to perform judgement and assessment, demonstrating the ability to take decisions upon the research and information gathered.
- Ability to summarise in a document of intentions physical, demographic, economic ambitions as part of a comprehensive plan of action that encompasses the transformation of the area in the long term (20 years) and short term (5 years) goals, highlighting links between different levels of change.
- Knowledge of best practice urban design and planning developments, accumulated by regularly reading at least two urban design and planning magazines, selecting relevant articles and including them in the research report.
- Ability to describe and relate the developed regeneration programmes for the study area to best practice design and planning developments.

2 AB 933 - Urban Design Studio 1c

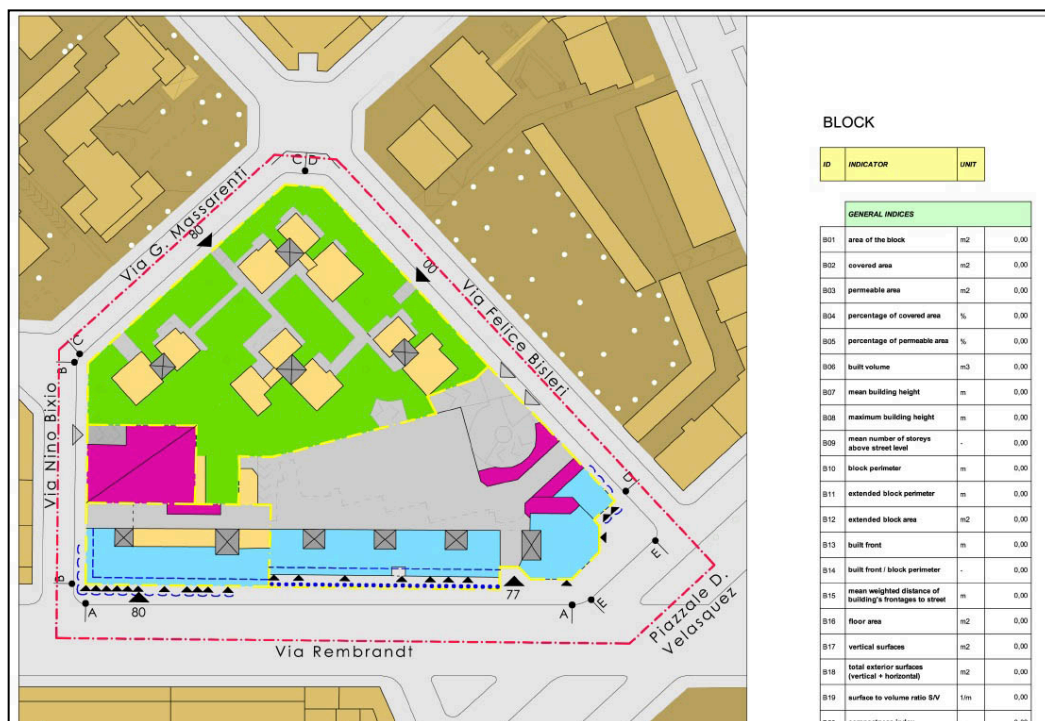
Ombretta Romice, Sergio Porta and Tutors

Focus: To develop a complete Urban Design Code (UDC) for Govan based on the evidence raised by the detailed study of all relevant types of urban blocks that are present in the Govan district and in Glasgow metropolitan area at large.

Project Description

This module consists in two parts that will be worked out in parallel.

1. First of all students will, individually develop the elements of an Urban design Code: each student will be assigned a number of urban blocks in the selected area and they will be asked to study their structure in detail, at the same time comparing it with significant other urban examples throughout Glasgow. This morphological analysis will be introduced and explained through lectures and workshops and will constitute the raw material for the construction of a unique Design Code for Govan, to then be used by students in their masterplans and space design.



A detailed morphological analysis of urban blocks selected in order to represent all block types in Glasgow metropolitan area, as well as at least one block for every character area in the Govan district, will be conducted by students as conducive to the formation of an Urban Design Code (UDC) that will support their successive masterplan work.

2. The second portion of this Credit will see students selecting one portion, or theme, from their Group Strategies. From now on, this will be their Masterplan Project Area (MPA). For their MPA students will develop a detailed design brief, explaining how this area will change in the future. The Brief will make explicit the student's ambitions for the area and its context, taking into account (and develop or criticise) the City's vision and plans for it, it will describe them through a clear vision, and the establishment of short, medium and long term goals for the achievement of such ambition. These will be made explicit through the detail of what activities, projects, changes will take place, how will they be delivered, and will be supported by extensive research of relevant precedent studies, to use as guidance, inspiration, benchmarks. This phase will take the form of a detailed design framework, indicating transformation, changes of uses, density, connections and movement etc.

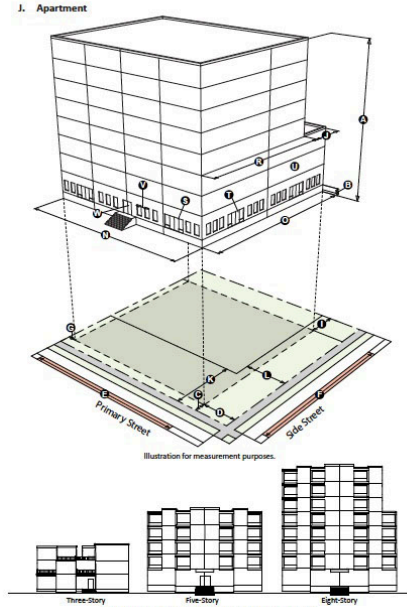
Students will relate their urban design frameworks to the current urban design and planning debate, supporting their work with best practice British and International examples.

Methodology

In the studio, students will receive instruction on how to:

- conduct a precise morphological analysis of urban blocks, representing relevant features such as density, access, percentages of built/open, continuity of frontages;
- carry out a quantitative analysis of structural spatial indicators as resulting from the morphological analysis;
- represent these information in a manner which will then be compiled within a complete Urban Design Code for Govan;

Article 4. Urban Edge Neighborhood Context Division 4.3 Building Form				
	E-CC-3	E-MX-2	E-MX-3	E-RX-5
HEIGHT				
Ⓐ Stories (min/max)	1/3	1/2	1/3	1/5
Ⓐ Feet, Pitched Roof (max)	40'	35'	40'	65'
Ⓐ Feet, Flat Roof (max)	35'	30'	35'	60'
Ⓐ Wall Plate Height (max)	30'	25'	30'	55'
Ⓐ Finished Ground Floor Height (min/max)	1' 4"	1' 4"	1' 4"	1' 4"
ZONE LOT AND BLOCK				
Zone Lot Size (min)				
Zone Lot Width (min)				
Zone Block Size (max)				
Primary Structures per Zone Lot (min/max)	1/1	1/1	1/1	1/1
USE				
Dwelling Units per Primary Structure (min/max)	3/na	3/na	3/na	3/na
STREET SETBACKS				
Ⓐ Primary Street (min/max)	10'/20'	0'/15'	0'/15'	0'/15'
Ⓐ Side Street (min/max)	10'/20'	10'/20'	10'/20'	10'/20'
REQUIRED STREET FRONTAGE				
Ⓐ Primary Street (min)	15%	15%	15%	15%
Ⓐ Secondary Street (min)	40%	40%	40%	40%
INTERIOR SETBACKS				
Ⓐ Side, interior 1 to 2-Story (min)	5'	5'	5'	5'
Ⓐ Side, interior 3-Story (min)	10'	10'	10'	10'
Ⓐ Rear, as a % of lot depth (min)	0%	0%	0%	0%
PARKING				
Ⓐ Primary Street Setback (min)	25'	25'	25'	25'
Ⓐ Side Street Setback (min)	5'	5'	5'	5'
Ⓐ Setback Abutting Res. Zone District (min)	5'	5'	5'	5'
CONFIGURATION				
Ⓐ Overall Structure Width, Primary Street (max)	150'	150'	150'	150'
Ⓐ Overall Structure Length, Side Street (max)	110'	110'	110'	110'
Ⓐ Horizontal Articulation Required (see Sec. 4.3.2)	no	na	yes	yes
Ⓐ Vertical Articulation Required (see Sec. 4.3.2)	no	na	yes	yes
Ⓐ Tower Floor Plate Above 8 Stories (max)	na	na	na	na
Ⓐ Separation of Tower Elements (min)	na	na	na	na
TRANSPARENCY				
Ⓐ Ground Story, Primary Street (min)	40%	40%	40%	40%
Ⓐ Ground Story, Side Street (min)	30%	30%	30%	30%
Ⓐ Upper Stories (min)	20%	20%	20%	20%
Ⓐ Length of Blank Wall, Primary/Side Street, All Floors (max)	40'	40'	40'	40'
COURTYARD CONFIGURATION				
Ⓐ Ground Floor Courtyard Width, as a % of Overall Structure Width (min)	55%	55%	55%	55%
Ⓐ Ground Floor Courtyard Depth, as a % of Overall Structure Length (min)	45%	45%	45%	45%
ENTRY FEATURES				
Ⓐ Required Entry Features, Primary Street (see Sec. 4.3.3)	(1) Front Porch; (2) Stoop; or (3) Canopy			



The morphological analysis is meant to be conducive to the definition of an Urban Design Code for Govan. This code will be “form-based, in the sense that will be focused on the physical dimension of the built environment as opposed to traditional “zoning” codes that are mainly based on quantitative determinations about allowed density, built consistency and land uses. Form-based codes are complex documents in themselves (the above image is an extract of the new code of the city of Denver, CO) that combine textual and graphic information in a coherent manner.

- compile and summarize information within a framework of intervention for the selected area, with a critical indication of the projects, the players/partners to involve and the phasing and flexibility of project stages;
- represent the detailed and strategic aspects of the framework both graphically and verbally, to convey long-term strategic and comprehensive urban sustainability and at the same time describe the physical quality of the changing environment;
- include within the framework the economic, legislative, societal and time-related issues that affect the processes of urban change in the selected area, and evaluate how these will impact on different societal groups.

Format

This is no longer group work, but individual work. Students will be led to understand and represent by drawing two separate boards for each case study block what are, among the many, those spatial aspects of the **morphology of urban fabrics** that can be qualified as *structural* and therefore of primary relevance for urban designers. They will then taught to develop **quantitative indicators** out of this morphological analysis and finally to understand how to base the **formation of an Urban Design Code** for their Masterplan Project Area (MPA) in Govan on those indicators, in a fully evidence-based approach to urban coding.

Students will in parallel produce a **detailed design brief of one part of the strategy**, explaining what they will develop in detail and how they will do so. They will select appropriate stakeholders and work with them along the way. They will illustrate intentions for the next detailed phase though the use of **at least 3 international comparable regeneration examples**, to be critically illustrated and presented as support of their brief. In parallel, students will collect, record and compile block-data to then enter in a general Design Code.

As for the previous two modules, students will produce a graphic document which is supported by the complete set of investigations and research produced so far, and which clearly describes how the ambitions laid out in the programme can be achieved and realised over the selected period of time. This document might include large scale propositions as well as detailed developments; each should be backed up by precedent studies. This document is to be introduced by a personal manifesto that clarifies the student's ambitions and brings together the outcomes of the first two design modules. The manifest is also to be summarised in a title and a **logo** for the project; these will remain 'labels' to the student's work until completion, should therefore summarise the spirit of the work communicate it clearly to fellow colleagues and members of the public.

Assessment

Student work will be assessed through reviews and against the following learning outcomes:

- Understanding of new information, approaches and processes exemplified by international best practice case and the way they support the masterplan for the study area and its urban quarters.
- Understanding of scenarios of long-term feasibility, and of the economic benefits resulting from good urban design.
- Ability to develop graphic and verbal skills to communicate the student's ambitions and intentions.
- Ability to summarise in a graphic document (framework) the main physical changes envisaged for the area, and accompany this projected transformation with a detailed account of its social and economic repercussions. The sum of these documents should be self-explanatory both visually and verbally and be able to communicate the student's idea to fellow colleagues and stakeholders.
- Knowledge of the contradicting interests that revolve around the urban transformation and change of the study area in relationship to economic, natural, human resources and the gathered research material, and the use of this knowledge to support the argument behind the proposed urban design framework.
- Ability to select comparable scenario of change from other international contexts and to demonstrate their appropriateness in relation to the design brief ability to select comparable scenario of change from other international contexts and to demonstrate their appropriateness in relation to the design brief.

2 AB 934 – Urban Design Studio 2

Ombretta Romice, Sergio Porta and Tutors

Focus

In-depth investigation and resolution of area or theme of interest by means of the comprehension of *the language of masterplanning* for sustainable communities as well as the basic understanding of what coding does mean in relation to their masterplan and place design.

Project Description

The Second Semester Project, called “Masterplanning and Place Design”, requires the student to take a stance on contemporary urban issues and through this medium pursue an agenda that reflects their own interests and creative ambitions. An important aim of this aspect of the course is to consider the social, political and technological aspects of design that draws on knowledge from a wide range of disciplines.

This work is meant to be an in-depth study and execution of the design of the area or theme that has particularly interested the student in the First Semester encompassing issues of urban space, architecture, landscape, representation, economy, sociology, sustainability, environment and transport. **The Masterplan and Place Design project is the execution of the detailed brief developed in AB 933, operated on the ground of knowledge and plans developed in AB 931, AB 932 and AB 933.**

Through this process, where possible, students are requested to test design ideas in a collaborative process that involves stakeholders. The work is to be enriched with an extensive visual and verbal vocabulary of relevant international examples of urban developments, masterplans and coding.



To address a masterplan for a complex urban area means first of all to achieve knowledge of a language that is specific of the discipline of the urban designer. This language is mainly graphical and is supported by an Urban Design Code that is a combination of graphical and textual information.

Methodology

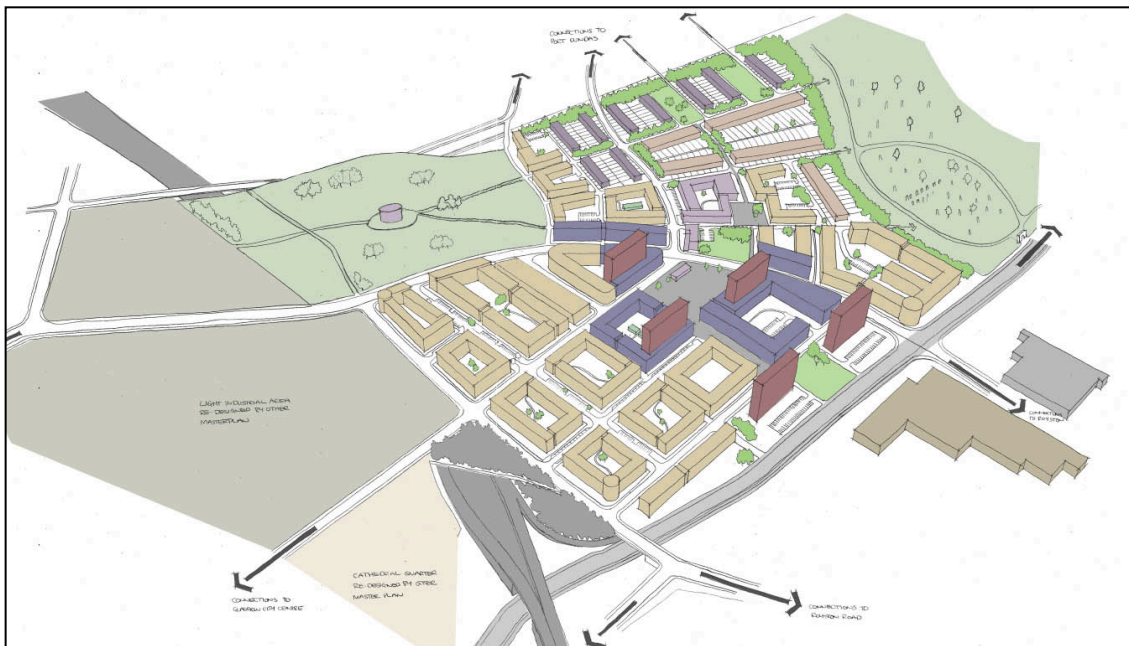
The point of departure for this work is the detailed application and resolution of the research, programme, framework and manifesto produced in the modules 1a, 1b and 1c. Students are led to the production of a masterplan for the area they selected in the previous phase.

The masterplanning phase is introduced by an exercise on the subdivision of blocks. A successive exercise is offered to make students familiar with the concept of density and its manifold manifestation in the urban fabric. A third task is the conception of a proposed street layout for the selected area, which leads to the assignment of project densities to the resulting urban blocks.

Students will apply indications developed in their Strategic Concept Plans by means of a detailed specification of block densities in a proposed scenario of regeneration that includes a new street layout.

The masterplan is finally conceived. It is constituted by the design at 1:1.000/500/200 of public and “interface” private urban spaces; that includes streets (with the implementation of basic traffic calming techniques), blocks, building footprints, fences, entrances, vegetation, parks, pathways and the identification of heights and uses of buildings.

The last task is the architectural design of part of the masterplanning area in a lower scaled creation that takes the name of Place Design. In this case, students experiment a different perspective on their work, in that they play the role of the architect who is called to manifest its ability and creativity within the rules established by the combined dispositions of masterplan and Urban Design Code. This is the ultimate heart of the discipline of urban design, which is in short an endless experimentation of the blurring border between what is dictated, what is suggested and what is left to the individual decisions of inhabitants and other professionals. In the perspective – that we embrace – of enhancing and promoting as much as possible the self-organization of urban systems as a way to ensure the participation of people to urban change and the evolutionary variety of places and dynamics, identifying and practicing those borders in every specific situation is just key to achieve sustainable urban environments and liveable communities.

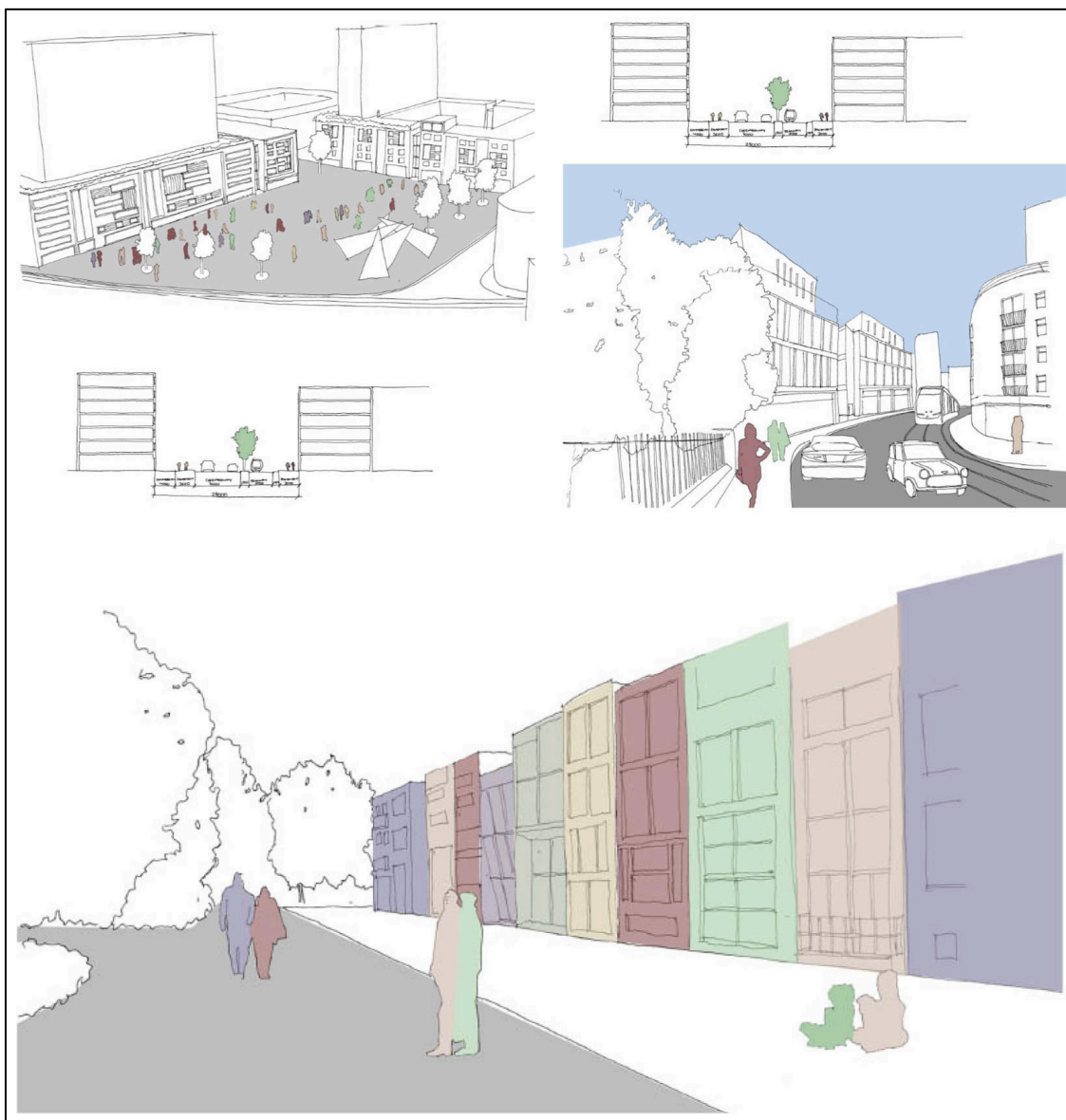


Masterplanning goes beyond a representation of spaces and rights in plan. It implies understanding space in 3D as for both the public and private domain, which again is strictly related to the Urban Design Code. This heads to the production of images like the one above that have a powerful capacity to communicative visions of the future to a wider audience of non-trained people and stakeholders.

Format

Students will represent detailed development of the theme or area that they identified as particularly significant within the framework produced in Design Studio 1c.

The outcome will be a presentation that encompasses spatial design (built form, urban space and landscape design), project organisation and delivery over time (students should plan how the project will be set up, implemented and managed, and identify roles for deliverers). Students' achievements will take the form of project at the two scales of the urban community (masterplan) and the street (place design).



In the Place Design application students are called to experiment the functionalities of their masterplan + coding work by addressing the detailed regeneration of one particular place, square, street, building front, urban block, to be developed in terms of architectural design.

Assessment

This module forms the conclusion of the studio portfolio for the PgDip and is evaluated on the ability to clearly explain and communicate the development of the design concept based on original research and critical analysis.

The project is to be framed within the boundaries of a social, political, economic and professional context embodying an appropriate philosophical approach and paying due regard to the history and theory of urban design and the interrelationship of space and its users.

The design work will be presented as a graphic document. It will be narrated and presented as a phased process, supported by research, and will show evidence of the knowledge-based contribution of the taught classes. The project will demonstrate the testing and appraisal of design options to show that the student's ideas are independently defined and appraised in relation to the work of others. The final work will be presented using a variety of appropriate media to clearly communicate the student ambitions to fellow colleagues and members of the public.

2 AB 947 - Dissertation Project

Ombretta Romice, Sergio Porta

Project description

After successful completion of the PgDip, the Dissertation Project follows as the final part of the MSc. The dissertation project might be either composed as a written thesis (ca. 12,000-15,000 words) or as an advanced design project. Both the topic of a written thesis and the design task of a design project are expected to be developed from the studio classes or the taught classes of the first two semesters of the course. The students may also select the topic to assist career development upon agreement with Course Director.

The general aim of the dissertation project is to exercise and demonstrate independent research abilities. A written thesis should focus on a specific urban design topic, have a substantial theoretical argument and critically review other theories. An advanced design project should critically reflect upon specific theoretical issues of urban design and a) develop a coherent design strategy according to this aspect for a specific area; or b) be process orientated or c) investigate the feasibility of proposals.

Methodology

The dissertation is a student's own piece of research. It has to present a hypothesis and demonstrate it through research. It is required to be a student's original work, backed up by literature/case studies review. During the work, students will attend tutorials with the member of staff selected as supervisor at the beginning of the process. The advanced design project is a design work which could entail different scales according to students' interest; it is nevertheless accompanied by a written thesis (ca. 3000 words) highlighting aims, objectives and means of accomplishment.

Format

Students will choose a specific topic and a specific mode for their dissertation project after an introductory seminar session. The topic will be agreed with the course director and the dissertation will be supervised by a member of core/external staff. Reviews of both the written thesis and the design project will take place in appropriate intervals over the 3rd semester.

Assessment

The final dissertation will be assessed by a panel composed by members of staff and external examiners. Student's work will be assessed against the following learning outcomes:

Awareness of:

- the various conditions and aspects of urban design strategies
- the complexity of the city and the different disciplines and tasks involved in urban design

Knowledge of:

- main urban design strategies and theories
- appropriate research methods

Understanding of:

- the relation between urban forms and influencing factors
- the consequences of specific urban design strategies

Ability to:

- undertake independent research on urban design
- compose a text or an advanced design project

Compulsory Classes

AB 936 URBAN DESIGN HISTORY
AB 939 URBAN THEORY
EV 929 PRINCIPLES OF SUSTAINABLE DEVELOPMENT
EF 912 ENVIRONMENTAL IMPACT AND SUSTAINABILITY
AB 943 REAL ESTATE DEVELOPMENT
AB 946 URBAN DESIGN POLICY AND PRACTICE



3



Compulsory
Classes



3 AB 936 - Urban Design History

Dr Ombretta Romice, Dr Wolfgang Sonne

General Aims

This class aims at both understanding the historic development of urban forms and the possible use of historic experiences for future design. The specific design qualities of selected historic examples will be analysed, and the way in which historic circumstances - i.e. conditions like politics, economy, society, technology or culture – have shaped these specific forms will be researched.

Specific Learning Objectives

Awareness of:

- the diversity of historic urban design approaches
- historic conditions of different urban design strategies
- the complexity of the city and the different disciplines and tasks involved into urban design

Knowledge of:

- main urban design strategies and models
- historic aims and conditions of urban developments
- specific qualities of different urban design strategies

Understanding of:

- the relation between urban forms and influencing factors
- the consequences of specific urban design strategies
- urban forms in the context of existing cities

Ability to:

- undertake scientific research on historical urban design developments
- understand and interpret urban design developments
- generate appropriate and successful design methods in an existing urban context

Syllabus

The class will be delivered as a 2.5 day teaching module. It is based on lecturer input, student presentations and discussions. The programme is structured according to principal urban design elements - like general plans, public squares and streets, urban blocks and parks – each being considered with some significant historic examples. Furthermore, the class includes the detailed examination of a historic example which will be visited and analysed in situ; students will produce a set of refined drawings on this example.

Topics include:

City plans, the grid: Lisbon 1756, Barcelona 1859

City plans, the radio-concentric system: Vienna 1893, Moscow 1935

Squares, politics and economy: Venice's St. Marc's Square 15th/16th c, London's Covent Garden 17th c

Squares, recreation and traffic: Edinburgh's Charlotte Square 1791, Berlin's Alexanderplatz 1929

Streets: Paris' Grands Boulevards 1850s, Rome's Corso Vittorio Emanuele 1880s

Urban blocks, mixed use: Turin 17th/18th c, Paris 17th/18th c

Urban blocks, housing: Berlin 1890-1930, London's LCC Estates 1890-1930, Amsterdam South 1920s

Parks: New York's Central Park 1857, Hamburg's Volkspark 1909

Assessment Method

1 oral presentation

1 set of drawings

Submission: date to be confirmed

3 AB 939 - Urban Theory

Dr Ombretta Romice

General Aims

This class aims to enhance the critical understanding of the complex phenomenon of the city and the relation of urban design to the city in general by considering key theories in urban planning and design. Analysis includes formal, aesthetic, social, political, economic, technological and cultural aspects.

Specific Learning Objectives

Awareness of:

- the complex nature of the city and the related complexity of urban design and city planning
- the diversity of theoretical approaches in history and diverse disciplines

Knowledge of:

- major urban theories from past and present on different aspects of the city and urban design
- historic conditions of specific theoretical approaches

Understanding of:

- the relation between urban design issues and the social, political, economic and cultural conditions
- the consequences of specific urban theories in urban design practice

Ability to:

- undertake scientific research on urban theories
- understand and interpret major urban theories
- apply these theories to specific contemporary planning tasks
- develop original arguments about the city and urban design
- express a critical view on the effects of theories on the practical urban design process

Syllabus

The class will be delivered as a 2.5 day teaching module. It is based on lecturer input, student presentations and discussions. The programme includes major urban theories from past and present and is structured according to principal aspects of the city and urban design.

Topics include:

Economy: Max Weber, Saskia Sassen, David Harvey

Sociology: Georg Simmel, Robert Park, Richard Sennett

Politics: Frederick Howe, Mike Davies, Dolores Hayden

Urban spaces: Camillo Sitte, Rob Krier, Jan Gehl

Urban architecture: Werner Hegemann, A. Trystan Edwards, Aldo Rossi, Rem Koolhaas, Hans Kollhoff

Urban image: Gordon Cullen, Kevin Lynch

Urban survey: Patrick Geddes, Jane Jacobs, Robert Venturi and Denise Scott Brown

Assessment Method

The class will be assessed through 2 assignments, a student presentation on a selected topic and a reflective essay on the class.

Peter Booth

General Aims

This module provides a wide platform from which to investigate various theories of urban sustainability. Overall, it will:

- how the idea of sustainable development and sustainability have evolved and been conceptualized.
- the relationship between policy construction, sustainability understandings and ideology
- the debates of scale, impact, social and economic organization to environmental conditions and management.

Specific Learning Objectives

Knowledge and Understanding

- awareness of the scope of human impacts upon the environment
- understandings of the theoretical perspectives on sustainable development issues
- knowledge of the basis and values underlying the techniques of appraising the environment
- ability to discuss the nature of environmental ethics, social justice and human rights and to examine their relationship with regard to sustainable development
- ability to explore the strengths and weaknesses of the policy instruments and institutions involved in the pursuit of sustainability

Disciplinary/Professional skills

- Ability to analyse information and policy and to create critical papers and reports
- Ability to research literature and applications of sustainable development
- Ability to discuss concepts and ideologies

Transferable skills

- Writing well argued reports
- Analysing development trends
- Assessing policy and action

Syllabus

The class will be delivered as 2 hour a week teaching module. It uses a combination of delivered material and constructive learning. The intention is allow free debate, critical thinking and conceptual development. To this end there is one assignment. The assignment is a critical essay which (for example) requires the testing of (Scottish) environmental policy against the theories of sustainability. The premise is that there is no overarching value or objective goal to be found to guide environmental policy and indeed there are barriers to achieving more sustainable practice due to previous understandings, the dynamics of social, economic and political forces and the very nature of cultural insitutions. In the class these are addressed as 'wicked problems'

The module requires the completion of the following parts:

- A 4,000-word essay

Assessment Method

- Evidence that the student has obtained a sound understanding of the principal themes and topics covered by the module
- Evidence of a capability to synthesise the multiplicity of concerns involved in the undertaken analyses
- Evidence of an ability to undertake policy analysis and evaluate policy outcomes
- A demonstrated ability to take the knowledge and lessons acquired from the literature
- A demonstrated ability of effectively disseminating this knowledge in written form

3

EF 912 - Environmental Impact and Sustainability

Dr David Grierson

General Aims

- To provide students with an understanding of the concepts of environmental sustainability and sustainable development.
- To identify principles of environmental impact.
- To elaborate these principles to describe approaches to impact mitigation.

Specific Learning Objectives

On completion of this module students should be able to:

- Demonstrate an understanding of environmental sustainability and sustainable development.
- Appreciate the environmental impact of engineering systems and products.

Syllabus

The Biosphere; Limits to Growth 1; Limits to Growth 2; Environmental Problems; Climate Change; Impacts on Land; Impacts on Air; Impacts on Water; Sustainable Development; Environmental Management

Assessment Method

Assessment in this class is based on three online tasks (on WebCT) that together carry a combined weighting of 20% towards the class credit. The first of these tasks involves students developing their own personalised web page, to include contact information for class colleagues. The second task involves students identifying two resource locations related to environmental impact and sustainability. Links to these are located on the students web pages. The third task requires students to engage on an online discussion forum. Assessment will also involve successful completion of an online randomized quiz (credit weighting - 30%) based on online lecture resource material and an essay submission (credit weighting - 50%), the topic for which will be identified during seminar discussions within the class. Detailed requirements are listed on the WebCT site for the class.

3 AB 943 - AB 943 – Real Estate Development

David Adams

General aims

The aim of this class is to understand the process of real estate development and its relationship to broader social, economic and political forces.

Specific Objectives

By the end of the course, participants should be able to:

- appreciate how the demand for development products and the supply of development opportunities are driven by social and economic change and political decisions;
- apply market research and analysis to selecting appropriate development products and determining how best to market them;
- understand relevant legal frameworks within which development takes place, including company law, building contracts, joint ventures and other forms of partnership;
- test alternative forms of site development in relation to their acceptability, marketability, suitability and viability, and where appropriate, recommend modifications to enhance these criteria.

Syllabus

Practical work will be used as a learning framework, around which lectures, workshops, presentations by visiting speakers and relevant reading will be structured.

Assessment

The course will be assessed through practical work, which we enable students to apply the main principles of property development by bringing forward and testing proposals for a mixed-use urban development.

3 AB 946 - Urban Design Policy and Practice

Steve Tiesdell

General aims

This module aims to provide an in-depth appreciation and knowledge of contemporary debates in urban design policy, in design control/regulation, and the role and salience of design within contemporary development control/management.

Specific Objectives

By the end of the class and having undertaken the relevant reading and assignments, students should be able to:

- Critically evaluate contemporary debates in urban design policy.
- Understand practice and procedures in design control/regulation.
- Understand the role and salience of design within contemporary development control/management.
- Appreciate different perspectives on the harmonious integration of new development into existing contexts
- Appreciate different perspectives on the conservation of the built environment.
- Appreciate the range of tools and techniques used in urban design control, regulation and management.

Syllabus

Class is delivered through formal lectures, seminars/discussions, workshops, field visits, directed reading and background reading.

Assessment

Assessed through coursework project involving (i) analysis of a specific neighbourhood (or part of a city) and (ii) production of design guidance (e.g. design policies, development/design brief or urban design framework) for the continuing management and development of that neighbourhood

Optional Classes

AB 935 URBAN LANDSCAPE DESIGN
AB 938 URBAN DESIGN REPRESENTATION
AB 940 URBAN TRANSPORT PLANNING
EF 902 PROJECT WORK AND PROJECT MANAGEMENT
EF 909 FINANCE

4

Optional
Classes



4 AB 935 - Urban Landscape Design

Felicity Steers and Rolf Roscher

General Aims

This class aims at both understanding major historic developments regarding the design of landscape in the urban context and enhancing the ability to develop appropriate design strategies for landscape elements in the city.

Specific Learning Outcomes

Students will gain:

Awareness of:

- the diversity of historic and contemporary landscape design and garden design approaches
- the complex relation between city and landscape
- of consequences of different landscape design strategies

Knowledge of:

- landscape design theories, both historic and contemporary
- landscape and garden design strategies and models
- specific landscape design methods

Understanding of:

- aims and consequences of major landscape design strategies
- impact of landscape design on the urban environment
- specific relations between the built urban fabric and the landscape elements within the city

Ability to:

- critically interpret landscape and garden environments
- define appropriate landscape and garden design strategies within a specific context
- use appropriate landscape theories for a specific context
- design high quality landscapes, gardens, and parks within the urban context

Syllabus

The class will be delivered as a taught module on 2.5 days. It is based on lectures, student presentations and discussions. The programme includes the discussion of landscape design theories, the interpretation of examples from landscape design history and the acquisition of landscape design strategies. Students are expected to give an oral presentation on a given topic and to develop a landscape design strategy for their studio design project.

Topics include:

- Landscape design theories
- Landscape design strategies
- Landscape design methods
- Public, semi-public and private green
- City and neighbourhood parks
- Landscape in the street
- The city as landscape
- City and landscape as cultural oppositions

Assessment

1 oral presentation

1 landscape design strategy

4 AB 938 – Urban Design Representation

Ombretta Romice, Sergio Porta, with Robert Adam (visiting professor)

General Aims

This class aims to develop skills in illustrating urban design analysis and proposals in an understandable, realistic and convincing manner. It will present and discuss examples of the various ways the “language” of urban design has found for express the evolving contents of the discipline up to the place-making attitude of our days. Such presentations will be linked to the overall structure of the Course: in particular, the class will be split into four lectures offered at the beginning of each of the four phases of the Course, again:

1. Case analysis;
2. Urban Design Strategy;
3. Block analysis and coding;
4. Masterplanning and place design.

This is aimed at deliver a clear notion that urban design is not just about design, but offers a much wider range of scopes, goals and tools for interpreting urban change at the crossing of different traditional and disciplines.

The class will help to achieve high quality representations for the final studio design project.

Specific Learning Outcomes

Awareness of:

- The role of different methods of urban design representation
- The relation between knowledge, concept, representation and built form
- The benefits and shortcomings of different forms of representation

Knowledge of:

- Urban design representation theories
- Urban design representation methods and techniques in different moments of the urban design process

Understanding of:

- The relevance of different illustrative techniques
- The implications of specific representational approaches
- The descriptive role of urban design representation

Ability to:

- Choose and develop appropriate representational means for specific stages of a project
- Master at least one representational method to produce high quality images
- Create descriptive and beautiful representations of urban design proposals related to the studio design project

Syllabus

This class will be delivered over 4 non-consecutive days that will correspond with the beginning of the four phases of the Course (see timetable). It is based on lectures, student exercises and discussions. The programme includes the presentation of many examples of representation techniques for both analysis and design in the many fields touched by the discipline and encompassing both professional and participatory approaches. Therefore the class addresses the benefits of different types of illustration (urban structure, perspective drawings, artist impressions, sketches, models, digital representations). The majority of this module is dedicated to hands-on learning and the achievement of an ability to understand the meaning of current professional expressions in our field.

Topics include:

- History and aims of urban design representations
- Various methods of urban design representation
- Aesthetic appraisal of urban design representation
- Practical examples in representing urban design proposals at different stages
- Graphics in the design process – the right visual for the right stage

Assessment

An illustrated essay in three parts – site analysis, strategies and detailed design. Each will be submitted in correspondence to one of the main milestones in the studio and contain a critical reviews of examples of famous professional work (on each of the 3 topics) as well a reflexive piece on the strength and weaknesses of each technique.

4 AB 940 - Urban Transport Planning

Neil Ferguson

General aims

Urban transport is increasingly unsustainable as travel patterns become more dependent on the car. Levels of urban mobility have risen substantially but the capacity of the transport system has not kept in pace. This module aims to explore the means by which all urban transport systems (including road, rail, metro, cycle lanes, pedestrian movement etc.) in the UK and Europe can be or have been made more sustainable. Solutions have not been sought within the transport sector alone, but also in other related sectors such as land use planning and development.

Specific Objectives

Knowledge and Understanding

- Awareness of the relationship between transport and urban form
- Awareness of the longer term visions for sustainable transport
- Knowledge of sustainable transport strategies
- Understanding the sustainable development agenda in a societal context where transport is a principal agent of change
- Ability to question past and present attitudes to redefine future trends; Students discuss and use a range of strategies to improve their understanding of the relationship between transport and sustainability
- Ability to assess the implications of radical policy alternatives
- Ability to develop appropriate sustainable transport strategies in the context of the studio design modules

Disciplinary/Professional skills

- Ability to analyse information to create focused papers and reports
- Ability to research European and international transport trends
- Ability to work as a team sharing tasks and information

Transferable skills

- Writing well argued reports
- Analysing development trends
- Assessing opportunities for policy action

Syllabus

The class will be delivered as a weekly lecture series in semester two.

Topics include:

- The dimensions of unsustainable urban transport
- The links between land use and transport planning
- Sustainable urban transport
- The use of Geographic Information Systems
- Sustainable transport and public policy

Assessment

Two essays demonstrating:

- Evidence that the student has obtained a sound understanding of the principal themes and topics covered by the module
- Evidence of a capability to synthesise the multiplicity of concerns involved in the undertaken analyses
- An ability to take the knowledge and lessons acquired from the case studies and the literature
- An ability of effectively disseminating this knowledge in oral, written and graphical terms

4 EF 902 – Project Work and Project Management

Selim Alkaner

General aims

The course provides a thorough and systematic review of strategies and processes for managing projects effectively. Participants develop project management knowledge and skills, qualitative analysis, plus decision-making and team-working abilities. Acquired concepts and skills are applied to real-world examples and case studies by active involvement and contribution of students through project team activities.

Specific Objectives

Upon completion of the module, students will be able to:

- demonstrate knowledge of various specialized management methods and techniques that have been developed specifically for use in project and matrix organizations,
- develop and complete a project plan,
- devise a build a Work Breakdown Structure (WBS) from an approved project plan,
- assign responsibility for project components,
- address "real world" management problems by setting specific objectives and using accepted solutions and practices,
- understand the role and use of various analytical and numerical techniques for defining, planning, estimating, scheduling, and controlling a project,
- use critical path (CPM) and PERT techniques to analyse the network of tasks,
- use one of the "industry standard" project management software tools to perform basic operations for planning a project, progress tracking and making informed management decisions,
- increase individual effectiveness within project-driven environments or organisations,
- integrate complementary skills within group working, through classroom work and online learning (WebCT) environment,
- comprehend the risk management process to manage project uncertainties.

Syllabus

Introduction; information systems; reasons for centralised information, information input and retrieval; information modelling process and techniques, databases as an information resource; information normalisation; Knowledge Information and Data (KID) acquisition techniques, knowledge data discovery process, data mining, data visualisation; Software Engineering process.

Assessment

Student work will be evaluated through three short exams and two team assignments/presentations.

4 EF 909 - Finance

Girma Zawdie

General aims

The module aims to introduce elements of *financial engineering* that are applied to reduce risk, reduce prospects of business insolvency and enhance the financial robustness of business enterprises. To this end, the module covers the essentials of Financial Engineering both as an academic discipline and as a strategy of risk management and business development. Recent trends in corporate business behaviour in major industrialized countries have heightened concern with issues of corporate governance, corporate ethics, financial strategies and the role of the financial engineer. Central to this concern is the aim of ensuring the solvency and sustainability of business ventures. In exploring the way forward, business enterprises often consider options that would enable them to enhance their position of competitiveness and solvency under uncertain and risky market conditions. What is the best strategy for survival and growth? What are the options for financing investment projects both in the private and public sectors of an economy? How would the financial engineer propose to combine loan capital and equity capital to raise funds for an investment initiative; and how would he/she advise his/her company/organization to build its investment portfolio to ensure financial security in volatile market conditions? These are some of the major issues the financial engineering module takes on board.

Specific Objectives

Upon successful completion of this module, the student will be able to:

- Identify and analyse issues arising from the financial accounts and reports of companies
- Evaluate investment decisions
- Identify and evaluate sources and methods of raising finance
- Analyse the principles underlying operation of financial/capital markets
- Identify and evaluate financial strategies and instruments for corporate risk management
- Identify the various risks involved in the construction business and evaluate the implications for financial strategies
- Evaluate the financial viability of risk transfer options available to PFI projects in terms of cost-benefit analysis.

Syllabus

- Elements of Financial Accounting
- Financial Reports: Balance sheets, income statements, Financial Ratios
- Financial assets and asset valuation
- Sources of project finance
- Capital structure and gearing
- Financial engineering of capital projects
- Influence of the stock market on Engineering firms
- Cases in business failures
- The PFI Debate
- Investment decisions, financial instruments and portfolio risk management
- Restructuring strategies - acquisitions and mergers

Assessment

Coursework will be handed in during the class.

Timetable

FIRST SEMESTER
SECOND SEMESTER
THIRD SEMESTER



Schedule

Classes running weekly:

Urban Design Studio 1a, 1b, 1c, 2: semester 1 and 2, Tuesday, 10.00-17.00, Department of Architecture

Code	Name	Semester	Day	Time	Location
EV 929	Principles of Sustainable Development	1	Monday	12.00-14.00	tbc
EF 912	Environmental Impact and Sustainability	1	Friday	11.00-13.00	M.413, James Weir Building
EF 902	Project Work and Project Management	1	Mon Wed	09.00-11.00 11.00-12.00	HD2.15, Henry Dyer Building
AB 940	Urban Transport Planning	2	Thursday	2.00-4.00	GH 6.10, Graham Hills Bldg
EF 909	Financial Engineering	2	Friday	11.00-13.00	tbc

Classes running as conferences

Code	Title	Location	Dates
AB 936	Urban Design History	Department of Architecture	12 Octobe 2009
AB 938	Urban Design Representation	Department of Architecture	over 4 days linked to the studio day
AB 935	Urban Landscape Design	Department of Architecture	Rolf and Felicity dates?
AB 939	Urban Theory	Department of Architecture	February
AB 943	Real Estate Development	Department of Urban Studies, GU	3, 4 March, plus tutorial on morning of 17 March
AB 946	Urban Design Policy and Practice	Department of Urban Studies, GU	24, 25 March, plus tutorial on afternoon of 27 April

AB 947 Dissertation Project takes place over the summer (June-August). Exams are generally in late August and external examinations in early September.

SEMESTER 1:

Week 1	MON	29 SEP	UNIVERSITY CLOSED	
	TUE	30 SEP	AB931/932/933 DESIGN STUDIO 1a,b,c INTRO	Studio, Architecture
	WED	01 OCT	AB 945 Urban Governance EF 902 Project Work and Project Management	GLASGOW UNIVERSITY 11.00-12.00, HD2.15, Henry Dyer
	THU	02 OCT		
	FRI	03 OCT	EF 912 Environmental Impact & Sustainability	11.00-13.00, M413, James Weir
Week 2	MON	06 OCT	EV 929 Principles of Sustainable Development	12.00-14.00, Graham Hills, 6.10
	TUE	07 OCT	STUDIO	Studio, Architecture
	WED	08 OCT	AB 945 Urban Governance EF 902 Project Work and Project Management	GLASGOW UNIVERSITY 11.00-12.00, HD2.15, Henry Dyer
	THU	09 OCT	Planning Systems	GLASGOW UNIVERSITY
	FRI	10 OCT	Planning Systems EF 912 Environmental Impact & Sustainability	GLASGOW UNIVERSITY 11.00-13.00, M413, James Weir
Week 3	MON	13 OCT	EV 929 Principles of Sustainable Development	12.00-14.00, Graham Hills, 6.10
	TUE	14 OCT	STUDIO + UD REPRESENTATION	Studio, Architecture
	WED	15 OCT	EF 902 Project Work and Project Management	11.00-12.00, HD2.15, Henry Dyer
	THU	16 OCT		
	FRI	17 OCT	EF 912 Environmental Impact & Sustainability	11.00-13.00, M413, James Weir
Week 4	MON	20 OCT	EV 929 Principles of Sustainable Development	12.00-14.00, Graham Hills, 6.10
	TUE	21 OCT	STUDIO: Guest Tutor A. MacDonald	Studio, Architecture
	WED	22 OCT	Changing Cities & Neighbourhoods EF 902 Project Work and Project Management	GLASGOW UNIVERSITY 11.00-12.00, HD2.15, Henry Dyer
	THU	23 OCT	Changing Cities & Neighbourhoods	GLASGOW UNIVERSITY
	FRI	24 OCT	EF 912 Environmental Impact & Sustainability	11.00-13.00, M413, James Weir
Week 5	MON	27 OCT	EV 929 Principles of Sustainable Development	12.00-14.00, Graham Hills, 6.10
	TUE	28 OCT	STUDIO	Studio, Architecture
	WED	29 OCT	Changing Cities & Neighbourhoods EF 902 Project Work and Project Management	GLASGOW UNIVERSITY 11.00-12.00, HD2.15, Henry Dyer
	THU	30 OCT	Changing Cities & Neighbourhoods	GLASGOW UNIVERSITY
	FRI	31 OCT	EF 912 Environmental Impact & Sustainability	11.00-13.00, M413, James Weir
Week 6	MON	03 NOV	EV 929 Principles of Sustainable Development	12.00-14.00, Graham Hills, 6.10
	TUE	04 NOV	STUDIO + UD REPRESENTATION	Studio, Architecture
	WED	05 NOV	EF 902 Project Work and Project Management	11.00-12.00, HD2.15, Henry Dyer
	THU	06 NOV		
	FRI	07 NOV	EF 912 Environmental Impact & Sustainability	11.00-13.00, M413, James Weir
Week 7	MON	10 NOV	EV 929 Principles of Sustainable Development	12.00-14.00, Graham Hills, 6.10
	TUE	11 NOV	STUDIO	Studio, Architecture
	WED	12 NOV	Urban Landscape Design EF 902 Project Work and Project Management	tbc 11.00-12.00, HD2.15, Henry Dyer
	THU	13 NOV	Urban Landscape Design	tbc
	FRI	14 NOV	Urban Landscape Design EF 912 Environmental Impact & Sustainability	tbc 11.00-13.00, M413, James Weir
Week 8	MON	17 NOV	EV 929 Principles of Sustainable Development	12.00-14.00, Graham Hills, 6.10
	TUE	18 NOV	STUDIO: Guest Tutor A. MacDonald	Studio, Architecture
	WED	19 NOV	EF 902 Project Work and Project Management	11.00-12.00, HD2.15, Henry Dyer
	THU	20 NOV		
	FRI	21 NOV	EF 912 Environmental Impact & Sustainability	11.00-13.00, M413, James Weir
Week 9	MON	24 NOV	EV 929 Principles of Sustainable Development	12.00-14.00, Graham Hills, 6.10
	TUE	25 NOV	STUDIO	Studio, Architecture
	WED	26 NOV	EF 902 Project Work and Project Management	11.00-12.00, HD2.15, Henry Dyer
	THU	27 NOV		
	FRI	28 NOV	EF 912 Environmental Impact & Sustainability	11.00-13.00, M413, James Weir
Week 10	MON	01 DEC	EV 929 Principles of Sustainable Development	12.00-14.00, Graham Hills, 6.10
	TUE	02 DEC	STUDIO: Guest Tutor A. MacDonald	Studio, Architecture
	WED	03 DEC	EF 902 Project Work and Project Management	11.00-12.00, HD2.15, Henry Dyer
	THU	04 DEC		
	FRI	05 DEC	EF 912 Environmental Impact & Sustainability	11.00-13.00, M413, James Weir
Week 11	MON	08 DEC	EV 929 Principles of Sustainable Development	12.00-14.00, Graham Hills, 6.10
	TUE	09 DEC	STUDIO + UD REPRESENTATION	Studio, Architecture
	WED	10 DEC	EF 902 Project Work and Project Management	11.00-12.00, HD2.15, Henry Dyer
	THU	11 DEC		
	FRI	12 DEC	EF 912 Environmental Impact & Sustainability	11.00-13.00, M413, James Weir
Week 12	MON	15 DEC	EV 929 Principles of Sustainable Development	12.00-14.00, Graham Hills, 6.10
	TUE	16 DEC	STUDIO	Studio, Architecture
	WED	17 DEC	EF 902 Project Work and Project Management	11.00-12.00, HD2.15, Henry Dyer
	THU	18 DEC		
	FRI	19 DEC	EF 912 Environmental Impact & Sustainability	11.00-13.00, M413, James Weir

CHRISTMAS VACATION 22 Dec 2008 – 02 Jan 2009

			Revision Period	
Week 13	MON	05 JAN		
	TUE	06 JAN		
	WED	07 JAN		
	THU	08 JAN		
	FRI	09 JAN		
			Revision Period	
Week 14	MON	12 JAN		
	TUE	13 JAN		
	WED	14 JAN	AB 944 Real Estate Markets	GLASGOW UNIVERSITY
	THU	15 JAN	AB 944 Real Estate Markets	GLASGOW UNIVERSITY
	FRI	16 JAN		
			Examination Period	
Week 15	MON	19 JAN		
	TUE	20 JAN		
	WED	21 JAN		
	THU	22 JAN		
	FRI	23 JAN		

SEMESTER 2:

Week 1	MON	26 JAN		
	TUE	27 JAN	AB 934 DESIGN STUDIO 2 INTRODUCTION	Studio, Architecture
	WED	28 JAN		
	THU	29 JAN	AB 940 Urban Transport Planning	14.00-16.00, Graham Hills, 6.10
	FRI	30 JAN	EF 909 Financial Engineering	11.00-13.00, tbc
Week 2	MON	02 FEB		
	TUE	03 FEB	STUDIO	Studio, Architecture
	WED	04 FEB	AB 936 Urban Design History	tba
	THU	05 FEB	AB 936 Urban Design History	tba
			AB 940 Urban Transport Planning	14.00-16.00, Graham Hills, 6.10
	FRI	06 FEB	AB 936 Urban Design History	Tba
			EF 909 Financial Engineering	11.00-13.00, tbc
Week 3	MON	09 FEB		
	TUE	10 FEB	STUDIO – INTERNAL REVIEW	Studio, Architecture
	WED	11 FEB		Tbc, Architecture
	THU	12 FEB	AB 940 Urban Transport Planning	14.00-16.00, Graham Hills, 6.10
	FRI	13 FEB	EF 909 Financial Engineering	11.00-13.00, tbc
Week 4	MON	16 FEB		
	TUE	17 FEB	STUDIO	Studio, Architecture
	WED	18 FEB	AB 939 Urban Design Theory	tba
	THU	19 FEB	AB 939 Urban Design Theory	tba
			AB 940 Urban Transport Planning	14.00-16.00, Graham Hills, 6.10
	FRI	20 FEB	AB 939 Urban Design Theory	Tba
			EF 909 Financial Engineering	11.00-13.00, tbc
Week 5	MON	23 FEB		
	TUE	24 FEB	STUDIO	Studio, Architecture
	WED	25 FEB		Tbc, Architecture
	THU	26 FEB	AB 940 Urban Transport Planning	14.00-16.00, Graham Hills, 6.10
	FRI	27 FEB	EF 909 Financial Engineering	11.00-13.00, tbc
Week 6	MON	02 MAR		
	TUE	03 MAR	STUDIO	Studio, Architecture
	WED	04 MAR	AB 943 Real Estate Development	GLASGOW UNIVERSITY
	THU	05 MAR	AB 943 Real Estate Development	GLASGOW UNIVERSITY
			AB 940 Urban Transport Planning	14.00-16.00, Graham Hills, 6.10
	FRI	06 MAR	EF 909 Financial Engineering	11.00-13.00, tbc
Week 7	MON	09 MAR		
	TUE	10 MAR	STUDIO	Studio, Architecture
	WED	11 MAR		
	THU	12 MAR	AB 940 Urban Transport Planning	14.00-16.00, Graham Hills, 6.10
	FRI	13 MAR	EF 909 Financial Engineering	11.00-13.00, tbc
Week 8	MON	16 MAR		
	TUE	17 MAR	STUDIO	Studio, Architecture
	WED	18 MAR		
	THU	19 MAR	AB 940 Urban Transport Planning	14.00-16.00, Graham Hills, 6.10
	FRI	20 MAR	EF 909 Financial Engineering	11.00-13.00, tbc
Week 9	MON	23 MAR		
	TUE	24 MAR	STUDIO	Studio, Architecture
	WED	25 MAR		
	THU	26 MAR	AB 940 Urban Transport Planning	14.00-16.00, Graham Hills, 6.10

	FRI	27 MAR	EF 909 Financial Engineering	11.00-13.00, tbc
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Week 10	MON	30 MAR		
	TUE	31 MAR	STUDIO	Studio, Architecture
	WED	01 APR		
	THU	02 APR	AB 940 Urban Transport Planning	14.00-16.00, Graham Hills, 6.10
	FRI	03 APR	EF 909 Financial Engineering	11.00-13.00, tbc

EASTER VACATION: 06-13 April 2009

Week 11	MON	20 APR		
	TUE	21 APR	STUDIO	Studio, Architecture
	WED	22 APR		
	THU	23 APR	AB 940 Urban Transport Planning	14.00-16.00, Graham Hills, 6.10
	FRI	24 APR	EF 909 Financial Engineering	11.00-13.00, tbc
Week 12	MON	27 APR		
	TUE	28 APR	STUDIO – FINAL REVIEW	Studio, Architecture
	WED	29 APR		
	THU	30 APR	AB 940 Urban Transport Planning	14.00-16.00, Graham Hills, 6.10
	FRI	01 MAY	EF 909 Financial Engineering	11.00-13.00, tbc

Week 13	MON	04 MAY		
	TUE	05 MAY		
	WED	06 MAY	AB 946 Urban Design Policy & Practice	GLASGOW UNIVERSITY
	THU	07 MAY	AB 946 Urban Design Policy & Practice	GLASGOW UNIVERSITY
	FRI	08 MAY		
Week 14	MON	11 MAY		
	TUE	12 MAY		
	WED	13 MAY		
	THU	14 MAY		
	FRI	15 MAY		
Week 15	MON	18 MAY		
	TUE	19 MAY		
	WED	20 MAY		
	THU	21 MAY		
	FRI	22 MAY		
Week 16	MON	25 MAY		
	TUE	26 MAY		
	WED	27 MAY		
	THU	28 MAY		
	FRI	29 MAY		
Week 17	MON	01 JUN	INTERNAL/EXTERNAL EXAMINATIONS	
	TUE	02 JUN	INTERNAL/EXTERNAL EXAMINATIONS	
	WED	03 JUN	INTERNAL/EXTERNAL EXAMINATIONS	
	THU	04 JUN	INTERNAL/EXTERNAL EXAMINATIONS	
	FRI	05 JUN	INTERNAL/EXTERNAL EXAMINATIONS	

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6

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