#### University of Cambridge: Programme Specifications

Every effort has been made to ensure the accuracy of the information contained in this programme specification. At the time of publication, the programme specification has been approved by the relevant teaching Faculty or Department. It is, however, natural for courses to develop and change over time and we reserve the right, without notice, to withdraw, update or amend this programme specification at any time.

1. Awarding Institution	University of Cambridge
2. Teaching Institution	University of Cambridge Institute of Continuing Education
3. Programme accredited by	Faculty of Architecture and History of Art
4. Final Award	Post-graduate Certificate in Professional Practice in Architecture
5. Programme Title	Architecture
6. UCAS Code (or other coding system if relevant)	N/A
7. Relevant QAA Subject Benchmark groups	Architecture
8. Qualifications Framework Level	N/A
9a. Date of production	March 2009
9b. Last Reviewed	N/A

# Post-graduate Certificate in Professional Practice in Architecture

The Post-graduate Certificate in Professional Practice in Architecture is delivered by the Faculty of Architecture and History of Art in partnership with the Institute of Continuing Education (IoCE). The Post-graduate Certificate forms part of the Institute's programme of credit-bearing professional development qualifications offered at FHEQ Level 7 offered to part-time adult students. In the UK, the training of an architect culminates with the Part 3 examination. Passing this examination qualifies the candidate to register with the Architects Registration Board (ARB) and thereafter be called an architect, and take up corporate membership of the Royal Institute of British Architects (RIBA). Thus it is the formal entry into the profession. The Part 3 Examination is recognised by the Architects Registration Board and the Royal Institute of British Architects as the final qualifying examination for obtaining registered status and professional membership.

## Aims of the Programme

The programme aims to

- 1. prepare students for the examination which leads to registration as an Architect and entry to the profession
- 2. develop students' knowledge and judgement regarding practice, law and management within architecture
- 3. engender debate about the major concerns for the profession

# Learning outcomes

The programme is based on the ARB document *Prescription of Qualifications: ARB Criteria*, published in May 2002 and effective September 2003. These criteria are 'held in common' by the RIBA and describe the requirements for recognition of Part 1, Part 2 and Part 3 courses in architecture in the UK. Parts 1 and 2 concentrate on design and technical aspects although Management, Practice and Law have a higher profile than previously. It is at Part 3 that the candidate has to demonstrate sufficient knowledge, skill and judgement to:

- manage the design development of a project
- manage the construction process of a project
- manage the business aspect of an architectural practice
- understand and operate within the social and ethical context

On successful completion of the programme, students will demonstrate within an academic portfolio the following learning outcomes:

## The Context for Practice

Knowledge of:

- The size and relative importance of the construction industry to other sectors of the national and international economy and the role of the profession relative to the industry
- The overlapping interests of organisations representing the built environment and their relation to the role of the architect
- The range of ongoing specialist panels of advisory, consultative or government bodies which have the responsibility for developing policies which guide or control construction industry practices

Understanding of:

• The social and economic context for investment in the built environment

Ability to:

- Apply principles underlying the law relevant to architectural practice and building procurement
- Act in accordance with the requirements of professional conduct and the concept of 'professionalism'
- Follow codes and standards regulating the profession of architecture
- Demonstrate that health and safety matters are integral to every stage of the design process and execution for those aspects of design for which the architect is responsible

## The Management of Architecture

Awareness of:

• Technical standards and sources of specialist information

Knowledge of:

Legislation on health and safety and its application to design and construction

Understanding of:

- Appropriate fees, negotiation and fee bidding techniques, bearing in mind the funding and procurement basis for the project, and with reference to other factors listed below
- Integrated project process and project team partnering
- Relevant statutory bodies, construction and development legislation and consultative bodies, and their potential effect on programme, cost and quality of design
- Methods and standards intended to ensure and manage quality standards

Ability to:

- Prepare, in consultation with the client, an acceptable brief and budget, including consultation with others as appropriate. Thereafter, to effectively communicate with the client at every stage of the project
- Assess the variety and appropriateness of project procurement methods and their implications in relation to client requirements and the architectural and professional input required
- Assess the architectural services required to deliver a project effectively and the establishment of appropriate scope of works for all members of the project team; to co-ordinate and integrate the work of other consultants and an awareness of the terms of their appointments
- Programme and manage the flow of information among the members of the design team
- Communicate effectively with each part of the client body and construction team
- Operate quality assurance procedures which ensure the maintenance of design standards and intentions in relation to budgetary and programme control
- Analyse the appropriateness and completeness for its purpose of forms of documentation including written and graphic communication

#### The Management of Construction

Knowledge of:

- Site organisation, mobilisation and the establishment of appropriate lines of communication in relation to the specific responsibilities of the building team
- Methods of dispute resolution, conciliation, adjudication, arbitration, and litigation

Understanding of:

- Project planning, documentation and execution
- The range of methods of building procurement, tender types and codes of practice for procedure, and an ability to identify an appropriate contract strategy and to create pre-contract information
- Value engineering, integrated supply chain management and the principles of lean construction
- The implications of, and ability to apply, collateral agreements such as the nomination of sub-contractors and the position of domestic sub- contractors, suppliers, manufacturers and statutory undertakings in relation to standard forms of contract
- Risk management in relation to construction and consultants contracts, liabilities, indemnities and insurance, and awareness of mechanisms such as insurance to deal with liabilities

- The value of post completion assessment and appraisal and methods of debriefing
- The maintenance of adequate financial control for cost planning of projects

Ability to:

- Analyse contract types in terms of their implications for time, cost, quality, information flow and the procedures related to each
- Assess and organise a quality control and programming system in relation to the architect's role in administering the building process
- Prepare architect's instructions and certificates appropriately for standard forms of contract, and to implement the procedures for the assessment and valuation of claims
- Create maintenance manuals and post completion information for clients and building users

## Practice Management and Business Administration

Awareness of:

- The need and techniques for the protection of intellectual property and copyright
- The various techniques for the marketing of professional services and how architects' commissions are obtained
- National and international trends for the distribution and commissioning of architectural projects

Knowledge of:

• The requirements for taxation, health and safety, employment contracts, civil liability and equal opportunities legislation, etc. on different business structures, including working from home

Understanding of:

- The resources (technical, IT, financial, personnel, etc.) necessary in order to offer professional services for a particular project
- Different forms of architectural practice, for example, sole trader, partnership, company, consortium or joint venture, and their respective legal implications
- The internal structures and organisations appropriate to different forms of architectural and multi-disciplinary practice
- The skills required for the management of people within an organisation and a basic appreciation of motivation, group dynamics, staff appraisal and reward structures
- The techniques and context required to create an effective and efficient ongoing environment for practice
- The financial management of an architectural practice

## Cognitive/Intellectual Skills

- 1. ability to critically evaluate theories and concepts underpinning the profession as an applied area of study as evidence to support recommendations made, reviewing reliability, validity and significance
- 2. ability to identify and define a concept or idea with potential for independent scholarly research and application in a new context

- 3. ability to apply principles underlying the law relevant to architectural practice and building procurement
- 4. ability to analyse the appropriateness and completeness for its purpose of forms of documentation including written and graphic communication
- 5. ability to assess the architectural services required to deliver a project effectively and the establishment of appropriate scope of works for all members of the project team; to co-ordinate and integrate the work of other consultants and have an awareness of the terms of their appointments
- 6. ability to analyse new situations or abstract data using objective and logical criteria to make informed and critical judgements
- 7. ability to act in accordance with the requirements of professional conduct and the concept of 'professionalism'
- 8. ability to follow codes and standards regulating the profession of architecture
- 9. ability to demonstrate that health and safety matters are integral to every stage of the design process and execution for those aspects of design for which the architect is responsible
- 10. ability to prepare, in consultation with the client, and others where appropriate, an acceptable brief and budget; to effectively communicate with the client at every stage
- 11. ability to assess the architectural services required to deliver a project effectively in all aspects

## Transferable Skills

- 1. self-evaluation, through demonstrating confidence in the application of their own criteria of judgement, challenging received opinions, and reflecting on action. They will seek and make use of feedback
- 2. autonomy, through taking responsibility for their own work, and critically analysing it
- 3. strategic thinking, through demonstrating their ability to apply a strategy to an idea, project or problem to achieve an effective conclusion
- 4. situational analysis, through demonstrating their ability to analyse a situation or information and competently undertaking reasonably straight-forward research tasks with minimum guidance
- 5. communication and presentation skills, through engaging effectively in debate in a professional manner and producing detailed and coherent project reports presented in a professional and confident manner
- 6. problem-solving skills, through identifying and defining complex problems and applying appropriate knowledge, tools, and methods to their solution
- 7. leadership, management, and team work skills, through interacting effectively within a team learning group, and recognising, supporting and being proactive in the various aspects of leadership; they will demonstrate ability to negotiate in a professional context and manage conflict

## Teaching and learning methods

Teaching methods will include, but not be limited to, formal lectures, interactive seminars and workshops, discussion and networking groups, structured reading and case analysis and presentation. Teaching sessions will set out concepts, conceptual frameworks and theory relating to the topics to be covered; other modes of teaching and learning are designed to enable participants to achieve the stated learning aims and objectives.

Periods of self-directed study and research between blocks of attendance will also be required; students will be expected to carry out significant in-depth research and analysis between taught sessions.

## Assessment methods

The programme is assessed using multiple and inter-related strategies, including written individual essays, practical assignments, a case study, and written and oral examinations. These formally assessed elements are:

- The Professional Experience and Development record (PEDR)
- A Case Study (up to 5,000 words)
- A Personal Statement (1,000 and 1,500 words)
- Written Examinations (2 papers)
- A Professional Interview

#### The Examination

The format of the Examination is approved by ARB/RIBA and consists of

• Written Papers

There will be two written examination papers: one paper of 2 hours and another of 3 hours duration. The latter will be 'open book' i.e. references are allowed. Paper 1 examines the more general issues of the syllabus while Paper 2 includes questions on The Contract and Practice and Project Management. In preparation for Paper 2 candidates will be issued in advance with details of the scenario when they submit the other documents on which they will be examined. The questions will not be seen until the formal examination. Candidates will be able to concentrate on considering their response to the problems posed. The examination questions are set by the Chair of Examiners and the Professional Course Director, in consultation with the External Examiner and the Professional Examiners.

#### Professional Interview

This is the last part of the examination during which the examiners will draw together all the information submitted by the candidate, assess their interpersonal skills, ask additional questions and make final judgements about a candidate's suitability.

#### The Examiners

Professional Examiners, all experienced practicing architects or from an allied profession such as quantity surveying, are drawn largely from the RIBA Professional Examiner Database. Examiners are invited to examine on an annual basis. They work in pairs with at least one of the pair having examined at Part 3 level previously. They will have personally seen and marked all of the papers relating to their examinees.

The External Examiner will see a selection of the submissions and the examination scripts and will also observe a number of the Professional Interviews.

The External Examiner and the University Moderator are appointed for a period of three years (renewable). Their main functions are to ensure comparability and consistency of standards and fairness of assessment procedures.

At the end of the interview process the examiners will make their final decision at a meeting of the Moderator's Panel attended by the Moderator, the External Examiner, the Professional Examiners and the Professional Course Director.

If necessary the Professional Studies Co-ordinator will be consulted on matters of practical experience.

The Moderator's and External Examiner's recommendations will be submitted to the next possible meeting of the Board of Management of the Institute of Continuing Education. Following approval by the Board, successful candidates for the Postgraduate Certificate in Professional Practice in Architecture will be notified in writing of the successful outcome, together with details of the award ceremony to be held at Madingley Hall. The list of successful candidates will be given to ARB to enable application for registration by the candidate.

In some exceptional cases where the Case Study or the personal statement submissions are unsatisfactory, the Professional Examiners may make recommendations and conditions for re-submission of documents in consultation with the other members of the External Examiners' panel.

Unsuccessful candidates will be advised by the Professional Course Director of the areas requiring improvement. An unsuccessful candidate may sit the Examination once more only. The reason for allowing a second attempt is that this course and examination place emphasis on judgement, which is based on experience rather than knowledge alone. A second year of accumulated experience should have a significant beneficial effect on a student's ability to perform well in the examination.

A candidate who had failed a single component of the course by a narrow margin may be allowed to retake only that component, with the following provisos: that this should be at the discretion of the examiners, who in their final report will recommend to the Board that such a course of action be followed; that the candidate would be permitted to come forward to resubmit the relevant element only in the year succeeding his or her original examination, and not at a later date; that the components to which this proviso should apply would be the case study, the career evaluation, Paper 1 or Paper 2, but not the log book/PEDR or the interview; and that in all cases the candidate would be required to present him or herself for interview though not to re-sit the rest of the examination, apart from the relevant component.

Active participation is required in all course activities.

## Programme structure: overview

The programme is offered at FHEQ Level 7 and attracts 60 credits.

The programme consists of 3 courses, attracting 60 credits in total; the curriculum is designed to facilitate in-depth study, independent research and critical analysis of the subject areas to present an overall understanding of architectural practice. Thus there are interlinking themes which appear in more than one course session. The three course sessions comprising the Post-graduate Certificate are:

- 1. The Architect's Role in the Construction Industry
- 2. Practice Management, Project Management and Planning Law
- 3. Building Contracts, Contract Administration and Other Practice Matters

Students will be assessed by means of essays, research projects and other assignments totalling 6,500 words and the Professional Experience and Development Record, in addition to two written examinations and professional interview.

Courses will be delivered in a blended format, consisting of required intensive

residential sessions, supported by self-directed learning in Study Groups. The Course Director and Professional Studies Advisers can be contacted for advice and feed-back between the course sessions. The programme involves an estimated 75 contact hours with tutors and speakers in lecture and workshop settings, and on line. In addition there is self-managed time for preparation, assignments and further reading.

The programme is offered on a part-time basis and students will normally take up to 12 months to complete the Post-graduate Certificate. The maximum time for completion will normally be 36 months.

### Programme structure: detail

#### Course details

The course is organised as intensive two- and three- day sessions in September, March and July, with submission of the PEDR, Personal Statement and Case Study at the end of the year (in August/September) and examinations and the professional Interview in September.

The aim of the course is to provide preparation for the examination as well as to act as a forum for discussion of certain major concerns of the profession. The first session in September will focus on the architect's role in the construction industry, the second session in March will focus on Practice and Project Management and on Planning Law and the third session in July will concentrate on Building Contracts and on Standard Forms of Contract. These topics are of course all interrelated so that, over the year, there will be a number of overlapping lectures and seminars. The teaching is delivered through a mix of lectures, seminars, debates and workshops with an emphasis on learning through engagement.

In addition to the taught sessions, candidates are grouped into Study Groups who meet and work on set problems in between the formal taught sessions. These Groups meet on average two to three times between taught sessions. In addition there is regular e-mail and telephone contact between students and the Course Director.

Candidates are also assigned an external Professional Studies Advisor who meets with them to discuss their office experience, to sign off their Professional Experience & Development Record and to advise them on their Case Studies.

# Course 1: The Architect's Role in the Construction Industry

This session includes lectures, seminars and workshops on:

- Introduction to the course
- The Law as it relates to architectural practice
- Cost control in building projects
- Briefing
- Design Teams and Project Teams
- Programming for architects and constructors

#### **Course 2: Practice Management, Project Management and Planning Law** This session includes lectures, seminars and workshops on:

- Setting up a small practices
- Working in a global practice
- Planning Law
- Managing Accounts in a small practice
- Financial Control in architectural practice

- Creating work opportunities: areas of growth
- Writing essays and dissertations
- Preparing for the examinations
- Teamwork and Chairing meetings
- Standard Forms of building contracts
- Presentations of proposed Case studies

# Course 3: Building Contracts Contract Administration and Practice Matters

This session includes lectures, seminars and workshops on:

- Employment Law
- Building Regulations
- The Law relating to Building Contracts
- Dispute resolution
- Easements and Restrictive Covenants
- Health and Safety and CDM
- Project Administration
- Some Post-Contract issues
- Marketing your practice
- Case Study presentations
- Reflecting on practice

#### Delivery

The programme is offered on a part-time basis, and students will normally take 12 months to complete the Post-graduate Certificate. The maximum time for completion will normally be 36 months.

#### Programme Requirements

In the UK, the training of an architect culminates with the Part 3 examination. Passing this examination qualifies the candidate to register with the Architects Registration Board (ARB) and thereafter be called an architect, and take up corporate membership of the Royal Institute of British Architects (RIBA). Thus it is the formal entry into the profession.

The Postgraduate Certificate awards transferable credits at level M and this would be of benefit to those who wish to pursue further formal training such as a qualification in Project Management.

The Part 3 Examination is recognised by the Architects Registration Board and the Royal Institute of British Architects as the final qualifying examination for obtaining registered status and professional membership.

Under the EU Directive for Architects, nationals of European member countries registered with ARB are also entitled to practise as architects in other member states subject to satisfying some additional local adaptation requirements. UK registration as an Architect is also highly regarded throughout the rest of the world.

Applicants to the programme will be expected to demonstrate proficiency in the English language; students whose first language is not English must be able to satisfy the current English Language Competence requirements of the University's Board of Graduate Studies in the year in which they apply for admission to the course

## Progression

The pass mark for each course is 50% and minimum attendance is 75%.

Candidates who have NOT been successful in the examination may take the examination a second time only. Candidates who have failed twice will not be eligible to take the examination again. The second attempt must be made within two years of completing the course to ensure currency of the course.

Students are required to pass all elements of the examination in order to pass the programme and achieve the award of the Post-graduate Certificate in Professional Practice in Architecture

# Employability

Students completing the Post-graduate Certificate in Professional Practice in Architecture will normally already be in employment; the Post-graduate Certificate will enable them to qualify for posts for architects, usually with greater responsibility and commensurate salary. It also enables the successful student to set up in their own architectural practice.

## Managing Teaching Quality and Standards

The teaching quality and standards of the course will be monitored by the Examiners' and Moderator's Meeting, consisting of the University Moderator and external examiner and professional examiners and other Faculty and IoCE members as agreed by the Education Committee.

# Student Support

Academic advice to students is available both before and after they have registered for a course from the Course Director. Once the course has begun, advice is available from both the Course Director and from the student's Professional Studies Adviser. In addition, the administrative staff assigned to the programme are able to provide information. All students are provided at the start of the course with the IoCE Student Handbook and a Course Handbook.

Administrative staff work closely with the academic team throughout the programme, and are able to provide appropriate levels and types of student support – for instance, support in technical matters, such as using the Intranet.