

# Applications for postgraduate study by research at the Welsh School of Architecture (MPhil or PhD degrees)

## Guidance on the research proposal

To supplement your application we require you to submit an outline research proposal. This proposal should be a brief description of the research you wish to pursue, expressed clearly and in a focussed way. Please use the following headings (a suggested length is 2 sides of A4 paper):

- Title (encapsulating the research topic and its scope)
- Research aim (a single statement of aim, broken into objectives if necessary)
- Research context (why you think this aim is worth pursuing)
- Research design and methodology (an outline of how you propose to conduct the research)
- Possible outcomes (the value of the research results)
- Resources and obstacles (possible impediments to the research)

You may add brief supplementary information if you wish, such as a projected schedule for the work or illustrations.

Your research topic should relate to the research themes followed by the School. We have two groups of researchers: Architectural Science and Architectural History and Theory. Their particular research interests are described more fully in the University Postgraduate Prospectus and on the School's web site at <http://www.cardiff.ac.uk/archi/>

Most postgraduate research students at the School are pursuing research topics of their own choosing. It is unusual for us to offer a pre-designed research programme for a student to follow. Consequently we expect a high degree of initiative from our students. Your proposal should make a firm choice of a topic *you* would find interesting and worthwhile to pursue. It should not point to a vague region of exploration in the hope that we will make the choice for you.

It is unlikely that you will be able to define at this early stage the precise course your research might take. This would be developed over time in discussion with your supervisor. Your proposal need therefore only be indicative. When the School's Research Committee receives your proposal it has to judge whether it the research it proposes is viable. So you should have thought sufficiently about your topic to allow you to anticipate the *scope* it offers for research, the *feasibility* of the method by which you intend to conduct the research, and the *value* of its possible outcomes. Here are some notes to help you with this.

## Judging whether the research is viable

Once you know broadly what you want your research to be about, you need to consider the viability of conducting the research, so that you can make a firm decision about whether to proceed. Particular aspects you should consider are:

- the research topic: with regard to scope
- your methodology: with regard to feasibility
- the outcome of the work: with regard to value

That is, you need to have regard to the scope your topic offers for research, the feasibility of the research method, and the value of the possible outcomes. These three aspects are discussed in the following paragraphs.

*Scope of the research topic.* Your research topic is the broad subject of the research, as it might be stated prior to establishing an aim. You should consider whether your topic presents sufficient scope for research. If there has been a great deal of prior research, scope might be limited. If that work has led to a strongly held belief that you think is vulnerable (such as that passive designs should be judged by their capital cost) there may be scope for building up an alternative view.

*Feasibility of the methodology.* When you have decided what you want to find out, examine the ways that there are of doing this. If there should turn out to be no really feasible way, you will have to abandon that idea and look for another line of enquiry. The following factors have a bearing on feasibility:

- Availability of and access to data and information; you may need to find out whether all the data you require has been published, or whether there is a chance that some information you need will be withheld.
- Practicality of pursuing a particular research design; you must know whether the facilities you require, such as equipment and computer software, are going to be available when you want them, and whether any access you may require to sites or buildings is likely to be granted.

- The time needed to complete the research; you must make realistic assessments, seeking advice as necessary, of how long research operations take, what waiting periods are needed, and what critical dates might be involved. These will be included in your proposal.
- The technical skills needed; if you choose a research design that requires you to develop any new skills, you need to consider whether you can develop them in the time available.
- The need for financial support; your research may give rise to expenditure on books, equipment, or travel, and if it does, you must consider whether you need financial support and find out whether it is available.
- The risk of not reaching an outcome; estimate the risk of the research taking too long or not reaching an outcome, and ask whether this risk is acceptable to you.

*Value of the outcome.* You should consider the value of the possible research outcome. Its value to the research community will be reflected in how highly regarded your work will be. You may also be concerned with the narrower value to yourself and with the wider value to society at large. There may be more than one possible outcome to your research (you may find one thing or another). Alternative outcomes do not necessarily have the same value; the extent to which they do is the symmetry of the research. If your research challenges a strongly held belief, success will have high value but failure will have low value, so the research is asymmetrical. It is obviously safer to pursue research which either can have only one outcome or is symmetrical.

## **Preparing the research proposal**

The proposal should explain what it is that you want to find out and, broadly, how you intend to do that. Its function is to persuade the School that the research is worth doing, so it should put up a convincing case, argued cogently. The way it is written should reflect the clarity of the thinking behind it.

It should contain the following:

### *Title*

This should encapsulate the *topic* of the research so that someone in the field can recognise what it is about and what its *scope* is. It should be precise but not lengthy.

### *Research aim*

Your research aim is the focus that will guide the research. It may be in the form of a question that your research is intended to answer or a research hypothesis that you intend to test. It is preferable to limit a research project to one principal question or hypothesis even though the project is scheduled over several years. This should lead towards a contribution to knowledge.

### *Research context*

You should say why the research should be undertaken. You may like to consider what is it that makes it important, how it fits existing theory, what need it fulfils, or why you are the right person to do it. Make clear the position reached by prior research in the area. From your own knowledge of the research field and an initial literature search, you must show that what you propose has not already been done and does link with earlier work.

### *Research design and methodology*

Establishing a research aim takes you some way towards framing the problem that you are investigating, but you do not have a complete investigative framework until you have established a research design. For this you must set out the research procedure whereby you expect to achieve the research aim in the time available. Do this in sufficient detail to be able to judge its *feasibility*. The design should be one that is appropriate to the research field that you have chosen.

### *Possible outcomes*

Evaluate the possible outcomes of the research. If you are testing a hypothesis, this is straightforward, as the hypothesis is either supported or rejected. More exploratory research does not offer such a definite range of outcomes but may be simply more or less successful. You should take a cool look at these possibilities when you decide whether to pursue your research aim or not. Consider their *value*.

### *Resources and obstacles*

Alert us about any abnormal expenditure that is entailed in executing the research, any unusual resources that will be required, or any possible obstacles to completion lying in wait. Ignore the normal resources of your time, staff supervision, and university library access. List such things as subcontracts, specialist equipment, licenses for specialist software, travel and accommodation, access to private places, dependence on permission from gatekeepers, and so on. These do not have to be costed out at this stage (although if you have costs, give them).