1. INTRODUCTION

1.1 The text of this Code of Practice is based on the Joint Research Councils and the Arts and Humanities Research Council (AHRC) statement on training provision for research students. Quality Assurance standards also require that the University provide appropriate training and monitoring for research students. Three strands of provision are indicated for the application of the statement at Brookes; Supervisory team provision, Faculty provision and University provision. In the sections that follow, the Joint Research Councils statement is followed by plans for its application.

The major responsibility for ensuring that training appropriate to the individual is provided lies with the supervisory team, with its effectiveness monitored by Faculties. The Director of Studies will normally be expected to co-ordinate such provision, except where the Director of Studies is external to the University, in which case the Brookes supervisor should ensure training is provided either internally or externally. Faculties will be expected to provide training appropriate for the field and area of study. The University will provide induction and training appropriate to all research students. The University (via the Research Degrees Sub-Committee) will monitor training provision via annual reports from Faculties and the University’s Research Training Co-ordinator.

The Code of Practice is not intended to provide a comprehensive guide to research training provision. It is anticipated that Faculties, the University and Supervisors will adjust or augment provision in the light of the needs of individual research students and the requirements of other funding bodies. Where a student is working externally for a Brookes degree, training may be most appropriately provided at the place of study. However, the University supervisor and postgraduate tutor should still monitor the training provided.

1.2 Throughout this Code, the following terminology is used:

‘Faculties’ are administrative and academic divisions within the institution.

‘Students’ refer to those people enrolled to study for a research degree.

‘Supervisors’ are those members of staff who guide the students’ research.

The ‘Director of Studies’ is the senior member of the supervision team who has overall responsibility for the supervision of the student.

‘Postgraduate Research Tutors’ are members of staff who have responsibility for research student matters within a Faculty, on behalf of the Dean of Faculty.

The ‘Research Degrees Sub-Committee’ (RDSC) is the senior committee in the University with responsibility for research degrees matters.

The ‘Research and Knowledge Transfer Committee’ (RKTC) monitors and implements policy relating to research within the University and is the committee to which the Research Degrees Sub-Committee reports.

1.3 These guidelines are published annually by the University, and students and their supervisors should acquaint themselves with them.
## 2. RESEARCH SKILLS AND TECHNIQUES

### Students should be able to demonstrate:

- the ability to recognise and validate problems
- original, independent and critical thinking, and the ability to develop theoretical concepts
- a knowledge of recent advances within one's field and in related areas
- an understanding of relevant research methodologies and techniques and their appropriate application within one’s research field
- the ability to critically analyse and evaluate one’s findings and those of others
- an ability to summarise, document, report and reflect on progress

### Supervisors should:

- consider all of the above in the training they provide for their students
- undertake regular meetings, including discussion of related work and its conceptual framework, decision making and forward planning
- require and comment on regular reports by the student
- give training in key methodologies as required or direct the student to other sources of training
- monitor progress in these areas.

### Faculties should:

- run research seminar series and, where relevant, research methods courses; encourage attendance at national and international conferences and provide an effective research environment
- contribute a reasonable amount towards the cost associated with attending conferences etc.
- require students to register the project formally and report on their work verbally and in writing
- require annual reports, transfer reports and interviews covering these areas and involve someone external to the supervisory team in this process.

### The University will:

- include a basic introduction to research in a general sense
- provide workshops on specific topics (e.g. statistics) as required.
### 3. RESEARCH ENVIRONMENT

#### Students should be able to:

- show a broad understanding of the context, at the national and international level, in which research takes place
- demonstrate awareness of issues relating to the rights of other researchers, of research subjects, and of others who may be affected by the research, e.g. confidentiality, ethical issues, attribution, copyright, malpractice, ownership of data and the requirements of the Data Protection Act
- demonstrate appreciation of standards of good research practice in their institution and/or discipline
- understand relevant health and safety issues and demonstrate responsible working practices
- understand the processes for funding and evaluation of research
- justify the principles and experimental techniques used in one’s own research
- understand the process of academic or commercial exploitation of research results.

#### Supervisors should:

- include discussion of these issues in meetings with the student
- give criticism of research methodology
- ensure that students correctly reference all work produced as part of the programme
- ensure that students receive instruction in health and safety issues as appropriate to the research environment.

#### Faculties should:

- run research seminar series and where relevant, research methods courses; encourage attendance at national and international conferences and provide an effective research environment
- provide health and safety training as required for the field of study
- provide explicit training covering all aspects of plagiarism
- require students to report on their work verbally and in writing. Annual reports, transfer reports and interviews will be major points of review covering these areas and should involve someone external to the supervisory team.

#### The University will:

- provide training courses that will include:
  - ethics and confidentiality
  - copyright and its attribution
  - research malpractice and the Brookes mechanisms for dealing with this
  - data ownership and requirements of the Data Protection Act.
  - the process for funding and evaluation of research
  - plagiarism
  - Intellectual Property Rights (IPR), patents and the commercialisation of research.
4. RESEARCH MANAGEMENT

<table>
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<th>Students should be able to:</th>
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<tr>
<td>• apply effective project management through the setting of research goals, intermediate milestones and prioritisation of activities</td>
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<td>• design and execute systems for the acquisition and collation of information through the effective use of appropriate resources and equipment</td>
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<tr>
<td>• identify and access appropriate bibliographical resources, archives, and other sources of relevant information</td>
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<td>• use information technology appropriately for database management, recording and presenting information.</td>
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<th>Supervisors should:</th>
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<td>• where required, give training that will support in developing the research programme and in data collection</td>
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<tr>
<td>• discuss the effectiveness of methods used and other alternatives</td>
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<td>• give support in the effective use of libraries and other information resources.</td>
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<th>Faculties should:</th>
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<tr>
<td>• include relevant project management/planning and information gathering/research methodologies in their research methods training.</td>
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<th>The University will:</th>
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<tr>
<td>• provide courses including:</td>
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<td>- time management, use of milestones, prioritisation</td>
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<tr>
<td>- library and learning resources information.</td>
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<td>• make available information on other resources including the wide range of courses available to research students.</td>
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5. PERSONAL EFFECTIVENESS

<table>
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<th>Students should be able to:</th>
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<tr>
<td>- demonstrate a willingness and ability to learn and acquire knowledge</td>
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<td>- be creative, innovative and original in one’s approach to research</td>
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<td>- demonstrate flexibility and open-mindedness</td>
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<td>- demonstrate self-awareness and the ability to identify own training needs</td>
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<td>- demonstrate self-discipline, motivation, and thoroughness</td>
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<td>- recognise boundaries and draw upon/use sources of support as appropriate</td>
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<td>- show initiative, work independently and be self-reliant.</td>
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<th>Supervisors should:</th>
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<tr>
<td>- encourage independent learning and development of creativity and originality in approach to research</td>
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<td>- allow increasing freedom for independence especially in years 2-3</td>
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<td>- allow students to identify their own training needs and support them in fulfilling them</td>
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<td>- allow time at supervisory meetings for these issues to be discussed.</td>
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<th>Faculties should:</th>
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<td>- develop and use their own monitoring schemes, including first year and transfer reports and interviews</td>
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<tr>
<td>- ensure that the research student is developing effectively in all the above areas. Remedy will require action by the student, the supervisory team and the Faculty.</td>
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<th>The University will:</th>
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<td>- provide a training course to include the concept of a skills diary and of continuous professional development</td>
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<tr>
<td>- make available information other resources including the wide range of courses available to research students</td>
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<tr>
<td>- provide, via the University Careers Service, careers training and resources.</td>
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6. COMMUNICATION SKILLS

Students should be able to:

- write clearly and in a style appropriate to purpose, e.g. progress reports, published documents, thesis
- construct coherent arguments and articulate ideas clearly to a range of audiences, formally and informally through a variety of techniques
- constructively defend research outcomes at seminars and viva examination
- contribute to promoting the public understanding of one’s research field
- effectively support the learning of others when involved in teaching, mentoring or demonstrating activities.

Supervisors should:

- encourage their students to read widely around the subject area and from a variety of sources
- require regular written work and evaluate and criticise it appropriately, providing further training where necessary. First year reports and transfer reports should be seen as being preparation for thesis writing
- support the student appropriately in writing the thesis, always with the aim of creating an independent writer
- create opportunities for students to present and discuss their work formally and informally - for instance in group meetings, supervisory meetings etc.
- provide feedback and training in presentation skills and prepare the student to speak to wider audiences
- where possible, support students in giving a talk to an outside audience or at least to a Faculty or Department during their PhD
- where resources permit, allow students to undertake the OCSLD Associate Teachers course
- undertake viva preparation, including a mock viva and use supervisory meetings to develop the skills needed for a viva.

Faculties should:

- identify (ideally at interview) if a student is likely to require additional support in written English and identify appropriate support (either before commencing study or during study)
- require reports by the student at regular intervals, which will be assessed by supervisors and at least one person external to the supervisory team and monitor the outcome of the assessment of those reports
- give subject-specific training in communication skills and give opportunities for students to attend a wide range of seminars and meetings
- invite the student to present their work by a variety of means (poster, formal talk, informal talk) during their studentship
- identify where possible, opportunities for public understanding activities and support the student in them
- encourage students to use opportunities for teaching and/or demonstrating and support and mentor them in it
- provide some funds to enable students to attend conferences.

The University will:

- provide training sessions on:
  - writing the thesis
  - oral presentation skills
  - the viva voce examination
  - poster presentation skills
- ensure students have access to the OCSLD associate teachers course.
# NETWORKING AND TEAMWORKING

## Students should be able to:

- develop and maintain co-operative networks and working relationships with supervisors, colleagues and peers, within the institution and the wider research community.
- understand one’s behaviours and impact on others when working in and contributing to the success of formal and informal teams.
- listen, give and receive feedback and respond perceptively to others.

## Supervisors should:

- encourage students to engage in dialogue with others in their field and help in establishing initial contacts, networking at conferences etc.
- wherever possible, encourage the student to participate in the research team, mentoring less experienced students, commenting on other’s work etc.
- informally monitor progress in these areas and provide support and advice in developing skills.

## Faculties should:

- where possible, ensure that students join research groupings (teams) and are provided space and facilities that encourage interaction between research students and with other staff.
- encourage team working by Faculty research policy and selectivity. By being part of a national and international research community, Faculties will encourage students to see the importance of contacts and to engage in dialogue.
- the University would facilitate interdisciplinary team working and activities at both Faculty and Departmental level.

## The University will:

- provide training courses and social events that give opportunity for networking and collaboration across the University.
- provide induction to include advice on networking and developing collaborative strategies.
Appendix 1
A summary of Faculty and University provision

**Faculties will seek to meet the training needs of research students by:**

1) Running an induction event.
2) Having a research seminar series.
3) Providing research methods courses where relevant.
4) Supporting attendance at national and international conferences.
5) Providing an effective research environment including: encouraging students to join research groupings and providing space and facilities fostering interaction between research students and other staff.
6) Running subject-specific training in communication skills which should include both written and presentation skills.
7) Providing appropriate health and safety training.
8) Requiring students to provide written reports and talk about their work and its wider context.
9) Giving opportunities for students to attend a wide range of seminars and meetings and to present their work by a variety of means.
10) Providing information on public understanding activities and supporting the student in them.
11) Encouraging students to use opportunities to teach and demonstrate and supporting and mentoring them in it.
12) Being part of a national and international research community and encouraging students to see the importance of contacts and to engage in widespread dialogue.

**In addition,** the Faculty will identify (ideally at interview) if a student is likely to require additional support in English and identify appropriate support (either before commencing study or during study).

**Monitoring function**

Faculties should require formal registration of the project within the University's deadlines and be satisfied with the standard of the registration, including its statements of training.

Faculties will require students to report regularly on their work verbally and in writing. Assessment should involve someone external to the supervisory team.

Faculties should keep a record of the training undertaken by its research students and periodically review the take-up and effectiveness of that provision.

Faculties will provide an annual report on training activities to RDSC via the Research Degrees Team for the Research Training Co-ordinator. Details of the report are provided in Appendix 2.
Summary of provision by the University

The University will seek to provide:

1) University wide induction events including:
   • training and managing the training process
   • time management and milestones
   • student supervisor relationships
   • monitoring and progression
   • networking and developing collaborative strategies
   • introduction to University facilities including library and learning resources.

2) Training courses and social events giving opportunity for networking and collaboration across the University.

3) University training courses:
   • ethics
   • copyright and its attribution
   • research malpractice and the Brookes mechanisms for dealing with this
   • data ownership and requirements of the Data Protection Act
   • the process for funding and evaluation of research
   • IPR, patents and the commercialisation of research
   • additional workshops on specific topics (e.g. statistics)
   • writing your thesis
   • oral presentation skills
   • the viva voce examination.

4) Other University training will be provided including:
   • careers specific training and resources
   • information technology
   • the OCSLD associate teachers course.

5) Web resources will give information on:
   • training available in the University and outside
   • careers links and further information on career development; information on research student training in the University
   • a 'Skills diary' research students can use to plan and record training
   • details of University regulations
   • contact details for key people in Faculties and the University
   • links to resources of use to research students.
Appendix 2

Annual report on Faculty training provisions

Faculty postgraduate tutors will provide a brief annual report to the Research and Knowledge Transfer Committee each June via the Research Training Co-ordinator giving details of training activities in the current academic year. The report should include the following details:

1) Number of part-time and full-time students in each year.
2) Number of students attending formal or informal induction.
3) Training activities organised (a copy of the programme given to research students will suffice).
4) Details of any other noteworthy Faculty or external training taken up by students or examples of first destination employment where former students have benefitted from training received.
5) Indication of any special training provision made for part-time research students.
6) Particular difficulties encountered in providing training in the Faculty, its take-up by students or with the University’s central training provision.
7) Review the effectiveness of the training provided.
8) Reflect on the Faculty’s Annual Monitoring Report.

Approved by the Research Degrees Sub-Committee - 15 December 2009
Approved by the Research and Knowledge Transfer Committee – 16 March 2010
Updated by Head of Research Degrees Team – December 2013

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