# SCHOOL OF PHYSICS & ASTRONOMY
## Faculty of Engineering and Physical Sciences

# MSc PHYSICS
# STUDENT HANDBOOK

## 2014-15

**Disclaimer: The information contained in this handbook is correct at the time of your receiving it but the University, while retaining proper regard for the interests of students who have begun their programmes, reserves the right to alter the programmes or the timetable if the need arises.**

Revision: August 2014

# Contents

# 1 Introduction

This handbook is for students taking the MSc by Research in Physics course. It is intended to provide a description of the programme aims and objectives, the programme structure, content assessment and management. It also describes the regulations and processes associated with the programme. Additional information is available on the School website (http://www.manchester.ac.uk/physics), the Faculty of Engineering and Physical Sciences (EPS) website (http://www.manchester.ac.uk/eps) and the University website (http://www.manchester.ac.uk).

The degree awarded at the successful completion of the course will be MSc Physics (sub-area) where sub-area corresponds to the particular research area in which the student has specialised. Currently the available areas are biological physics, theoretical physics, nuclear physics, particle physics, condensed matter physics, nonlinear & liquid crystals and photon physics.

## 1.1 Programme Structure

The Master of Science by Research (MSc) programme is a 1-year course running September to September each year, although it is possible to complete it part-time over a 2-year period.

The course will normally consist of a 135 credit research project, in addition to no more than 45 credits of taught content, making 180 credits in total. The taught content will serve to provide the student with research skills and a depth of specialist knowledge that is directly applicable to the field of research.
The taught content will consist of course units, normally comprising three 15 credit course units. These will usually occur in the first semester to ensure that the student has undertaken the necessary skills training and acquisition of specialist knowledge prior to beginning their research proper. However, depending on the options requested, one or two modules may occur in the second semester.

**The choice of taught modules for each student will be agreed between the student, supervisor and the MSc Programme Director**. In addition, students may be required to attend group meetings, seminars, presentations or other events.

## 1.2 Programme Management

The Programme is managed and operated in accordance with the policies, principles, regulations and procedures of the University of Manchester.

The day to day management of the programme within the School of Physics and Astronomy is handled on behalf of the Head of School by the Director of Postgraduate Studies (PG Director) and the Postgraduate Committee which includes representatives from each of the research groups, and PG student representatives.

The important members of the School's postgraduate management team for programmes in Physics are:

| Role | Name | ✉ | ☎ |
|---|---|---|---|
| Head of School | Prof Stephen Watts | stephen.watts@manchester.ac.uk | 69222 |
| Director of PG Studies | Dr Mark Dickinson | mark.dickinson@manchester.ac.uk | 54215 |
| Programme Director | Dr Gavin Smith | gavin.smith@manchester.ac.uk | 54156 |
| PG Examinations Officer | Dr Mike Godfrey | michael.j.godfrey@manchester.ac.uk | 63182 |

Research Group Contacts:

| | | | |
|---|---|---|---|
| Astronomy & Astrophysics | Dr Malcolm Gray | malcolm.gray@manchester.ac.uk | 63967 |
| Biological | Prof Henggui Zhang | h.zhang-3@manchester.ac.uk | 63966 |
| Photon | Prof Phil Dawson | philip.dawson@manchester.ac.uk | 63183 |
| Condensed Matter | Dr Irina Grigorieva | Irina.Grigorieva@manchester.ac.uk | 54065 |
| Liquid Crystals | Prof Helen Gleeson | helen.gleeson@ manchester.ac.uk | 54071 |
| Nonlinear | Prof Tom Mullin | tom.mullin@manchester.ac.uk | 54070 |
| Nuclear | Dr Kieran Flanagan | kieran.flanagan-2@manchester.ac.uk | 54281 |
| Particle | Prof Terry Wyatt | terry.wyatt@manchester.ac.uk | 54173 |
| Complex Systems | Dr Tobias Galla | tobias.galla@manchester.ac.uk | 54264 |
| Theoretical Biological Physics | Prof Henggui Zhang | h.zhang-3@manchester.ac.uk | 63966 |
| Theoretical Nuclear Physics | Prof Mike Birse | mike.birse@manchester.ac.uk | 54206 |
| Theoretical Particle Physics | Dr Mrinal Dasgupta | mrinal.dasgupta@manchester.ac.uk | 54204 |

54100

School Office

## 1.3 Calendar for 2014/2015 Session

### 2014

| | |
|---|---|
| 15-19 September | Registration Week |
| 18 September | PG poster session |
| 22 September | Semester 1 lecture courses commence |
| 12 December | Semester 1 lecture courses finish |

*15 December – 09 January - Christmas Vacation [no lectures]*

### 2015

| | |
|---|---|
| 12 – 23 January | Semester 1 Examinations |
| 26 January | Semester 2 lecture courses commence |

*23 March – 10 April – Easter Vacation [no lectures]*

| | |
|---|---|
| 14 May – 03 June | Semester 2 Examinations |
| 07 September | Deadline for MSc dissertation submission |
| 07 – 11 December | Graduation (for graduation information go to http://www.studentnet.manchester.ac.uk/crucial-guide/academic-life/graduation/) |

# 2. Programme of Study: Course Aims and Objectives

The programme is designed for postgraduate students who seek to:

- Pursue a career in research and/or teaching both in the UK and other countries.

- Pursue a career in industry or commerce.

- Further their professional knowledge and standing, by studying and carrying out research in physics and astronomy at the frontiers of human knowledge.

There is emphasis in the course on self-motivation, particularly when undertaking the dissertation. Students are expected to build on the formal teaching, by studying preprints, published papers and conference proceedings, and by attending seminars, presentations and group meetings in order to expand and develop their knowledge of their field and other areas of physics.

## 2.1 Aims

The aims of the lecture modules are to develop and expand the student's knowledge and understanding of current physics and mathematics and to expose them to some of the techniques and tools required for them to undertake research in physics at a professional level.

The aims of the research project are to develop the student's skill to investigate observed or calculated phenomena. In addition the research project will allow the students to develop:

- the ability to work independently and constructively within a research group in the laboratory or in a theory environment;

- intellectual and communication skills necessary to present and articulate research findings in verbal and written formats;

- skills of numerical manipulation, and statistical analysis, of data using sophisticated computer software.

## 2.2 Intended Learning Outcomes

On completion of the MSc programme, a successful student will be able to:

- Critically assess a project to evaluate the best strategy to achieve the desired outcome.

- Plan and manage a research project to appropriate timescales and respond and adapt to changing circumstances.

- Understand the physical basis of the operation of apparatus for measurement (detectors), so that the impact of the apparatus on the physical observations can be understood.

- Understand the essential mathematical descriptions of physical phenomena.

- Use sophisticated computer software to analyse data.

- Link the research findings into physics knowledge obtained variously in lectures, read in journals, encountered in the laboratory or obtained by the student from self-questioning, from the lecturers, supervisors and from other research group colleagues (including other students).

# 3 Progression and Course Structure

## 3.1 Requirements for the Award of Degree

For the award of the MSc a student will be required to obtain an average mark of not less than 50% in the taught modules and their dissertation must be deemed to be at a satisfactory level by the examiners. Students with an average mark of 70% or higher in the taught units and with a dissertation deemed by the examiners to be of a suitable standard may be awarded a distinction. Any student who is required to resit one or more course units will not be eligible to achieve a Merit or Distinction at Masters level.

## 3.2 Taught Modules

Students may only choose from a list of approved taught modules. The list of available taught modules can be found at https://www.teaching.physics.manchester.ac.uk/TW4_PG/PG%20courses%20(full%20list)%2014-15.pdf

Each postgraduate lecture module carries 15 credits.

**PLEASE NOTE:**
**If you elect to take a course that is also given at UG level and you are a postgraduate student IT IS YOUR RESPONSIBILITY TO LET THE TUTOR KNOW so that they know to set you the extra**

**assessment that makes up the additional 5 credits (UG courses carry 10 credits and PG courses carry 15 credits).**

Each course unit will have a presence in Blackboard. Blackboard is a web-based system that complements and builds upon traditional learning methods used at The University of Manchester. By using Blackboard you can:

- view course materials and learning resources;
- communicate with lectures and other students;
- collaborate in groups;
- get feedback;
- submit assignments;
- monitor your own progress;

at a time and place of your own convenience. You can find up to date information about Blackboard on the University webpages at http://www.studentnet.manchester.ac.uk/blackboard/

*An MSc student may take no more than one 15 credit level 3 course*. The exact taught modules each student will undertake will be agreed between the student, supervisor, advisor and if necessary, the MSc Programme Director.

One of the MSc modules that can be undertaken for 15 credits is a literature review based upon your general field of study, which is organized by the supervisor and which is marked by a different member of your research group. This module can be taken only once, but can occur in either semester as agreed by your supervisor and the MSc programme director. This would normally comprise a comprehensive review of the field written up as a small dissertation of around 20 pages, and must be on a topic which is not that of your MSc project.

The method of assessment for other modules varies from module to module and may consist of written examinations, interviews and oral assessments, continuous assessment in any of a number of different forms including example sheets, the production of written reports or the presentation of seminars, or a combination of these.

**Any late piece of work will lose 10 marks if it is less than 24 hours late and an additional 5 marks per day thereafter, including weekends. Loss of marks is applied after conversion to a percentage; thus a piece of work graded at 60% which is up to one day late will be awarded 50%.**

**All students must submit two copies of all pieces of assessed work. Only one Assessed Coursework Coversheet is required for both copies.**

**Assessed Coursework MUST NOT be spiral bound or in plastic pockets and MUST be anonymous – DO NOT PUT YOUR NAME ON EITHER COPY OF THE ESSAY OR ASSESSED COURSEWORK.**

**Assessed work must be submitted during School Office opening hours of 10am until 4pm. Any assessed work not submitted by 4pm on the day of the deadline will be deemed to be late.**

**PLEASE NOTE that coursework may not be handed in on behalf of another student. If any student is unable to submit by the deadline they must bring evidence of mitigating circumstances (eg medical note) in order not to incur a late submission penalty.**

**The deadline for receipt of Mitigating Circumstances forms and the evidence to support them is the last day of the examination period in the relevant semester.**

**All assessed coursework must be submitted before the examination period begins so deadlines will only be set during term time and before the first day of examinations. Deadlines will not be permitted on Fridays as the penalties for late submission are enforceable over the weekend which may disadvantage students who miss the deadline.**

In examination papers, a marking scheme is given as a guide to the relative importance of different parts of each question. Examiners follow these guidelines, but they may make small amendments in order to take into account how questions have been answered by the majority of students. No additional credit is given to students who answer more than the number of questions specified on the exam paper. If, for example, three questions have been answered (in whole or in part) when only two are required, then the last question attempted will be ignored. If you have attempted a question, but do not wish it to be marked, because you wish a later answer to be marked instead, you should cross through the unwanted attempt. Examiners will use their discretion to judge what constitutes an attempt.

Marks for the taught component of the course will be considered by an examination board at the end of each teaching semester. Students who fail to achieve the required pass mark of 50% in a taught module, may at the discretion of the examination board, be allowed to undertake on one further occasion an additional assessment (the form of which is at the discretion of the module leader) in that module. However, the maximum mark to be awarded for resubmitted coursework or retaken examination will be 50% on transcripts and will be marked with an R (re-assessed work). (Note that no compensation of marks is allowed.) Any student who

is required to resit one or more course units will not be eligible to achieve a Merit or Distinction at Masters level.

### Checking of Examination Marks

The School has in place a number of measures for ensuring fair and accurate marking of examination scripts and recording of marks, including double checking of marks entered on grids and checking of scripts where progression or resit decisions could be affected.

If a student has genuine cause to believe that a mistake has been made in the marking, they may request, via the School Office, to have the marking checked. There is a fee for this, currently £15 per paper, which is refunded if the mark is found to be wrong by more than 5%. Checking is done by an independent member of the academic staff, using the original marking scheme. The checking could result in a lower mark. Experience over the years shows that such checks rarely lead to any changes. Any requests for checking must be made no later than 20 working days after the publication of examination results.

In line with the University Policy on Feedback to students, an opportunity will be granted to students who request to see their exam scripts, but this will usually be some time after the exam, and is not formally connected with the checking procedure specified here.

### 3.2.1 Mitigating Circumstances

Any student who feels they have mitigating circumstances which prevent them from submitting assessed coursework or attending examinations should fill in the Mitigating Circumstances Form and attach the appropriate supporting documentation and submit both by the appropriate deadline. In each semester this deadline will be the last day of the examination period.

The form can be downloaded at:
http://teachweb.ph.man.ac.uk/TW4_PG/Course_Information.html

### 3.3 Research Dissertation

Each student will be allocated a dissertation supervisor who will guide the dissertation research. The dissertation will be marked by an internal examiner, who is not the student's supervisor, and an external examiner nominated by the supervisor. A research project and supervisor will be assigned shortly after the start of the course. ***The student generally works on the project throughout the course, though for the first part of the course, time is divided between project work and***

***lectures. From May onwards the student works full time on the given project.***

Dissertations should be submitted in accordance with the information set out in the University's Guidance Notes for the Presentation of Dissertations, available at
http://documents.manchester.ac.uk/display.aspx?DocID=7420
At least two months prior to the submission of a dissertation, a student must complete and submit a Notice of Submission Form which will automatically become available in eProg. The completed dissertation must be handed in to the EPS Graduate School, Room C4 in the Sackville Street Building, by the submission deadline. **The deadline for submission of an MSc dissertation is 07 September 2015.**

**PLEASE NOTE that this is the deadline for the two hard copies of the dissertation and that the electronic version must be submitted through eScholar at least 3 calendar days before that deadline.**

**It is important that you and your supervisor come to an agreement on the style and content of the dissertation as soon as possible, so that a well defined work programme can be established with this deadline in mind.**

The dissertation will be read by an external examiner, appointed by the EPS Graduate School on the recommendation of the supervisor and PG Director, and by an internal examiner who will be a member of the academic staff. The examiners will normally make a recommendation about award of the degree on the basis of this reading, but in exceptional circumstances may call the candidate for an oral examination before making this recommendation. The examiners may recommend acceptance of the dissertation (with or without minor corrections) for the award of an MSc, possibly with distinction, or if the dissertation is not of a sufficient standard, re-submission in amended form, or outright rejection. (Re-submitted dissertations can not be awarded distinction.)

At the recommendation of the Examiners, students will normally be allowed one resubmission of a failed dissertation or project and this will normally be within four months of the date of the publication of the result. The Examiners, may, exceptionally, decide not to allow resubmission. The Faculty will agree that the grounds for allowing/not allowing a resubmission are justified.

On successful completion of the programme within the normal time frame, graduation can take place in December.

Students for the degree of Master of Science by Research (MSc) are expected to submit their dissertation within the standard period of the

degree programme. However, in exceptional circumstances and at the discretion of their School, a student may be permitted to register for a period of submission pending up to four months for the sole purpose of completing the write-up of the dissertation. A submission pending fee is payable by the student for any such submission pending period that is granted by their School.

The regulations can be found on the Graduate Education website;

http://www.staffnet.manchester.ac.uk/services/rbess/graduate/ordinancesandregulations/

### 3.4 Dissertation Advice

The production of a dissertation is almost certainly the largest single academic and literary task you will have attempted. Few students realise how much effort goes into the production of a worthy dissertation. A typical timescale is about four to six months. There are varying attitudes by both supervisors and students to reading and commenting on drafts of theses. This depends largely on the individuals concerned, but it is important to agree on the procedure early on to avoid misunderstanding. **The importance of clear writing in good English cannot be overstressed.**

It is worthwhile looking at a few examples of recent MSc dissertations before starting to plan your own dissertation. The reader should be assumed to be a physicist in your field of research, although not an expert in the particular work described. The most useful recommendation is to make sure your dissertation coherently tells a good story; do not flip haphazardly from subject to subject, and keep your best results and conclusions to the end. Most complaints from external examiners centre on poor spelling, punctuation and illogical presentation of topics; it is worthwhile having a colleague read your final draft to eliminate these. The University and Faculty has strict regulations regarding the format of theses. Make sure that you conform to them.

Here are some general points:

***Presentation***

Presentation should be of a high standard with no spelling, typographical, grammatical or punctuation errors. Tenses should be consistent and appropriate. Notation should be consistent. There must be sensible numbering of equations, tables, figures, references and other items. Jargon must be avoided. Graphs must have sensible scales and labelled axes.

***Background material***

The dissertation should include a description of relevant background material and literature, including theory and experimental equipment, to enable the reader to understand the research, and to demonstrate the author's understanding. This description should not be a mere list, but show evidence of critical judgment, e.g. by explaining why certain choices were made. The main reason for the dissertation is to demonstrate the author's actual work and contributions to the research undertaken. Hence the amount of background which is given should not be excessive; 20-30% of the dissertation is normally regarded as a reasonable proportion.

***Academic Standard***

It is important that the work be described in sufficient detail so that another researcher could confidently repeat it. Most importantly, the reader must be able to assess the reliability of the conclusions, i.e., the author must convince the reader that the results can be justified and should be believed. The dissertation material should be set in the context of current research; other relevant work must be cited, and if appropriate compared to that which has been undertaken.

Ideally, the content of a dissertation should be suitable and ready for publication and this should be the goal. However it is realised that this may not always be possible in the time available. At the very least it should be straightforward for the supervisor, or some other colleague, to bring your work to the stage for publication.

### 3.5 Plagiarism

Plagiarism is the unreferenced use of other authors' material in your assignments and dissertations. **If you reference other people's work it must be acknowledged clearly.**

The University's regulations state very clearly that plagiarism is a serious academic offence and the consequences of committing such an offence are severe.

All students should read the guidance notes on plagiarism and academic malpractice which are available at: www.manchester.ac.uk/policies/

If you are in any doubt you must seek guidance from your supervisor. The induction process with which you start your programme also contains a section on plagiarism to help you. Here are some simple examples for which you need a reference:

- A direct quotation from a book or article or the web

If a **book** quote :

Author (year of publication), title, publisher

If a **paper** in a journal quote:
Author (year of publication) paper title, journal title, volume, volume number, page numbers

If on the **web** quote:
Author, URL, (retrieved date)

- when you are reporting **someone else's views** but writing them in your own words: (author)

- when you are using **someone else's work** to back one or your claims: (author)

**Good advice: if in doubt, it is always better to quote the reference**

### 3.6 Appeals Procedure

In the event that a student wishes to appeal against a mark, grading or a decision on progression, it is important that the appeal is made to the MSc Programme Director in writing (or e-mail) as soon as possible. A copy of any supporting documentation (not the original) should be supplied. The postgraduate committee undertakes to promptly consider and deal with appeals on the grounds of bias, prejudice or inadequate assessments as set out in the University Regulations. The decision on the appeal will be notified to the student by the MSc Programme Director. Thereafter, if the student wishes to take the matter further, the MSc Programme Director will refer the circumstances to the Director of Postgraduate Studies and the Head of School who may deal with the matter within the School or advise the student to contact the Faculty.

### 3.7 Electronic monitoring of progression

eProg is a University-wide system for postgraduate researchers to record and monitor progression throughout their programme and manage skills training activities. The eProg system offers an online platform for academic staff and their PGR students to record and track key milestones throughout the student's programme, from the point of registration to thesis examination. The system also provides access to an extensive catalogue of skills training activities across the University.

Accessing eProg
eProg can be accessed via the *Student Portal* by going to
https://my.manchester.ac.uk/uPortal/f/home/normal/render.uP

Components of eProg

eProg is made up of the following components:

- Personal timelines: Each student has a personalised bespoke timeline which provides a visual representation of forthcoming key milestones and information that make up your programme of study.
- Progression: Each student has their own progression area which provides a detailed list of milestones and skills training activities with the dates or deadlines attached.
- Online forms: Students will be required to complete online progression forms which are tied to individual milestones. These forms provide a formal record of meetings or discussions between you, your supervisor and your advisor. It also provides an opportunity for any issues or problems to be raised. All forms and the deadlines by which they must be completed can be found on your eProg progression page. You can access, complete and save information at any time prior to these meetings and we recommend that you do this so that information is available to review before each meeting takes place. At the meeting your supervisor or advisor will complete the remainder of the form with their comments and feedback. This provides us with a record that you are making satisfactory progress.

- Skills training: A skills training area where students can search training events across the University, book onto any courses of interest and view courses they are registered for or have attended
- Help and support: Help and advice on how to use eProg and useful links to online training (in Blackboard)

<u>Student responsibilities</u>
Your responsibilities as a student are:

- to meet with your supervisor and advisor to review progress and to complete the appropriate online forms
- to attend/complete all mandatory skills training components

<u>Supervisor and advisor responsibilities</u>
The supervisor's and advisor's responsibilities are:

- to meet or liaise with their students in a timely manner to discuss student's progress and to submit the appropriate online progression forms
- to encourage attendance of their students at all required skills training events

<u>Contacts</u>
For queries related to specific milestones on your programme, please email rebecca.shaw@manchester.ac.uk.

### 3.8 Attendance monitoring

Recording and monitoring student attendance is a University requirement as stated in Regulation XX and as documented in The Policy on Recording and Monitoring Attendance

Attendance points for postgraduate research students will be recorded monthly via the attendance and engagement forms within the University's online progression system, eProg. It is the main supervisor's (or appropriate member of the supervisory team's) responsibility to ensure that attendance and engagement forms are completed in a timely manner for each of their students.

Where a pattern of non attendance that meets the trigger points or causes for concern is recorded, the School will contact the student and request that they attend a meeting with their Programme Director (or nominee) or PGR Director.

If the student fails to respond to this request to meet with the Programme Director (or nominee) or PGR Director, within 5 working days, and/or is absent on one further occasion, or attends the meeting but fails to provide a satisfactory explanation for not complying with the programme's attendance requirements, the School will issue a formal warning.

The warning will indicate the steps to be taken to affect the necessary improvement in attendance, including the consequences of further poor attendance. This letter will be kept in the eProg personal document store for Postgraduate Research students.

In instances where the School is satisfied that circumstances exist which show good cause for the student's failure to comply with the attendance requirements, alternative action may be taken. This should include referral to relevant support services where appropriate. Information about sources of support can be found at the end of this document.

If a student fails to comply with the steps to be taken to improve attendance the Examination Board/PGR progress committee may refuse the student permission to proceed on their programme, with the consequences that s/he may be excluded from the programme of study. Examination Boards can also refuse referred assessment.

A student who is refused permission to take any form of assessment or progress on the grounds of unsatisfactory attendance may submit an appeal against that decision within ten working days of the notification of the decision, in accordance with the provisions of Regulation XIX (Academic Appeals). In order to allow sufficient time for the completion of an appeal, the latest date upon which a refusal may be issued for taught students is the last teaching day of the second semester.

The University expects that all students will attend every timetabled teaching or learning session or required supervisory session, unless absence has been authorised.

# 4 Student Responsibilities

## 4.1 Personal Details

Students are responsible for updating their personal details in the student system by going to their student portal. If you have problems logging in please contact 0161 275 5000 or email selfservice@manchester.ac.uk and not the School of Physics and Astronomy. All email correspondence from the school will be undertaken using the university email address that you will be given upon enrollment.

## 4.2 Attendance

It is crucial that postgraduate students attend regularly and maintain a continuous dialogue with their supervisors. Attendance at the courses for which the student has registered is a normal requirement. As well as securing the appropriate grade by assessment, it is also a formal requirement that students earn the relevant number of credits. Credits are obtained by attending courses, through private study, by being assessed, by project work and by other group related activities such as attending seminars. Failure to attend the courses means a failure to obtain a sufficient number of credits to progress to the award of diploma or degree. For those students receiving financial support, it should be noted that the supervisor and Director of PG studies may be required to sign a certificate of satisfactory attendance and work in order for payments to continue.

Satisfactory attendance, which is determined by the Programme Director, is required at School and group seminars and workshops that are relevant to the student's research interests. They are also encouraged to attend other seminars as part of their general scientific education. Since communication is a vital part of science, you may be asked to make a verbal presentation of the results of a literature survey concerning your project or your research data.

# 5 Student Support and Guidance

## 5.1 Support

Postgraduate training in the School of Physics and Astronomy differs from undergraduate training in many ways. An important feature is that the student becomes an integral part of a research group working in their chosen field. The research group provides the kind of close support and guidance which is unfeasible at undergraduate level and which should become one of the many rewarding research experiences. Within the research group, the student will have a supervisor. The supervisor will be responsible for allocating and discussing the project and will respond to day-to-day queries on science and administration. Students are also allocated an advisor who will normally be the group postgraduate (PG) contact and will provide additional support and guidance.

The School also supports a peer mentoring programme in which experienced, trained, postgraduate students act as mentors for less experienced PG students.

### 5.2 Student Appeals and Complaints

The School and the University take the well-being of their students very seriously. Students who have cause for concern are asked to speak to their supervisor in the first instance. The more information the student can provide the more effective this discussion is likely to be. Alternatively, a student may seek advice from Student Information, Advice & Guidance (IAG) Service (atriumadvice@manchester.ac.uk), or the Students' Union Advice Centre (0161 306 4009 or 0161 275 2858; www.umu.manchester.ac.uk).

If matters remain unresolved, then the student should consider making a formal appeal or complaint. Information about the processes involved can be obtained from: www.manchester.ac.uk/policies/

### 5.3 Student Feedback and Representation

A student representative from each research area is invited to attend meetings of the postgraduate committee. The invitation is made, typically via group contacts, asking all eligible students if they wish to undertake this role.

Questionnaires are circulated to all students who attend lectures providing the opportunity for these courses to be assessed by students according to a number of criteria on a scale ranging from well above average to well below average. Students are also encouraged to discuss matters of concern with their supervisor or advisors.

Comments made by students at the postgraduate committee, via course questionnaires or directly through supervisors, advisors or the pastoral care scheme will be considered by the postgraduate committee or by the

PG Director in consultation with relevant people. Feedback in response to student comments will be made in the form of committee meeting minutes or directly through supervisors.

### 5.4 Code of conduct for students and supervisors

The University has a formal Code of Conduct for students and supervisors.

http://www.staffnet.manchester.ac.uk/services/rbess/graduate/code/

http://www.staffnet.manchester.ac.uk/services/rbess/graduate/code/supervision/

http://www.staffnet.manchester.ac.uk/services/rbess/graduate/code/progressandreview/

#### 5.4.1 The Role of the School

The School contains many research groups covering a wide range of interests in Physics and Astronomy. It is inevitable and probably even desirable that the various groups provide rather different environments in which you will work. However, the general pattern of supervisory practice is the same throughout the School. Admission to a research group is made on the basis of your interests, qualifications, and, of course, the availability of places. In most cases, students are well satisfied with this. In the rare case where you find yourself in a group in which you are unable to work to your full potential, the normal procedure to resolve this problem is through discussion with the Programme Director and group head. The ultimate recourse is to the PG Director acting in consultation with the Head of the School.

#### 5.4.2 The Role of the Supervisor

The University Code can only be a guideline whose detailed application depends on circumstances. The most important general requirements are that the supervisor is approachable and accessible, and that when advice or recommendations are given, you feel that they are constructive and fair. A very important part of the supervisor's responsibility is in helping to plan deadlines, for example, in connection with the various reports that you must complete. This implies that frequent and adequate consultation between you and your supervisor takes place. A reasonable guide to this is a minimum contact time of an hour each week. Supervisors are expected to make suitable arrangements for supervision in the event of their absence.

#### 5.4.3 The Role of the Student

The University Code requirements for students can be summarised in three words: communication, application and motivation. As far as communication is concerned, even experienced supervisors may not be aware of some particular problems and you should take the initiative to make sure that these are communicated to the supervisor. Application and motivation are largely up to the individual but even here, supervisors can help considerably by providing an appropriate working environment. Approachability and accessibility are, of course, an important ingredient for success in research for both you and your supervisor. You should consult with your supervisor if you need to be away from the School for any period in excess of a couple of days. Illness must be reported to your supervisor, and you should take particular care that you comply with the regulations of your funding body in the event of protracted absence due to illness or any other reason.

### 5.5 Channels for Appeals and Complaints

In the case of any general grievances or complaints, other than appeals against marks, the student is encouraged to initially raise the matter with their supervisor, advisor or the PG mentor. If the matter is not resolved at this stage, or if none of these points of contact seems appropriate, the student is encouraged to raise the problem with the PG Director and then, if necessary, the Head of School.

## 6 Course Modules Available to MSc Students

### 6.1 Transferable Skills

The Graduate Development programme runs a wide range of courses which are available to MSc students. Students are required to attend the introductory modules. Details are available from http://www.researchsupport.eps.manchester.ac.uk/

The courses usually covers topics such as:
- ☐ Managing your research project
- ☐ Team working
- ☐ Presenting to different audiences
- ☐ Presentation skills for those whose 1st language is not English
- ☐ Finding a job in the UK
- ☐ Finding a job Overseas
- ☐ Applying for jobs - CVs and applications

**PLEASE NOTE that transferable skills courses do not carry credits and cannot be substituted for the three 15 credit course units that**

**you must take to satisfy the requirements of the taught component.**

### 6.2 Specialist Physics Modules

Course unit information and details of the lecture timetable can be found at
https://www.teaching.physics.manchester.ac.uk/TW4_PG/Course_Modules.html
Course unit with numbers ending in 1 are given in the first semester, those ending in 2 are second semester courses. Marks for these courses include completion of given assignments and a formal examination at the end of the relevant semester. It is extremely important that postgraduate students obtain the lecturer's agreement (in addition to that of their supervisor) before attending a lecture course.

## 7. Tier 4 Visa Attendance Monitoring Census

The University operates attendance monitoring census points within the academic year in order to confirm the attendance of students holding a Tier 4 Student Visa. This is to ensure the University meets the UKVI statutory requirements as a sponsor of Tier 4 students and its responsibilities in accordance with its Highly Trusted Sponsor status.

If you are a Tier 4 visa holder, you must attend these attendance monitoring census points, in addition to complying with the School's own programme attendance requirements.

### When are the census points?

In the 2014/15 academic year, the attendance monitoring census points will be during the following periods:

| Census Point | Dates | Population |
|---|---|---|
| October 2014 | 29 September - 13 October 2014 | All active Tier 4 students |
| January 2015 | 12 - 26 January 2015 | All active Tier 4 students |
| May 2015 | 13 May - 3 June | All Active Tier 4 students |
| July 2015 | 17 July - 3 August | Active PGT, PGR and visiting students only |

Please note:

- If you are a new student, registration is your first point to confirm your attendance at the University and you will not be required to attend a further census point in October 2014.

- Postgraduate taught and research students will also have an additional attendance monitoring census point in the period **17 July to 03 August 2015**

- You will receive an e-mail from the School to confirm when and where you should attend to have your attendance confirmed. You must check your University e-mail account regularly. Failure to check your e-mail account is not a valid reason to be absent from a census point.

## What if a Tier 4 student cannot attend a census point?

If you cannot attend in person due to a valid reason which includes: illness; placement; field studies; on year abroad; research work; or any other reason connected to your programme of study, you must email the School to inform us of your absence and your inability to attend in person. In the case of illness, you must provide a copy of a medical certificate. If you are in this position you should report in person to the School as soon as possible after you return to campus.

Students who are recorded as interrupting their studies are not expected to attend during their period of interruption.

## What happens if a student does not attend a census point?

The School must be able to confirm your presence to the UKVI by the end of each census point in the academic year. If you do not attend a census point when required by your School and you do not provide a valid explanation for your absence you will be deemed to be "not in attendance".

Those students identified as "not in attendance" will be reported to the UKBA and the University will cease to sponsor the student's Tier 4 visa. The Tier 4 visa will then be curtailed and the student must leave the UK within 60 days

## Further information

For more information on Tier 4 visas:
www.ukba.homeoffice.gov.uk/visas-immigration/studying/adult-students/

If you have any concerns about the attendance monitoring census points, or your Tier 4 visa status, please contact visa@manchester.ac.uk

# 8 Additional Information

## 8.1 Teaching and Demonstrating

There are opportunities for postgraduate students to work as paid demonstrators in undergraduate laboratories and as tutors giving tutorials and workshops. This must be agreed with the supervisor who can give advice on whether this is appropriate. Interested students should contact the Director of Teaching, Dr. Peter Mitchell (peter.mitchell@manchester.ac.uk) or Dr Neal Jackson (neal.jackson@manchester.ac.uk), Laboratory Director. The University requires students who tutor or demonstrate in laboratories to attend a training course. Details of the course can be obtained from the Faculty Graduate Office.

## 8.2 Holidays

The timing of holidays and other time away from the University must be discussed with, and agreed by, your supervisor.

## 8.3 Learning Resources

### 8.3.1 Email

When you registered you will have been given a university email account with an address ending @postgrad.manchester.ac.uk. This is the only account to which the University will send information. If is vital that you check this account for email regularly as the University assumes that you will receive and read all email sent to this account. It is possible to set up this account so that emails sent to it are forwarded to some other email address, however, it remains the responsibility of the student to organise this.

In the School of Physics and Astronomy most computer resources for postgraduates are provided by the student's research group. Supervisors can provide more details.

### 8.3.2 Library

The University library is the John Rylands Library (www.library.manchester.ac.uk). The library has several sites on campus including the Main Library which is off Oxford Road, the Precinct Library in Crawford House and the Joule Library on E floor of the Sackville Street Building.

## 9. GRADUATE DEVELOPMENT

### Faculty of Engineering & Physical Sciences

**STAFF:** Dr Jim Boran (Researcher Development Manager)
Dr Gemma Muckle (Researcher Development Officer)
Dr Alex Hinchliffe (Researcher Development Assistant
Alys Kay (Online Development Officer)
Dee-Ann Johnson (Communications Officer)

**WEBSITE** http://www.researchsupport.eps.manchester.ac.uk/
**EMAIL** eps-grads@manchester.ac.uk
TWITTER http://twitter.com/epsgrads/
EPROG http://www.manchester.ac.uk/eprog

**AIMS:** Within the Faculty of Engineering and Physical Sciences our goal is to encourage you to reach your full potential by providing support that complements the key stages of your research programme. Graduate Development offers a range of training and development opportunities that you can choose to engage with as and when you need to. Built around individual personal development plans and self-reflection, our face-to-face and online training enables you to successfully complete your degree and maximise your future employability.

The Graduate Development programme is based around seven core skills:

- Research skills and techniques
- Understanding the research environment
- Research management and information literacy
- Professional effectiveness
- Communication skills
- Networking and teamworking
- Career management and lifelong development

We aim to help you gain and enhance those skills that best meet your individual personal and professional needs. This is achieved through personal development planning – a four step cycle including:

- Conducting a skills audit through the online Development Needs Analysis – compare your existing skills with the skills needed to be a successful researcher and identify areas of strength and areas where you benefit from further development.
- Constructing a Personal Development Plan – plan, record and review your development activities and progress.
- Developing new skills through workshops or other means of development (e.g. seminars, presentations, publications, public engagement, volunteer activities).
- Reviewing achievements and reflecting on future needs – this includes periodically revisiting your skills audit.

## 10. The University Language Centre

The University Language Centre provides courses and language learning resources for students from a wide variety of disciplines wishing to include a modern languages element within their studies. It also offers a wide range of courses and services for international students for whom English is not a first language.

**Foreign language courses -** Offered as part of the University Language Centre's institution-wide language programme (LEAP), these courses are available to students from across the University and may be studied on a credit or on a non-credit basis to complement your degree. Currently there are 18 languages, ranging from the main international languages (e.g. *French, Spanish, Arabic, Chinese, German*) to a number of lesser taught languages (e.g. *Japanese, Hindi, Hebrew, Persian, Turkish, Greek*), offered at various levels. For more information on the full range of languages and levels that are available, please consult the University Language Centre website via the link given below.

**English Language Programmes -** If English is not your native language, you may wish to enquire about the wide range of credit bearing and non-credit bearing English courses available through the University Language Centre. International students who would like advice on how they can improve their academic writing are encouraged to make use of the one-to-one writing consultation service. Please refer to the Academic Support Programmes section of the ULC webpage via the link given below.

**Face to Face -** This is a reciprocal language learning scheme, in which students can meet with native speakers of the language they are learning. International students find that this is a good way to meet home students and to become more integrated into the University. Home students can prepare themselves for study abroad by finding out about their partners' home universities and cultures. For more information, please enquire at the ULC reception.

**Tandem Programme -** This programme is similar to Face to Face, but is more formal and provides credits which count towards your University degree. It is fully monitored, assessed and supported via practical workshops. For more information please refer to the Foreign Languages section via the link given below.

**Open Learning Facilities** - The University Language Centre's open learning facilities, situated in the Samuel Alexander Building, offer**:**

- A well stocked library of materials in text, audio, video, DVD and CD-ROM formats
- Materials in some 60 languages

- A suite of TV/VCR presenters fed by a range of satellite and terrestrial channels
- A suite of dedicated multimedia PCs for computer aided language learning.
- Support and advice for learners from expert staff and through on-line resources

A full guide to the University Language Centre's courses, services and its language learning resources is available at: http://www.ulc.manchester.ac.uk.

## 11. Sources of Support for Students:

http://www.manchester.ac.uk/connect/jobs/disabled-applicants/contact/

http://www.studentnet.manchester.ac.uk/counselling/

http://manchesterstudentsunion.com/adviceservice

http://www.occhealth.manchester.ac.uk/

http://www.studentnet.manchester.ac.uk/crucial-guide/academic-life/support/disabled-students/