

# 'Big Data' MSc Programmes

## Industrial Placement — Rules and Guidelines

### 1 Introduction

This booklet concerns industrial placement for the 'Big Data' MSc programmes With a Year in Industry only. It contains information on finding, choosing and securing a suitable placement, carrying out the placement, and producing the placement report for assessment.

The responsibility for choosing and securing a placement ultimately rests with the student. However, advice and structured support are provided at every stage by the departmental Placement Committee in close collaboration with the College Careers Service. The supporting activities that are programmed aim to enable students to choose an appropriate placement, perform effectively in the various recruitment and selection activities that are part of the process of getting a placement, and gain as much as possible from the placement experience.

Whilst getting a placement can be seen as hard work (and is not easy), the skills and enhanced self-awareness that students will develop are fundamental to their future career.

#### 1.1 Learning outcomes

Students who successfully complete their placement will have obtained:

- an understanding of the complexities and demands of the job application process;
- an understanding of recruitment priorities of employers;
- an understanding of the day-to-day running of a company;
- an insight into data handling and analysis skills required in business;
- experience of a range of practical work-based situations;
- improved technical skills and increased ability to evidence and demonstrate their skills to future employers;
- an understanding of recruitment priorities of employers.

### 2 Eligibility

All placements must be approved by the Placement Committee. A student should not sign a contract with an employer until approval has been obtained from the Committee.

There are two essential conditions that must be satisfied for a student to go on a placement. Firstly, the Placement Committee will need to ascertain that the placement is appropriate for the programme of study and will be of sufficient educational value to the student. Secondly, the student needs to satisfy the Placement-progression requirements.

## 2.1 An appropriate placement

An appropriate placement should satisfy the following requirements:

- be relevant to the programme of study and provide the student with opportunities to meet the learning outcomes (see Section 1.1);
- be paid; whilst legally a UK placement can pay below the National Minimum Wage (see <https://www.gov.uk/national-minimum-wage-rates>) students are strongly advised not to accept unpaid placements;
- be a full-time role with a contract of employment (or similar);
- enable the student to engage in up to a year's work;
- facilitate the completion of academic work and attendance of related events at the College;
- allow prearranged visits/conference calls by the academic supervisor;
- provide an adequate supervision in the workplace;
- meet the requirement of the risk-assessment process.

The placement normally starts at the earliest on the 1<sup>st</sup> of July after the progression decision has been made by the examination sub-board (see below). Students taking courses outside the departments of Computer Science and Economics may have the decision delayed until the examination marks are confirmed.

## 2.2 Progression requirements

The progression requirements aim to ensure that only students who have acquired the academic background and skills to engage effectively in work at a company or organisation, and therefore benefit from a placement, are allowed to progress to the placement.

A student wishing to do a year in industry must satisfy the following requirements:

- Engage with the activities run by the Careers service throughout the year.
- Achieve a good result in the placement test and show good performance in coursework assignments (as detailed in the programme handbook).
- Pass the taught part of the programme.

The details are laid out in Section 7.13 Progression to the placement of the PGT Student Handbook.

Students who failed the placement-progression requirements or fail the taught part in the Summer-term exams will be transferred to the corresponding one-year programme.

## 3 Finding a placement

As mentioned at the start of this handbook, the responsibility for securing a placement ultimately rests with the student. However, the Department and College will organise visits from companies, placement fairs, and special workshops and one-to-one support to help students choose placements in roles that might suit their career ambitions and personal circumstances. In this

section, we will give examples of other opportunities that are available, which students may pursue on their own initiative.

Please note that a placement is not a job — it is part of the degree and, as such, it needs to satisfy the requirements specified in Section 2.1. Although the placement is unlikely to be the dream job, experience shows that no matter what sort of placement a student completes, and whether they enjoy the placement or not, the year in industry enhances the student's employability and likelihood to be successful in moving along any chosen career path.

### **3.1 Placement lists**

Many large companies have been offering placement opportunities for a while and have well-established recruitment processes. In many cases, the potential placement providers contact the Careers Service or the MSc programme staff when they are ready to accept applications. The student is also encouraged to approach prospective companies directly.

Placement opportunities will be posted on the Departmental Facebook group, with instructions on how to apply and/or links to the company's appropriate webpages. It is not possible to issue a list of placement providers at the beginning of the year, as it is up to the companies when, and if, they advertise.

As more and more universities offer industry placements, there has been an increase in the number of companies publishing on-line placement lists. There will be many overlaps with the opportunities listed on the Careers site, but opportunities can be found on sites such as <http://www.ratemyplacement.co.uk/> or <http://www.milkround.com>.

"The Engineering Development Trust: etrust" ([www.etrust.org.uk/](http://www.etrust.org.uk/)) is a charity that, among other activities, finds placements for the Year in Industry students. Students seeking for year in industry placements are strongly suggested to register with them. For more information see: <http://www.etrust.org.uk/the-year-in-industry>.

Care should be taken when assessing these opportunities to ensure they meet placement requirements (see Section 2.1). Please note that a student must not sign a contract until the approval has been obtained from the Placement Committee.

### **3.2 Self-sourcing**

A student who already has good contacts in the business world may want to make use of them in the search for a placement. If a contact works for an organisation that already offers placements (this can usually be checked via the company website) the student can ask them if they can provide a reference or recommendation to support the application.

If the contact works for an organisation that has not previously offered a placement year, then the student could start discussing it with them, perhaps using the details provided in Section 2.1.

The main negotiations with a self-sourced placement provider will be carried out by the student. However, a member of the Committee will need to contact the organisation directly before the signing of any contract. The student will be asked to provide appropriate contact details to facilitate this contact. The company should be prepared to discuss placement requirements with the Placement Committee.

### **3.3 Getting a placement approved**

Students cannot accept a placement offer until the placement opportunity has been approved by the Placement Committee. Therefore, when a student gets to the contract stage, they should make an appointment to speak to a member of the Placement Committee.

Amongst other things, the Committee will need to check:

- the quality of opportunity and its relevance to the programme of study; this is usually assessed on the basis of the role/job description;
- the robustness of the company, i.e., how long it has been in business and its reputation;
- the suitability of location in terms of safety and adviser visits/conference calls.

The student should provide the Placement Committee with all appropriate information.

### **3.4 UK and overseas placements**

Students registered on a Year-in-Industry Big Data MSc programme, regardless of their country of origin/nationality, automatically have the right to go on a placement in the UK as part of their studies. However, some students may be thinking of a non-UK based placement, which can be more complex in a number of ways.

What follows are examples of the sort of differences a student may encounter when investigating overseas placement opportunities. It is up to the student to research carefully, but if they have any concerns, they should speak to a member of the Placement Committee.

#### **3.4.1 Working conditions**

Some placement/internship opportunities in Europe are unpaid and contracts of employment, working hours, insurance cover and general health and safety standards can vary significantly from those in the UK. The student will need to have explored thoroughly all these aspects for any non-UK based placement.

#### **3.4.2 Visas**

Placements in other countries may require a visa, which is not automatically granted to all students, even if they have an offer from a placement organisation. Visas can also take a considerable amount of time to secure, and so it is wise to investigate this aspect at an early stage in the process. Government policies change periodically and so even if in previous years a country allowed one year placements, it does not automatically follow that they would in the future. Up-to-date information can usually be obtained from the relevant country's embassy.

#### **3.4.3 Agencies**

There are now numerous companies offering to find an overseas placement for a fee, and part of the fee is payable whether a placement has been secured or not. Students are advised not to rely only on such agencies as there are no guarantees that a suitable placement will be found.

#### **3.4.4 Costs**

In general, overseas placement providers do not pay for travel, e.g., flights to and from the placement location. Neither do they provide accommodation, although some will provide housing for the first couple of weeks to enable the employee to settle in. For example, if the placement is in the USA, not only the student will need to fund return flights, but will also need to have sufficient funds to pay up-front utility deposits within the very early stages of the time there, and then perhaps purchase or hire a car.

## 4 Application process

Placement recruitment processes follow the same patterns as regular graduate recruitment. Most placement providers will require an on-line application including a CV. They will also expect applicants to engage in any or all of the following:

- telephone interviews;
- online tests;
- face-to-face or Skype interviews;
- group assessment days.

Group sessions and one-to-one support will be available from the Royal Holloway Careers Service to help students to prepare for these processes. It is important that students should attend these sessions as the recruitment process is very competitive and knowing the tricks and techniques for the placement recruitment process will be invaluable.

Standard/template CVs or cut-and-paste on-line application form answers, sprayed to all possible placement providers, are unlikely to be sufficient to secure a placement. Group-assessment days demand interpersonal skills that most students need to practice and company research is vital. Students are encouraged to take advantage of the available help and invest some time in preparing for each application/interview/assessment-day as well as possible.

An important point to note is that closing dates for applications can be misleading. Many organisations run a rolling programme of recruitment and so their closing dates for placement applications may be set far in the future. However, the organisation may be assessing applications as they come in and running interviews and assessment days at regular intervals until they have filled all their positions. It is essential that students should apply early to secure a placement.

### 4.1 Events and support

Students are expected to attend careers workshops and events alongside regular studies. Some of those events will involve placement organisations, i.e., company representatives or current placement students. These are well worth attending even for students who do not intend to work for that particular company. Recruitment processes of many organisations are very similar and hints and tips are usually forthcoming at these events, either during the formal presentation, or afterwards when individuals' questions are taken. Students should always use the opportunity to ask a question if they are thinking of applying to that particular organisation and note the name of the person spoken to so that it could be mentioned at an interview.

During the year there will be a compulsory briefing on placement health and safety/risk assessment. Failure to attend will mean that the student is not allowed to do a placement, as RHUL's insurance cover will not be valid for the placement.

Members of the Placement Committee or Careers Service may require a student to also attend a one-to-one meeting to discuss progress and identify appropriate additional support, if required.

### 4.2 Help from academic advisers

Students are advised to discuss initial placement plans with their academic advisers. The adviser usually acts as a referee for placement applications. A reference letter is not normally required at the application stage; the referees are contacted if a placement offer is accepted. At the early stages of the application, students need to obtain permission to use their adviser's name and contact details on the CV or application form.

Please note, however, that academic advisers are not trained careers professionals and are unable to provide detailed advice. For more specific support, students should book an appointment with the Careers Service.

### **4.3 Placement offer**

Whilst many of the recruitment processes start in the Autumn, it is unlikely that an offer of employment will be issued before the Christmas break. In fact, it may be issued much later. The variability is due to when organisations choose to advertise, the speed of their HR processes, and sometimes how many placement students they are recruiting.

When a student gets a verbal or written offer, they should check all the details carefully, including pay/salary, dates of employment, actual location of role (not always the HQ or where applicants go for an interview). Students should consider practicalities such as commuting and accommodation. All concerns should be discussed with a member of the Placement Committee before accepting the offer.

Some companies give a short period of time to consider the offer with a deadline for a response. Missing the deadline is likely to mean missing out the opportunity. However, it must be emphasised that it is highly unprofessional to accept more than one offer, or to accept an offer and continue to engage in other recruitment activities.

Remember that a placement offer cannot be accepted before an approval has been obtained from the Placement Committee and before a successful completion of the P2P test (see Section 2). The student should provide the Placement Committee with a copy of the contract or offer letter and the job description (see Section 3.3).

Please note that some contracts will be 'Training Contracts' rather than 'Contracts of Employment'. This can mean that they contain a clause relating to the passing of professional examinations. Failing the examinations can lead to a termination of the placement.

## **5 On the placement**

Departmental and College Careers Service staff work in collaboration with employers to ensure that each student gets the most of their year in industry.

### **5.1 Placement adviser**

Each student on a placement gets a placement adviser. This can be the same person as the student's academic adviser or may be a different person more experienced in industry collaborations.

The adviser monitors progression and is the first point of contact in the College if the student is unhappy with anything concerning the placement.

The adviser should keep a regular contact with the student during their placement, not less than once per month during the first few months, and not less than once in two months during the remainder of the placement, to check that all is well.

The adviser visits the student at the location of the placement at least once, depending on the duration of the placement. In some cases, visits can be replaced by conference calls. The main purpose of the visits/calls is to make sure that the placement proceeds as agreed and the job tasks undertaken by the student are of sufficient educational value.

## 5.2 Guidance for employers

During the placement, the employer should follow these guidelines.

- Employers should designate one member of their staff to serve as the Placement Supervisor and as a point of contact with the Department. If that member of staff changes, the Programme Director should be informed accordingly.
- Employers should agree with the Department procedures for monitoring the attendance of Tier-4 Visa students while they are on their placement. This includes UKBA requirements for maintaining contact information for the work placement and having regular contact with the Placement Adviser and the students to ensure they are attending to sufficient levels.
- Employers should agree a programme of work with the student and their placement adviser, and agree in advance terms of employment including hours of work and salary.
- Employers should ensure that Health and Safety regulations are complied with during the placement, and should organise appropriate training and induction sessions at the start of the placement.
- Employers should be aware that a student's work must have reasonable educational value, and that the student is required to submit a written report on this work to be assessed as part of the overall MSc. It is strongly desirable that the employer should submit to the Programme Director, at the end of the placement, a report to be taken into account in the College's formal assessment of the work done by the student.
- It is desirable, but not essential, that near the end of the placement the employer should ask the student to give a presentation on the work done to the student's academic and placement adviser, and other associated company employees (typically members of the same group as the student). This may contribute to the employer's report on the student.

## 5.3 Placement and individual project

In February or March during the year before going on a placement, every student should complete a project ballot form as explained in the Project Handbook. The purpose of this is to ensure that if the placement arrangements do not work out and the student is unable to go on a placement, they should proceed to a project without delay after the Summer Term exams.

Year-in-industry students are encouraged (but not obliged) to review their initial project proposals so that their projects can be informed by their placement experience. The procedure is described in the Project Handbook.

Students proceed to the project immediately upon completing the placement. The deadline for the project is set by the Project Committee to give the student as much time as available to other students.

# 6 Assessment

Students must submit for assessment a report on their industrial placement. The deadline for submitting the report is the same as the deadline for submitting the individual project dissertation. The placement report will be marked and the mark will count towards the individual project mark.

The report should normally contain the following sections:

- Introduction to the company or organisation where the placement was held;

- Aims and objectives of the work and projects undertaken;
- Description of work and projects undertaken.

Students should add a final conclusion section giving a short statement about their overall experience and what they have learned on the placement.

The guideline for the size of the report is 4000–6000 words.

The company or organisation employing the student will normally provide a report on the student's work and the report will also be taken into account by the markers.

The student's report will be marked by the academic supervisor and a member of the placement committee during the same period while the dissertation is marked. In the event of a small discrepancy (less than 10%) the marks will be averaged with a two-to-one weighting towards the supervisor's mark. In the event of a larger discrepancy, a third independent marker will mark the report, and the placement committee shall seek agreement amongst all markers as the final outcome.

Markers will mark according to the following scheme and will justify marks with a short paragraph on the form. The mark consists of three components:

- Engagement (30% of the mark) – how well the student engaged with the company or organisation.
- Achievements (50% of the mark) – what the student actually achieved during the placement.
- Writing up (20% of the mark) – the style and clarity of the report.

The marking penalty for late submission is 10% of the agreed mark for a project submitted within 24 hours of project deadline. After 24 hours no project will be accepted and a mark of Incomplete will be given.