Cardiff University

School of Computer Science & Informatics

Handbook: MSc Programmes with placement

Programmes with Placement:

MSc Computing

MSc Information Security & Privacy

MSc Strategic Information Systems

MSc Computing & IT Management

MSc Computer Science

Contents

Acknowledgement

This handbook is based on the Cardiff School of Physics & Astronomy placement handbook.

1. Introduction

The aim of the Placement is to provide students with an opportunity to gain valuable work experience as part of their Master's programme. The placement will normally last between 7 and 10 months and will take place between the taught phase and the dissertation phase of the programme.

Students will work with the Placement Provider[1] (which may be a company, charity or institution) and the School to identify suitable professional and personal development objectives for the placement. It is expected that students on placements will be paid by the company for the duration of the placement.

Students will be assessed on their reflection on the placement experience through a reflective report which will be written after successfully completing the placement.

Undertaking the Placement will enable students to plan, review, record and evaluate their progress against agreed objectives. Core to the placement will be the ability to demonstrate competency to Level 4 in one or more of the Professional Skills from the Skills Framework for the Information Age (SFIA[2]). Students will be required to reflect on how they have developed their employability skills and discuss how these will contribute to their on-going professional development. This will be accompanied by identifying how their experience on placement relates to the programme of study by reflecting on the linkage between theory and practice. During the Placement students will engage in Continuing Professional and Personal Development activities.

The placement provides a strong platform for post-MSc future personal development planning to enable students to continue to develop their skills to Level 5 in the SFIA framework, which is required for Chartered IT Professional Status under the BCS – The Chartered Institute for IT (http://www.bcs.org/category/10976).

Students are responsible for finding their own placements, but the School may use placement consultants to inform students of suitable[3] placement opportunities. A series of workshops and talks will be provided before the placement to give advice on applying for a placement and on preparing students to get the most from their placement opportunities. The School will ensure that the placement conforms to the University's Code of Practice on Study Away from the University. The School does not guarantee that a placement can be found for all students.

---

[1] Terms within this document e.g. placement provider, module leader, assessment panel are defined in Appendix 1 – Glossary.
[2] SFIA - http://www.sfia.org.uk/
[3] Student proposed placements should be at the appropriate level.

1.1 Eligibility

It is expected that students who have not secured a placement by the end of the Spring Semester examination period will transfer to the one year programme and begin their dissertations immediately following the completion of the taught phase. Students who do not pass the taught phase of the programme at the first attempt are not normally able to proceed to the placement. He earliest date for beginning the placement is 30th June 2014. Students who complete the taught phase in the June Examination Board will normally be expected to finish their placement period by the end of April (latest date 4th May 2014). Students who complete the taught phase in the September Examination Board will normally be expected to finish their placement period by the end of June.

2. Responsibilities

2.1 The Student

The Student's first duty is to the Placement Provider (defined herein). Students should also be aware that they are representing Cardiff University and the School of Computer Science & Informatics.

Students should:

- Ensure that they understand and act within the Placement Provider's rules and regulations in all areas, and specifically with respect to confidentiality, responsibilities, inter-personal relationships, and Health and Safety.
- Work in a team and/or as an individual as directed towards agreed goals and in a timely manner.
- Be involved in defining and/or negotiating the path through the Placement.
- Apply their academic knowledge to the tasks they are working on and show initiative.
- Realise that there may be some times when the Placement Provider will wish them to do work not directly related to the main task/s.
- Record their work appropriately, and submit reports by the specified deadlines.
- Be frank about any shortcomings in their work, and think about the accuracy, reliability, and significance of the outcomes.
- Ensure that they understand the role of their Placement Mentor (defined herein).
- Ensure that they understand the role of their Student Professional Placement (SPP) Tutor.
- Ask to have information clarified and/or re-confirmed if they are not sure.
- Define boundaries and responsibilities with their Placement Mentor.
- Conform to normal Placement Provider hours of attendance.
- Be aware of their responsibilities to the Programme and the University, including the timely return of reports.

- Be aware of their rights to a safe workplace environment.
- Be aware of local safety regulations and the University's guidelines in the Code of Practice for Study Away from Cardiff University which can be found at:

  http://learning.cf.ac.uk/curriculum-design/code-of-practice-on-placement-learning/

- Be aware of their rights to be treated in accordance with applicable legislation for the workplace.

2.2 Placement Consultant(s)

The School is working in conjunction with a Placement Consultant(s). They are responsible for the following:

The Placement Consultant(s) for the Placement is responsible for ensuring placements that they find, are suitable for the purposes of the Programme and allow the students to satisfy the required learning outcomes. This may be achieved through visits or telephone communication with the Placement Provider. The Placement Consultant(s) or deputy will (along with the nominees from the School) assess all the reflective self-assessments and investigate and document any concerns that arise.

In addition, the Placement Consultant(s) will:

- In the 2nd week of the first term provide a presentation explaining the Placement Programme and the advantages gained from choosing it.
- Deliver a series (of up to a maximum of 10) tutorials during the Autumn Semester covering the essentials for acquiring a placement, i.e. CV writing, interview skills, team role identification etc.
- Provide (up to a maximum of 8) 1-hour drop in sessions for students to discuss any issues or concerns.
- Deliver up to two separate Health & Safety lectures. Note: Attendance at one of the H&S lectures is compulsory.
- Review, comment on and where appropriate correct students CVs.
- Contact and liaise with prospective employers.
- Email/phone/communicate placement opportunities to students and responding to student email/phone calls etc.
- Provide prospective employers with suitable CVs or where applicable direct students to online application processes.
- When appropriate/necessary arrange interviews.
- Contact employers to obtain the result of interviews and when possible obtain detailed feedback.
- Manage the subsequent selection/appointment process.
- Make arrangements for undertaking visits to the students and liaise with their employer, once after approximately 1 month of employment and again approximately half way through the placement period.

- Raise any concerns with the employer or student as appropriate.
- As appropriate maintain contact with students during their placement.
- On return of the students to University (having completed their Placement) arrange, attend and comment on their presentations.

2.3 Module Leader

The Module leader will oversee the module and ensure that close ties are maintained with the Placement provider to ensure smooth running of each placement.

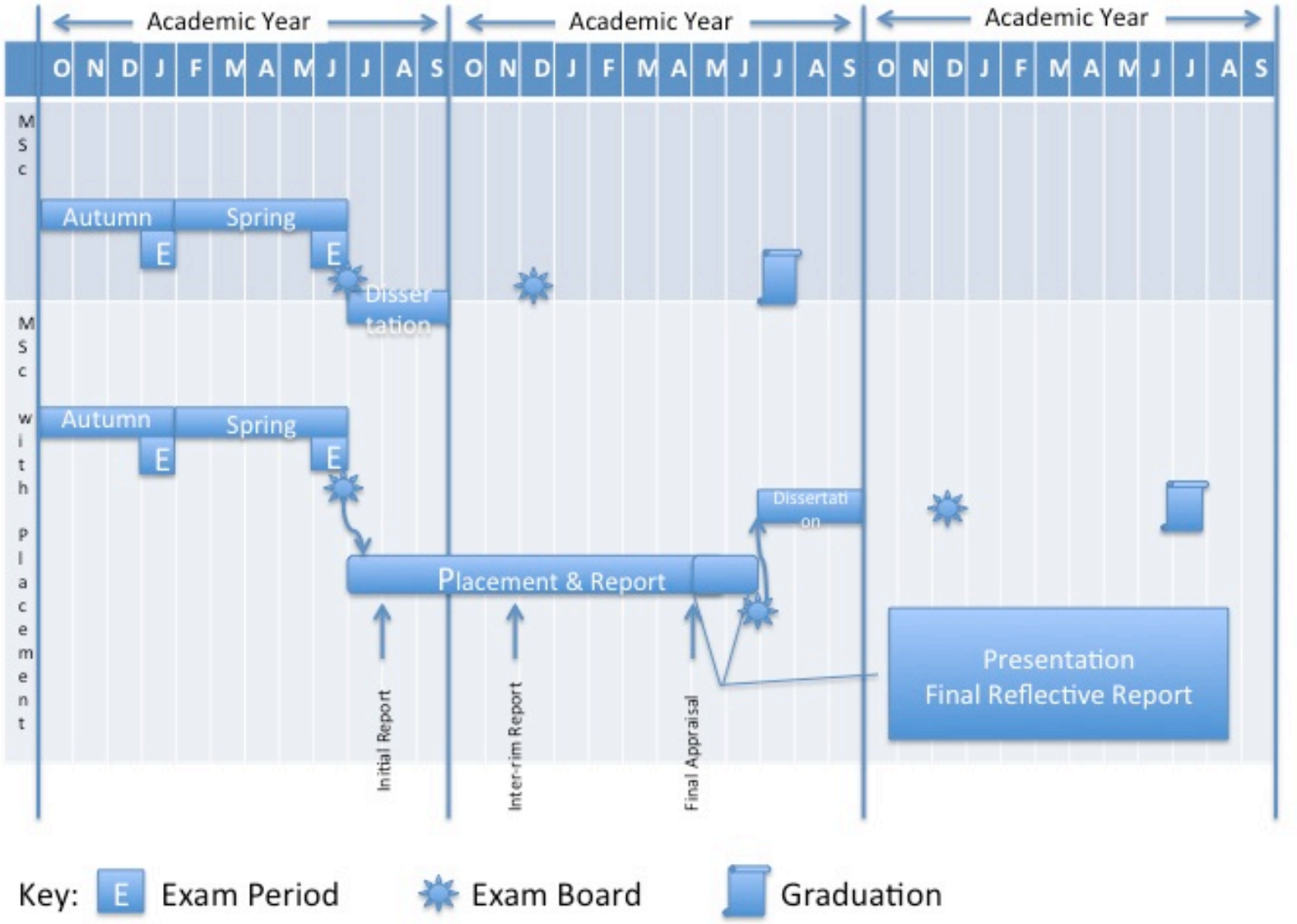
Module leader should:

- Arrange the placement presentation for each student (to be presented to employers, staff and students).
- Provide pastoral and academic support for the Student.
- Respond to email requests from the Student within 1 working week, except in situations where the Student is notified that the Module Leader is out of email contact and an alternative contact email address is provided.

2.4 Student Professional Placement (SPP) Tutor

Any member of Academic Staff, representatives from the Placement Consultants or any other person the School authorizes may act as the SPP Tutor.

3. Placement Timetable



4. Assessment during the Placement

Formative assessment will be through two reports submitted during the placement, and a final appraisal carried out by the Placement Mentor. It is also strongly recommended that students keep a reflective log of their experience throughout the placement. This will not be submitted but will provide a useful source of information to draw on for report writing as well as for discussion at meetings with the Placement Mentor and SPP Tutor.

Regular meetings between the student and the Placement Mentor will take place to provide guidance and monitor progress.

An SPP Tutor will normally make two visits to the student's workplace, coinciding with the submission of the two reports. The reports will be assessed jointly by the Placement Mentor and SPP Tutor, and feedback and discussion between the student, Placement Mentor and SPP Tutor will take place during the two visits. The visits will also fulfill a pastoral role, and help to resolve any difficulties that may have arisen.

The formative assessments take place in three stages:

i. **Initial report** (early in the placement after approximately 1 month) - assessed jointly by Placement Mentor and SPP Tutor.
ii. **Interim report** (approximately half way through the placement) – assessed jointly, as above
iii. **Final Appraisal** (at the end of the placement) – assessed by the Placement Mentor.

The student will be required to successfully complete each stage before he/she proceeds to the next stage, with an opportunity to resubmit stage 1 or stage 2 within a short time frame following a failure. The student must complete all three stages to complete the placement.

The initial report will contain a summary of the student's role in the organization including current duties and responsibilities. In addition the student will set outline objectives relevant to the role that will be carried out whilst on placement and appropriate to their Programme of Study. These objectives should relate the following criteria:

i. **Demonstration of competency at Level 4** in one or more relevant Professional Skills from the SFIA framework (see Appendix 2).

ii. **On-going professional development** related to business and employability skills.

iii. **Relating experience on placement to their programme of study** by reflecting on the linkage between theory and practice.

The interim report will critically review progress against the previously set objectives and the three criteria above, and set detailed objectives for the remainder of the placement period. The aim will be to ensure that the student will have carried out significant work at M level by the end of the placement. Guide lengths for the reports are about 1,000 words for the initial report and 1,500 – 2,000 words for the interim report.

The final appraisal will verify that the student has completed the work placement to the satisfaction of the Placement Provider.

4.1 In-School Assessment

Students, who successfully complete a placement to the satisfaction of the Placement Provider and the School, will then be required to prepare a presentation and produce a final reflective report.

Students who complete the taught phase in the June Examination Board will normally be expected to finish their placement period by the end of April the following year. Students who complete the taught phase in the September Examination Board will normally be expected to finish their placement period by the end of June the following year.

Students at the completion of the placement period will be expected to return to the School and will have three weeks to complete their final reflective report. Students will also give a presentation during this period to receive formative feedback that will help them to provide appropriate examples, which clearly show how they have met Level 4 for their relevant Professional IT Skills in their final reflective report.

4.2 Presentation – (Formative Assessment)

Students will give a presentation lasting no more than 15 minutes to members of staff from the School, other MSc students and staff from the Placement Providers who wish to attend.

The presentation should address the following:

i. Placement Overview (ideally up to 3 minutes)

Students should provide a concise overview of their placement organisation. They should also outline their main roles and responsibilities during the placement.

ii. Professional IT Skills (ideally up to 10 minutes)

Students should provide appropriate examples of their work whilst on placement that clearly demonstrate how they have met Level 4

(or above) in one or more of the Professional IT Skills from the SFIA framework (see Appendix 2).

Feedback will be provided by members of the Assessment Panel[4], but all members of the audience will be encouraged to provide constructive comments.

4.3 Final Reflective Report - (Summative Assessment)

In the report students will need to address the following:

4.3.1 Placement Overview

Students should provide an overview of their placement organisation and briefly discuss how the activities of the teams or groups they worked with have contributed to the business objectives of the organisation. They should also outline their roles and responsibilities whilst on placement.

4.3.2 Professional IT Skills

Students should provide a range of reflective examples of their work whilst on placement that clearly demonstrate how they have met Level 4 (or above) in one or more relevant Professional IT Skills from the SFIA framework.

4.3.3 Generic Skills

Students should provide a range of reflective examples to show how they have developed their generic skills (Autonomy, Complexity, Influence and Business Skills) whilst on placement and demonstrate the level they have reached in each of these skills. Examples should also be provided to show how they have developed their employability skills (e.g. Teamworking, Problem Solving, Decision Making, Assertiveness, Time Management, Communication) whilst on placement. Students should also discuss how their improved generic and employability skills will contribute to their on-going professional development.

4.3.4 Linkage between Theory and Practice

Students should provide a range of relevant examples that critically evaluate how their experience gained on placement compares and contrasts to relevant theories studied on their degree programme. They should also discuss how the activities of the teams or groups they have worked with have been influenced by research, standards and best practice.

[4] Made up of Module Team, Placement Consultants and University Representative if different from above.

The guidance for the size of the report is 6,000 words. The report will be marked by members of the Assessment Panel.

The report contributes 100% to the overall mark for the placement module.

For your ‘In School assessment’, after your placement, you will be required to demonstrate professional competence at SFIA level 4 (or above) in one or more of the Professional IT Skills from the SFIA framework. (see Appendix 2).

Appendix 1: Glossary

A1.1 Assessment Panel

The panel comprising any of: Module Leader, SPP Tutors or other Academic staff is charged with assessing and providing feedback on the student's presentation and reflective report.

A1.2 Module Leader

The member of academic staff responsible for the placement element of the postgraduate taught schemes which operate "with placement" option. They are responsible for the smooth running and periodic review of the placement element of the programmes.

A1.3 Placement Consultant(s)

The School is working in conjunction with a Placement consultant(s), which is an independent company, contracted to provide services to the School to assist with elements associated with Placements. The Placement consultant(s) for the Placement is responsible for ensuring placements that they find, are suitable for the purposes of the Programme and allow the students to satisfy the required learning outcomes. This may be achieved through visits or telephone communication with the Placement Provider. The Placement Consultant(s) or deputy will (along with the nominees from the School) assess all the reflective self-assessments and investigate and document any concerns that arise.

A1.4 Placement Mentor

The person charged by the Placement Provider with providing help and support for the student whilst on placement. The Placement Mentor will normally be the student's line manager whilst on placement. The Placement Mentor will normally be the person that assesses the student's progress whilst on placement and assesses their initial and interim reports and conducts the final appraisal upon completion of the placement.

A1.5 Placement Provider

The 'employer' that will provide the placement. This may be a company, charity or any other suitable organization.

A1.6 Student Professional Placement (SPP) Tutor

Any member of Academic Staff, representatives from the Placement Consultants or any other person the School authorizes may act as the SPP Tutor. A SPP Tutor will normally make two visits to the student's workplace, coinciding with the submission of the initial and interim reports. The reports will be assessed jointly by the Placement Mentor and SPP Tutor, and feedback and discussion between the student, Placement Mentor and SPP Tutor will take place during the two visits. The visits will also fulfill a pastoral role, and help to resolve any difficulties that may have arisen.

Appendix 2:

A2.1 Skills Framework for the Information Age.

The criteria used to assess the learning outcomes of this work placement will be derived from the Skills Framework for the Information Age (SFIA).

The creators of the Skills Framework for the Information Age were determined that SFIA would be a useful tool for managers and professionals working in information technology around the world.

In order to achieve that, the design goals were:

- Emphasis on skills, not technologies or products
- A practical tool that fits into any scheme of management
- Reflects informed thinking in the IT industry

These were achieved so successfully that SFIA has become the IT world's favourite skills framework.

In May 2003, the SFTA Foundation was established by BCS, e-skills UK, IMIS and the IET to own, promote and maintain SFIA.

SFIA

- is the UK government backed IT skills standard providing a common reference model of roles that exist in IT and the skills needed to perform them
- has gained industry-wide recognition including acknowledgement from the following bodies: e-skills, BCS, IET, IMIS, Intellect, OGC, itSMF and the DTI.
- allows employers to measure the skills they have against the skills they need and identify skill gaps

A2.2 How SFIA works

It is constructed as a two-dimensional matrix, describing levels of responsibility (generic skills) on one axis and categories of work (professional skills) on another.

A2.3 Generic skills and levels of responsibility

There are seven levels of responsibility; each has a full definition expressed in terms of Autonomy, influence and Business skills.

- Level 1 Follow
- Level 2 Assist
- Level 3 Apply
- Level 4 Enable
- Level 5 Ensure / advise
- Level 6 Initiate / influence
- Level 7 Set strategy / inspire / mobilise

The levels cover the range from starter to senior IT manger and world-leading technologist. The nature of these generic definitions makes them suitable for use as the basis of core competencies.

A2.4 Professional IT Skills / categories of work

The skills definitions are diagnostic, not prescriptive; they contain enough information to enable a judgement as to whether someone has the skill, and at what level. They do not attempt to list all the things that the skilled individual might be able to do. The definitions provide precise statements of the various levels of skill required.

There are **six** main categories of work/professional skills:

1. Strategy and architecture
2. Business change
3. Solution development and implementation
4. Service Management
5. Procurement and management support
6. Client Interface

A2.5 Generic Skills

SFIA's generic levels provide a background against which the specific professional skills can be judged. Each skill has a name, a code and an overall description; there is also a specific interpretation of the skill at each of the levels at which it is recognised. An example of the layout of a skill (Programming/Software development PROG) is shown here:

Programming/software development PROG

The design, creation, testing and documenting of new and amended programs from supplied specifications in accordance with agreed standards.

Level 4 Designs, codes, tests, corrects and documents large and/or complex programs and program modifications from supplied specifications using agreed standards and tools, to achieve a well-engineered result. Takes part in reviews of own work and leads reviews of colleagues' work.

A2.6 Using the SFIA Framework on your Placement

Identifying Potential Professional IT Skills for your Role

One of the main learning outcomes for the CMT305 Placement module is to demonstrate competency to Level 4 in one or more of the Professional Skills from the SFIA framework

As soon as you are informed of your role and main responsibilities then you should identify one or more Professional IT Skills from the SFIA Framework Reference that you think are most relevant for demonstrating your competency. There are nearly 100 different IT Professional Skills defined in the framework.

Example

Dafydd has obtained a placement as a Database Developer in a local software development company. He has been told that he will be allocated to a project team and will be involved in the design, implementation and testing of a database that will form part of a new information system for a client. Daffyd identifies potential Professional IT Skills from the list in the Framework Summary and finds the skills in the SFIA Framework Reference.

Subcategory	Skill	Code	1	2	3	4	5	6	7
Systems development	Systems development management	DLMG					5	6	7
	Data analysis	DTAN		2	3	4	5		
	Systems design	DESN		2	3	4	5	6	
	Network design	NTDS					5	6	
	Database/repository design	DBDS		2	3	4	5	6	
	Programming/software development	PROG		2	3	4	5		
	Animation development	ADEV			3	4	5	6	
	Safety engineering	SFEN			3	4	5	6	
	Sustainability engineering	SUEN				4	5	6	
	Information content authoring	INCA	1	2	3	4	5	6	
	Testing	TEST	1	2	3	4	5	6	
Human factors	User experience analysis	UNAN			3	4	5		
	Ergonomic design	HCEV			3	4	5	6	
	User experience evaluation	USEV		2	3	4	5		
	Human factors integration	HFIN					5	6	7
Installation and integration	Systems integration	SINT		2	3	4	5	6	
	Porting/software integration	PORT			3	4	5	6	
	Systems installation/decommissioning	HSIN	1	2	3	4	5		

Dafydd identifies the following Professional IT Skills that seem to be relevant to his role and responsibilities:

- *Data Management covering skills 4-6 from the Strategy and Architecture Section*
- *Data Analysis covering skills 2-5 from the Solution Development and Implementation Category*
- *Database/Repository Design covering skills 2-6 from the Solution Development and Implementation Category*
- *Programming/Software Development covering skills 2-5 from the Solution Development and Implementation Category*
- *Testing covering skills 2-7 from the Solution Development and Implementation Category.*

Assessing Your Skills Level

The SFIA framework has defined seven different levels of responsibility based on the levels of autonomy, influence, complexity and business skills required to demonstrate that a person is working at each of the levels. The generic skills are given below:

Level 5

Autonomy

Works under broad direction. Work is often self-initiated. Is fully accountable for meeting allocated technical and/or project/supervisory objectives. Establishes milestones and has a significant role in the delegation of responsibilities.

Influence

Influences organisation, customers, suppliers, partners and peers on the contribution of own specialism. Builds appropriate and effective business relationships. Makes decisions which impact the success of assigned projects i.e. results, deadlines and budget. Has significant influence over the allocation and management of resources appropriate to given assignments.

Complexity

Performs an extensive range and variety of complex technical and/or professional work activities. Undertakes work which requires the application of fundamental principles in a wide and often unpredictable range of contexts. Understands the relationship between own specialism and wider customer/organisational requirements.

Business skills

Advises on the available standards, methods, tools and applications relevant to own specialism and can make appropriate choices from alternatives. Analyses, designs, plans, executes and evaluates work to time, cost and quality targets. Assesses and evaluates risk. Communicates effectively, both formally and informally. Demonstrates leadership. Facilitates collaboration between stakeholders who have diverse objectives. Understands the relevance of own area of responsibility/specialism to the employing organisation. Takes customer requirements into account when making proposals. Takes initiative to keep skills up to date. Mentors colleagues. Maintains an awareness of developments in the industry. Analyses requirements and advises on scope and options for continuous operational improvement. Demonstrates creativity and innovation in applying solutions for the benefit of the customer/stakeholder. Takes account of relevant legislation.

Level 4

Autonomy

Works under general direction within a clear framework of accountability. Exercises substantial personal responsibility and autonomy. Plans own work to meet given objectives and processes.

Influence

Influences team and specialist peers internally. Influences customers at account level and suppliers. Has some responsibility for the work of others and for the allocation of resources. Participates in external activities related to own specialism. Makes decisions which influence the success of projects and team objectives.

Complexity

Performs a broad range of complex technical or professional work activities, in a variety of contexts. Investigates, defines and resolves complex problems.

Business skills

Selects appropriately from applicable standards, methods, tools and applications. Demonstrates an analytical and systematic approach to problem solving. Communicates fluently orally and in writing, and can present complex technical information to both technical and non-technical audiences. Facilitates collaboration between stakeholders who share common objectives. Plans, schedules and monitors work to meet time and quality targets and in accordance with relevant legislation and procedures. Rapidly absorbs new technical information and applies it effectively. Has a good appreciation of the wider field of information systems, their use in relevant employment areas and how they relate to the business activities of the employer or client. Maintains an awareness of developing technologies and their application and takes some responsibility for personal development.

Level 3

Autonomy

Works under general direction. Uses discretion in identifying and resolving complex problems and assignments. Usually receives specific instructions and has work reviewed at frequent milestones. Determines when issues should be escalated to a higher level.

Influence

Interacts with and influences department/project team members. Has working level contact with customers and suppliers. In predictable and structured areas may supervise others. Makes decisions which may impact on the work assigned to individuals or phases of projects.

Complexity

Performs a broad range of work, sometimes complex and non routine, in a variety of environments. Applies methodical approach to problem definition and resolution.

Business skills

Understands and uses appropriate methods, tools and applications. Demonstrates an analytical and systematic approach to problem solving. Takes the initiative in identifying and negotiating appropriate personal development opportunities. Demonstrates effective communication skills. Contributes fully to the work of teams. Plans, schedules and monitors own work (and that of others where applicable) competently within limited deadlines and according to relevant legislation and procedures. Absorbs and applies technical information. Works to required standards. Appreciates the wider field of information systems, and how own role relates to other roles and to the business of the employer or client.

Level 2

Autonomy

Works under routine direction. Uses minor discretion in resolving problems or enquiries. Works without frequent reference to others.

Influence

Interacts with and may influence immediate colleagues. May have some external contact with customers, suppliers and partners. May have more influence in own domain.

Complexity

Performs a range of varied work activities in a variety of structured environments. Contributes to routine problem resolution.

Business skills

Understands and uses appropriate methods, tools and applications. Demonstrates a rational and organised approach to work. Is aware of health and safety issues. Identifies and negotiates own development opportunities. Has sufficient communication skills for effective dialogue with customers, suppliers and partners. Is able to work in a team. Is able to plan, schedule and monitor own work within short time horizons. Absorbs technical information when it is presented systematically and applies it effectively.

BCS – The Chartered Institute for IT requires that person needs to demonstrate that they are working at SFIA level 5 when they apply for Chartered IT Professional

status. SFIA Level 4 in the competencies discussed above align well with our expectations Masters students. This was therefore chosen as the most appropriate level for MSc students to demonstrate their competency for at least one of the IT Professional skills.
At the beginning of the placement you should assess your current skills against the framework for the IT Professional Skills you have identified as being relevant for your role. This will be useful preparation for setting objectives.

Example

At the start of the placement Dafydd assesses his current skills against the descriptors for his identified IT Professional Skills.

Data Management starts at SFIA level 4 and Dafydd realises he has insufficient experience for this skill.

Data Analysis starts at SFIA level 2 but Dafydd realises that his experience is more appropriate to level 3. He has done most of the activities at level 3 except for advising database designers and other application team members.

Data analysis: Level 3 Applies data analysis, data modelling, and quality assurance techniques, based upon a detailed understanding of business processes, to establish, modify or maintain data structures and associated components (entity descriptions, relationship descriptions, attribute definitions). Advises database designers and other application development team members on the details of data structures and associated components.

Dafydd also finds that he has covered most of the areas at SFIA Level 3 for Database/Repository Design, Programming/Software Development and Testing.

Dafydd also looks at the generic skills and identifies several areas that he would like to get the opportunity to develop whilst on placement.

Setting Objectives for the Initial Report

At the start of your placement you need to work with your Placement Mentor to agree objectives for the Initial Report. Your Placement Mentor should set objectives relating to your work activities. However, you both need to discuss how you can work towards demonstrating competency to SFIA level 4 in one or more of the IT Professional Skills by the end of the placement. If you have identified several potential IT Professional Skills then it is advisable to set objectives for the *two* most relevant skills for the initial report. If you and your Placement Mentor have difficulty identifying at least one IT Professional Skill that will give you the opportunity to demonstrate you have reached SFIA level 4 if you are capable, then contact your SPP Tutor.

You also need to set objectives for developing your generic skills (autonomy, influence, complexity and business skills). These should address skills that will not be covered through your chosen IT Professional Skills.

When Dafydd first meets his Placement Mentor he discusses how he will be assessed on the placement including the need to demonstrate competency in one or more relevant Professional IT Skills from the SFIA framework. Dafydd discusses his current experience for the IT Professional Skills he has identified as relevant to his

role. This helps Dafydd's Placement Mentor in setting initial work objectives for Dafydd.

Dafydd and his Placement Mentor meet the next day to discuss the work objectives. They agree that Data Analysis and Database/Repository Design are the two most relevant IT Professional Skills. They particularly focus on understanding the differences between level 3 and level 4 for these two skills to identify the areas that will build on Dafydd's current skills.

Data analysis: Level 4 Investigates corporate data requirements, and applies data analysis, data modelling and quality assurance techniques, to establish, modify or maintain data structures and their associated components (entity descriptions, relationship descriptions, attribute definitions). Provides advice and guidance to database designers and others using the data structures and associated components.

Data analysis: Level 3 Applies data analysis, data modelling, and quality assurance techniques, based upon a detailed understanding of business processes, to establish, modify or maintain data structures and associated components (entity descriptions, relationship descriptions, attribute definitions). Advises database designers and other application development team members on the details of data structures and associated components.

They identify several areas that Dafydd needs to develop to reach SFIA Level 4 and they determine objectives to address these. Dafydd also mentions the generic skills he would like to develop over the placement and agrees objectives with his Placement Mentor.

Dafydd includes the objectives in his initial report. These are approved by the SPP Tutor as appropriate objectives for meeting the learning outcomes of the module and relevant to the programme of study.

Review, Record and Evaluate your Progress

You should use the SFIA framework to help you review, record and evaluate your progress on placement.

- On a weekly basis you should record examples in your portfolio that help to demonstrate that you are meeting the objectives in your initial report.
- At least once a month you should evaluate your progress in meeting your objectives. You should then meet to discuss your progress with your Placement Mentor.
- You may need to identify new IT Professional Skills or generic skills from the SFIA framework and agree new objectives with your Placement Mentor if you get further responsibilities during your placement. Objectives for new IT Professional Skills should only be added if there is a good chance that you will be able to demonstrate competency in at least one area that is specific to level 4 for that skill.

Example

Dafydd finds time at the end of each week to update his portfolio with examples that show how his work activities are helping him meet his objectives.

At the end of each month Dafydd reviews and records his progress. He starts by evaluating how his work activities are helping him progress on his set of objectives and identifies what he is doing well and what areas need improvement. He then

meets with his Placement Mentor to discuss his progress and to agree any new objectives for the coming month.

Dafydd makes excellent progress and after six months he completes his tasks for the project he is working on. His Placement Mentor provides Dafydd with the opportunity to develop his project management skills by giving him responsibility for managing the database development in another project. They identify areas in the level 4 Project Management Professional IT skills and agree new objectives for Dafydd's last four months.

Develop Reflective Examples for the Interim and Final Reports

For your interim report you will need to provide some reflective examples that demonstrate your competency at Level 4 in the appropriate Professional IT Skills and for developing your generic skills.

For your final report you need to choose a broad range of examples that demonstrate your competency in at least one Professional IT Skill at SFIA level 4. If you have focused on one IT Professional Skill then you will need to provide relevant examples that cover most (if not all) of the areas discussed for Level 4 of that skill. If you have covered two or three IT Professional Skills then you do not need to cover all areas of each skill. Focus instead on providing examples for the areas in each skill that are specific to Level 4 or that incorporate level 4 generic skills that are relevant to each IT Professional skill.

If you have developed several skills during the placement then it is advisable to restrict your chosen IT Professional Skills to two or three skills from the SFIA framework that will give you the best opportunity to demonstrate that you are working at level 4

Example

Dafydd needs to write his interim report. He is pleased that he has recorded his experience on a regular basis and looks through the examples in his portfolio and his monthly progress reviews. Dafydd realises that he has a number of examples that could be included for the IT Professional Skills in the report. He realises that the generic level descriptors on page 12 of the SFIA framework are also useful in identifying the three examples that best demonstrate his autonomy and responsibility in carrying out the task including his involvement in the decision making, his influence with team members and other stakeholders, complexity of the task and how he has tackled this complexity and the relevant business skills required to carry out the task.

Dafydd writes up his examples addressing the relevant generic level descriptors and makes sure that each example has a clear explanation of how his work addresses a specific area of one of the IT Professional Skills for SFIA level 4. Where appropriate Dafydd evaluates the effectiveness of methods, tools and techniques used and he highlights areas for improvement. Dafydd reflects on what he has learnt for each example, and he discusses how he would do things differently in the future where appropriate.