Faculty of Engineering and Environment Department of Computer Science and Digital Technologies

MSc Computer Science

Programme Handbook 2015-16

1

Contents

1.	W	elcome from the Programme Leader	3
2.	De	epartment Introduction	3
3.	Ał	oout this handbook	_ 3
4.	w	ho's Who and Communication?	3
	4.1	Who to go to for help	3
	St	udent Support Team	4
	Pr	ogramme Leader: Shelagh Keogh	4
	Pr Mo	ogramme Administrator	4 1
	4 2	Communication	بة 1
		entacting Your Programme Leader	
	En	nail	4
	eL	earning Portal	5
	Pla	asma TV Screens	5 5
	ГГ		J
5.	Pr	ogramme Information	5
	5.1	Programme Aims	5
	5.2	Programme Learning Outcomes	7
	5.3	Programme Structure	9
	5.4	Learning Teaching and Assessment Strategy	11
	5.5	Feedback on Assessment	12
	5.6	Student Feedback	12
	5.7	Programme and Assessment Schedule and Assessment	
	Criter	ia	13
	5.8	External Examiner Information	13
5.9	ə Sp	pecialist Facilities (Resources and Laboratories)	_ 13
	5.10	Professional Bodies	13
	5.11	FAQ	13
Ap	pendi	x A – Assessment Schedule	_ 18
Ap	pendi	x B - Example master's Assessment Framework	_ 21

1. WELCOME FROM THE PROGRAMME LEADER

Welcome to your MSc Computer Science programme, Engineering and Environment, Northumbria University. We hope you will find your studies interesting, useful, challenging and fun! I am sure you will find the course, engaging and beneficial to you and your future career aspirations. As your programme leader I will do all that is possible to ensure your course meets your expectations. I look forward to working with you over the coming year.

Shelagh Keogh (BA (Hons), MRes, PMBCS, FRSA)

2. DEPARTMENT INTRODUCTION

The Department of Computer Science and Digital Technologies at Northumbria University encompasses all of our work in games, robotics, mobile applications, animation and digital visual effects, computer forensics and ethical hacking, network technology and website design. Our students, staff and researchers develop and refine cutting edge technologies that impact on the way we all live our lives. They work cross-discipline, exploring the way that technology can impact on health, travel, security intelligence, artificial intelligence and many other sectors.

3. ABOUT THIS HANDBOOK

This handbook is designed to provide a guide to your programme of study at Northumbria. It should be read alongside the University and Student Handbooks which contain more general information about being a student at Northumbria within Engineering and Environment.

It does not provide all of the information that you will need although it attempts to tell you where to find most of that information. The latest version of much of the further information that you need is to be found in a comprehensive and definitive form on your "My Northumbria" and through the eLP (Blackboard) – more information on these sites later in the guide.

4. WHO'S WHO AND COMMUNICATION?

4.1 Who to go to for help

You will meet a broad range of academic, administrative and technical staff throughout your studies. The majority of staff will be drawn from the various subject areas within the Faculty. However, we also draw upon subject specialisms outside the faculty and external consultants, industrialists and advisors.

Staff from the faculty and from the wider university (such as the University Library, IT Services and Student Support and Wellbeing) are here to help you get the most out of your Programme. In this section, we introduce you to some of the key people who will support you at Faculty and subject area level.

Student Support Team

The Student Support Team is available to assist all students requiring information and/or advice. The team is located in B201 Ellison Building. Opening times: Monday – Thursday 8.30 – 17.00 hours Friday 8.30 – 16.30 hours Email: <u>ee.studentsupport@northumbria.ac.uk</u> Telephone: 0191 227 4722

Programme Leader: Shelagh Keogh

Office Location: Pandon Building, room 112 Email: shelagh.keogh@unn.ac.uk Telephone: 0191 2437293 Office Hours: Shelagh Keogh's timetable will be posted on her office door: Room 112 Pandon Building

Your Programme Leader is the academic leader for your Programme and is responsible for managing the programme on a day to day basis, working with other Faculties and University staff – academic, administrative and technical – as needed. Your Programme Leader is committed to helping you get the most out of the Programme and, where relevant, will liaise with your Module Tutors and other relevant staff to make sure that they are aware of your needs and of how you are doing.

Programme Administrator

Your Programme Administrator (Andrew Cox) holds all the key information regarding your programme. This is the person who manages such processes as enrolment, option choice, day to day correspondence, confirmation of attendance letters, marks entry, etc. All programme administrators can be contacted via the Pandon Faculty Office. <u>a.cox@northumbria.ac.uk</u>

Module Tutors

For each module of study, you will have a designated Module Tutor. The Module Tutor is responsible for the organization of the module and supporting your learning and assessment on that module. Details of each tutor can be found on the modules listed on your elearning portal (Blackboard).

4.2 Communication

Contacting Your Programme Leader

If you wish to meet with your programme leader then you should send an email with a request in the first instance. Also you can come along to drop in sessions; times will be posted on the programme leader's door, Pandon Building, room 112.

Academic staff may teach on many modules and programmes. In addition they may have other roles and responsibilities which take them from their office. Thus it is advisable to make an appointment if you wish to see them. You can do this via email or you can just turn up at their office. Occasionally you may be able to have an immediate appointment, but don't be disappointed if you are asked to return at a mutually convenient time. Please contact staff to cancel if you are unable to make the arranged appointment.

Email

Email is used extensively throughout the University and is a very effective method of communication between students and staff. You will be automatically allocated an email

address by the University once you have enrolled. Do remember that the Northumbria email address is the one that should be used when contacting University and Faculty staff. It is also the one that is used by staff to make contact with you, so do make sure that you check it regularly, particularly if you also use a personal email account. Please be aware that staff may not reply to your email immediately due to their other duties and activities.

eLearning Portal

The eLearning Portal (eLP) is a very important resource for students. You will find specific information related to the modules you are taking, such as copies of lecture and seminar handouts, assignment briefings, instructions, and announcements. In general your Programme Leader uses you individual email to send you any notifications that are necessary. It is therefore important that you check the eLP regularly – at least daily – for new announcements and new material.

Plasma TV Screens

The faculty has a number of plasma screens in the Pandon and Ellison buildings. These are also used to display announcements, events and opportunities such as visits from potential placement providers.

Programme Notice Board

(First Floor of Pandon building just through the floor entrance door to your left)

This board is mainly used for additional but not essential information. This may be career opportunities, professional bodies information etc. You should check this board from time to time but most important notices are sent to you through the email system so it is particularly important to keep a check of your emails daily.

PLEASE NOTE: IT IS REALLY IMPORTANT THAT IF YOU HAVE AN ISSUE YOU CONTACT US AS SOON AS POSSIBLE – WE ARE HERE TO HELP

5. PROGRAMME INFORMATION

Here you will find specific information on your programme of study. There is a national requirement that all university programmes of study have a publicly available Programme Specification and this section is based on that programme specification. The full and definitive version of the programme specification can be found at http://www.northumbria.ac.uk/programmespecs/.

5.1 Programme Aims

This specialist MSc has been designed to complement the other postgraduate programmes delivered in the Faculty. It focuses upon advanced level study in aspects of Computer Science: application development, databases, computer networking and the internet. It aims to build upon the Faculty's existing strengths in the provision of postgraduate teaching and to exploit existing expertise to meet modern, vocationally orientated demand in this expanding discipline. It builds upon the research and vocational experience that exist within these areas in the faculty. In this way it supports the university core principle and value of "Academic Excellence" by best teaching, research and knowledge exchange.

The programme has been designed to foster enthusiasm and a spirit of enquiry by promoting practical, technological, intellectual, professional and transferable skills. It aims to produce postgraduates who are highly skilled professionals, able to lead the development

and management of computing systems or to progress to academic or research orientated careers in their specialist areas. This supports the University's aim to "provide an outstanding student experience".

The primary aim of the programme is to provide an advanced course of study in the theory and practice of current and emerging computer science. Designed for computing graduates and established computing professionals, it aims to enhance their career opportunities by updating and advancing their knowledge and skills. The programme thereby supports the corporate strategy by being a programme which is "attractive and accessible to people of all ages and backgrounds".

The programme provides the opportunity for students to develop qualities that are needed in complex and unpredictable professional environments, in circumstances that require initiative, sound judgement and personal responsibility. It aims to produce postgraduates who can deal with complex issues both creatively and systematically, and who will show originality in tackling and solving problems. Thereby the programme aims to attract excellent students and thereby support the university aim to meet the skills' needs of the new economy.

Additionally, the programme aims to develop:

- complex and specialised knowledge and skills in the field of computer science
- students' critical, analytical, evaluative and problem-solving abilities through practical application and theoretical appreciation of the principles associated with computer science
- students' appreciation of innovations and advances in computer science, and the implication for continuing professional development
- students' receptive skills, vision and flexibility to adapt to innovations and advances in computer science
- students' appreciation of major issues at the frontiers of the subject, through debate, discussion and critical analysis
- the application of professional and ethical principles, standards and practices in the field of computer science
- knowledge and skills to satisfy requirements of the British Computer Society
- tangible transferable and life long learning skills to support continuing educational and professional development.

5.2 Programme Learning Outcomes

By the end of this programme of study students will be able to demonstrate specialist in-depth knowledge and critical understanding of:

a) Knowledge and Understanding

- A1: the role, nature, threats to information security, evolution and limitations of aspects of computer science
- A2: essential facts, concepts, principles, theories, methods, techniques and tools in the application and management of a range of current and emerging aspects of computer science
- A3: the main features and major issues associated with the establishment and management of a technical project
- A4: major issues at the frontiers of research and development in computer science
- A5: the professional, ethical, legal and social issues involved in the development and operation of a range of aspects of computer science.

b) Intellectual Skills

- B1: apply knowledge and understanding to systematically identify and analyse complex problems of a familiar and unfamiliar nature and offer appropriate strategic solutions using a range of effective methods and tools
- B2: critically examine, understand, apply, discuss and evaluate the philosophies, techniques, tools, and methods relevant to computer science for a range of applications and a variety of domains
- B3: use evidence and criteria to integrate, evaluate, interpret and synthesise information and data from a variety of sources, discriminating between what is primarily essential or useful, and what has secondary value
- B4: reflect on the professional, ethical, social and legal issues surrounding the development and use of computer science
- B5: critically examine and understand the ways of defining, promoting, controlling and validating the attainment of quality in the field of computer science
- B6: understand how the boundaries of knowledge are advanced through research and advanced scholarship
- **B7**: identify, plan and execute a significant individual project by conducting independent research and applying originality plus a range of specific skills and established techniques in research methodologies and literature reviewing.

c) Practical Skills Students will be able to: C1: apply a range of techniques, tools and knowledge in the analysis, design, construction, testing and maintenance of high quality, enabling solutions to complex computer science problems in a variety of both real world and theoretical contexts C2: use appropriate techniques, tools and knowledge to support effective management of the development, operation and security of complex software systems across a range computer science fields C3: use appropriate techniques, tools and knowledge to support effective project management C4: appreciate and apply appropriate techniques, tools and knowledge to support effective research C5: apply in a business or industrial context the processes and principles associated with professionalism in Computer Science d) Transferable/Key Skills Students will be able to: D1: learn independently, enhancing their existing skills and developing new ones to a high level, enabling them to sustain their own continued professional development D2: demonstrate creativity in problem solving and decision making in complex and unpredictable situations D3: critically appraise the processes used in a research and development computer science project D4: demonstrate initiative, personal responsibility, personal enterprise, self reliance and self direction, acting autonomously in planning and implementing tasks at a professional level D5: manage their time and resources efficiently D6: engage in critical self appraisal of their own learning experience, personal strengths, limitations and performance D7: demonstrate research skills at an appropriately advanced level.

5.3 Programme Structure

Full time: September start

The programme typically runs over three semesters. In the first two semesters taught modules are studied. In the third semester students complete their project. During the summer students will take a vacation or obtain work experience. Exceptionally, students may complete the programme within 1 year.

Semester 1	Semester 2	Summer	Semester 1
Sept –Jan	Feb-May	June-Sept	Sept-Jan
			CG0174 MSc Project (60)
IS0749 Resear	ch and Project Management (20)		
EN0725 Wireless Technology (10)	IS0729 Systems Security Management (10)		
EN0706 Systems Development Workshop (20)	CM0730 Decision Support Systems (20)		
CM0729 AI for Applications (20)	CM0721 Implementation of Object Oriented Designs (20)		

Full time: January start

The programme typically runs over three semesters. In the first two semesters taught modules are studied. In the third semester students complete their project. During the summer students will take a vacation or obtain work experience.

Semester 2		Semester 1	Semester 1
Feb - May	Summer break June - Sept	Sept - Jan	Jan - May
IS0749 Research and Project Management		Continuation of IS0749 Research and Project Management (20)	CG0174 MSc Project (60)
IS0729 Systems Security Management (10)		EN0725 Wireless Technology (10)	
CM0730 Decision Support Systems (20)		CM0729 AI for Applications (20)	
CM0721 Implementation of Object Oriented Designs (20)		EN0706 Systems Development Workshop (20)	

Full time students undertake 60 points worth of study each semester.

Part time students are recommended to study 30 points per semester, but variations are possible. Part time students may choose to take some options earlier or later in order to increase the range of options available (subject to meeting pre-requisites for particular modules).

5.4 Learning Teaching and Assessment Strategy

The learning, teaching and assessment methods fully comply with the QAA Code of Practice on Assessment. The methods are diverse, incorporating the best techniques to fit both the particular subject under study and the depth of learning required at postgraduate level.

At the start of each semester all students are provided with full details of the learning, teaching and assessment styles for each module.

Each module adopts a teaching and learning strategy that is appropriate to the subject matter covered. Some modules adopt a traditional approach with initially, learning and teaching taking place via lectures, small group seminars and practical skills sessions in computing laboratories and classrooms. Deep learning is facilitated by applying theoretical concepts in practical ways in order to reinforce lecture topics and maximise "learning by doing". Other modules follow a flexible learning approach with the students being provided with the appropriate materials and the lecturers acting as learning facilitators, supporting the students in a flexible manner.

The internet and the University and Faculty web resources, including eLP, are used to support lectures, seminars, computing laboratory and classroom sessions and private study.

Directed and supported independent learning quickly becomes prevalent as students are expected to become increasingly creative, reflective, independent learners and researchers. Seminars are used extensively for student centred discussion and debate of major and emerging issues. Case studies and open-ended, complex and unpredictable problems are presented for analysis, solution and critical evaluation. Students are encouraged to reflect on their own professional experience, and to make use of this where appropriate.

The taught modules are followed by the Individual Project which is the showcase for Masters students to demonstrate their technical, intellectual, management and research skills. All students are prepared for the project via earlier modules covering project management and research methods. Students are encouraged to identify a project which is linked to industry or based on a real-world problem, to increase the project's validity and the Faculty's enterprise links.

All students are allocated an academic project supervisor who is a suitable subject specialist. Supervisors meet their students regularly on a one-to-one basis, providing full support throughout the period of the project. Milestones are scheduled to facilitate progress, with students submitting an outline proposal and detailed Project Proposal to their supervisors at appropriate times. Students, supervisors and the Project Panel are issued with the Project Guide containing full details of the process and deliverables, and notes for guidance. Further support is available via eLP. Students are also provided guidance in the form of lectures from the Project Tutor about the process and expected deliverables.

The project is preceded by the systems development workshop. This provides students with the opportunity to apply their project management, research skill to a significant piece of independent work. This module consolidates the other studies by providing the opportunity for students to apply their knowledge in a practical setting.

Wherever possible and appropriate a student will be paired with an academic supervisor who is an active researcher in the student's area of research. In this way it is hoped to maximise the opportunity for MSc research to contribute towards publishable research papers, for the mutual benefit of the student, the Faculty, the University and the discipline itself. This supports the university's commitment to the best teaching, research and knowledge exchange.

Assessment is seen as an integral part of the learning process and the programme has been designed to ensure that the overall balance of assessment tasks measures the learning outcomes in an effective and efficient way. Both summative and formative elements are utilised, the latter to provide students with feedback which is developmental and timely.

Great care has been taken to ensure that the learning outcomes for each individual module are not over-assessed, and do not produce unmanageable workloads for students and staff. This measure ensures that students can produce work to the best of their abilities and that staff can be confident that the marks they give are correct. Where appropriate student achievement is measured by assignment, individual portfolio or individual project rather than formal examination, which is generally accepted to be less applicable at this higher level of study. Modules with 100% coursework make use of mechanisms such as vivas and presentations to ensure integrity of assessment.

Learning, teaching and assessment of transferable skills permeate the whole of the programme.

Modules taught by resource-based learning are supported by workshop/seminar/laboratory sessions. The resource based learning supports the different learning styles of different students, encourages student autonomy and promotes active learning.

In accordance with section 4.1.3 of the Assessment Regulations for Northumbria Awards, this programme has a formal progression point after completion of 120 credits.

5.5 Feedback on Assessment

There are two kinds of assessments, formative and summative. Formative assessment (this is not marked (graded) but rather it is designed to help you improve your work) feedback is incorporated into modules wherever appropriate and students are encouraged to participate in formative activities through linking those activities to your Personal Development Plans and using the formative activities to develop the skills, techniques and expectations of summative assessment. Summative assessments are marked (graded) and recorded on your record; methods include assignments, exams, technical reports, case study analyses, presentations, portfolio and project work.

5.6 Student Feedback

The University and the Faculty regard obtaining student views as an essential part of the "quality assurance" process - both for immediate concerns affecting current operation of the programme, and for longer term development and enhancement.

Student views are sought at a variety of levels, and in a variety of ways. You will probably find that many lecturers will ask you to complete a questionnaire concerning their particular module/teaching. Unless specified otherwise these questionnaires are treated anonymously, and it is a significant help to staff if you complete and return these questionnaires as accurately and as quickly as possible.

In addition each programme has student representatives on the staff-student liaison committees. These operate informally at a programme/programme level with several meetings each semester with the programme leader, and a more formal Faculty committee which normally meets once each semester. These provide a forum for discussing operational and policy matters relating to the programmes. Any matters of general concern to students on the programme may be raised, but it is expected that matters relating to an individual student or module would be raised on an individual basis at least in the first instance.

Details of the number of representatives for each set of students (part time, full time, by seminar group etc) will be announced early in the first semester, and the programme leader will invite nominations and arrange for an election if necessary.

5.7 Programme and Assessment Schedule and Assessment Criteria

To help you understand our expectations and to help in planning your time we have put together an assessment schedule, see Appendix A. Each module team will design an assessment criteria/framework for each assessment in accordance with the nature of the study. Each assessment framework will be different, but an example of the criteria that is used for masters is appended to this guide in appendix B.

5.8 External Examiner Information

The external examiner for this programme is Dr John Lloyd from the University of Newcastle.

5.9 Specialist Facilities (Resources and Laboratories)

There are lots of computer labs in the faculty. The majority of facilities used on this programme are available in the standard computer labs that are mostly based in Pandon building. For some modules more specialist labs or equipment may be used – for example, networks related modules have access to the specialist Networking lab in Pandon S3. You will also have 24 hour access to the computers in Pandon Basement for more general computer facilities.

5.10 Professional Bodies

The MSc Computer Science is an accreditated course under the regulations according to the British Computing Society.

5.11 FAQ

How much time should I spend on a module?

Generally, As much as it takes! Different students have different levels of expertise and aptitude for particular subjects, and some people learn faster than others. As a guideline a full time notional student workload (NSW) for a 15 week semester is 600 hours. This would give an average workload of 40 hours learning activity per week for a "notional" student.

As a real student (rather than a notional one) you will find that your actual hours differ from this figure. In addition students also need to spend time on non-learning activities - finding where the lecture is, waiting in the library queue to check out a book, reading mail messages and a myriad other things.

What is the pass mark for an assignment?

Assignments don't have an individual pass mark.

How do I pass the programme?

Normally, by passing all the assessments on the modules.

What if I was ill for an exam, or had other good reasons for not doing well as well as I could normally have done?

If there are extenuating circumstances, you should discuss this with your personal tutor or a programme leader, and complete a person extenuating circumstances form (available from the Faculty Office). The Progress and Awards examination board will then be able to consider your situation and may make allowances, or give you a *deferral* assessment, to give you a second chance during the summer.

What is the difference between a deferral and a referral?

A deferral will count as your first attempt. A referral is only allowed if you have failed to get a pass mark in a module. The maximum recorded mark for a referral is the pass mark for the module. For a deferral you can get up to 100%. If you fail a deferral, you can still be allowed a referral. If you fail a referral you may be able to repeat the module next time it runs, but will be charged the module fee.

What if I still don't pass all my modules?

The Progress and Awards board is allowed to disregard up to 20 points of study for a Postgraduate Diploma or M.Sc. If you don't qualify for a M.Sc. the board will consider you for a Postgraduate Diploma, and then for a Postgraduate Certificate (minimum of 60 points needed).

Who decides my marks?

The lecturers on a module will recommend marks to an examination board, which agrees the marks in consultation with an external examiner from another University.

Do I have to wait until June to get any marks or feedback on how I am doing?

No, module tutors will give marks, and personal feedback on each assignment after it has been marked. The marks are provisional until the examination board has made its decisions. Once the provisional marks for semester one have been collated you will be provided with a transcript of your marks for the semester.

What if I think the Progress and Awards Board, or the Subject Division examination board have been unfair?

You have a right of appeal, but should consult a programme leader, and the regulations, first. You can't appeal simply because you think your work was worth more marks. Appeals should be submitted within three weeks of the decision that you are appealing against.

What do I do if I can't complete an assignment on time?

Talk to your module tutor. If you have good grounds, then ask for an extension. If you can't have an extension it is always better to submit something than nothing. If at all possible, you should ask for an extension **before** the assignment is due. Only your programme leader may grant extensions. Do not commit academic misconduct just because you are in a rush.

What if I miss an exam?

If you know in advance that you can't attend an exam, then contact a programme leader and ask for advice. If you miss an exam, and think you have a valid reason, you should contact a programme leader, and complete a Personal Extenuating Circumstance form. *Note that documentary evidence will be required* (e.g. If you were ill, a doctors note will be needed).

How do I find out about programme announcements?

Check the programme notice board, read your e-mail, check Blackboard

How do I find out about examination timetables?

The examination timetable is usually available a few weeks before the exams, and is posted on a notice board close to the Faculty Office. A copy will **not** appear on the programme notice board.

I am on holiday when the exams take place. What can I do?

Change your holiday dates! You should not book holidays for the exam period. It is your responsibility to ensure you are available during all three assessment periods.

What does the Faculty Office do?

The Faculty office is on the ground floor of Pandon Building. The administrators for Informatics programmes are based there. You should contact the faculty office about change of address, change of study plans (*after* discussing it with a programme leader), assignment extension request forms and personal extenuating Circumstances forms.

How do I contact the programme leader?

It is generally best to use email, always include your programme and student id please. Please use university email, not your home email for this purpose. Phoning is not recommended. If a meeting is needed, then suggest some times and include a telephone number in your email. Always include your real name. If you need to leave a form or letter it can be handed in at the Faculty Office. Northumbria Students' Union (NSU) is here to make sure you have the best experience possible. NSU is one of the largest and most exciting Unions in the country and that's all because of YOU. We represent you, the student, on all levels, on the issues students are concerned about; receiving a great academic experience, being very employable when you graduate, being safe on campus and in the city and having a fantastic time while a student.

NSU is run by students for students. You can have your say in what NSU does and how it is run, by contacting your <u>Sabbatical Officers</u> or by coming along to <u>Student Council</u>

MEMBERSHIP: As a student of Northumbria University you are automatically a member of the Students' Union. We also sell NUS Extra Card from the Students' Union at both <u>Coach Lane</u> and <u>City</u> <u>Campus</u> giving you discounts in shops and online, but you don't need one to use any of our services.

DIVERSE: Your Students' Union is a place which brings together students from all walks of life, all parts of the country and the world and many different cultures. NSU provides lots of opportunities for you to <u>Get Involved</u>, make lasting friendships, increase employability and have FUN!

INDEPENDENT: NSU is independent of the University, with its own staff, services and decisionmaking structure. Run by students for students, providing the best services and opportunities for students we push for change from the University to deliver for students. Find our more at our <u>You</u> <u>Said, SU Did</u> page. If you need advice about academic appeals or other issues, we can help. Check out the <u>Advice Page</u>.

VALUE: Your NSU offers the best value for money, and everything you spend goes straight back into the Students' Union to fund all the activities that we run for you.

If you would like more information check out the website <u>www.mynsu.co.uk</u> or come and see us at our <u>offices</u> in City, Coach Lane and London.

* * *

The libraries at City Campus and Coach Lane provide access to a wide range of print and electronic resources including over half a million print books, over 700,000 eBooks and more than 50,000 electronic journals. More details can be found on the University Library website: http://library.northumbria.ac.uk/home

City Campus Library (number 14 on City Campus map) is housed near the Student Union building (number 30 on City Campus map).

Coach Lane Library is situated on the East Side of the Campus, in F Block (number 16 on Coach Lane Campus map).

City Campus library is open 24/7 during term time and from 9am to midnight during vacation times. Coach Lane library is open 7am until midnight (Monday to Friday), 9am until midnight (Saturday and Sunday). Opening hours are prominently displayed in the foyers of the library buildings, any changes are advertised on the Library website and on social media. Opening hours vary during bank holidays and are subject to change, so please check before you travel.

You will need to keep your smartcard with you to gain access to and leave the libraries. Your Smartcard is a universal card which not only gives access to the Libraries and other University buildings, but it also allows you to print, copy, scan, borrow books and make cashless payments.

The Library Catalogue can be accessed on and off-campus through the University Library website and the dedicated catalogue computers on each floor of both Libraries. The catalogue can be used to search for books and eBooks located in the University Library. It is quick and easy to use and will give you the information you need to locate the material on the shelves or read online. eBooks can be read on and off-campus, anytime, anywhere. NORA can be used to search for, and retrieve, upto-date scholarly materials including articles, reports and statistics that are relevant to your studies. You can browse through all the online resources relating to your subject in one place including databases, journals and websites.

Students are entitled to borrow up to 15 items at any one time. Items can be issued using the selfissue machines on the ground floor of City and Coach Lane Libraries. You can renew your library books online through the MyLibrary section of MyNorthumbria or via the Library Catalogue.

Northumbria students can use other libraries such as the Robinson Library at Newcastle University and Newcastle City Library using the SCONUL access scheme. For more information see the Library SCONUL information page: <u>http://library.northumbria.ac.uk/sconul-holiday</u>

The Northumbria Skills Programme is a comprehensive skills programme designed to develop the key skills you need to succeed at university and beyond provided by the Library. It runs throughout the year and provides classroom style skills sessions on many topics including academic writing skills, giving accomplished presentations, and referencing your work correctly, as well as regular drop in surgeries. Some sessions are bookable; simply consult the timetable on the Northumbria Skills Programme website: http://library.northumbria.ac.uk/skillsdev-nsp

Skills Plus is the Library's collection of online learning materials, with a focus on digital literacy and study skills that can be accessed on and off-campus. Using these resources is an excellent way to develop your skills through a range of online tutorials with quizzes, video demonstrations and printable help guides. <u>http://nuweb2.northumbria.ac.uk/library/skillsplus/topics.html?l3-0</u>

If you need help or advice, on or off campus, you can contact Ask4Help. The Ask4Help service provides you with help and support to access a range of University services including Library, Disability Support, Student Finance and Careers. The quickest way to find answers to some of the most popular questions asked by students is to look at Ask4help online. You can also contact us by phone and speak to a member of our dedicated enquiry team or email us your questions.

www.northumbria.ac.uk/ask4help ask4help@northumbria.ac.uk 0191 227 4646

APPENDIX A – ASSESSMENT SCHEDULE

Teaching Week	W/B	Time Table week	CM0721 - Implementation of Object Oriented Designs	EN0725 - Wireless Computer Network Technology	EN0706 - Systems Development Workshop	IS0729 - Systems Security Management	IS0749 - Research and Project Management	CM0730 - Decision Support Systems	CM0729 - Artificial Intelligence for Applications
Induction	16/09/2013	9							
1	23/09/2013	10							
2	30/09/2013	11							
3	07/10/2013	12							
4	14/10/2013	13							
5	21/10/2013	14							
6	28/10/2013	15					Part A Hand In		
7	04/11/2013	16							
8	11/11/2013	17							
9	18/11/2013	18							
10	25/11/2013	19					Feedback Due Part A		
11	02/12/2013	20							Practical Group Work Hand in
12	09/12/2013	21		Assignment hand in					Individual essay hand in
	-			Winter Break	– Timetable weeks 2	2/23/24			

Teaching Week	W/B	Time Table week	CM0721 - Implementation of Object Oriented Designs	EN0725 - Wireless Computer Network Technology	EN0706 - Systems Development Workshop	IS0729 - Systems Security Management	IS0749 - Research and Project Management	CM0730 - Decision Support Systems	CM0729 - Artificial Intelligence for Applications
Assessment and Feedback week	06/01/2014	25							
Assessment and Feedback week	13/01/2014	26		Exam					
1	20/01/2014	27			Assignment Hand Out		Part B Hand In		
2	27/01/2014	28		Assignment Feedback					Feedback
3	03/02/2014	29	Portfolio Hand Out						
4	10/02/2014	30		Exam Feedback					
5	17/02/2014	31					Feedback Due Part B		
6	24/02/2014	32							
7	03/03/2014	33				Assignment A Hand In			
8	10/03/2014	34	Portfolio due						
9	17/03/2014	35	Assignment Set				Part C Hand In		

Teaching Week	W/B	Time Table week	CM0721 - Implementation of Object Oriented Designs	EN0725 - Wireless Computer Network Technology	EN0706 - Systems Development Workshop	IS0729 - Systems Security Management	IS0749 - Research and Project Management	CM0730 - Decision Support Systems	CM0729 - Artificial Intelligence for Applications
10	24/03/2014	36			Individual report Hand In (30%)				
11	31/03/2014	37				Feedback			
	Spring Break								
12	28/04/2014	41	Feedback		Group report (70%)			Assignment Hand In	
Revision and Assessment	05/05/2014	42	Assignment due			Assignment B Hand In	Feedback Due Part C		
Revision and Assessment	12/05/2014	43			Feedback Due for individual Report				
Revision and Assessment	19/05/2014	44							
	26/05/2014	45			Feedback Due for Group Report			Feedback	
	02/06/2014	46	Feedback			Feedback			
	09/06/2014	47							
	16/06/2014	48							
	23/06/2014	49							
	30/06/2014	50							

APPENDIX B - EXAMPLE MASTER'S ASSESSMENT FRAMEWORK

e 86- 100 understanding and skills appropriate to level 7. All learning outcomes met a Exemplary in: use of primary sources of literature from a range of perspectivanalysis and structure of argument; critical evaluation of theories including of the discipline; creative original use of theory, research methods and findiinformation to the intended audience.	of the knowledge, high level. ves; development of those at 'cutting edge' ngs; presentation of
86- Exemplary work providing evidence of a complete or near complete grasp of understanding and skills appropriate to level 7. All learning outcomes met a Exemplary in: use of primary sources of literature from a range of perspectivanalysis and structure of argument; critical evaluation of theories including of the discipline; creative original use of theory, research methods and findi information to the intended audience.	of the knowledge, high level. ves; development of those at 'cutting edge' ngs; presentation of
76-85 Outstanding work providing evidence to an extremely high level of the know and skills appropriate to level 7. All learning outcomes met, most at high level of primary sources of literature from a range of perspectives; developme structure of argument; critical evaluation of theories including those at 'cutt discipline; creative use of theory, research methods and findings; presentative the intended audience.	wledge, understanding vel. Outstanding in: ent of analysis and ting edge' of the on of information to
70-75 Excellent work providing evidence to a very high level of the knowledge, ur appropriate to level 7. All learning outcomes met, many at high level. Excellent work providing evidence for a range of perspectives; development of analysis a argument; critical evaluation of theories including those at 'cutting edge' of creative use of theory, research methods and findings; presentation of inforr audience	nderstanding and skills llent in: use of primary and structure of f the discipline; some mation to the intended
67-69 Very good work providing evidence of the knowledge, understanding and sh level 7. All learning outcomes met, some at a high level. Very good in: use of from a variety of sources; development of analysis and structure of argument of theory; application of relevant theory, research methods and findings to the question; presentation of information to the intended audience.	kills appropriate to of up-to-date material ht; critical evaluation he problem in
63-66 Good work providing evidence of the knowledge, understanding and skills a All learning outcomes met, many are more than satisfied. Good in: use of up a variety of sources; development of analysis and structure of argument; crit theory; application of relevant theory, research methods and findings to the presentation of information to the intended audience	appropriate to level 7. p-to-date material from tical evaluation of problem in question;
60-62 Good work providing evidence of the knowledge, understanding and skills a All learning outcomes met, many are more than satisfied. Good in most of use of up-to-date material from a variety of sources; development of analysi argument; critical evaluation of theory; application of relevant theory, resea findings to the problem in question; presentation of information to the inten	appropriate to level 7. the following aspects: as and structure of rch methods and ided audience.
57-59 Highly satisfactory work providing evidence of the knowledge, understandin appropriate to level 7. All learning outcomes are met, some are more than sa satisfactory in: use of relevant material from a variety of sources; developme structure of argument; evaluation of theory; application of relevant theory, r findings to the problem in question; presentation of information to the inten	ng and skills atisfied. Highly ent of analysis and research methods and ided audience.
53-56 Satisfactory work providing evidence of the knowledge, understanding and level 7. All learning outcomes are met. Satisfactory in: use of relevant mater sources; development of analysis and structure of argument; evaluation of th relevant theory, research methods and findings to the problem in question; p information to the intended audience.	skills appropriate to rial from a variety of heory; application of presentation of
50-52 Acceptable work providing evidence of the knowledge, understanding and s level 7. All learning outcomes are met. Adequate in: use of relevant material sources; development of analysis and structure of argument; evaluation of th relevant theory, research methods and findings to the problem in question; p information to the intended audience.	skills appropriate to l from a variety of heory; application of presentation of
45-49 Work is not acceptable in providing evidence of the knowledge, understand appropriate to level 7. A substantial majority of the learning outcomes are m others are nearly satisfied. Adequate in most but not all of the following asp material from a variety of sources; development of analysis and structure of of theory; application of relevant theory, research methods and findings to t question; presentation of information to the intended audience.	ing and skills net, however, and the pects: use of relevant argument; evaluation he problem in
30-44 Work is not acceptable in providing evidence of the knowledge, understand appropriate to level 7. Most of the learning outcomes are met, however, and nearly satisfied. Adequate in at least some of the following aspects: use of r a variety of sources; development of analysis and structure, argument; evaluapplication of relevant theory, relevant methods and findings to the problem presentation of information to the intended audience	ing and skills many of the others are relevant material from uation of theory; n in question;
1-29 Work is not acceptable and shows little evidence of the knowledge, understa appropriate to level 7. Few of the learning outcomes are met. Inadequate in inadequate in at least one of the following aspects: use of relevant material sources; development of analysis and structure of argument; evaluation of the relevant theory, research methods and findings to the problem in question; p Information to the intended audience.	anding and skills several, or seriously from a variety of heory; application of presentation of
0 Work not submitted OR Work giving evidence of serious academic misconor regulations in ARNA Appendix 1) OR Work showing no evidence of the kr understanding and skills appropriate to level 7. None of the learning outcom	duct (subject to nowledge, nes are Met.

Source: A. Dordoy (2007), Academic Registry, Northumbria University (as published in Matthews Lesley (2007), Dissertations: issues in guidance, supervision and assessment