



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

PROGRAMME OF STUDY HANDBOOK

SCHOOL OF APPLIED COMPUTING

LEVEL 7

FACULTY OF ARCHITECTURE, COMPUTING AND ENGINEERING

2018-2019

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INTRODUCTION

This handbook provides you with detailed information about your course, or Programme of Study, in the academic year 2018-2019. Module descriptors are presented in the accompanying Module Directory document.

The University has made every effort to make the information as full and as accurate as possible, but you should note that minor changes in the organisation of modules between the planning stage and the actual teaching are inevitable. We shall try to keep any such changes to a minimum, and you will receive plenty of advance warning in the event of any alteration. We would also be grateful if you would let us know about any changes that you think might be helpful if introduced into future handbooks.

FEEDBACK

Feedback on your programme of study and modules is welcome and important and will help us to improve and enhance your learning experience. You can give feedback in a number of ways: through the student representative for your programme of study, through module evaluation questionnaires, through informal meetings with your personal tutor, teaching staff, or Head of School, through focus groups set up by Schools to gain feedback from students on particular issues, or through the Students' Union. If there are issues, then it is important that you share these with us so that we can address them. Your opinion is valued.

WELCOME MESSAGE FROM THE HEAD OF SCHOOL

Welcome to the School of Applied Computing for the 2018-19 academic year. We are excited to welcome our new students, and welcome back our continuing students. We look forward to working with you over the coming year to help you to succeed in your chosen programme pathway, and would like to take this opportunity to wish you every success in your studies in the coming year.

Professor Ian Wells, Head of School

PROGRAMMES OF STUDY AND PROGRAMME DIRECTORS

This handbook covers the following Programmes of Study. The name and contact details of the Programme Directors are also listed below.

Programme Study	of	Programme Director	Tel. No.	E-mail
Head of School		Professor Ian Wells	01792 481111	ian.wells@uwtsd.ac.uk
MSc Applied Computing		Dr Kemi Ademoye	01792 4181013	kemi.ademoye@uwtsd.ac.uk
MSc Computer Networks and Security		Dr Kapilan Radhakrishnan	01792 481154	kapilan.radhakrishnan@uwtsd.ac.uk
MRes Computing		Dr Carlene Campbell	01792 481747	carlene.campbell@uwtsd.ac.uk
MSc Software Engineering (Web Development)		Dr Kemi Ademoye	01792 4181013	kemi.ademoye@uwtsd.ac.uk

PASTORAL SUPPORT

A member of academic staff will be identified at the beginning of the academic year to act as a point of first contact for all pastoral support issues. Details of the arrangements for Pastoral Support are contained in the *University Regulations – Postgraduate Student Guide* which is published on the Academic Office section on the University's website:

<http://www.uwtsd.ac.uk/academic-office/university-regulations-student-guide/>

ADMINISTRATIVE PROCEDURES

Details of the administrative procedures are contained in the *University Regulations – Postgraduate Student Guide*.

All relevant forms (e.g. essay submission form, dissertation form, extension request form) can be found in the postgraduate student section on the University's VLE and / or on the University's intranet.

Contact details for the Faculty office administrative lead for the programme of study:

Sue Williams

Telephone: 01792 481192

Email: sue.williams2@uwtsd.ac.uk

EXTERNAL EXAMINERS

All taught Programmes of Study which lead to an award of the University have at least one External Examiner. The principal purposes of the University's external examiner system are to ensure that:

- the standard of each award is maintained at the appropriate level;
- the standards of student performance are comparable with standards on similar programmes or subjects in other UK institutions with which they are familiar;
- the processes for assessment and the determination of awards are sound and fairly conducted.

Students may request a copy of the previous year's External Examiner's Report for their programme of study by contacting the Programme Director.

The current External Examiners for the Programmes of Study are:

Programme of Study	External Examiner for 2018/19 (forename/surname)	External Examiner for 2017/18 (if different to current)
MSc Applied Computing	Dr Robert Mellor	
MSc Computer Networks and Security	Dr Robert Mellor	
MRes Computing	Dr Robert Mellor	
MSc Software Engineering (Web Development)	Dr Robert Mellor	

Please note that students are not permitted to make direct contact with the External Examiners without permission and to do so may be considered a disciplinary offence.

ACADEMIC YEAR 2018/2019

The academic year 2018/2019 will be divided up as follows:

Induction 24/09/18 - 28/09/18

Semester 1: 24/09/18 - 25/01/19

Semester 2: 28/01/19 - 12/07/19

Examination Boards: normally October, February and June annually

INFORMATION ABOUT YOU AND YOUR PROGRAMME OF STUDY

Information about you and your programme of study is held by the University on a central Student Record System managed by the University Registry. It is essential that the University Registry has an accurate record of your personal details at all times. It is equally important to ensure that you are enrolled on the correct Programme of Study and on the correct modules. Failure to register properly or to inform the Registry of any changes to your personal details is likely to cause some or all of the following problems:

- failure to keep you generally informed;
- not being able to borrow materials from the Library and Learning Resources;
- not being able to use the Information Technology services;
- failure to contact you in an emergency;
- delay in progressing from Part I to Part II, where applicable;
- delay in graduation as a result of not completing sufficient credits at the correct level;
- general inefficiencies in administrative processes resulting in delays for other students.

Please take time to check the enrolment information provided by the University Registry and be sure to notify the Registry of any errors or changes.

DISCLOSURE AND BARRING SERVICE (DBS) – ENHANCED

If your programme involves you coming into contact with children or vulnerable adults, you will be required to undertake a DBS check (Enhanced). Further details will be provided by the University Registry or Head of School.

As part of each programme's procedures relating to DBS, continuing students will normally be required to inform their Programme Director immediately of any change to their criminal convictions status.

You will also be asked to complete a formal self declaration during the enrolment period at the beginning of the academic year, which confirms your criminal conviction status. This declaration will be kept within Registry.

MODULAR TERMINOLOGY

Programme of Study (Course)

A Programme of Study or course is the collection of modules leading to a particular award.

Module

A module is an academically coherent unit of learning activity with defined aims/learning outcomes, content and assessment scheme.

Module Credit Rating

Every module has a credit rating. Credit is an award made to a learner in recognition of the verified achievement of designated learning outcomes at a specified level.

Level of Study

A level is assigned to each module to define the standard of its academic demand. The basic characteristics of study at Master's level, which is called Level 7 in the National Qualifications Framework. The basic characteristics of the relevant levels of study are outlined in section 6.1.5 of Chapter 6 of the University's *Academic Quality Handbook*, a copy of which is available on the Academic Office section of the website: <http://www.uwtsd.ac.uk/academic-office/academic-quality-handbook/>

Students should note that the expectations and demands of work at Level 7 is higher than those at undergraduate Levels 4-6, and that this will be reflected in the assessment and marking of the module assessments.

ASSESSMENT

At the start of each module, tutors will provide on Moodle full details of the means by which you will be assessed in that module. This will include a full assessment brief and guidelines on the criteria that will be used for marking your work as well as clear information about when the assessments are due and the turn-around feedback time for the assessments. It will also detail how you will be able to discuss the feedback on your work and your performance and what to do if you have any questions.

All assessed written coursework needs to be submitted in electronic copy via Turnitin; alternative instructions will be provided by the Programme Director for any forms of coursework that cannot be submitted via Turnitin.

The University offers programmes in both English and Welsh. The normal expectation is that you will be assessed in the same language in which the programme or modules are delivered. If you have been taught in English and wish to be assessed in Welsh, or vice versa, you should consult your Programme Director about the options available to you.

You will receive confirmation of your assessment marks at the end of each year. Any marks released prior to formal approval by the Progression / Award Examining Board are provisional.

Extenuating Circumstances

If you believe that there are extenuating circumstances which may have adversely affected your ability to complete coursework or examinations, you should follow the

University's procedures for Extenuating Circumstances for Taught Provision, which can be found on the Academic Office section on the University's website:

<http://www.uwtsd.ac.uk/academic-office/procedures-for-academic-appeals-complaints-and-other-student-cases/>

Additional needs in terms of assessment

If you have any additional needs in terms of assessment, it is your responsibility to liaise with Student Services regarding those needs at the start of the academic year, so that a Statement of Compensatory Measures can be drafted in line with the University's procedures for assessment of students with additional needs.

<http://www.uwtsd.ac.uk/services-for-disabled-students/>

Note that the period between the end of the summer examinations and the end of the summer term is an independent study period, which should be used to prepare for your next year of study. Further details will be provided by your Programme Director.

Academic Appeals

Information about how to appeal is provided in the 'Academic Appeal Procedure' in Chapter 13 of the *Academic Quality Handbook*, and in supporting documentation published on the Academic Office section on the University's website:

<http://www.uwtsd.ac.uk/academic-office/procedures-for-academic-appeals-complaints-and-other-student-cases/>

Additional advice is available from the Students' Union. It is very important that you note carefully the grounds on which appeals may be made and submit your appeal on the appropriate form because incomplete or ineligible appeals cannot be processed.

Assessment Regulations

The rules and regulations that govern the assessment of your Programme of Study are available in Chapters 6 and 7 of the University's *Academic Quality Handbook*, a copy of which is available on the Academic Office section of the website:

<http://www.uwtsd.ac.uk/academic-office/academic-quality-handbook/>

Responsibilities of students in relation to the assessment process

As noted in section 7.3 (5) of Chapter 7 of the *Academic Quality Handbook*, students are responsible for ensuring that:

- i) They are correctly enrolled on their programme of study (including re-enrolment for each academic year after initial enrolment).
- ii) They read and understand the information provided about how they will be assessed, how their final award will be determined, and the action to take in the event that they experience difficulties relating to assessment.
- iii) They attempt every assessment component of a module.
- iv) They attend examinations and other assessment events, including re-examination and re-assessment events, as required; and that they are available to attend oral examinations if required to do so within the published dates of terms or semesters, or other date notified to them in advance.
- v) They submit work for assessment as required and in accordance with the required format and deadline.
- vi) They inform their School or Student Services of any disability or long term impairment which might require special provisions for assessment.
- vii) They familiarise themselves with the University's definition of unfair practice and undertake assessments in a manner that does not attempt to gain unfair advantage.

- viii) They follow the prescribed procedures in the event that they experience extenuating circumstances or wish to appeal against the decision of an Examining Board.
- ix) They keep a copy of work presented for assessment wherever feasible.
- x) They make their work available for sampling for external examining purposes and for archiving.

VIRTUAL LEARNING ENVIRONMENT (VLE)

Moodle is the University's Virtual Learning Environment (VLE). The VLE is used to support learning and teaching. It can be accessed by **enrolled** students from anywhere in the world using the internet and a web browser.

Some of Moodle's features allow students to:

- Access course materials
- Facilitate communication between students and tutors
- Support group tasks
- Take online assessments with automatic marking and feedback facilities

Moodle can be used for administration tasks such as:

- Displaying announcements e.g. lecture venue changed
- Submission of assignments electronically
- Administration of online surveys, such as module questionnaires

How to Access:

You can access Moodle in 3 different ways:

1. From MyDay
Access your MyDay dashboard either by logging into a campus PC and opening Internet Explorer, or accessing <http://myday.uwtsd.ac.uk> from any browser on an internet-connected device. Click on the Moodle tile.
2. From the University Website
Navigate to <http://uwtsd.ac.uk> and select Quick Links (top left side of screen) and then Moodle.
3. URL Input
Open any browser on an internet-connected device and navigate to <http://moodle.uwtsd.ac.uk>

Log in using your Network username and password which are the same used to access campus PC.

If you are missing courses/modules in the **My Courses** block please contact your **lecturers** to ask if they use Moodle. Please note it can take 24hrs for enrolment data to feed into Moodle. If you have problems finding resources (timetables, lecture notes, assignment briefs etc.) please contact the **lecturer** that delivers the course/module.

For any technical issues or error messages contact the **IT Service Desk** via:

Web: <https://webhelp.uwtsd.ac.uk>

Tel: 0300 500 5055

Or email: ITServiceDesk@uwtsd.ac.uk

In any correspondence please include your name and username (your student number) together with details of your issue.

ASSESSMENT FEEDBACK VIA TURNITIN

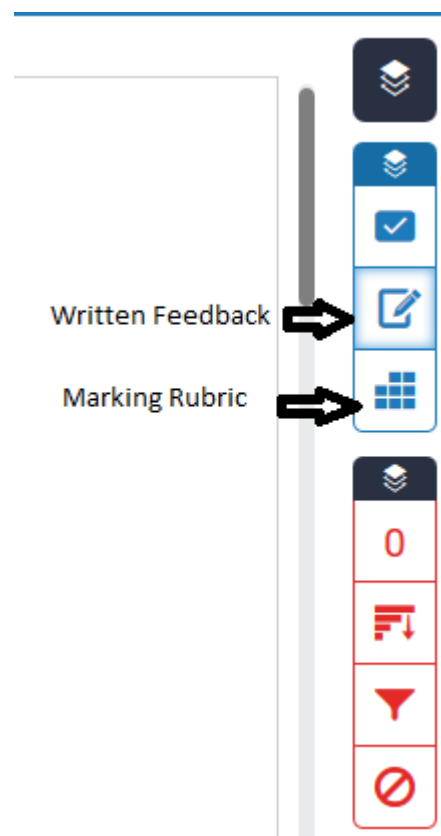
For feedback provided through Turnitin, there are two areas to get your feedback: written feedback, and the marking rubric.

Written feedback will comment on the overall work.

The marking rubric will focus on how the piece of work meets the criteria listed in the relevant rubric.

The marking rubric does not give a mathematically calculated result based on the sum of individual components, but is used holistically to help determine the mark.

Written Feedback and the Marking Rubric can be found by clicking the buttons as shown when you view your submitted assignment in Turnitin.



PROGRAMMES OF STUDY

(1) MSc Applied Computing

Programme Learning Outcomes

Students who have successfully completed the MSc Applied Computing degree programme will be expected to demonstrate the following learning outcomes:

Knowledge and Understanding:

- A systematic understanding of knowledge in their field, and originality in the application of that knowledge.
- A comprehensive understanding of techniques applicable to their own research or advanced scholarship.
- A conceptual understanding that enables them to critically evaluate current research and advanced scholarship in the discipline.
- The ability to critically evaluate and analyse styles of management and organisational structure.

General (Transferable) Skills:

- An ability to deal with complex issues both systematically and creatively.
- Self-direction and originality in solving problems, and independently plan and implement tasks at an appropriate level.
- An ability to communicate their conclusions clearly to specialist and non-specialist audiences.

Subject-Specific Skills:

- An ability to analyse, design, implement and test advanced software solutions making use of current distributed techniques, architectures and technologies
- To demonstrate advanced theoretical and practical knowledge of database systems including mechanisms for data storage, interrogation and visualisation
- The ability to manage both the development and deployment of web applications.
- To demonstrate advanced theoretical and practical knowledge of emerging computing technologies.

PROGRAMME STRUCTURE

The table below shows the current composition of the programme:

Code	Title	Credits
PART I		
Compulsory Modules		
M7X01690	Distributed Web Applications	20
M7X01697	Leadership and Management	20
M7X01699	Managing Information Systems and Projects	20
M7X01702	Research Methods and Data Analysis	20
M7X01705	Web Technologies for eCommerce	20

Optional Modules (choose one)		
M7X01688	Data Mining	20
M7X01689	Data Warehousing	20
PART II		
Compulsory Module		
M7X01698	Major Project	60

The modules that are delivered each academic year will depend on a number of factors, including the number of students that opt to study that module. All the options on your Programme of Study will not necessarily be offered each year.

The following modules will be offered in 2018/19:

Code	Title	Credits
PART I		
Compulsory Modules		
M7X01690	Distributed Web Applications	20
M7X01697	Leadership and Management	20
M7X01699	Managing Information Systems and Projects	20
M7X01702	Research Methods and Data Analysis	20
M7X01705	Web Technologies for eCommerce	20
M7X01688	Data Mining	20
PART II		
Compulsory Module		
M7X01698	Major Project	60

(2) MSc Computer Networks and Security

Programme Learning Outcomes

Knowledge and understanding:

- A systematic understanding of knowledge in their field, and originality in the application of that knowledge.
- A comprehensive understanding of techniques applicable to their own research or advanced scholarship.
- A conceptual understanding that enables them to critically evaluate current research and advanced scholarship in the discipline.
- The ability to critically evaluate and analyse styles of management and organisational structure.

General (transferable) skills:

- An ability to deal with complex issues both systematically and creatively.
- Self-direction and originality in solving problems, and independently plan and implement tasks at an appropriate level.
- An ability to communicate their conclusions clearly to specialist and non-specialist audiences.

Subject-specific skills:

- An ability to analyse and design advanced computer networks (both software and hardware aspects) and to identify and take appropriate action to eliminate security threats.
- To demonstrate advanced theoretical and practical knowledge of complex routing protocols and multilayer switching as used in very large corporate networks and internetworks.
- To analyse, design and deploy security measures on Enterprise networks.

To demonstrate advanced theoretical and practical knowledge of emerging networks technologies.

PROGRAMME STRUCTURE

The table below shows the current composition of the programme:

Code	Title	Credits
PART I		
Compulsory Modules		
M7X01691	Emerging Network Technologies	20
M7X01695	Implementing IP Routing	20
M7X01696	IP Switched Networks	20
M7X01697	Leadership and Management	20
M7X01701	Network Security	20
M7X01702	Research Methods and Data Analysis	20
PART II		
Compulsory Module		
M7X01698	Major Project	60

The modules that are delivered each academic year will depend on a number of factors, including the number of students that opt to study that module. All the options on your Programme of Study will not necessarily be offered each year.

The following modules will be offered in 2018/19:

Code	Title	Credits
PART I		
Compulsory Modules		
M7X01691	Emerging Network Technologies	20
M7X01695	Implementing IP Routing	20
M7X01696	IP Switched Networks	20
M7X01697	Leadership and Management	20
M7X01701	Network Security	20
M7X01702	Research Methods and Data Analysis	20
PART II		
Compulsory Module		
M7X01698	Major Project	60

(3) MRes Computing

The programme consists of two parts, a taught element consisting of three 20 credit modules followed by a second element requiring in-depth research into a problem.

Programme Learning Outcomes: Masters by Research (MRes)

Students who have successfully completed the Master by Research (MRes) Computing degree programme will be expected to demonstrate the following learning outcomes:

Knowledge and Understanding:

- A systematic understanding of knowledge in their field, and originality in the application of that knowledge.
- A comprehensive understanding of techniques applicable to their own research or advanced scholarship.
- A conceptual understanding that enables them to critically evaluate current research and advanced scholarship in the discipline.
- The ability to critically evaluate and analyse styles of management and organisational structure.

General (Transferable) Skills:

- An ability to deal with complex issues both systematically and creatively.
- Self-direction and originality in solving problems, and independently plan and implement tasks at an appropriate level.
- An ability to communicate their conclusions clearly to specialist and non-specialist audiences.

Subject-Specific Skills:

- An ability to analyse, design, implement and test advanced computer and computer system solutions making use of current distributed techniques, architectures and technologies.
- An in-depth understanding of the business and legal issues necessary for successful transfer and implementation of the acquired knowledge to the commercial environment.

Programme Learning Outcomes: Post Graduate Certificate Computing

Students who successfully complete 60 credits (Part I) will be eligible for the award of Postgraduate Certificate.

Knowledge and Understanding:

- A systematic understanding of knowledge in their field, and originality in the application of that knowledge.
- A comprehensive understanding of techniques applicable to their own research or advanced scholarship.

General (Transferable) Skills:

- An ability to deal with complex issues both systematically and creatively.
- Self-direction and originality in solving problems, and independently plan and implement tasks at an appropriate level.
- An ability to communicate their conclusions clearly to specialist and non-specialist audiences.

Subject-Specific Skills:

- An ability to analyse, design, implement and test advanced computer and computer system solutions making use of current distributed techniques, architectures and technologies.
- An in-depth understanding of the business and legal issues necessary for successful transfer and implementation of the acquired knowledge to the commercial environment.

PROGRAMME STRUCTURE

Part I

Part I of the programme is made up of the taught modules totalling 60 credits. Those students undertaking full-time study will take all three modules during the first semester, then progress (at the January exam board) to Part 2, which is Individual Research of the programme for the second semester and summer term. Those undertaking part-time study will take all three modules during the first and second semesters before progressing (at the June exam board) to Part 2, which is Individual Research of the programme at the start of the summer term.

Part II

Part II (Major Project) of the programme is an in-depth investigation into a particular area. This element of the programme will be equivalent to 120 credits. The outcome of the Major Project may take a variety of forms and may be formulated through a variety of means - student idea, industrial liaison, staff-student discussion, or a combination of them. The student will essentially be working independently with regular meetings with their allocated supervisor. The main supervisor will be the first point of contact for the student, and will be responsible for monitoring student progress etc.; however other members of the team will be available at known times throughout the working week to answer queries that each student may have. The expectation is that full-time students will complete within a year with the maximum period for full-time study being two years (AQH 8.8). The expectation with regards to the part-time students is that they will be expected to complete 60 credits a year, though a minimum of 40 credits completed a year is allowed subject to confirmation by the Programme Director. The maximum period of study for a part-time student is four years (AQH 8.8).

The modules that are delivered each academic year will depend on a number of factors, including the number of students that opt to study that module. All the options on your Programme of Study will not necessarily be offered each year.

Programme Theme: Data Science

The table below shows the current composition of the programme (Data Science):

Code	Title	Credits
PART I		
Compulsory Modules		
M7X01699	Managing Information Systems and Projects	20
ACFA7000	Research technique	20
Optional Modules (choose one)		
M7X01689	Data Warehousing	20
M7X01688	Data Mining	20
M7X01690	Distributed Web Applications	20
PART II		
Compulsory Module		
ACFA7001	Research Project/Dissertation	120

The following modules will be offered in 2018/19:

Code	Title	Credits
PART I		
Compulsory Modules		
M7X01699	Managing Information Systems and Projects	20
ACFA7000	Research technique	20
M7X01688	Data Mining	20
PART II		
Compulsory Module		
ACFA7001	Research Project/Dissertation	120

Programme Theme: Networks

The table below shows the current composition of the programme (Networks):

Code	Title	Credits
PART I		
Compulsory Modules		
M7X01691	Emerging Network Technologies	20
ACFA7000	Research technique	20
Optional Modules (choose one)		
M7X01695	Implementing IP Routing	20
M7X01696	IP Switched Networks	20
M7X01701	Network Security	20
PART II		
Compulsory Module		
ACFA7001	Research Project/Dissertation	120

The following modules will be offered in 2018/19:

Code	Title	Credits
PART I		
Compulsory Modules		
M7X01691	Emerging Network Technologies	20
ACFA7000	Research technique	20
M7X01701	Network Security	20
PART II		

Compulsory Module		
ACFA7001	Research Project/Dissertation	120

(4) MSc Software Engineering (Web Development) for the DVLA

This is a special industrial MSc programme that will be run for staff working at the DVLA.

There are three exit awards available on this degree programme: Masters of Science (MSc), Post Graduate Diploma (PGDip) and Post Graduate Certificate (PGCert).

Programme Learning Outcomes: MSc Software Engineering (Web Development)

Students who have successfully completed the MSc Software Engineering (Web Development) degree programme will be expected to demonstrate the following learning outcomes:

Knowledge and Understanding:

- A systematic understanding of knowledge in software engineering techniques as applicable to the Web, and originality in the application of that knowledge.
- A comprehensive understanding of techniques applicable to their own research or advanced scholarship.
- A conceptual understanding that enables critical evaluation of current research and advanced scholarship in software engineering.
- Advanced theoretical and practical knowledge of emerging software engineering professional practices and standards.

General (Transferable) Skills:

- An ability to deal with complex issues both systematically and creatively.
- Self-direction and originality in solving problems, and independently plan and implement tasks at an appropriate level.
- An ability to communicate conclusions clearly to specialist and non-specialist audiences.

Subject-Specific Skills:

- An ability to use contemporary analysis and design methods to specify and develop large scale, high quality software systems in systematic, controlled and efficient manner.
- The ability to consistently produced work which applies to and is informed by research and practice at the forefront of the software engineering discipline.
- A systematic understanding of software project management methods and techniques.
- An in-depth understanding of the professional, legal, social and ethical framework within which they would have to operate as professionals in the software engineering field.

Programme Learning Outcomes: Post Graduate Diploma (PGDip) Software Engineering (Web Development)

Students who have successfully completed the PGDip Software Engineering (Web) degree programme will be expected to demonstrate the following learning outcomes:

Knowledge and Understanding:

- A systematic understanding of knowledge in software engineering techniques as applicable to the Web, and originality in the application of that knowledge.
- Advanced theoretical and practical knowledge of modern software production and deployment approaches.

General (Transferable) Skills:

- An ability to deal with complex issues both systematically and creatively.
- An ability to communicate conclusions clearly to specialist and non-specialist audiences.

Subject-Specific Skills:

- An ability to use contemporary analysis and design methods to specify and develop large scale, high quality software systems in systematic, controlled and efficient manner.
- The ability to consistently produced work which applies to and is informed by research and practice at the forefront of the software engineering discipline.
- An understanding of the professional, legal, social and ethical framework within which they would have to operate as professionals in the software engineering field.

Programme Learning Outcomes: Post Graduate Certificate (PGCert) Software Engineering (Web Development)

Students who have successfully completed the PGCert Software Engineering (Web) degree programme will be expected to demonstrate the following learning outcomes:

Knowledge and Understanding:

- Advanced theoretical and practical knowledge of modern software production and deployment approaches.

General (Transferable) Skills:

- An ability to deal with complex issues both systematically and creatively.
- An ability to communicate conclusions clearly to specialist and non-specialist audiences.

Subject-Specific Skills:

- The ability to consistently produced work which applies to and is informed by research and practice at the forefront of the software engineering discipline.
- An understanding of the professional, legal, social and ethical framework within which they would have to operate as professionals in the software engineering field.

PROGRAMME STRUCTURE

The table below shows the current composition of the programme:

Code	Title	Credits
PART I		
Compulsory Modules		
ACCA7000	Programming and Software Testing	20
ACCA7001	Agile Software Engineering Principles	20
ACCA7002	Database Systems	20
ACCA7003	Object-Oriented Programming	20
ACCA7004	Web Development	20
ACCA7005	Web Services	20
PART II		
Compulsory Module		
ACCA7006	Major Project	60

Where appropriate, the University may allow students to study modules in addition to the 120 credits studied for the level of study e.g. Welsh medium or IT modules. Students would need to discuss this with their Programme Director.

Module details are correct on 1 September 2018, and will not normally be changed during the year. In the unlikely event of the School having to make changes to these details during the year, you will be notified in writing. Module descriptors are presented in the accompanying Module Directory document.

ASSESSMENT OF PART I

Each module will be assessed independently in ways which reflect the objectives and learning outcomes of the module and the programme of study as a whole and the learning and teaching strategies employed within the module.

Details of assignments, guidance on the objectives of the assessment and criteria applied in marking will be provided at the beginning of each module.

Full information about the classification of results and regulations for progression can be found in Chapter 6 of the *Academic Quality Handbook*.

Details of what constitutes 'satisfactory progress' can be found in Chapter 6 of the *Academic Quality Handbook*. For further information on 'progress' see the *University Regulations – Postgraduate Student Guide*.

All work in Part I will normally be marked within the University's agreed 20 clear term-time working days turn-around time for assessed coursework. You will be contacted by the module co-ordinator if this is not possible.

COURSEWORK DEADLINES

Assessment deadlines and / or examinations, coursework deadlines and full information about examinations will be provided by the module tutor.

All assessed written coursework needs to be submitted in electronic copy via Turnitin; alternative instructions will be provided by the Programme Director for any forms of coursework that cannot be submitted via Turnitin.

MAJOR PROJECT PREPARATION AND ASSESSMENT

Each candidate accepted into Part II will be required to submit a dissertation/portfolio not exceeding 15,000 words or the equivalent. The word limit does not include appendices (if any), essential footnotes, the formal declarations and statements or the bibliography and index. The appendices can act as a repository of raw data. It should be noted that examiners are not obliged to read the appendices when examining a piece of work.

If a piece of work is clearly above the indicated word limit, then the student should discuss editorial action with his/her supervisors before submission.

The module code for the dissertation/portfolio is: M7X01698

MAJOR PROJECT

It is expected that students reaching the dissertation stage of a Master's Programme of Study will have acquired and practised research skills relevant to the modules studied. Students will be allocated a supervisor who will advise them on the issues arising at various stages in the research project.

Dissertations must be submitted in accordance with the University's requirements as set out in the Guide to Postgraduate Taught Dissertations (Appendix GA29).

<http://www.uwtsd.ac.uk/academic-office/appendices-and-forms/>

Students are advised that the dissertation will then be "open access", i.e. freely available to be used in accordance with copyright and end-user permissions. Students wishing to request a bar on access should refer to section 7.16.1 (2) of Chapter 7 of the *Academic Quality Handbook*.

Please note that if you would like to graduate in July, you should hand in your dissertation no later than 1 April in order to make sure that all the marking and examination procedures are completed in good time. Master's dissertations will normally be marked within the University's agreed 30 clear working days turn-around time.

Details of the responsibilities of the student and dissertation support entitlement can be found in the Supervision Policy for Taught Master's Students (Appendix GA30).
<http://www.uwtsd.ac.uk/academic-office/appendices-and-forms/>

Nature and demands of tutorial supervision for this Programme of Study

Nature

It is expected that students project will be either Experiment-based, Development-based, Survey-based or Review-based. Project proposals must be submitted and accepted before the student begins the project. While it is expected that the majority of work on the project is completed over the summer, students are encouraged to explore the area of their research problem and possible research/development methods required to answer this question earlier in their course.

Project Tutorials

During the third semester, all students will receive a project tutorial on a regular basis, approximately one hour every three weeks. These tutorials will initially ensure that every student has an agreed project title (this is true of full and part time students).

UNIVERSITY ATTENDANCE POLICY

All students are required to attend all scheduled classes and tutorials and Faculties will record individual academic attendance on a weekly basis.

Contact points will be specified for each programme, taking into account the structure of the programme and the scheduled timetable. Disciplinary action will be taken for any sustained periods of unauthorised absence. Students who have a legitimate reason for unexpected absences (including the instance of illness or injury) must provide evidence to their Tutor, London Student Services or Faculty Office, as appropriate, immediately following their return, to ensure that it is noted as authorised leave.

Wherever possible, students should request permission through their Tutors, London Student Services or Faculty Office in advance of any absence, completing the appropriate forms to explain the circumstances that require this. Although short authorised absences are not normally counted against the student, these are taken into consideration in the annual review of each student's cumulative attendance (see below). Confirmation of authorised absence will be lodged on each student's record.

If a student does not provide any reasonable justification for periods of unauthorised absence, fails to respond to initial and/or final Attendance Warning Letters, and/or the required actions agreed at meetings with academic staff, and does not improve their attendance record, the Faculty will ask the Registry to withdraw the student.

International Students with a UKVI Tier 4 Visa

In addition to the attendance requirements noted above, the following regulations will apply to international students who require a 'Tier 4' visa for their studies in the UK.

Each student's **cumulative attendance** (%) will be reviewed during and at the end of each academic Term. The required level of attendance will be defined by the Faculty/campus taking into account the level of study, structure of the programme, and scheduled timetable. Initial and Final Warning letters will be issued for low levels of attendance to advise her/him that attendance is below the level expected by the University and that, if poor attendance continues, this may lead to the individual being withdrawn from the programme. Very low levels of attendance for an academic Term will lead to immediate withdrawal.

Appeal against withdrawal due to poor attendance – Information on how to appeal against withdrawal due to poor attendance is provided on the University's website (<http://www.uwtsd.ac.uk/academic-office/procedures-for-academic-appeals-complaints-and-other-student-cases/>).

It is very important that you note carefully the grounds on which appeals may be made and submit your appeal on the appropriate form (using the Administrative Appeal (Attendance) Application) because incomplete or ineligible appeals cannot be processed (<http://www.uwtsd.ac.uk/academic-office/other-forms-and-policies/>).

If travelling within or outside of the UK during term-time or vacation periods, students should provide contact details and/or a travel itinerary to the Faculty Office or London Student Services to assure immediate contact in the case of an emergency.

Students must always request permission from the University prior to their departure, for authorisation to travel away from their campus during term-time. They must also inform their Tutor, London Student Services or Faculty Office of the date on which they plan to leave the University at the end of each Term, once all teaching and examination requirements have been completed.

It is a requirement of UK Visas & Immigration (UKVI) and a condition of all Tier 4 visas that missing 10 consecutive contact points without any form of authorisation will result in the student being reported to Registry. Registry will then withdraw the student from their programme and inform the UKVI that their Tier 4 visa sponsorship is withdrawn.

All international students holding a Tier 4 visa are also required to attend one (for the London campus) or three (for the Wales-based campuses) compulsory, University re-registration events in each academic year. Students will receive a notification of the timing and location of each event. If an international student fails to attend a re-registration event the student will be reported to Registry. Registry will then withdraw that student from their programme and inform the UKVI that their Tier 4 visa sponsorship is withdrawn.

Students who have a legitimate reason for absence (including the instance of illness or injury while in the UK preventing attendance) must provide evidence to their Tutor, London Student Services or Faculty Office immediately following their return, to request that it be noted as authorised leave. If approved, the confirmation of authorised absence will be lodged on the student's record.

SCHOOL AND FACULTY POLICIES

Your School or Faculty have additional policies in a range of areas. Your Programme Director will provide you with relevant details.

ABOUT UNFAIR PRACTICE AND PLAGIARISM

The University defines unfair practice as 'any act, intentional or otherwise, whereby a person may obtain for himself/herself or for another, an unpermitted advantage...'. Committing unfair practice in assessment is one of the most serious offences in academic life, and its consequences can be severe. It undermines the integrity of scholarship, research, and of the examination and assessment process.

It is very important to understand that it is no defence to claim that unfair practice has been committed unintentionally, accidentally, due to extenuating circumstances or a long-term impairment (irrespective of whether or not these circumstances or long-term impairment have been acknowledged by the University).

Plagiarism is one type of unfair practice. Plagiarism is passing off, or attempting to pass off, another's work as your own. It includes copying the words, ideas, images or research results of another **without acknowledgement**, whether those words etc. are published or unpublished. It is plagiarism, for example, to copy the work of another student, of a member of staff or a published article without crediting the author. Persons who allow their work to be plagiarised are also guilty.

It should be noted that re-submitting work that has already been submitted for a different assessment task without noting that this is the case is also regarded as plagiarism (and is called self-plagiarism) and will be treated as such.

Plagiarism is one of the worst offences in academic life, and its consequences can be severe. It undermines the integrity of scholarship, research, and of the examination and assessment process. The guidance that follows explains what is meant by plagiarism, describes the University's regulations for dealing with it, and provides help in avoiding it.

When enrolling as a student at the University of Wales Trinity Saint David you have consented to your work being scrutinised both electronically and in person to check for cases of plagiarism. In many Schools your work will be submitted electronically via Moodle.

For submissions outside of the Moodle platform, it is equally important that you reference your sources accurately. In some cases you will be expected to submit both hard and electronic copies, which can be checked against the database of the UK Higher Education Plagiarism Detection Service. For handwritten, portfolio and process workbook submissions check with your module tutor if you are in any doubt about whether you have infringed the regulations. They are here to assist you; ensure that you take advantage of their expertise.

Plagiarism: Regulations, Procedure and Penalties

Full details of the University's procedures and penalties for dealing with issues of plagiarism can be found in Chapter 13 of the *Academic Quality Handbook*, which can be seen on the University website or obtained from the Faculty Offices. These details are also summarised in the *University Regulations – Postgraduate Student Guide* which is published on the Academic Office section on the University's website: <http://www.uwtsd.ac.uk/academic-office/university-regulations-student-guide/>

Avoiding Plagiarism

Coursework, dissertations, or creative work are meant to be your own original work. Obviously you will use the work of others. Not only is this inevitable, it is expected.

All scholarship builds on the work of others. The important thing to remember is always to **acknowledge your sources**. The University recognises four referencing styles: APA, Harvard, IEEE and MHRA and provides a handbook for each of these styles. For your course of study you should be using **IEEE**. The handbooks can be found online: <https://www.uwtsd.ac.uk/library/infoskills/referencing-handbooks/> or in print from the Library and Learning Resources. A Referencing Essentials session will be provided during the first term of your first year but as a general rule of thumb observe the following:

- *Anything that is copied or quoted from another source, including electronic sources such as the internet, must be in quotation marks and attributed to the original author. This may be in the body of the text or as a footnote, depending on which Referencing style you are asked to use.*
- *Paraphrasing or summarising the work of others involves putting their ideas into your words. This is fine, but again, acknowledge your source.*
- *Where you are generally indebted for your ideas to one or two main sources, this can be a bit trickier. If the ideas or the way they are presented come from one or two sources, make this clear. Do the same if they come from lectures. It is important not to claim originality where it does not exist but to indicate in general where the information comes from.*
- *Full citations in timed unseen examinations are obviously not expected, but you should indicate general indebtedness and always credit any quotations you have managed to remember.*

The golden rule is; **'if in doubt, provide references'** and your Referencing Handbook will provide you with specific guidance to help you to do this correctly. For support, contact your tutor or Academic Liaison Librarian. There are no penalties for asking for advice and guidance; there are severe penalties for plagiarism and failure to reference means your work could be considered to be plagiarised.

Other types of Unfair Practice

There are other types of unfair practice, including, but not limited to producing work as a group where it is an individual task (called collusion), fabricating data or making false claims to have carried out research, using the service of an essay bank/essay mill, having an unauthorised source of information in an examination, prohibited communication during an examination. The same regulations, procedures and penalties apply to all types of unfair practice.

LIBRARY AND LEARNING RESOURCES

Library and Learning Resources (LLR) supports the learning, teaching and research activities of staff and students across the University with libraries at Carmarthen, Lampeter, London and Swansea and includes online resources, social learning spaces, special collections and archives.

The library prioritises the purchase of e-books over print wherever possible and loan periods are regularly reviewed by the library to ensure that they are appropriate and provide equitable access to resources. It is expected that at least all Essential reading list items are available from the library. The LLR follows a Fairer Fines policy which means students are only fined on items if they are in heavy demand or requested by another library user.

The LLR provides a *Need More?* service which aims to provide a one stop shop for all learning resource needs, for example, if a book, journal or thesis is needed which is not in the library stock then it may be purchased or borrowed from another library. Further information can be found here: <http://www.uwtsd.ac.uk/library/library-guide/need-more/>.

Learning Spaces

There are six libraries across the Carmarthen, Lampeter, London and Swansea campuses. As well as collections, the library provides a variety of modern and flexible learning spaces, reflecting different styles of working e.g. group study spaces and quiet areas, as well as IT facilities, wireless internet, photocopying and printing facilities and excellent customer service.

Online Library

The LLR offers a wide range of printed and electronic resources including an extensive collection of online e-journals and e-books that are available 24/7. Users may access an extensive collection of online e-journals and e-books that are available 24/7 including scholarly journals, newspapers, company reports and reference material. The library catalogue searches the whole range of print and online library materials and gives access to your library account from anywhere.

InfoSkills

All students are provided with a library tour, a Basic Skills session and a Referencing Essentials session in the first few weeks at the University. Academic Liaison Librarians will help students to develop the skills required to find, use and evaluate information sources within their subject areas. Numerous sessions are offered throughout the year to help students develop their Information Skills further to support their academic success and employability. These include sessions on identifying fake news, using statistics, commercial awareness, managing the information about them that is available online and accessing information sources in accessible formats. The LLR operates an open door policy which enables students to ask for help and advice on the information resources available throughout the academic year. Academic Liaison Librarians are welcomed to Staff / Student Committees, School Board meetings and also attend other relevant Faculty meetings where invited, including Faculty Board. For further information on InfoSkills provision go to:

<https://www.uwtsd.ac.uk/library/infoskills/>

Special Collections and Archives

The Library is also home to the Special Collections of UWTSd, including the University's oldest printed books, manuscripts and archives. The Special Collections include over 35,000 printed works, 8 medieval manuscripts, around 100 post medieval manuscripts, and 69 incunables. Material from the Archives includes the institutional archive of St David's College, later The University of Wales, Lampeter, and Trinity College Carmarthen, both constituent members of the University of Wales Trinity Saint David. Students are encouraged to use these wonderful resources as part of their studies, regardless of discipline. Visits and workshops are often arranged within the purpose-built reading rooms in the Lampeter campus library and there is a regular programme of exhibitions across the campuses and online.

Services for Researchers

The LLR also provides advanced support for Research Students including support for the Researcher Development Framework such as Research Data Management, Data Plans, Open Access and measuring the impact of research through use of

bibliometric and altmetrics. Access to other libraries is also available via the SCONUL scheme as well as access to scanning and postal loans services via the *Need More?* service.

For recent service developments, updates and contact information please visit the University Library website at <http://www.uwtsd.ac.uk/library/>. Please also follow the Library and Learning Resources on Facebook, Instagram or Twitter for up-to-date news, service developments and information on new services and resources: @UWTSDLib

STUDENT SERVICES

A professional support service providing high quality information, advice, guidance, practical and emotional support to enable all students to reach their full potential. Support available includes the Careers Service, Financial Support, Learning Support, Counselling Service and support for students from a care background. For further details see <http://www.uwtsd.ac.uk/student-services/>.

STUDY SKILLS

All students have access to study skills support to assist them in their studies. Details of provision are available from the Student Services offices on each campus and at <http://www.uwtsd.ac.uk/study-skills/>.

Topics covered include:

- Developing effective study strategies
- Planning and writing assignments
- Preparing presentations
- Planning for seminars
- Preparing for exams

Drop-in study skills sessions and 1:1 appointments are available on the Carmarthen, Lampeter and Swansea campuses during term time – no appointment necessary. Distance learning students are also able to access the Study Skills Distance service using e-mail, telephone or Skype. Please see the Student Services study skills webpages for further details: <http://www.uwtsd.ac.uk/study-skills/>.

GRADUATE SKILLS FOR EMPLOYMENT

Students are encouraged to use the Careers Service from the first year so that they can begin to plan their professional development in preparation for future employment.

Time at University should be seen as preparing for the world of work, which is increasingly a world that lays a premium on flexibility and ability to adapt to changing situations. Within this context Personal Transferable Skills (PTS) and Professional Development Planning (PDP) have come to feature very prominently as important graduate attributes. PTS are skills acquired in the course of academic study which might be independent of the discipline in question and, therefore, transferable and usable in other contexts, including the world of work. PDP is the planning process through which one is able to reflect upon and analyse, personal strengths and identify areas for future development. Four main categories of such skills have been identified: problem solving, managing/organising, team work and communication. Each Programme of Study has been designed to include opportunities to acquire and

develop personal skills and plan professional development in readiness for graduation. Further details are available from your Programme Director.

COMPLAINTS

You have a right to make a complaint about any specific concern about the provision of your Programme of Study or a related academic service. Full details of the complaints process can be found in the 'Procedure for Student Complaints' in Chapter 13 of the *Academic Quality Handbook* and in supporting documentation published on the Academic Office section on the University's website:

<http://www.uwtsd.ac.uk/academic-office/procedures-for-academic-appeals-complaints-and-other-student-cases/>