BSc (Hons) in Applied Software Engineering

Swansea University
Prifysgol Abertawe

Course Handbook

2024/2025

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difficilia quae pulchra

things that are excellent are difficult

The Faculty of Science and Engineering has made all reasonable efforts to ensure that the information contained within this publication is accurate and up-to-date when published but can accept no responsibility for any errors or omissions.

The Faculty of Science and Engineering reserves the right to revise, alter or discontinue degree programmes or modules and to amend regulations and procedures at any time, but every effort will be made to notify interested parties.

It should be noted that not every module listed in this handbook may be available every year, and changes may be made to the details of the modules. You are advised to contact the Programme Director directly if you require further information.

– September 20, 2024.

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Welcome to the Faculty of Science and Engineering

Whether you are a new or a returning student, we could not be happier to be on this journey with you. At Swansea University and in the Faculty of Science and Engineering, we believe in working in partnership with students. We work hard to break down barriers and value the contribution of everyone.

Our goal is an inclusive community where everyone is respected, and everyone's contributions are valued. Always feel free to talk to academic, technical and administrative staff - I'm sure you will find many friendly helping hands ready to assist you. And make the most of living and working alongside your fellow students.

During your time with us, please learn, create, collaborate, and most of all – enjoy yourself!

Professor David Smith
Pro-Vice-Chancellor and Executive Dean
Faculty of Science and Engineering

Contacts

Faculty of Science and Engineering	
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University Information

Health and Safety
Owing to Fire and Health & Safety Regulations (and from the general considerations of security), the hours of entry to certain buildings on the campus are restricted. Outside these hours, entry can only be gained on the written permission of the Head of School or other authority concerned.

Emergency Procedures
In the event of a medical (or other) emergency call 333 immediately on a University landline or ask a member of staff to do so. If you are unsure if 333 has been called, call 333 again. For all emergency calls on University property dial 333 on a University phone. This helps the University to speed the arrival of the Emergency Services.

In the event of a fire:

1. Raise the alarm at once by breaking the glass of the nearest fire alarm call point.

2. Send the first available person to telephone 333 and give the location of the fire.

3. If appropriate, call for assistance and attack the fire with the correct extinguisher.

4. If the fire should get out of control, or your escape is threatened, leave the building at once, closing doors and windows as you go.

If you hear the fire alarm:

1. Leave the building immediately, closing all doors behind you: use the nearest available exit; do not stop to collect personal belongings; do not use the lifts; and do not re-enter the building.

2. When clear of the building proceed at once to the assembly area for that building (as indicated on the blue Fire Action signs around the building).

Data Protection
The University's procedures comply with the principles of the Data Protection Act 2018. The responsibilities of students in relation to the provision of personal data can be found on the Swansea University website. Students as data subjects have a right to request from the University a copy of their own personal data. A standard form must be completed. The University's registration number with the Information Commissioner is Z6102454.

Assessment and Feedback
The university operates a strict policy with regards to submission deadlines. Late submissions will not be accepted and students will receive 0% for any assignments which are not submitted before the deadline. The university adheres to a policy of providing feedback on all submissions within three weeks of the submission deadline.

Transcripts and Diploma Supplements
You can expect to receive an academic transcript at the end of your studies at Swansea which details the modules you pursued and the marks obtained.

The Structure of the Programme

The BSc in Applied Software Engineering is a 3-year programme where each year consists of three trimesters. Lectures and labs are delivered on campus every Wednesday from 1pm-8pm.

Taught Modules

Each trimester consists of two taught modules each worth 15 credits. Each taught module is typically assessed with a combination of lab work, course-work and two class tests (a Mid-Term Test and End-Term Test). The pass mark for every module is 40%. At the end of each trimester, students will be offered the opportunity to redeem any failed modules (i.e., a module with a mark of less than 40%) from the current trimester; modules with a redeemed failure will have the mark capped at 40%.

At the end of each trimester, any student who has a non-compensated failure in any module (i.e., less than 30% in any 1st- or 2nd-year module), or has accumulated more than 30 credits of failed modules during the academic year, will be required to withdraw from the programme.

Work-Based Modules

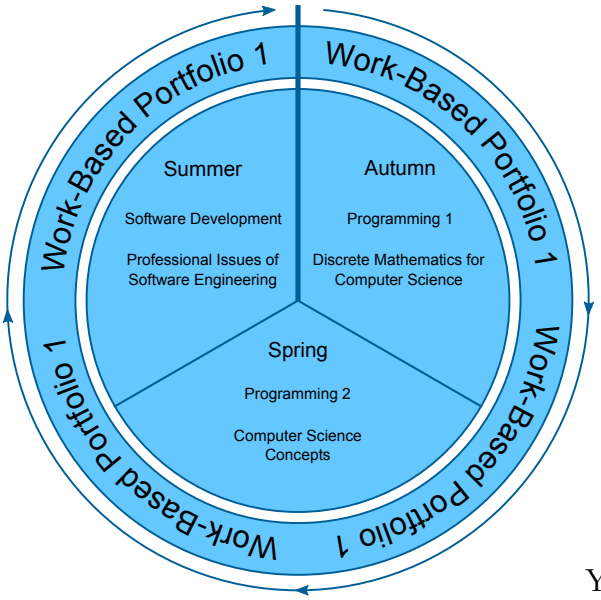
In addition to the six taught modules, a 30-credit Work-Based Portfolio module runs throughout each of the first two academic years. These are core modules and must be passed with a minimum of 40%. Each Work-Based Portfolio module consists of a significant task from each of the taught modules where the knowledge acquired from that taught module is put into practice in the workplace. The work-based tasks are completed in the students own time.

In the final year, two 15-credit Work-Based Project modules run through the whole academic year. These are also core modules, and represent the specification, development and implementation of a substantial software project.

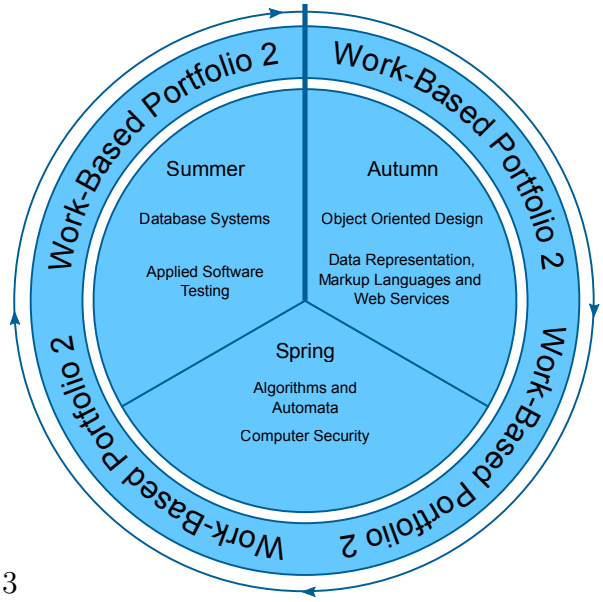
Overview

A visual overview of the structure of the course is given below. Fine details of each of the modules can be found at the end of this Course Handbook.

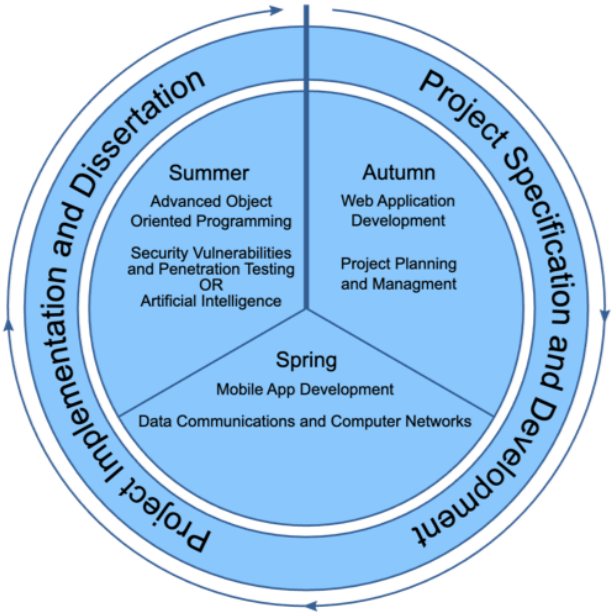
Year 1



Year 2



Year 3



First Year Modules

CSF100	Work Based Portfolio	Filippos Pantekis	Year	15
CSF101	Programming I	Filippos Pantekis	TB1	15
CSF102	Programming II	Filippos Pantekis	TB2	15
CSF104	Software Development	Jack Roberts	TB3	15
CSF105	Computer Science Concepts	Jack Roberts	TB2	15
CSF106	Discrete Mathematics	Jack Roberts	TB1	15
CSF107	Professional Issues of Software Engineering	Olga Petrovska	TB3	15

Second Year Modules

CSF200	Work Based Portfolio	Ben Lloyd-Roberts	Year	15
CSF202	Object Oriented Programming	Randell Gaya	TB1	15
CSF203	Database Systems	**PENDING**	TB3	15
CSF205	Data Representation, Markup Languages & Web Services	Ben Lloyd-Roberts	TB1	15
CSF206	Algorithms & Automata	Olga Petrovska	TB2	15
CSF207	Computer Security	Ben Lloyd-Roberts	TB2	15
CSF209	Applied Software Testing	Randell Gaya	TB3	15

Third Year Modules

CSF300	Project Implementation and Dissertation	Olga Petrovska	Year	15
CSF301	Project Specification and Development	Olga Petrovska	Year	15
CSF302	Project Planning and Management	Olga Petrovska	TB1	15
CSF304	Web Application Development	Connor Clarkson	TB1	15
CSF306	Mobile Application Development	Connor Clarkson	TB1	15
CSF307	Advanced Object Oriented Programming	Filippos Pantekis	TB2	15
CSF308	Data Communications and Networks	**PENDING**	TB2	15
CSF325	[Optional] Artificial Intelligence	**PENDING**	TB3	15
CSF328	[Optional] Security Vulnerabilities & Penetration Testing	Ben Lloyd-Roberts	TB3	15

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www.swansea.ac.uk/undergraduate/courses/science/computer-science/bsc-applied-software-engineering/

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