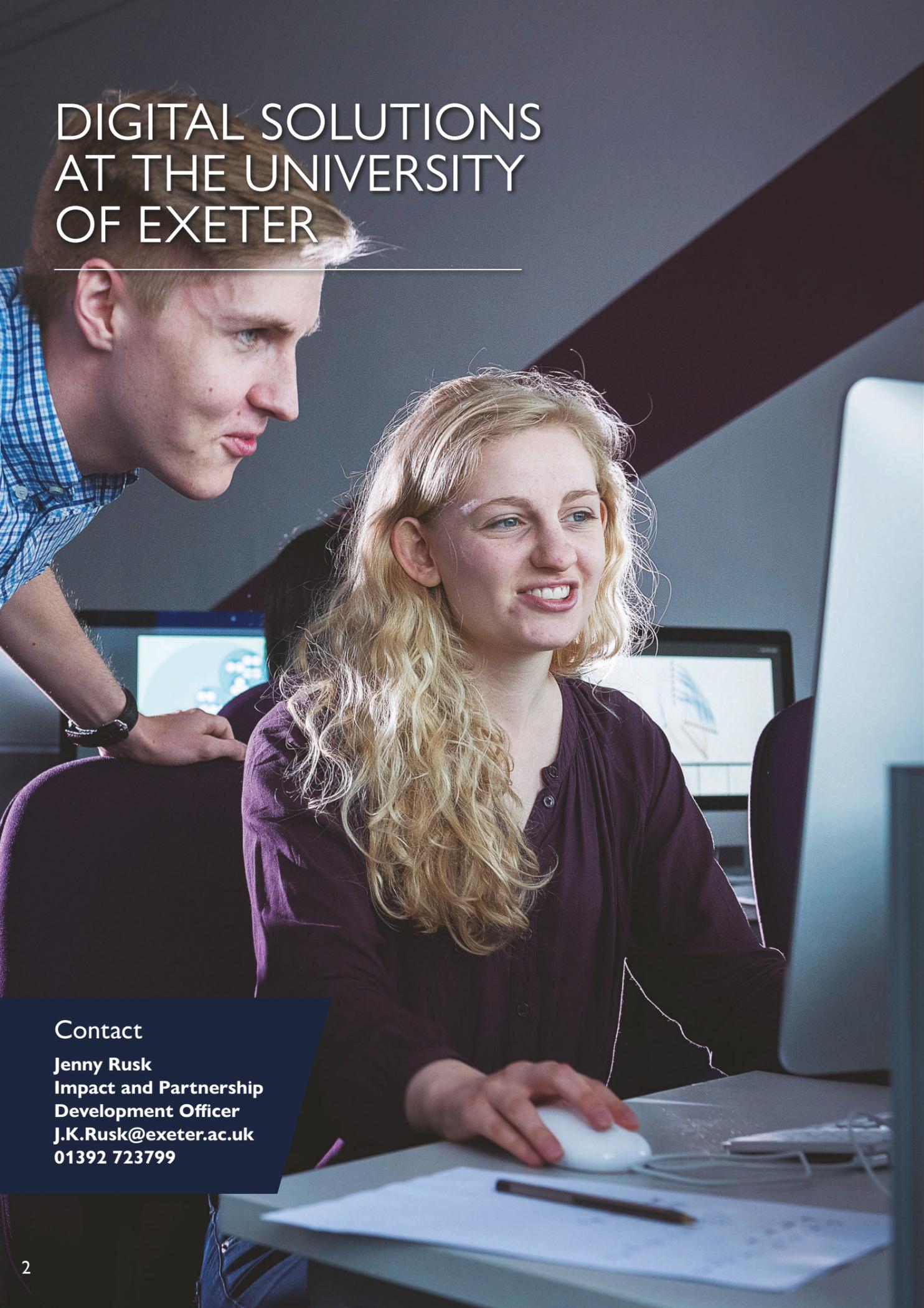


Level 6 Digital and Technology Solutions (Professional) Degree Apprenticeship

BSc (Hons) Digital and Technology Solutions



DIGITAL SOLUTIONS AT THE UNIVERSITY OF EXETER



Contact

Jenny Rusk
Impact and Partnership
Development Officer
J.K.Rusk@exeter.ac.uk
01392 723799

Enable your team to enhance your business to develop, protect and improve products, services and productivity through the implementation of technology solutions. We work in partnership with employers to offer a work-based learning experience backed by the educational excellence of Exeter. We provide employers with an affordable way to recruit high-calibre IT talent.

This programme gives employers an opportunity to shape the development of their next-generation employees. To meet specific employers' needs, pathways relating to specific role areas are available across five IT specialisms. Students will benefit from gaining extensive professional experience throughout their degree, graduating free of student debt into employment.

Our programme is distinctive in the way it minimises disruption to an apprentice's work for their employer.

Given that degree apprenticeships assess projects undertaken in the workplace, apprentices can bring business value from the outset which will increase with their skills and knowledge.

Offering this programme opens a relationship with the University spanning the early stages of development and recruitment through to graduation, with the option to recruit subsequent cohorts. During this time we will build a partnership with employers which establishes regular two-way feedback mechanisms such as company visits from academic staff or a forum for discussion with fellow employers.

Our dedicated education team will work with you to ensure that the work-based learning component of the programme is designed to meet your business needs and our educational standards. Apprentices will benefit from the same support as other Exeter undergraduates, including all aspects of the 'Exeter experience' such as the Students' Guild advice and careers services.



Accredited by the Tech Partnership



Part of the South West Institute of Technology



Teaching Excellence
Framework assessment 2017



5 star rated from QS



A member of the Russell Group
of universities

PROGRAMME MODULES

Please note that availability of all modules is subject to timetabling constraints and that not all modules may be available every year. For-up-to-date details of all our programmes and modules, please check the degree apprenticeships section of our website at exeter.ac.uk/undergraduate/degrees/computerscience/digital-technology-apprenticeship

Core Modules

Business organisation

Development of knowledge in organisational theory, change management, marketing, strategic practice, human resource management, IT service management, and professional communications and application of these skills in a professional setting. The module also explores how to exploit data to deliver improved business insights.

Interpersonal and foundation skills

Development of skills in communication, leadership and collaboration, negotiation, analytical and critical thinking and mathematical foundations.

Systems development

Key processes related to building functioning applications for business. Application of the basic concepts of programming and programming logic and introduction to software engineering practice at an overview level.

Information and data

Centred on the core skills of identifying organisational information requirements, modelling using conceptual data modelling techniques and converting the conceptual data models into relational data models, and then implementing and utilising a relational database using an industry standard database management system. Covers basic database administration tasks and key concepts of data quality and data security.

IT project management

Study covers introduction to the processes, methods, techniques and tools that organisations use to manage their IT projects. Apprentices will learn how to apply a systematic methodology for initiating, planning, executing, controlling, and closing projects.

Digital technology infrastructure

An introduction to basic computer system organisation and network infrastructure with an overall focus on the services and capabilities that network infrastructure solutions enable in an organisational context. Development of knowledge and skills needed for the planning, design, implementation and management of computer networks and understanding of the network infrastructure capabilities and limitations.

Information security

This module provides knowledge on the fundamental principles of Information Technology Security and Risk Management at the organisational level. It focuses on critical information and cyber security principles and management, and the role of hardware, software, processes, communications, applications, people and policies and procedures with respect to organisational information security.

Information systems

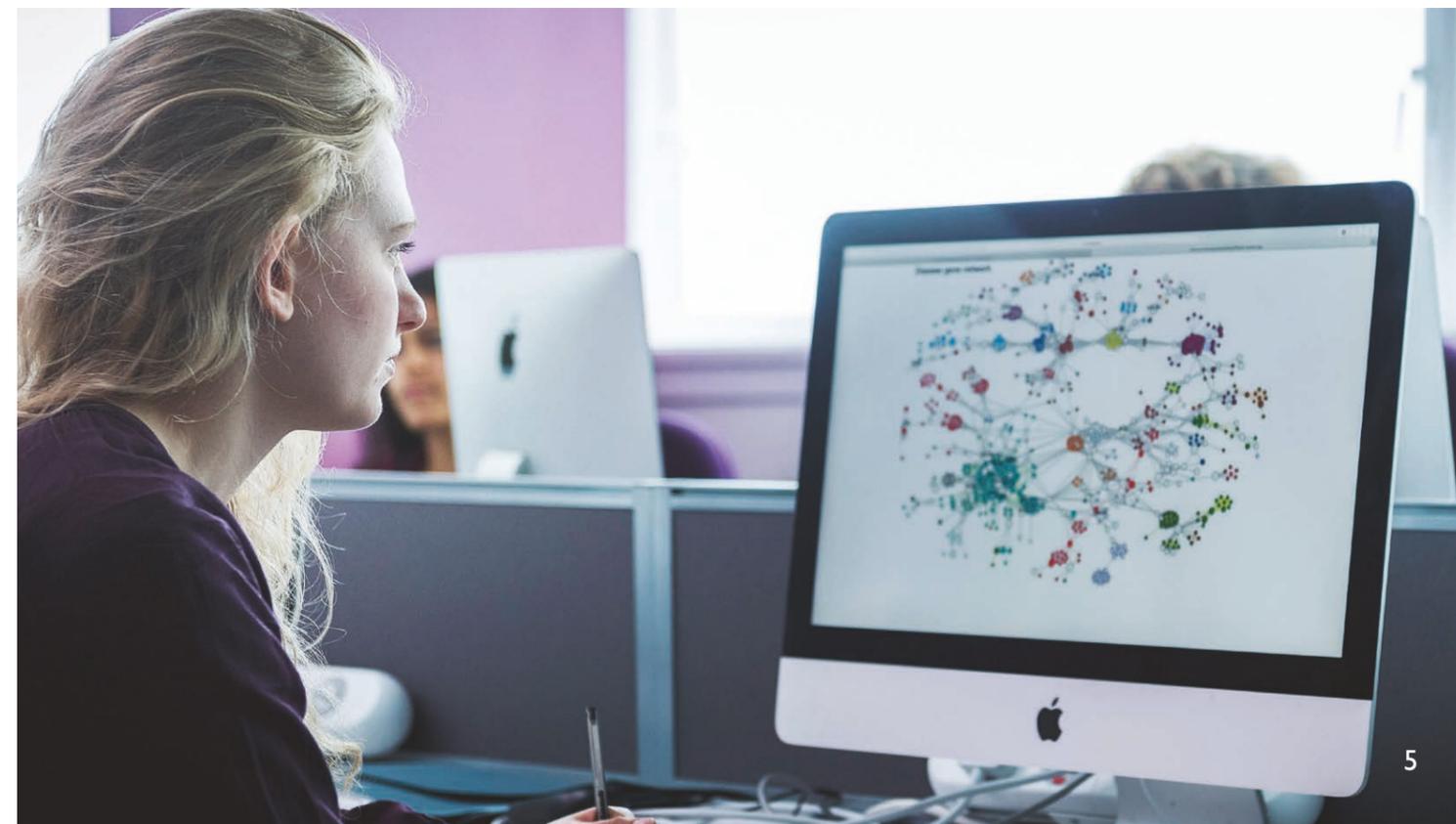
The ways an organisation can develop its capabilities using information technology. Gain an understanding of how information is used in organisations and how IT enables improvement in quality, speed, and agility. Alongside an introduction to systems and development concepts, technology acquisition, and various types of application software that have become ubiquitous in modern organisations and society.

IT law and ethics

Addresses a wide range of legal, ethical and societal issues that confront IT professionals. Civil and criminal law as it pertains to digital technologies, focusing on pressing issues such as intellectual property, confidentiality, data protection, privacy, contracts and computer crime. Ethical issues in IT and software engineering, addressing the responsibility of the IT professional towards others and encompassing issues such as system reliability and relevant codes of conduct.

Reflective practice

An opportunity for apprentices to apply what they learn during the apprenticeship to their day-to-day work and to develop useful workplace skills and behaviours. The aim is to allow integration and internalisation of skills and knowledge.



Specialisms

Accredited by Tech Partnership Degrees, this programme allows businesses to recruit apprentices across five IT specialisms:

Software engineer

A software engineer designs, builds and tests high-quality software solutions following best practices and industry standards. The engineer will need to be able to interpret requirements specification documentation and designs in order to develop and test software that meets its requirements, even when these requirements may change.

Data analyst

A data analyst collects, organises and studies data to provide new business insight. They provide up-to-date, accurate and relevant data analysis for the organisation, typically involved with managing, cleansing, abstracting and aggregating data across the network infrastructure.

They have a good understanding of data structures, software development procedures and the range of analytical tools used to undertake a wide range of standard and custom analytical studies, providing data solutions to a range of business issues. They will document and report the results of data analysis activities, making recommendations to improve business performance.

IT business analyst

A business analyst is responsible for assessing the business impact of change, capturing, analysing and documenting requirements and supporting the communication and delivery of requirements with relevant stakeholders. They create detailed analysis of systems, make recommendations for improvement, and produce specifications of user requirements that enable software engineers to develop the right software solutions.

IT consultant

An IT consultant requires a broad set of skills in business analysis, solutions development, network infrastructure, data and cyber security. They will use consulting skills in order to advise clients on how best to utilise technology to meet their business objectives, overcome problems and increase productivity and provide strategic guidance to clients with regard to technology and facilitate changing business processes through enhancements to technology solutions. They will provide technical assistance and are responsible for providing training.

Cyber security analyst

A cyber security analyst is responsible for the implementation, maintenance and support of the security controls that protect an organisation's systems and data assets from threats and hazards. They ensure that security technologies and practices are operating in accordance with the organisation's policies and standards to provide continued protection. They require a broad understanding of network infrastructure, software and data to identify where threats and hazards can occur and are responsible for performing periodic vulnerability assessments to evaluate the organisation's ongoing security posture and will provide visibility to management of the main risks and control status on an ongoing basis.





PROGRAMME STRUCTURE

Apprentices will be full-time employees of your business, gaining a University of Exeter degree over four years through:

- Two short weeks of on-campus teaching at the University per year (September and January – totalling eight to nine days)
- One week of on-campus exams and presentations at the University per year (May)
- One day a week (term-time) distance learning comprising online classes and workshops, interactive exercises and recorded lectures
- Assessed work-based learning intended to allow apprentices to practise and hone their skills

Approximately 20 percent of the apprentice's time will be given over to study, though our model is designed to be flexible around the needs of employers and workloads. The programme is designed to mitigate disruption to the apprentice's daily role, meaning we can work with employers across the country.

Our dedicated partnerships team liaise closely with employers throughout the programme; we can assist you with recruiting, educational support and administration. Each apprentice is allocated a University Mentor to ensure their successful completion of the programme.

Entry requirements

- A levels: AAB
- IB Diploma: 34 points
- BTEC Level Three Extended Diploma DDD

Other qualifications of a similar level can be considered. We would encourage applicants with non-standard qualifications to contact us to discuss their eligibility.

Where a candidate has already gained a good undergraduate degree this may be offered to meet entry requirements.

PROGRAMME STRUCTURE

Please note that the modules available may alter from year to year, as publicised by the University. Term dates are as publicised on the University's website but some residentials and teaching may take place outside of these.

<p>Year 1</p> <p>All modules are compulsory Taught modules at 15 credits each</p> <p>30 credits work-based learning Total 90 credits</p>	<p>Term 1</p> <table border="1"> <tr> <td>Business Organisation</td> <td>Interpersonal and Foundation Skills</td> </tr> <tr> <td colspan="2">Reflective Practice 1</td> </tr> </table>	Business Organisation	Interpersonal and Foundation Skills	Reflective Practice 1		<p>Term 2</p> <table border="1"> <tr> <td>Systems Development 1</td> <td>Information and Data</td> </tr> <tr> <td colspan="2">Reflective Practice 1</td> </tr> </table>	Systems Development 1	Information and Data	Reflective Practice 1		<p>Term 3</p> <table border="1"> <tr> <td>Exams: Term 1 and 2 modules</td> </tr> <tr> <td>Presentation</td> </tr> </table>	Exams: Term 1 and 2 modules	Presentation
Business Organisation	Interpersonal and Foundation Skills												
Reflective Practice 1													
Systems Development 1	Information and Data												
Reflective Practice 1													
Exams: Term 1 and 2 modules													
Presentation													
<p>Year 2</p> <p>All modules are compulsory Taught modules at 15 credits each</p> <p>30 credits work-based learning Total 90 credits</p>	<p>Term 1</p> <table border="1"> <tr> <td>Digital Technology Infrastructure</td> <td>IT project Management</td> </tr> <tr> <td colspan="2">Reflective Practice 2</td> </tr> </table>	Digital Technology Infrastructure	IT project Management	Reflective Practice 2		<p>Term 2</p> <table border="1"> <tr> <td>Information Security</td> <td>Systems Development 2</td> </tr> <tr> <td colspan="2">Reflective Practice 2</td> </tr> </table>	Information Security	Systems Development 2	Reflective Practice 2		<p>Term 3</p> <table border="1"> <tr> <td>Exams: Term 1 and 2 modules</td> </tr> <tr> <td>Presentation</td> </tr> </table>	Exams: Term 1 and 2 modules	Presentation
Digital Technology Infrastructure	IT project Management												
Reflective Practice 2													
Information Security	Systems Development 2												
Reflective Practice 2													
Exams: Term 1 and 2 modules													
Presentation													
<p>Year 3</p> <p>2 x taught compulsory 15 credit modules 1 x elected specialism 15 credits 45 credits work-based learning Total 90 credits</p>	<p>Term 1</p> <table border="1"> <tr> <td>Information Systems</td> <td>IT Law and Ethics</td> </tr> <tr> <td colspan="2">Reflective Practice 3</td> </tr> </table>	Information Systems	IT Law and Ethics	Reflective Practice 3		<p>Term 2 (one module based on specialism)</p> <table border="1"> <tr> <td>Software Engineering 1 Business Analysis 1</td> <td>IT Consulting 1 Data Analysis 1 Cyber Security 1</td> </tr> <tr> <td colspan="2">Reflective Practice 3</td> </tr> </table>	Software Engineering 1 Business Analysis 1	IT Consulting 1 Data Analysis 1 Cyber Security 1	Reflective Practice 3		<p>Term 3</p> <table border="1"> <tr> <td>Exams: Term 1 and 2 modules</td> </tr> <tr> <td>Presentation</td> </tr> </table>	Exams: Term 1 and 2 modules	Presentation
Information Systems	IT Law and Ethics												
Reflective Practice 3													
Software Engineering 1 Business Analysis 1	IT Consulting 1 Data Analysis 1 Cyber Security 1												
Reflective Practice 3													
Exams: Term 1 and 2 modules													
Presentation													
<p>Year 4:</p> <p>1 x elected specialism 15 credits 1 x chosen module 15 credits 60 credits (final project) work-based learning Total 90 credits</p>	<p>Term 1 (one module based on specialism)</p> <table border="1"> <tr> <td>Software Engineering 2 Business Analysis 2</td> <td>IT Consulting 2 Data Analysis 2 Cyber Security 2</td> </tr> <tr> <td colspan="2">Synoptic Project</td> </tr> </table>	Software Engineering 2 Business Analysis 2	IT Consulting 2 Data Analysis 2 Cyber Security 2	Synoptic Project		<p>Term 2 (one module from other specialism/ independent study)</p> <table border="1"> <tr> <td colspan="2">Choose one option from above (Year 3 Term 2 modules except your own specialism) or independent project</td> </tr> <tr> <td colspan="2">Synoptic Project</td> </tr> </table>	Choose one option from above (Year 3 Term 2 modules except your own specialism) or independent project		Synoptic Project		<p>Term 3</p> <table border="1"> <tr> <td>Exams: Term 1 and 2 modules</td> </tr> <tr> <td>Presentation</td> </tr> </table>	Exams: Term 1 and 2 modules	Presentation
Software Engineering 2 Business Analysis 2	IT Consulting 2 Data Analysis 2 Cyber Security 2												
Synoptic Project													
Choose one option from above (Year 3 Term 2 modules except your own specialism) or independent project													
Synoptic Project													
Exams: Term 1 and 2 modules													
Presentation													

EPA*

* End-point Assessment.

UNIVERSITY OF EXETER DEGREE APPRENTICESHIPS

Details of the programmes listed below can be found [here](#).

Current

- Level 6 Chartered Manager Degree Apprenticeship (BSc [Hons] Responsible Business Management)
- Levels 4 and 6 Civil Engineering Degree Apprenticeship (BEng Civil Engineering)
- Level 7 Clinical Associate in Psychology Degree Apprenticeship (MSc Clinical Associate in Psychology)
- Level 6 Diagnostic Radiographer Degree Apprenticeship (BSc [Hons] Diagnostic Radiography and Imaging)
- Level 6 Digital and Technology Solutions Degree Apprenticeship (BSc [Hons] Digital and Technology Solutions)
- Level 4 Investment Operations Specialist Apprenticeship and Level 6 Financial Services Professional Degree Apprenticeship (BSc [Hons] Applied Finance)
- Level 7 Research Scientist Apprenticeship (MSc Data Science Professional)
- Level 7 Senior Leader Apprenticeship (PGDip in Management with option of a separately funded Exeter MBA top-up)
- Level 7 Senior Leader (Healthcare) Apprenticeship (PGDip Healthcare Leadership and Management with option of a separately funded MSc top-up)

New for Autumn 2021

- Level 7 Advanced Clinical Practitioner Degree Apprenticeship (MSc Advanced Clinical Practice)
- Level 6 Data Scientist Degree Apprenticeship (University of Exeter and Exeter College collaboration leading to BSc [Hons] Data Science)
- Level 6 Psychological Wellbeing Practitioner Apprenticeship (Grad Cert Psychological Wellbeing Practitioner)
- Level 7 Senior People Professional Degree Apprenticeship (MSc Applied Human Resource Management)

New for Spring 2022

- Level 6 Diagnostic Radiographer Degree Apprenticeship (MSc Diagnostic Radiography and Imaging)
- Level 7 Systems Thinking Practitioner Apprenticeship (MSc Systems Thinking in the Public Sector)