

KEY PROGRAMME INFORMATION

Originating institution(s) Wiltshire College and University Centre	Faculty responsible for the programme Faculty of Science and Technology
Final award(s), title(s) and credits FdSc Biomedical Science 120 (60 ECTS) Level 4 and 120 (60 ECTS) Level 5 credit Students who undertake this award may do so in order to meet the academic requirements of the Level 5 Technician Scientist degree apprenticeship route	
Intermediate award(s), title(s) and credits CertHE Biomedical Science - 120 (60 ECTS) Level 4 credit Foundation Year Certificate in Biomedical Science - 80 (40 ECTS) Level 3 credit	
UCAS Programme Code(s) (where applicable and if known) F941	HECoS (Higher Education Classification of Subjects) Code and balanced or major/minor load. 100265
External reference points The UK Quality Code for Higher Education Part A: Setting and maintaining academic standards Chapter A1: UK and European reference points for academic standards (October 2013) - incorporates the Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (Qualification Frameworks), Foundation Degree qualification benchmark.	
Professional, Statutory and Regulatory Body (PSRB) links Not Applicable	
Places of delivery Wiltshire College and University Centre – Salisbury campus	
Mode(s) of delivery Full time 3 years Part time 5 years	Language of delivery English
Typical duration 1 year level 3 1 year level 4 1 year level 5	
Date of first intake September 2020	Expected start dates September
Maximum student numbers Not Applicable	Placements Not Applicable
Partner(s) Wiltshire College	Partnership model Franchise
Lead Provider (Degree Apprenticeships) Wiltshire College	
Date of this Programme Specification September 2020	
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Approval, review or modification reference numbers E201819027 FST 1920 23 FST 2021 06	
Author Chris Papp	

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PROGRAMME STRUCTURE

Programme Award and Title: FdSc Biomedical Science									
Year 0 / Level 3									
Students are required to complete 4 core modules.									
Module Name	Core / Option	No of credits	Assessment Element Weightings			Expected contact hours per module	Module version no.	HECoS Code (plus balanced or major/minor load)	
			Exam 1	Cwk 1	Cwk 2				
Foundations in Biology	Core	20	50	50	-	95	V1.0	100346 100%	
Foundations in Chemistry	Core	20	-	50	50	95	V1.0	100417 100%	
Mathematical Science Skills	Core	20		100	-	95	V1.0	100403 100%	
Practical Science	Core	20	-	75	25	100	V1.0	100390 100%	
Progression requirements: Requires 80 credits at Level 3									
Exit qualification: Foundation Year Certificate in Biomedical Science (Requires 80 credits at Level 3)									

Year 1 / Level 4									
Students are required to complete 6 core modules.									
Module Name	Core / Option	No of credits	Assessment Element Weightings			Expected contact hours per module	Module version no.	HECoS Code (plus balanced or major/minor load)	
			Exam 1	Cwk 1	Cwk 2				
Introduction to Biomedical Science	Core	20	50	50	-	90	V1.0	100265 100%	
Fundamental Chemistry	Core	20		40	60	90	V1.0	100417 100%	
Essential Biology and Physiology	Core	20	50	50	-	66	V1.0	100350 100%	
Mathematics for Science	Core	20	-	100	-	60	V1.0	100400 100%	
Academic Writing Skills	Core	20	-	100	-	30	V1.0	101090 100%	
Practical Laboratory Skills	Core	20	-	50	50	80	V1.0	100392 100%	
Progression requirements: Requires 120 credits at Level 4									
Exit qualification: CertHE Biomedical Science (requires 120 credits at Level 4)									

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Year 2 / Level 5									
Students are required to complete 6 core modules.									
Module Name	Core / Option	No of credits	Assessment Element Weightings			Expected contact hours per module	Module version no.	HECoS Code (plus balanced or major/minor load)	
			Exam 1	Cwk 1	Cwk 2				
Professional Development Portfolio	Core	20	-	100	-	25	V1.0	101278 100%	
Bioanalytical Techniques	Core	20		30	70	100	V1.0	100901 100%	
Work Related Project	Core	20	-	60	40	30	V1.0	101278 100%	
Further Chemistry	Core	20	60	40	-	100	V1.0	100417 100%	
Immunology	Core	20	50	50	-	70	V1.0	100911 100%	
Molecular Biology	Core	20	-	50	50	90	V1.0	100354 100%	
Progression requirements: Requires 120 credits at Level 5									
Exit qualification: FdSc Biomedical Science (120 credits at Level 4 and 120 credits at Level 5)									

AIMS OF THE DOCUMENT

The aims of this document are to:

- Define the structure of the programme.
- Specify the programme award titles.
- Identify programme and level learning outcomes.
- Articulate the regulations governing the awards defined within the document.

AIMS OF THE PROGRAMME

Foundation Degree (FdSc) Biomedical Science with Foundation Year

The Foundation Year in Applied Science is studied in the first year of a three-year full-time programme or the first two years of a five-year part-time programme. It forms an integral part of the Foundation Degree (FdSc) suite within the Faculty of Health and Life Sciences Department at Wiltshire College and University Centre. It also forms part of the College's commitment to widening participation acknowledging that students with potential to succeed at degree level may come from a wide range of backgrounds and educational experiences.

The Foundation Year is distinctive from other level 3 courses designed for access to Higher Education in that it is part of an extended Foundation Degree programme and is tailored to the needs of the various courses at level four within Wiltshire College in partnership with Bournemouth University. Therefore, students not only have opportunity to develop knowledge and skills that prepare for level 4 of their intended courses, but also have opportunity to familiarise themselves with the institution and become part of the broader student community within the College.

Thus, the Foundation Year programme offers an alternative route of entry for applicants who lack the traditional entry requirements to join year one of the Foundation Degree (FdSc) suite of courses.

Students on the course will fall into three major categories:

- Mature students returning to full-time education often with a mix of vocational experience and qualifications.
- Students who have either non-subject appropriate A Levels or lack appropriate A Levels or equivalent qualifications for their chosen degree course.
- Students who have been identified as having potential to undertake such subjects but who would benefit from an additional year of study to realise this potential.

The main aims of the Foundation Year are:

- Develop the students' knowledge and understanding of facts, concepts and principles in the areas of Biology and Chemistry and related subjects.
- Develop the students' understanding of scientific methods.
- Develop the students' knowledge and understanding of the Mathematics that underpins Chemistry, Biology and related sciences.
- Prepare the students for progress onto Year 1 of their chosen Foundation Degree course.

The centrepiece of the Foundation Year is the 'Practical Science' module which will incorporate aspects of academic writing in preparation for reports which will be required at levels 4 and 5. The modules are designed to 'mesh' with the other subject-specific modules on the programme whereby skills and academic writing are combined with the knowledge gained in the more academic modules.

This programme will support students who have a strong interest in science and know they want to pursue a career in the science industry but are undecided on a specific route. The course will offer students the opportunity to apply to become laboratory technicians which links with the relationship we have with the NHS and Tetrius Park.

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The Foundation Degree (FdSc) in Biomedical Science is studied in the second and third year of a full time Foundation Degree (FdSc) or the third, fourth and fifth year of a part-time Foundation Degree. It will give the student sufficient vocational skills and knowledge to be attractive to employers at the end of the two years study. An additional third year on the top-up course to achieve a full BSc degree would place all the knowledge gained and skills developed to good use in the scientific field.

The Foundation Degree builds skills and knowledge as the student progresses from level 4 to 5 with level 4 modules preparing the student to achieve more independent learning at level 5 which in turn prepares students for level 6 (top-up year) if desired.

The number of students at any one year will be relatively small so all students will have maximum support from each module and personal tutor. This will inevitably be required as students learn new scientific and mathematical skills. Students will be required to research current topics in their area of study and a specific module has been designed in the first year to help them understand how best to achieve this.

Overall, the course is intended to produce students who are 'fit for work' with the theoretical and practical knowledge which would benefit any employer in the Biomedical Science field.

The Foundation Degree programme aims to develop critically informed, agile and resourceful graduates who:

- Have a theoretical and practical knowledge of the scientific, technical and interpretative basis of Chemistry and Biology.
- Can apply the acquired range of skills and knowledge to specific scientific problems and communicate effectively with those working in the scientific profession.
- Have the necessary professional knowledge and management skills to develop successful careers in specialist fields in Biomedical Science.
- Have the ability to carry out independent investigations in the area of Biomedical Science.
- Have the skills and knowledge necessary for progression onto a top up year course to attain a full BSc (Hons) degree.
- Have the skills and motivation to manage their own personal development and lifelong learning.

This programme will offer students the opportunity to apply to become laboratory technicians which links with the relationship the College has with the NHS and Tetrius Park.

Wiltshire College and University Centre has secured a £28.1 million investment from the Swindon and Local Enterprise Partnership (SWLEP). This funding is being used to support the development of undergraduate courses and feeder courses in Life Sciences at both the Salisbury and Lackham campuses and Agri-Tech at the Lackham campus. The funding will also be used to construct a 3,500 square metre Life Sciences and Engineering Centre at Salisbury and a 2,400 square metre Agricultural Technology Centre and a Higher Education Centre at Lackham.

The advancing area of Life Sciences and Agri-Tech has foundations in Wiltshire with the Tetrius Science Park based near Salisbury, Wiltshire. This Science Park is a collaboration of three partners, Defence Science and Technology Laboratories (DSTL), GWE Business West and New Sarum Enterprises. The College already has good relationships with Porton Down as well as the NHS where established and successful collaborative work takes place. As an institution, we are proactively involved in the upskilling of the regional work force by engaging with businesses, industry and the military to develop Higher Education courses.

The Swindon and Wiltshire Local Enterprise Partnership (SWLEP) Strategic Economic Plan means that there is an increased demand for employment, the projected growth for the area is 17,500 jobs between 2010 and 2020. In Wiltshire, the proportion of 25-29 year olds with degrees is 33.0% compared with 42.2% in England. Wiltshire Council identifies in their Education, Employment and Skills Strategy (2014-2020) that by 2020 approximately 65% of the jobs growth will require a level 4

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qualification and above. By 2020, it is projected that more than 1 in 4 jobs will be at the higher end of the occupational spectrum (Level 3+). There is also a demographic change in the county which includes an aging workforce, an increased birth rate that will impact on education as well as the resettlement of 4,000 Army personnel and their families.

ALIGNMENT WITH THE UNIVERSITY'S STRATEGIC PLAN

A Foundation Degree (FdSc) in Biomedical Science with Foundation Year is proposed as a partnership between Wiltshire College and University Centre and Bournemouth University. The Foundation Degree (FdSc) in Biomedical Science with Foundation Year addresses the STEM curriculum development strategy of the College and the aspiration of the University to widen participation in the Life Sciences and has been developed following extensive discussions and collaboration between the partners. It is anticipated that the Foundation Degree (FdSc) in Biomedical Science with Foundation Year will be offered from September 2019.

This proposal aims to widen participation in Higher Education and improve the skills and qualifications of those across the county of Wiltshire and beyond by providing the qualification from 2 local bases at Salisbury and Lackham. It will offer a suitable progression route from the BTEC Applied Science or Forensic Science award offered at Wiltshire College and neighbouring Colleges and should offer enhanced employment opportunities within the disciplines of Biomedical Science.

The overarching aim of the programme is that students complete the programme and gain a recognised academic qualification plus the added vocational / employability factors that future employers seek which are embedded throughout the programme.

The Foundation Degree (FdSc) in Biomedical Science will appeal to those who have an interest in science and who also want to have maximum flexibility in terms of career progression in science industries and place of study. The programme has been designed to be highly practical and as such provide a wide range of skills which are transferable and relevant to several areas of science. Recruitment for the Foundation Degree (FdSc) in Biomedical Science is also to be targeted to school leavers having achieved a level 3 qualification but who do not want to leave the locality to achieve higher qualifications.

Wiltshire College has partnerships with many companies and organisations within the county of Wiltshire and it is hoped specific programmes across the suite of Foundation Degrees would be attractive for these companies to support CPD opportunities to their staff for those enrolled on an apprenticeship scheme.

Following successful completion of the Foundation Degree (FdSc) in Biomedical Science, the students may have an opportunity to progress directly into the fourth year of a related degree programme at Bournemouth University to attain the award of an Honours degree.

Bournemouth University has extensive experience in the development and delivery of high-quality, accredited Science degree programmes and is in an excellent position to be able to work with Wiltshire College to develop a course to offer students opportunities for employment within the fields of Biomedical Science.

LEARNING HOURS AND ASSESSMENT

Bournemouth University licensed programmes are composed of modules of study which are assigned a credit value indicating the amount of learning undertaken. The minimum credit value of a module is normally 20 credits above which credit values normally increase at 20-point intervals. 20 credits are the equivalent of 200 study hours required of the student including lectures, seminars, assessment and independent study. 20 University credits are equivalent to 10 European Credit Transfer System (ECTS) credits.

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As a rule, time devoted to assessment should normally represent approximately 25% of the student learning time for a module (i.e. 50 hours for a 20-credit module), leaving the rest for specific programme-related activities including lectures, seminars, preparatory work, practical activities, reading, critical reflection and independent learning.

The assessment workload for a unit should consider the total time devoted to study, including the assessment workload (i.e. formative and summative assessment) and the taught elements and independent study workload (i.e. lectures, seminars, preparatory work, practical activities, reading, critical reflection). Assessment per 20 credit unit should normally consist of 3,000 words or equivalent.

For the Foundation Year, there is an overall aggregate pass mark for all modules. To progress, students will be required to pass each individual module on the overall aggregate. Students achieving the qualifying mark in the individual modules will be entitled to progress to the next part of their chosen Foundation Degree course.

Module Name	Qualifying Mark
Foundations in Biology	40%
Foundations in Chemistry	40%
Mathematical Science Skills	40%
Practical Science	40%

If students do not achieve the qualifying mark in modules worth up to 20 ECTS, students will be required to retake the assessment for the failed papers. This is known as "referral". At referral, a student will be required to take all papers of a failed module for which a mark of less than the qualifying mark was achieved at the first attempt. Students may not refer in any paper where a mark equal to the qualifying mark was achieved or exceeded.

STAFF DELIVERING THE PROGRAMME

Students will usually be taught by a combination of senior academic staff with others who have relevant expertise including, where appropriate, according to the content of the module, academic staff, qualified professional practitioners, demonstrators / technicians and research students.

INTENDED LEARNING OUTCOMES AND HOW THE PROGRAMME ENABLES STUDENTS TO ACHIEVE AND DEMONSTRATE THE INTENDED LEARNING OUTCOMES

LEVEL 5 / Diploma in HE INTENDED LEVEL OUTCOMES

A: Knowledge and understanding This level provides opportunities for students to develop and demonstrate knowledge and understanding of:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:
A1 Understand the fundamental concepts, principles and theories of Chemistry and Biology A2 Illustrate a comprehensive and detailed knowledge of Chemistry and Biology with areas of specialisation in depth A3 Apply appropriate techniques to solve scientific problems A4 Utilise effective research methods to analyse and evaluate appropriate literature in science	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes): <ul style="list-style-type: none">• Lectures (A1-3, A5-6)• Practicals (A2, A5-7)• Seminars (A1-3)• Directed reading (A4)• Use of the VLE (A7)• Independent research (A4)

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<p>A5 Understand the theory and carry out practical aspects in Chemistry and Biology</p> <p>A6 Demonstrate an ability to carry out scientific calculations to the required degree of accuracy and precision</p> <p>A7 Apply appropriate techniques to elucidate chemical structures from spectroscopic data</p>	<p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Open book examinations (A1, A2, A3, A5-6) • Closed book examinations (A1-3, A5-6) • Practical write-up (A4, A5-6) • Literature review (A1-2) • Oral exam (A1, A4) • Presentation (A1-2, A4) • Problem solving (A7)
<p>B: Intellectual skills</p> <p>This level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:</p>
<p>B1 Critically evaluate theory and practice</p> <p>B2 Be creative in the solution of problems and in the development of research activity</p> <p>B3 Analyse and synthesise information identifying implicit values detecting false logic or reasoning and ensuring that conclusions are supported by evidence</p> <p>B4 Integrate and evaluate information from a variety of sources in order to gain a coherent understanding of theory and practice</p> <p>B5 Interpret and evaluate experimental data to yield analytical information</p> <p>B6 Formulate and test hypotheses whilst applying professional judgement to balance risks, costs, benefits, safety, reliability, aesthetics and environmental impact</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (B3-5) • Practicals (B5-6) • Seminars (B4) • Directed reading (B3) • Use of the VLE (B2-4) • Independent research (B6) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Open book examinations (B3-5) • Closed book examinations (B3-5) • Practical write-up (B1-2) • Literature review (B4-6) • Oral exam (B3-6) • Presentation (B3-5) • Problem solving (B3)
<p>C: Practical skills</p> <p>This level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:</p>
<p>C1 Demonstrate confidence and competence in the use of information technologies including working effectively in an online environment</p> <p>C2 Undertake competent, safe, evaluative, reflective and effective practice</p> <p>C3 Conduct research into scientific issues either individually or as part of a team</p> <p>C4 Analyse experimental results and determine their strength and validity</p> <p>C5 Act autonomously with minimal supervision or direction</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (C5) • Practicals (C2-6) • Seminars (C5) • Directed reading (C1-2) • Use of the VLE (C1, C3) • Independent research (C1, C3) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p>

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<p>within agreed guidelines</p> <p>C6 Prepare and present scientific reports</p>	<ul style="list-style-type: none"> • Open book examinations (C4) • Closed book examinations (C4) • Practical write-up (C2-6) • Literature review (C1, C3, C5) • Oral exam (C2, C5) • Presentation (C3, C5) • Problem solving (C1, C4)
<p>D: Transferable skills</p> <p>This level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:</p>
<p>D1 Perform effectively when working in collaboration with others</p> <p>D2 Manage own roles, responsibilities and time, undertake personal and career development, utilise skills in new and changing situations and contexts</p> <p>D3 Relate to and interact effectively with individuals and groups including working effectively as a team member</p> <p>D4 Communicate effectively using verbal and / or non-verbal means including receiving, responding to and presenting information in a variety of visual forms</p> <p>D5 Manage tasks and identify and solve problems using information sources and apply numerical skills and techniques</p> <p>D6 Demonstrate an ability to reflect critically on own scientific abilities and skills analysing own strengths and weaknesses</p> <p>D7 Demonstrate ability to work autonomously to complete a project within strict guidelines and time scales</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (D2) • Practicals (D1, D3-D6) • Seminars (D2, D5) • Directed reading (D2, D5) • Use of the VLE (D6) • Independent research (D1-2, D6) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Open book examinations (D2, D5-6) • Closed book examinations (D2, D5-6) • Practical write-up (D2, D5-6) • Literature review (D1-2, D5) • Oral exam (D2-3, D5) • Presentation (D1-5) • Problem solving (D2, D5-6)

LEVEL 4 / Certificate in HE INTENDED LEVEL OUTCOMES

<p>A: Knowledge and understanding</p> <p>This level provides opportunities for students to develop and demonstrate knowledge and understanding of:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:</p>
<p>A1 Understand the fundamental concepts, principles and theories of Chemistry and Biology</p> <p>A2 Apply appropriate techniques to solve scientific problems</p> <p>A3 Utilise effective research methods to analyse and evaluate literature in science</p> <p>A4 Understand the theory and carry out practical aspects in Chemistry and Biology</p> <p>A5 Demonstrate an ability to carry out scientific calculations to the required degree of accuracy and precision</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (A1-3, A5-6) • Practicals (A2, A5-6) • Seminars (A1-3) • Directed reading (A4) • Use of the VLE (A6) • Independent research (A4) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p>

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<p>A6 Apply appropriate techniques to elucidate chemical structures from spectroscopic data</p>	<p>Learning Outcomes):</p> <ul style="list-style-type: none"> • Open book examinations (A1-3, A5-6) • Closed book examinations (A1-3, A5-6) • Practical write-up (A4-6) • Literature review (A1-2) • Oral exam (A1, A4) • Presentation (A1-2, A4) • Problem solving (A6)
<p>B: Intellectual skills</p> <p>This level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:</p>
<p>B1 Critically evaluate theory and practice</p> <p>B2 Be creative in the solution of problems and in the development of research activity</p> <p>B3 Analyse and synthesise information identifying implicit values detecting false logic or reasoning and ensuring that conclusions are supported by evidence</p> <p>B4 Integrate evidence from a range of sources to support findings and hypotheses</p> <p>B5 Formulate and test hypotheses whilst applying professional judgement to balance risks, costs, benefits, safety, reliability, aesthetics and environmental impact</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (B3-5) • Practicals (B1-2) • Seminars (B4) • Directed reading (B3) • Use of the VLE (B2-4) • Independent research (B4) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Open book examinations (B3-5) • Closed book examinations (B3-5) • Practical write-up (B1-2) • Literature review (B4-5) • Oral exam (B3-5) • Presentation (B3-5) • Problem solving (B3)
<p>C: Practical skills</p> <p>This level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:</p>
<p>C1 Demonstrate confidence and competence in the use of information technologies including working effectively in an online environment</p> <p>C2 Undertake competent, safe, evaluative, reflective and effective practice</p> <p>C3 Conduct research into scientific issues either individually or as part of a team</p> <p>C4 Analyse experimental results and determine their strength and validity</p> <p>C5 Act autonomously with minimal supervision or direction within agreed guidelines</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (C5) • Practicals (C2-6) • Seminars (C5) • Directed reading (C1-2) • Use of the VLE (C1, C3) • Independent research (C1, C3) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Open book examinations (C4) • Closed book examinations (C4)

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<p>C6 Prepare and present scientific reports</p>	<ul style="list-style-type: none"> • Practical write-up (C2-6) • Literature review (C1, C3, C5) • Oral exam (C2, C5) • Presentation (C3, C5) • Problem solving (C1, C4)
<p>D: Transferable skills</p> <p>This level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:</p>
<p>D1 Perform effectively when working in collaboration with others</p> <p>D2 Manage own roles, responsibilities and time, undertake personal and career development, utilise skills in new and changing situations and contexts</p> <p>D3 Deploy a range of interpersonal skills including effective listening, negotiating, persuasion and presentation</p> <p>D4 Relate to and interact effectively with individuals and groups including working effectively as a team member</p> <p>D5 Communicate effectively using verbal and / or non-verbal means including receiving, responding to and presenting information in a variety of visual forms</p> <p>D6 Manage tasks and identify and solve problems using information sources and apply numerical skills and techniques</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (D2) • Practicals (D1, D3-D6) • Seminars (D2, D5) • Directed reading (D2, D5) • Use of the VLE (D6) • Independent research (D1, D2, D6) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Open book examinations (D2, D5-6) • Closed book examinations (D2, D5-6) • Practical write-up (D2, D5-6) • Literature review (D1-2, D5) • Oral exam (D2-3, D5) • Presentation (D1-5) • Problem solving (D2, D5-6)

LEVEL 3 INTENDED LEVEL OUTCOMES

<p>A: Knowledge and understanding</p> <p>This level provides opportunities for students to develop and demonstrate knowledge and understanding of:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:</p>
<p>A1 Understand the fundamental concepts, principles and theories of Chemistry and Biology</p> <p>A2 Apply appropriate techniques to solve scientific problems</p> <p>A3 Utilise effective research methods to analyse and evaluate appropriate literature in science</p> <p>A4 Understand the theory and carry out practical aspects in Chemistry and Biology</p> <p>A5 Demonstrate an ability to carry out scientific calculations to the required degree of accuracy and precision</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (A1-3) • Practicals (A1-5) • Seminars (A1-5) • Directed reading (A4) • Use of the VLE (A2) • Independent research (A3) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Open book examinations (A1-2, A4-5)

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	<ul style="list-style-type: none"> • Closed book examinations (A1-2, A4-5) • Practical write-up (A1-5) • Literature review (A3) • Problem solving (A2)
<p>B: Intellectual skills</p> <p>This level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:</p>
<p>B1 Critically evaluate theory and practice</p> <p>B2 Be creative in the solution of problems and in the development of research activity</p> <p>B3 Analyse and synthesise information ensuring that conclusions are supported by evidence</p> <p>B4 Integrate and evaluate information from a variety of sources in order to gain a coherent understanding of theory and practice</p> <p>B5 Interpret and evaluate experimental data to yield analytical information</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (B4) • Practicals (B1-5) • Seminars (B1-5) • Directed reading (B1) • Use of the VLE (B4) • Independent research (B4) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Open book examinations (B3-5) • Closed book examinations (B3-5) • Practical write-up (B1-5) • Problem solving (B5)
<p>C: Practical skills</p> <p>This level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:</p>
<p>C1 Demonstrate confidence and competence in the use of information technologies including working effectively in an online environment</p> <p>C2 Undertake competent, safe, evaluative, reflective and effective practice</p> <p>C3 Conduct research into scientific issues either individually or as part of a team</p> <p>C4 Analyse experimental results and determine their strength and validity</p> <p>C5 Use appropriate skills to communicate effectively in scientific situations</p> <p>C6 Prepare and present a scientific report</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (C5) • Practicals (C2-4) • Seminars (C5) • Directed reading (C1-2) • Use of the VLE (C1, C3) • Independent research (C1, C3) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Open book examinations (C4) • Closed book examinations (C4) • Practical write-up (C1-2, C4-6) • Problem solving (C4-5)
<p>D: Transferable skills</p> <p>This level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the level learning outcomes:</p>
<p>D1 Perform effectively when working in collaboration with</p>	<p>Learning and teaching strategies and</p>

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<p>others</p> <p>D2 Deploy a range of interpersonal skills including effective listening, negotiating, persuasion and presentation</p> <p>D3 Relate to and interact effectively with individuals and groups including working effectively as a team member</p> <p>D4 Manage tasks and identify and solve problems using information sources and apply numerical skills and techniques</p>	<p>methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Lectures (D3-4) • Practicals (D1-4) • Seminars (D2-4) • Use of the VLE (D3-4) <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • Open book examinations (D4) • Closed book examinations (D4) • Practical write-up (D1-4) • Problem solving (D2-4)
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ADMISSIONS REGULATIONS

The regulations for the Foundation Degree are the University's Standard Undergraduate Admissions Regulations.

Applicants should normally be at least 18 years of age by 31st December in the year of entry.

Applicants should confirm their ability to study on a Foundation Degree by presenting evidence of:

- 48 UCAS Tariff Points (normally to include Biology), e.g. 2Es or 1C at A2 level or an AVCE Double Award at EE or BTEC / City and Guilds National Technical Diploma.
- Additionally, candidates will normally be expected to present passes at grade C (4 in the new grading system) or above in at least three other subjects (double or triple science) at GCSE level or equivalent and passes at grade C (4) and above in English and Mathematics will be normally expected.

Or

- Learning through experience, demonstrated in portfolios or records of achievement and / or by specific learning tasks set at interview and confirmed by employer reference(s).

Or

- A combination of academic and experiential learning to be considered on its individual merits.

Applicants are required to demonstrate a set of basic skills required to fulfil the demands of the programme:

- An ability to express themselves in written English.
- Basic numerical skills.
- A basic understanding of Science.

These skills should be demonstrated at levels equivalent to GCSE grades A-C. To this end, applicants may offer:

- GCSE, GCE or CSE results.
And/or
- Results of appropriate BTEC or Access programmes to science courses.
And/or
- An accredited record of using these skills in employment.

Applicants whose first language is not English must offer evidence of qualifications in written and spoken English. Acceptable qualifications are TOEFL 550, IELTS 6.0 or direct equivalents.

The regulations for the Foundation Year are the University's Standard Undergraduate Admissions Regulations.

Applicants should either be young learners aged from 18 to 21 who have not engaged in post-16 education but whose experience since leaving full-time education may have helped to equip them for further study.

Alternatively, either applicants aged over 21 who are mature learners with no formal qualifications or learners with A Levels (or equivalent) which were obtained more than three years ago are welcome to apply.

It is desirable for applicants to have achieved a grade C (4) or greater in GCSE Mathematics (or equivalent).

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Applicants whose first language is not English are welcome to apply with a suitable IELTS qualification or university recognised equivalent and evidence of academic qualifications would be required.

Applicants are encouraged to apply for the year in which they wish to enter the programme although deferrals will be allowed in exceptional circumstances.

PROGRESSION ROUTES

Students who successfully complete the Foundation Degree (FdSc) in Biomedical Science with Merit classification at Wiltshire College will be guaranteed an interview at Bournemouth University to progress onto Level 6 of BSc (Hons) Biomedical Science and credited with 120 credits at Level 4 and 120 credits at Level 5.

Recognition arrangements provide formally approved entry or progression routes through which students are eligible to apply for a place on a programme leading to a BU award. Recognition guarantees entry onto the BU receiving programme, but in some cases, additional entry criteria such as a Merit classification from the feeder programme may apply. Please see the Recognition Register (https://intranet.sp.bournemouth.ac.uk/pandptest/7J_Recognition_Register_Public.xlsx) for a full list of approved Recognition arrangements and agreed entry criteria.

In order to take advantage of exciting new approaches to learning and teaching as well as developments in industry, the current, approved Progression route(s) for this programme may be subject to change. Where this happens, students will be informed and supported by the Faculty as early as possible.

ASSESSMENT REGULATIONS

The regulations for this programme are the University's Standard Foundation Degree with Foundation Year Assessment Regulations.

WORK BASED LEARNING (WBL) AND PLACEMENT ELEMENTS

An assessed Work Related Project module is a core module incorporated across the Foundation Degree programmes and offers an opportunity for learners to obtain credit for and to reflect upon their learning either formally by production of a major project or on a day-to-day basis in the workplace.

As the part time students are normally employed in the science industry, the Work Related Project offers an informal opportunity for reflection on current practice which may be documented subsequently as part of the work related project module.

All students, both full-time and part-time, undertake an industry related major project. This can be carried out within a company or developed within the College environment. In both cases, the projects involve direct contact with the customer. When a project is carried out at Wiltshire College, students will normally design and develop a project specified by a company.

For learners undertaking a Higher or Degree Apprenticeship, supporting evidence for NVQ 4 requirements can be taken from the Work Related Project report and the work based learning elements of the programme.

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Programme Skills Matrix

Modules		Programme Intended Learning Outcomes																											
		A 1	A 2	A 3	A 4	A 5	A 6	B 1	B 2	B 3	B 4	B 5	B 6	C 1	C 2	C 3	C 4	C 5	C 6	C 7	D 1	D 2	D 3	D 4	D 5	D 6	D 7		
LEVEL 5	Bioanalytical Techniques	X	X	X	X	X			X	X	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X		
	Work Related Project	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X		
	Professional Development Portfolio			X	X				X	X					X	X		X	X	X		X	X	X		X	X		
	Further Chemistry	X	X		X	X	X	X	X		X	X	X		X		X	X	X		X	X			X	X	X		
	Immunology	X	X	X		X			X		X		X			X		X			X	X	X			X	X		
	Molecular Biology	X	X	X		X			X		X	X	X			X	X	X		X	X	X	X		X	X	X		
LEVEL 4	Introduction to Biomedical Science	X				X	X	X			X		X		X	X		X	X			X			X	X	X		
	Fundamental Chemistry	X	X		X	X				X		X		X	X	X	X	X		X	X			X	X	X	X		
	Essential Biology and Physiology	X	X	X		X				X		X		X	X	X	X	X		X	X			X	X	X	X		
	Mathematics for Science		X			X						X		X			X				X				X	X			
	Academic Writing Skills	X		X		X		X		X		X	X	X		X		X	X		X	X	X		X	X			
	Practical Laboratory Skills	X	X		X	X			X	X	X	X		X	X	X	X	X	X	X	X	X			X	X	X	X	
LEVEL 3	Foundations in Biology	X	X		X	X			X	X	X	X		X				X			X	X	X	X					
	Foundations in Chemistry	X	X		X	X			X	X	X	X		X				X			X	X	X	X					
	Mathematical Science Skills	X	X	X		X				X		X	X			X	X							X					
	Practical Science	X	X	X	X	X		X	X	X		X		X	X	X	X	X	X		X			X					

A – Subject Knowledge and Understanding

This programme provides opportunities for students to:

1. Understand the fundamental concepts, principles and theories of Chemistry, Biology and Environmental Science with areas of specialisation in depth.
2. Apply appropriate techniques to solve scientific problems.
3. Utilise effective research methods to analyse and evaluate appropriate literature in

C – Subject Specific / Practical Skills

This programme provides opportunities for students to:

1. Demonstrate confidence and competence in the use of information technologies including working effectively in an online environment.
2. Undertake competent, safe, evaluative, reflective and effective practice.
3. Conduct research into scientific issues either individually or as part of a

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<p>science.</p> <ol style="list-style-type: none"> 4. Understand the theory and carry out practical aspects in Chemistry and Biology. 5. Demonstrate an ability to carry out scientific calculations to the required degree of accuracy and precision. 6. Apply appropriate techniques to elucidate chemical structures from spectroscopic data 	<p>team.</p> <ol style="list-style-type: none"> 4. Analyse experimental results and determine their strength and validity. 5. Use appropriate skills to communicate effectively in scientific situations. 6. Act autonomously with minimal supervision or direction within agreed guidelines. 7. Prepare and present scientific reports.
<p>B – Intellectual Skills This programme provides opportunities for students to:</p> <ol style="list-style-type: none"> 1. Critically evaluate theory and practice. 2. Be creative in the solution of problems and in the development of research activity. 3. Analyse and synthesise information, identifying implicit values, detecting false logic or reasoning and ensuring that conclusions are supported by evidence. 4. Integrate and evaluate information from a variety of sources in order to gain a coherent understanding of theory and practice. 5. Interpret and evaluate experimental data to yield analytical information. 6. Formulate and test hypotheses whilst applying professional judgement to balance risks, costs, benefits, safety, reliability, aesthetics and environmental impact. 	<p>D – Transferable Skills This programme provides opportunities for students to:</p> <ol style="list-style-type: none"> 1. Perform effectively when working in collaboration with others. 2. Manage own roles, responsibilities and time, undertake personal and career development and utilise skills in new and changing situations and contexts. 3. Deploy a range of interpersonal skills including effective listening, negotiating, persuasion and presentation. 4. Relate to and interact effectively with individuals and groups including working effectively as a team member. 5. Communicate effectively using verbal and / or non-verbal means including receiving, responding to and presenting information in a variety of visual forms. 6. Manage tasks and identify and solve problems using information sources and apply numerical skills and techniques. 7. Be independent and reflective learners analysing own strengths and weaknesses.