

DEFINITIVE COURSE RECORD

Course Title	FdSc Practical Life Sciences [higher apprenticeship]
Awarding Body	University of Suffolk
Level of Award ¹	FHEQ Level 5
Professional, Statutory and Regulatory Bodies Recognition	None
Credit Structure ²	240 Credits Level 4: 120 Credits Level 5: 120 Credits
Mode of Attendance	Full-time and part-time
Standard Length of Course ³	2 years full-time
Intended Award	FdSc Practical Life Sciences
Named Exit Awards	CertHE Practical Life Sciences
Entry Requirements ⁴	80 UCAS tariff points plus 5 GCSE's at grade C/4 (or equivalent) including English, Maths and a science subject together with a relevant Level 3 qualification. Mature applicants without UCAS points/English and maths qualifications will be considered based on relevant industry experience and diagnostic assessment of English and maths. All applicants needs to be working in a suitable scientific setting. All applicants will be required to attend an interview with a member of the course team to establish that the course meets the intended progression plans of the applicant. * If a student is to access a work placement as part of the course, a DBS may need to be considered based on the nature of the work (i.e. in a hospital or school laboratory). If the student completes work experience within a food technology/pharmacological company a DBS would not likely be necessary. If the student is already employed in a relevant role the employer would follow their own policy on this.
Delivering Institution(s)	University of Suffolk at East Coast College (Lowestoft)

This definitive record sets out the essential features and characteristics of the FdSc Practical Life Sciences [higher apprenticeship] course. The information provided is accurate for students entering level 4 in the 2022-23 academic year⁵.

¹ For an explanation of the levels of higher education study, see the [QAA Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies \(2014\)](#)

² All academic credit awarded as a result of study at the University adheres to the [Higher education credit framework for England](#).

³ Where the course is delivered both full-time and part-time, the standard length of course is provided for the full-time mode of attendance only. The length of the part-time course is variable and dependent upon the intensity of study. Further information about mode of study and maximum registration periods can be found in the [Framework and Regulations for Undergraduate Awards](#).

⁴ Details of standard entry requirements can be found in the [Admissions Policy](#) and further details about Disclosure and Barring Checks (DBS) can be found on the [University's DBS webpage](#).

⁵ The University reserves the right to make changes to course content, structure, teaching and assessment as outlined in the [Admissions Policy](#).

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Course Summary

The FdSc in Practical Life Sciences is a programme that will support learners to develop an understanding of the essential practical and theoretical elements, within many areas of biological science, which are needed within industry. The course offers opportunities to study a range of practical and theoretical topics related to biomedical and bioscience topics. This qualification provides an essential broad base to the theoretical knowledge and practical experience needed for the laboratory science industry. It offers an opportunity for learners to follow a career into many areas of industrial science where key practical skills development and understanding are necessary.

Course Aims

- The knowledge and skills necessary for employment in a range of roles within the biological science sector;
- A level 5 programme demonstrating linkage to the National Occupational Standards and the relevant professional bodies;
- To provide a sound foundation for progression to higher level qualifications in a related discipline;
- Full understanding of the structure, context and relevance of the biological science sector, and the roles and responsibilities within it;
- To raise student aspiration and reflect on their personal learning journey;
- To develop students as autonomous, analytical and evaluative learners through the ability to devise, plan and manage research projects appropriate to the level of study
To develop students' employability/transferable skills throughout the programme.

Course Learning Outcomes

The following statements define what students graduating from the FdSc Practical Life Sciences course will have been judged to have demonstrated in order to achieve the award. These statements, known as learning outcomes, have been formally approved as aligned with the generic qualification descriptor for level 4/5 awards as set out by the UK Quality Assurance Agency (QAA)⁶.

Knowledge and Understanding

- Demonstrate a detailed knowledge and understanding of the chemical principles that apply to the structures of biological building block molecules;
- Demonstrate a detailed knowledge and understanding of the structures of biological macromolecules and the relationships to biological functions;
- Demonstrate a detailed knowledge and understanding of the underlying concepts of molecular biology and application in health, disease and immunity.

⁶ As set out in the [QAA Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies \(2014\)](#)

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Cognitive Skills

- Process and analyse scientific data;
- Synthesise, analyse and communicate information including published scientific research and reports, and to draw logical conclusions.

Subject Specific Skills

- Demonstrate an ability to select, apply and evaluate appropriate techniques involved in scientific research;
- Apply and evaluate appropriate and published literature to scientific protocols and methodologies and with consideration of ethical issues.

Key/transferable Skills

- Demonstrate further development of Graduate skills in areas of communication, numeracy, self-management, technology, problem solving, working with others, improving own learning and performance;
- Review targets for development and reflect on personal, academic and career progress.

Course Design

The design of this course has been guided by the following QAA Benchmarks / Professional Standards / Competency Frameworks:

- Framework for Higher Education Qualifications (FHEQ) (QAA 2008);
- QAA Foundation Degree Qualifications Benchmark Statement (2010) / Foundation Degree Characteristics (2015);
- QAA Subject Benchmark Statement Biosciences (2015);
- QAA Subject Benchmark Statement Biomedical Sciences (2015);
- QAA Subject Benchmark Statement Chemistry (2014);
- QAA Subject Benchmark statement Earth Sciences, Environmental Sciences and Environmental Studies (2014);
- Level 4 NVQ in Laboratory and Associated Technical Activities (LATA);
- RSciTech/RSci competencies.

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Course Structure

The FdSc Practical Life Sciences comprises modules at levels 4 and 5.

Module Specifications for each of these modules is included within the course handbook, available to students on-line at the beginning of each academic year.

	Module	Credits	Module Type ⁷
Level 4			
	Laboratory Techniques and Laboratory Management for Applied Biology 1	(20 credits)	M
	Presenting the Analysis of Scientific Data and Bioinformatics	(20 credits)	R
	Cell Biology	(10 credits)	R
	Physiology	(10 credits)	R
	Fundamentals of Biochemistry	(20 credits)	R
	Molecular Biology and Genetics	(20 credits)	R
	Personal and Professional Development	(20 credits)	M
Level 5			
	Laboratory Techniques and Laboratory Management for Applied Biology 2	(20 credits)	M
	Industry Related Project	(20 credits)	M
	Scientific Research	(20 credits)	M
	Immune Responses	(10 credits)	R
	Microbiology	(10 credits)	R
	Infectious Diseases	(10 credits)	R
	Medicinal Chemistry (Drug Design)	(10 credits)	R
	Environmental Analysis Techniques	(20 credits)	R

⁷ Modules are designated as either mandatory (M), requisite (R) or optional (O). For definitions, see the Framework and Regulations for Undergraduate Awards

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Awards

On successful completion of the course, students will be awarded an FdSc Practical Life Sciences. Students who leave the course early may be eligible for a CertHE Practical Life Sciences on successful completion of 120 credits including all mandatory modules at level 4.

Course Delivery

The course is delivered at East Coast College (Lowestoft Campus). Students studying full-time on FdSc Practical Life Sciences apprenticeship programme are likely to have approximately nine contact hours per week throughout their studies for the FdSc and apprenticeship components. The contact hours will be a mix of lectures, seminars, practical laboratory sessions (including at CEFAS laboratories, Lowestoft), workshop and group activities. There is a need for the employer to commit to 20% off the job training throughout the programme which will include the attendance at the College on the course. Students will normally be expected to undertake a minimum of 15 hours of independent study in an average week for full time, but should be prepared for this to vary based on assignment deadlines and class exercises.

Course Assessment

A variety of assessments will be used on the course to enable students to experience and adapt to different assessment styles. The assessment methods used will be appropriate to assess each module's intended learning outcomes. Assessment on the course overall will be approximately 70% coursework (including essays, reports, presentations, group work and research projects), 15% examinations and 15% practical assessments.

End Point Assessment

All students on the course undertake an End Point Assessment (EPA) to complete their Technician Scientist, Level 5 Apprenticeship. Students will be expected to undertake the EPA as part of their apprenticeship /after the successful completion of their apprenticeship (FdSc Practical Life Sciences). The EPA will be delivered by the by a separate training provider. The EPA will be approximately 100% coursework (including a work-based problem solving project report, presentation and discussion (of project report) and a vocational competence discussion). Following successful completion of the EPA students will achieve their Technician Scientist, Level 5 Apprenticeship.

Special Features

The FdSc Practice Life Sciences (higher apprenticeship) course meets the requirements of the Technician Scientist apprenticeship standard.

Course Team

The academic staff delivering this course are drawn from a team that includes teaching specialists and current practitioners. All staff are qualified in their subjects with their own specialist knowledge to contribute.

Course Costs

Students undertaking FdSc Practical Life Sciences [higher apprenticeship] will not be charged tuition fees directly. Tuition fees will be agreed between the University and a student's employer. Students will be required to sign a commitment statement before starting their apprenticeship which will detail the student's, employer's, and University's expectations under the apprenticeship agreement.

Students would need to pay additional costs to go on extra-curricular trips and visits designed to complement course delivery, amounting to a maximum of £500 payable at a later date.

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Students are likely to incur other costs for personal protective equipment (such as a laboratory coat) amounting to approximately £100 per year.

Academic Framework and Regulations

This course is delivered according to the Framework and Regulations for Undergraduate Awards and other academic policies and procedures of the University and published on the [website](#).