

DEFINITIVE COURSE RECORD

Course Title	FdSc Biomedical Science [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
Standard Length of Course ³	30 months/2.5 years full-time; 2 years FdSc completion followed by 6months EPA preparation and completion (sign-up will be 36months to allow for flexibility in completion).
Intended Award	FdSc Biomedical Science
Named Exit Awards	CertHE Biomedical Science
Entry Requirements ⁴	80 UCAS tariff points plus GCSE grade C in English, maths (or equivalent English and maths qualifications) and science. 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 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.
Delivering Institution(s)	University of Suffolk at East Coast College (Lowestoft)

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

Course Summary

The FdSc Biomedical Science contains a balance of the knowledge requirements, along with the practical skill development, for you to develop the skills to work successfully in the biological science industry at laboratory assistant/associate level (or equivalent). The course will also provide a strong subject base in the area of biological and Biomedical Science which will support progression to top-up to a full BSc (Hons) Practical Life Sciences at University of Suffolk, East Coast College. The module content will support the evidence requirements for you to apply for professional body registration at registered science technician (RSciTech) or

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](#)

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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registered scientist (RSci) levels through the science council (if you chose to do this). The course targets progression into an industrial science career and supports those already employed in a biological scientist role seeking further training and development.

Course Aims

- To provide the knowledge and skills necessary for employment in a range of roles within the biological science sector
- To provide 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
- To provide 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 Biomedical Science 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 knowledge and understanding of organisms' molecular and cellular process for life and the key chemical principles which are relevant to biological systems.
- Demonstrate knowledge and understanding of the key chemical principles which are relevant to biological systems.
- Demonstrate knowledge of the physiological functioning of the human body and functional human anatomy and its underlying concepts.
- 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.

Cognitive Skills

- Present, evaluate and interpret quantitative and qualitative scientific data.
- Demonstrate relevant reading, selection, utilisation and communication of information from scientific literature.
- Process and analyse scientific data.

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

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

Subject Specific Skills

- Employ a variety of methods used in the investigation, measurement, recording and analysis in science, with due regard to scientific standards and risk assessment.
- Demonstrate an understanding of the aims, methods, sources and applications of data.
- 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 development of graduate skills in areas of communication, numeracy, self-reflection and management, technology, problem solving, working with others, improving own learning and performance.
- Demonstrate an understanding of how self-managed learning can enhance lifelong development.
- Review targets for development and reflect on personal, academic and career progress.

Course Design

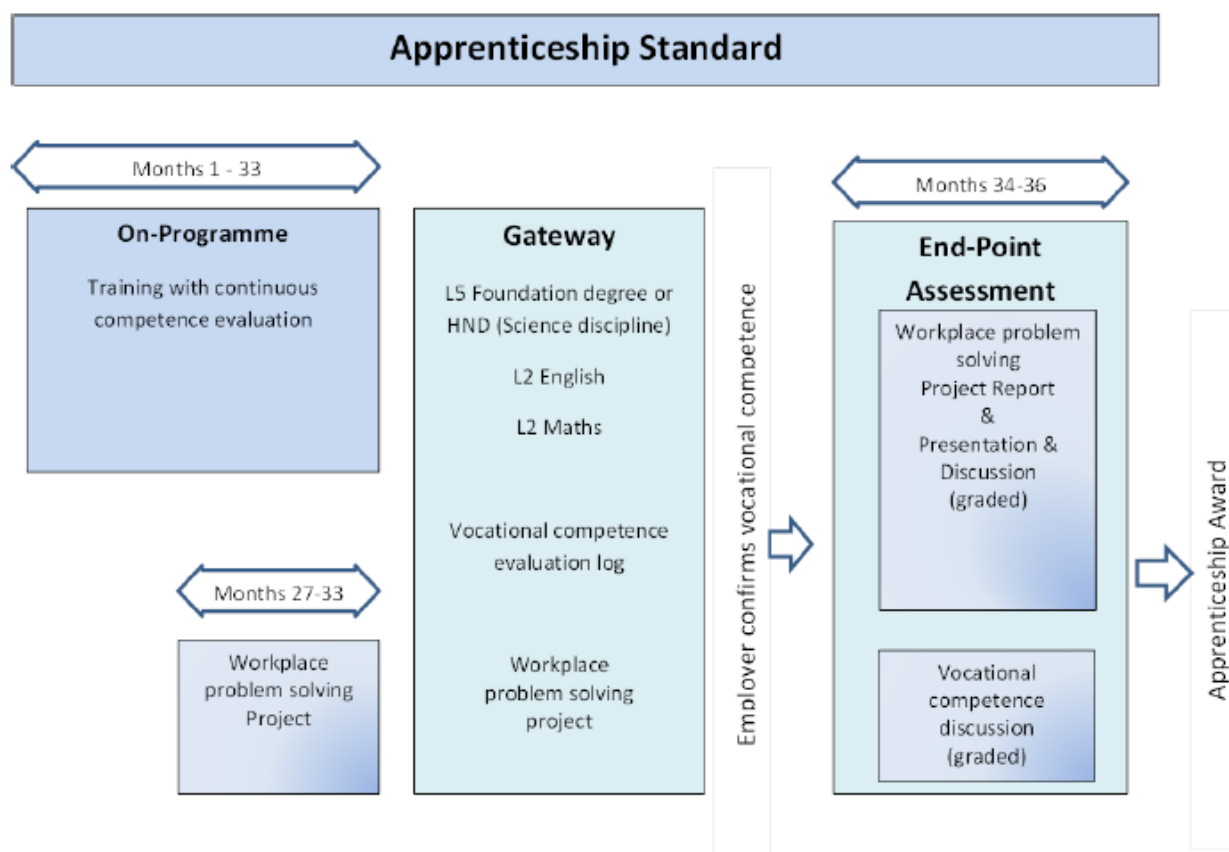
The design of this course has been guided by the following QAA Benchmarks / Professional Standards / Competency Frameworks:

- Framework for Higher Education Qualifications (FHEQ) (QAA 2015)
- QAA Foundation Degree Characteristics (2020)
- QAA Higher Education in Apprenticeships Statement (2010) (2019)
- QAA Subject Benchmark Statement Biosciences (2019)
- QAA Subject Benchmark Statement Biomedical Science (2019)
- QAA Subject Benchmark Statement Chemistry (2019)
- Level 4 NVQ in Laboratory and Associated Technical Activities (LATA)
- RSciTech/RSci competencies

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Course Structure

The apprenticeship includes the FdSc Biomedical Science degree. The components of the apprenticeship link as below;



The apprenticeship is likely to take 30 months to complete; 24 months for the FdSc and a further 6 months for EPA preparation and completion. Apprentices will be signed-up for a 36 month period however to allow for flexibility in EPA preparation and scheduling.

The FdSc Biomedical Science 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			
4	Personal and Professional Development	20	M
4	Cell Biology	10	R
4	Physiology	10	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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4	Fundamentals of Biochemistry	20	R
4	Introduction to Biomedical Science	20	M
4	Presenting the Analysis of Scientific Data and Bioinformatics	20	M
4	Laboratory Techniques and Laboratory Management for Applied Biology 1	20	M
Level 5			
5	Industry Related Project	20	M
5	Scientific Research	20	M
5	Laboratory Techniques and Laboratory Management for Applied Biology 2	20	M
5	Further Biochemistry	20	R
5	Immune Responses	10	R
5	Infectious Diseases	10	R
5	Molecular Biology	20	R

Awards

On successful completion of the foundation degree component, students will be awarded an FdSc Biomedical Science. Students who leave the course early may be eligible for a CertHE Biomedical Science 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 Biomedical Science are likely to have approximately nine contact hours per week throughout their studies. The contact hours will be a mix of lectures, seminars, practical laboratory sessions, workshop and group activities. Students will normally be expected to undertake approximately 27 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.

The apprenticeship has a requirement for 20% off the job training. During the first 2 years of the apprenticeship the FdSc attendance will count as the 20% requirement. EPA preparation in the final 6 months (following FdSc completion) will account for the 20% off the job requirements. Training in the workplace during non-timetabled weeks will count within the 20% off the job training also.

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.

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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 after the successful completion of their (FdSc Biomedical Science. The EPA will be delivered 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).

The EPA will contain;

- Work place problem solving project (WPPS) report
- Presentation and discussion of WPPS (graded)
- Vocational competency discussion

Following successful completion of the EPA students will achieve their Technician Scientist, Level 5 Apprenticeship.

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 Biomedical Science [higher apprenticeship] will not be charged tuition fees directly. Tuition fees will be agreed between the College 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 College'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.

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](#).