



## Programme Specification (Undergraduate)

FOR ENTRY YEAR: 2026/27

Date created: n/a

Last amended: 22/07/2026

Version no. Choose an item. Date approved by

EQED: Click or tap here to enter text.

### 1. Programme title(s) and code(s):

BSc Pharmaceutical Science

BSc Pharmaceutical Science with a Year in Industry

BSc Pharmaceutical Science with a Year Abroad

#### a) [HECOS Code](#)

| HECOS Code | %   |
|------------|-----|
| 100423     | 100 |

#### b) UCAS Code (where required)

BSc Pharmaceutical Science F160

BSc Pharmaceutical Science with a Year in Industry F161

BSc Pharmaceutical Science with a Year Abroad F162

### 2. Awarding body or institution:

University of Leicester

### 3. a) Mode of study

Full-time

#### b) Type of study

Campus-based

### 4. Registration periods:

| Degree                 |         |                           |         |                           |                          |                          |                                               |                                               |
|------------------------|---------|---------------------------|---------|---------------------------|--------------------------|--------------------------|-----------------------------------------------|-----------------------------------------------|
|                        | BSc     | BSc with Year in Industry | BSc     | BSc with Year in Industry | BSc with Foundation Year | BSc with Foundation Year | BSc with Year in Industry and Foundation Year | BSc with Year in Industry and Foundation Year |
|                        | Normal  | Max.                      | Normal  | Max.                      | Normal                   | Max.                     | Normal                                        | Max.                                          |
| Pharmaceutical Science | 3 years | 5 years                   | 4 years | 6 years                   | 4 years                  | 6 years                  | 5 years                                       | 7 years                                       |

### 5. Typical entry requirements

A-level BBB or equivalent and GCSE Maths grade 6. Applications from mature students with a Level 3 qualification in Chemistry and/or Pharmaceutical Science and experience of employment in a chemistry-related field are welcomed and will be considered on a case-by-case basis.

For entry to, and progression from, Foundation Year variant: See the STEM Foundation Year programme specification from the year of entry.

## 6. Accreditation of Prior Learning

APL will not be accepted for exemptions from individual modules; however, may be considered for direct entry to Year 2, on a case by case and subject to the general provisions of the University APL policy.

## 7. Programme aims

The programme aims to:

- equip students with knowledge of applied physical, chemical and biological sciences as necessary to understand ideas central to the pharmaceutical sciences.
- provide a broad understanding of the processes involved in development of new drugs including drug design, discovery, formulation, mode of action and manufacture.
- ensure students are aware of medicine regulation, governance and standards.
- train students in the practical skills necessary for the safe manipulation and analysis of pharmaceutical agents.
- generate interest in, and understanding of, the wider role of pharmaceutical science in society e.g. industry and commerce.
- enable students to develop independent learning skills as well as the experience of working as part of a team.
- stimulate intellectual development, reflection on errors, development of critical analysis powers and the ability to solve problems.
- *to enhance communication skills.*
- provide students with training in mathematical techniques and IT skills.
- introduce students to pharmaceutical science research methodology through carrying out a research project.
- introduce students to some topics of current research and technological advances in the chemical and pharmaceutical sciences.
- equip students with the knowledge and generic skills for employment or further training in R&D, science-based industry and establishments, education, and for training at management levels in other professions.

In addition, for the 'with a Year abroad' variants

- The 'Year Abroad' variant of this programme is offered in accordance with the University's [standard specification for the experiential year abroad variant](#).

In addition, for the 'with Industry' variants

- The 'Year in industry' variant of this programme is offered in accordance with the University's [standard specification for year in industry programme variants](#).
- To provide experience of applications of professional and discipline-specific skills in Industry and to reinforce knowledge through its use in different environments.

## 8. Reference points used to inform the programme specification

- [QAA Benchmarking Statements for Chemistry](#)
- [QAA Benchmarking Statements for Biomedical Science and Biomedical Sciences](#)
- Framework for Higher Education Qualifications (FHEQ)
- UK Quality Code for Higher Education
- [University Education Strategy](#)
- [University Assessment Strategy](#) [log-in required]

- University of Leicester Periodic Developmental Review Report
- External Examiners' reports (annual)
- United Nations Education for Sustainable Development Goals
- Student Destinations Data
- [Royal Society of Chemistry accreditation guidance](#)
- [Academy of Pharmaceutical Sciences accreditation guidance](#)

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### 9. Programme Outcomes

Unless otherwise stated, programme outcomes apply to all awards specified in 1. Programme title(s).

#### a) Knowledge and Critical Understanding

##### i) Competence in an appropriate body of knowledge

| Intended learning Outcome                                                                                                                                                                                                                              | Teaching methods                                                                      | Learning Activities                                                              | Assessment Type                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Students should be able to recall and apply basic science theory in the applied physical, chemical, biological and pharmaceutical sciences (specifically organic chemistry, related mathematics, biochemistry, materials science, and pharmaceuticals) | Lectures, Practical Classes, Computer Classes, Small group sessions (e.g. tutorials). | Practice problems, hands-on experiments, pc simulations/tasks, directed reading. | Written examinations; assessed practical work; assessed computer exercises; assessed problems; tutorial work. |
| Students should be able to solve structured and unseen model problems                                                                                                                                                                                  | Lectures, Practical Classes, Computer Classes, Small group sessions (e.g. tutorials). | Practice problems, hands-on experiments, pc simulations/tasks, directed reading. | Written examinations; assessed practical work; assessed computer exercises; assessed problems; tutorial work. |
| Students should be able to conduct experiments and apply practical techniques                                                                                                                                                                          | Practical Classes, Computer Classes                                                   | hands-on experiments, pc simulations/tasks                                       | Assessed practical work, reports and presentations.                                                           |
| Typical students should have detailed knowledge of selected topics in the broad areas of, medicinal chemistry, pharmaceutical science,                                                                                                                 | Lectures, Practical Classes, Computer Classes, Small group sessions (e.g. tutorials). | Practice problems, hands-on experiments, pc simulations/tasks, directed reading. | Written examinations; assessed practical work; assessed computer exercises; assessed problems; tutorial work. |

|                                                                      |  |  |  |
|----------------------------------------------------------------------|--|--|--|
| regulations, and the industries of drug discovery and administration |  |  |  |
|----------------------------------------------------------------------|--|--|--|

ii) Breadth of knowledge

| Intended learning Outcome                                                                                                                                                                   | Teaching methods                                                                      | Learning Activities                                                              | Assessment Type                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Students should be able to apply chemical, pharmaceutical and biochemical concepts in new situations e.g. ability to predict physical and chemical properties by comparison with analogues. | Lectures, Practical Classes, Computer Classes, Small group sessions (e.g. tutorials). | Practice problems, hands-on experiments, pc simulations/tasks, directed reading. | Written exams; assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |
| Students should be able to apply logic combined with both chemical and pharmaceutical knowledge to make deductions based on (limited) evidence.                                             | Lectures, Practical Classes, Computer Classes, Small group sessions (e.g. tutorials). | Practice problems, hands-on experiments, pc simulations/tasks, directed reading. | Written exams; assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |
| Students should be able solve familiar and unfamiliar chemistry and/or pharmaceutical science related problems.                                                                             | Lectures, Practical Classes, Computer Classes, Small group sessions (e.g. tutorials). | Practice problems, hands-on experiments, pc simulations/tasks, directed reading. | Written exams; assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |
| Students should be able design, construct and undertake experiments.                                                                                                                        | Lectures, Practical Classes, Computer Classes, Small group sessions (e.g. tutorials). | Practice problems, hands-on experiments, pc simulations/tasks, directed reading. | Written exams; assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |

iii) Understanding of source materials

| Intended learning Outcome                                                                                           | Teaching methods                                                                                                                  | Learning Activities                                                                                                | Assessment Type                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Students should be able to critically appraise physical and pharmaceutical information and discuss its limitations. | Lectures; Problem Classes; Tutorials; Laboratory Practical Classes; Group projects; Computer aided learning; Project supervision. | Information Searching and Reviewing, Practice Problems, Coursework tasks, database class tests, research projects. | Written exams; assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |
| Students should be able to summarise key findings of scientific papers.                                             | Lectures; Problem Classes; Tutorials; Laboratory Practical Classes; Group projects; Computer aided learning; Project supervision. | Information Searching and Reviewing, Practice Problems, Coursework tasks, database class tests, research projects. | Written exams; assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |
| Students should be able to draw quantitative conclusions from sample data.                                          | Lectures; Problem Classes; Tutorials; Laboratory Practical Classes; Group projects; Computer aided learning; Project supervision. | Information Searching and Reviewing, Practice Problems, Coursework tasks, database class tests, research projects. | Written exams; assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |
| Students should be able to critically assess and compare scientific theories.                                       | Lectures; Problem Classes; Tutorials; Laboratory Practical Classes; Group projects; Computer aided learning; Project supervision. | Information Searching and Reviewing, Practice Problems, Coursework tasks, database class tests, research projects. | Written exams; assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |

**b) Cognitive and Practical Skills****i) Selection and analysis of sources**

| Intended learning Outcome                                                                                                                                             | Teaching methods                                                                                                                    | Learning Activities                                        | Assessment Type                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Students should be able to use basic IT skills to access chemical information from online databases;                                                                  | Laboratory classes & research projects; problem classes, careers / skills training sessions; lectures from visiting speakers        | Coursework tasks, database class tests, research projects. | Assessed IT tasks; laboratory/project assessments; practical and project reports; assessed problems.                                                                           |
| Students should be able to access, search and appraise scholarly articles;                                                                                            | Laboratory classes & research projects, problem classes, careers / skills training sessions; lectures from visiting speakers        | Coursework tasks, database class tests, research projects. | Open note assessments; meeting deadlines; project assessments; coursework tasks, written examinations; assessed CVs                                                            |
| Students should be able to gather, retrieve, and manipulate chemical information and data from a variety of sources, analyse & use it to support a chemical argument; | Laboratory classes & research projects; careers / skills training sessions; lectures from visiting speakers                         | Coursework tasks, database class tests, research projects. | Open note assessments; meeting deadlines; project assessments; coursework tasks, written examinations; assessed CVs                                                            |
| Students should be able to demonstrate professional use of standard equipment and knowledge of and application of safety procedures.                                  | Lectures; Directed Reading; Problem Classes; Tutorials; Laboratory Practical Classes; Computer aided learning; Project supervision. | Hands-on experiments, research projects, coursework tasks. | Assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |

**ii) Critical engagement**

| Intended learning Outcome                                           | Teaching methods                                                          | Learning Activities                                                           | Assessment Type                                                                                   |
|---------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Typical students should be able to critically appraise physical and | Lectures; Problem Classes; Tutorials; Laboratory Practical Classes; Group | Practice problems, hands-on experiments, research projects, coursework tasks. | Written exams; assessed practical work, including lab samples, associated data, lab notebooks and |

|                                                                                      |                                                                                                                                   |                                                                               |                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| pharmaceutical information, and discuss its limitations                              | projects; Computer aided learning; Project supervision.                                                                           |                                                                               | reports; assessed computer exercises; assessed problems; tutorial work; project assessment.                                                                                                   |
| Typical students should be able to summarise key findings of scientific papers       | Lectures; Problem Classes; Tutorials; Laboratory Practical Classes; Group projects; Computer aided learning; Project supervision. | Practice problems, hands-on experiments, research projects, coursework tasks. | Written exams; assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |
| Typical students should be able to draw quantitative conclusions from sample data    | Lectures; Problem Classes; Tutorials; Laboratory Practical Classes; Group projects; Computer aided learning; Project supervision. | Practice problems, hands-on experiments, research projects, coursework tasks. | Written exams; assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |
| Typical students should be able to critically assess and compare scientific theories | Lectures; Problem Classes; Tutorials; Laboratory Practical Classes; Group projects; Computer aided learning; Project supervision. | Practice problems, hands-on experiments, research projects, coursework tasks. | Written exams; assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |

iii) Presentation of an argument

| Intended learning Outcome                                                                                                                          | Teaching methods                                                                               | Learning Activities                                                                                                                | Assessment Type                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Typical students should be able to present scientific ideas, data and results in a variety of (appropriate) forms, e.g. reports, seminars, posters | Tutorials, Laboratory Practical Classes; Group projects; Problem classes; Project supervision. | Elevator pitches, poster presentations, flash presentations, short research talks/seminars, project vivas, Experimental write-ups, | Assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed |

|                                                                                                                               |                                                                                                |                                                                                                                                                                                                  |                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                               |                                                                                                | research project dissertations, activities, coursework tasks.                                                                                                                                    | problems; tutorial work; project assessment.                                                                                                                                   |
| Typical students should be able to use discipline specific software, e.g. drawing, molecular modelling, molecular visualisers | Tutorials, Laboratory Practical Classes; Group projects; Problem classes; Project supervision. | Elevator pitches, poster presentations, flash presentations, short research talks/seminars, project vivas, Experimental write-ups, research project dissertations, activities, coursework tasks. | Assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |
| Typical students should be able to participate in scientific discussion and debate.                                           | Tutorials, Laboratory Practical Classes; Group projects; Problem classes; Project supervision. | Elevator pitches, poster presentations, flash presentations, short research talks/seminars, project vivas, Experimental write-ups, research project dissertations, activities, coursework tasks. | Assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |

iv) Independent research

| Intended learning Outcome                                                  | Teaching methods                                                            | Learning Activities                                        | Assessment Type                                                                      |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Students should be able to access, search and appraise scholarly articles. | Laboratory classes & research projects; careers / skills training sessions. | Hands-on experiments, research projects, coursework tasks. | Open note assessments; meeting deadlines; Project assessments; written examinations. |
| Students should be able to collect and analyse data.                       | Laboratory classes & research projects; careers / skills training sessions. | Hands-on experiments, research projects, coursework tasks. | Open note assessments; meeting deadlines; Project assessments; written examinations. |

v) Relevant technical skills

| Intended learning Outcome | Teaching methods | Learning Activities | Assessment Type |
|---------------------------|------------------|---------------------|-----------------|
|---------------------------|------------------|---------------------|-----------------|

|                                                                                                                          |                                                                                                         |                                                            |                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Students should be able to discuss and implement experimental methodology.                                               | Tutorials, Laboratory Practical Classes; Group projects; Problem classes; Project supervision.          | Hands-on experiments, research projects, coursework tasks. | Assessed practical work, including lab samples, associated data, lab notebooks and reports; assessed computer exercises; assessed problems; tutorial work; project assessment. |
| Students should be able to use spreadsheets, word processing and presentation facilities.                                | Problem classes; research projects; literature based coursework exercises; laboratory practical classes | Hands-on experiments, research projects, coursework tasks. | Assessed IT tasks; laboratory/project assessments; practical and project reports; assessed problems.                                                                           |
| Students should be able to use basic IT skills to access chemical information from online databases.                     | Problem classes; research projects; literature based coursework exercises; laboratory practical classes | Hands-on experiments, research projects, coursework tasks. | Assessed IT tasks; laboratory/project assessments; practical and project reports; assessed problems.                                                                           |
| Students should be able to use mathematical packages for data analysis.                                                  | Problem classes; research projects; literature based coursework exercises; laboratory practical classes | Hands-on experiments, research projects, coursework tasks. | Assessed IT tasks; laboratory/project assessments; practical and project reports; assessed problems.                                                                           |
| Students should be able to use chemistry and pharmacy specific software such as drawing or molecular modelling packages. | Problem classes; research projects; literature based coursework exercises; laboratory practical classes | Hands-on experiments, research projects, coursework tasks. | Assessed IT tasks; laboratory/project assessments; practical and project reports; assessed problems.                                                                           |

vi) Autonomous working

| Intended learning Outcome                                                                          | Teaching methods                                                                               | Learning Activities                                        | Assessment Type                                            |
|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|
| Students should be able to plan and undertake projects involving elements of independent research; | Laboratory classes & research projects; careers / skills training sessions, personal tutoring. | Hands-on experiments, research projects, coursework tasks. | Project (and taught experiment) supervisor/practical mark. |

vii) Presentation of research findings

| Intended learning Outcome                                                                                                | Teaching methods                                      | Learning Activities                                                                                             | Assessment Type                                                 |
|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Students should be able to disseminate the background, application, analysis and conclusions of their experimental work. | Practical Classes, Skills Lectures, Research Projects | poster presentations, flash presentations, short research talks/seminars, project vivas, dissertations/reports. | Presentations and questioning, research write-ups/dissertation. |

**c) Transferable skills**

i) Verbal, written and digital communication

| Intended learning Outcome                                                                                                                          | Teaching methods                                                                                               | Learning Activities                                                                                        | Assessment Type                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Students should be able to describe and discuss scientific concepts to a variety of audiences.                                                     | Lectures, Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Elevator pitches, poster presentations, flash presentations, short research talks/seminars, project vivas. | Presentations and questioning (including projects)                                                                               |
| Students should be able to give reasoned arguments in response to chemical questions.                                                              | Lectures, Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Elevator pitches, poster presentations, flash presentations, short research talks/seminars, project vivas. | Presentations and questioning (including projects)                                                                               |
| Students should be able to write concise and clear scientific reports (including abstracts), laboratory notebooks & reports and project summaries. | Lectures, Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | experimental write-ups, research project dissertations, activities, coursework tasks.                      | Written lab-notebooks, project and laboratory reports; assessed CVs; assessed coursework including essays, written examinations. |
| Students should be able to write CVs                                                                                                               | Lectures, Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time.           | CV/Cover letter activities, coursework tasks.                                                              | Written lab-notebooks, project and laboratory reports; assessed CVs; assessed coursework including essays, written examinations. |

|                                                                                                                    |                                                                                                                |                                                                                              |                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Students should be able to clearly discuss some areas of current research Pharmaceutical Sciences in written form. | Lectures, Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Practice problems, experimental write-ups, research project dissertations, coursework tasks. | Written lab-notebooks, project and laboratory reports; assessed CVs; assessed coursework including essays, written examinations. |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|

ii) Numeracy

| Intended learning Outcome                                                                    | Teaching methods                                                                                               | Learning Activities                                                           | Assessment Type                                                                                                |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Students should be able to use analytical and graphical methods.                             | Lectures, Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Practice problems, hands-on experiments, research projects, coursework tasks. | Written examinations; practical and project reports; presentations; assessed practical work; assessed problems |
| Students should be able to analyse data.                                                     | Lectures, Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Practice problems, hands-on experiments, research projects, coursework tasks. | Written examinations; practical and project reports; presentations; assessed practical work; assessed problems |
| Students should be able to solve numerical problems involving e.g. calculus, linear algebra. | Lectures, Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Practice problems, hands-on experiments, research projects, coursework tasks. | Written examinations; practical and project reports; presentations; assessed practical work; assessed problems |

iii) Self-reflection

| Intended Learning Outcome                                                               | Module Code            | Teaching methods                                                      | Learning Activities                                                          | Assessment Type                                                          |
|-----------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Critically evaluate personal knowledge, skills, behaviours and professional development | CH1205, CH3260, CH3266 | Workshops, tutorials, mentoring, feedback sessions, personal tutoring | Reflective journals; personal development planning; peer feedback; portfolio | Reflective portfolio; reflective essay; professional practice reflection |

|                                                                                   |  |  |                                          |  |
|-----------------------------------------------------------------------------------|--|--|------------------------------------------|--|
| through structured self-reflection, identifying strengths, areas for improvement, |  |  | development; guided reflection exercises |  |
|-----------------------------------------------------------------------------------|--|--|------------------------------------------|--|

iv) Problem solving

| Intended learning Outcome                                                                                                     | Teaching methods                                                                                               | Learning Activities                                                           | Assessment Type                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Students should be able to analyse problems.                                                                                  | Lectures, Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Practice problems, hands-on experiments, research projects, coursework tasks. | Assessed examinations; assessed problems; group work assessment; project assessments. |
| Students should be able to plan and implement projects.                                                                       | Lectures, Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Practice problems, hands-on experiments, research projects, coursework tasks. | Assessed examinations; assessed problems; group work assessment; project assessments. |
| Students should be able to apply chemistry and/or pharmaceutical knowledge and problem-solving ability to novel applications. | Lectures, Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Practice problems, hands-on experiments, research projects, coursework tasks. | Assessed examinations; assessed problems; group work assessment; project assessments. |
| Students should be able to solve unfamiliar numerical problems.                                                               | Lectures, Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Practice problems, hands-on experiments, research projects, coursework tasks. | Assessed examinations; assessed problems; group work assessment; project assessments. |

v) Organisation and management

| Intended learning Outcome                                                                          | Teaching methods                                                                               | Learning Activities                                        | Assessment Type                                            |
|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|
| Students should be able to plan and undertake projects involving elements of independent research; | Laboratory classes & research projects; careers / skills training sessions, personal tutoring. | Hands-on experiments, research projects, coursework tasks. | Project (and taught experiment) supervisor/practical mark. |
| Students should be able to work to deadlines managing their time effectively.                      | Laboratory classes & research projects; careers / skills training sessions, personal tutoring. | Hands-on experiments, research projects, coursework tasks. | Meeting deadlines for all assessments.                     |

vi) Teamwork

| Intended learning Outcome                                                            | Teaching methods                                                                                     | Learning Activities                                                             | Assessment Type                                                  |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------------------------|
| Students should be able to discuss concepts and formulate plans working with peers.  | Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Practice Problems, Authentic Tasks, Hands on experiments, Independent Research. | Group assessment (outcomes and questioning); project assessment. |
| Students should be able to recognise individual strengths within a team.             | Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Practice Problems, Authentic Tasks, Hands on experiments, Independent Research. | Group assessment (outcomes and questioning); project assessment. |
| Students should be able to organise time and tasks coherently between group members. | Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Practice Problems, Authentic Tasks, Hands on experiments, Independent Research. | Group assessment (outcomes and questioning); project assessment. |
| Students should be able to produce joint reports/presentations.                      | Practical Classes, Small Group Actives (e.g. tutorials, workshops), Coursework study time, Projects. | Practice Problems, Authentic Tasks, Hands on experiments, Independent Research. | Group assessment (outcomes and questioning); project assessment. |

Year Abroad

In addition, for the 'with a Year abroad' variants the additional programme outcomes apply

Year in Industry

In addition, for the Year in Industry' variants the additional programme outcomes apply

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### 10. Progression points

This programme follows the standard Scheme of Progression set out in [Senate Regulations](#) – see the version of Senate Regulation 5 governing undergraduate programmes relevant to the year of entry.

The following additional progression requirements for this programme have been approved by the Quality and Standards Sub Committee on 28/07/2026

1. The following modules must be passed at the first attempt, and a re-sit will not, as standard, be provided:

- CH1205
- CH2255
- CH3266

Discretion may be given by the Board of Examiners, who may require resubmission of one or more assessed coursework elements, where it is possible for students to achieve a pass mark for the module by improving their mark in individual coursework elements. There are no resit opportunities for non-mitigated missed practical work.

These modules are not eligible for compensated pass and must be passed at 40.00%.

2. Students must attend and complete 100% of scheduled laboratory sessions to pass the modules listed below:

- CH1205
- CH2255

A limited number of additional “catch-up” sessions may be provided for students who have accepted mitigation for non-attendance.

If, during the year, a student reaches a point where they have failed to complete more lab sessions than there are catch-up sessions available, the module will be failed as they are now unable to meet the 100% completion requirement. As these modules are not eligible for compensation, this means a student’s studies for the current academic year will come to an immediate end.

The Board of Examiners will convene at the earliest subsequent opportunity to make a decision regarding the student’s progression, determined in line with the standard Senate Regulations; typically, Termination of Studies; a Repeat Year may be granted in certain exceptional circumstances.

In cases where a student has failed to meet a requirement to progress they will be required to withdraw from the course.

#### a) Course transfers

Transfers between Pharmaceutical Science, Chemistry, and Medicinal Chemistry are allowed up until the very start of Semester 1 of Year Two.

#### b) Year abroad

For the Year Abroad variant (for experiential Year Abroad only) [the additional progression points apply](#)

### c) Year in Industry

For the Year in Industry variant, the [additional progression points apply](#)

#### 11. Criteria for award and classification

This programme follows the standard scheme of undergraduate award and classification set out in [Senate Regulations](#) – see the version of *Senate Regulation 5 governing undergraduate programmes* relevant to the year of entry.

The following additional award requirements for this programme have been approved by the Quality and Standards Sub Committee on 28/07/2026:

- Students will need to achieve a minimum 40% mark in the project module CH3266.

#### 12. Special features

Small group tutorials, group problem solving, student-centred learning, research-based projects, links with industry, problem and context-based learning.

For the Year Abroad variant (for experiential Year Abroad only) [the additional Special Features apply](#).

For the Year in Industry variant; the University recognises that undertaking a work placement as part of the programme of study can enhance career prospects and provide added value, and as such this programme includes a 'year in industry' variant.

By experiencing real-world scenarios and applying skills and knowledge to a professional environment, students can gain a unique insight into how their studies can be utilised in industry. This will not only showcase their abilities to future employers but will also enhance their studies upon returning to university to complete your programme.

To understand the special features for year in industry undergraduate programme variants, this programme specification should be read in conjunction with the [programme specification content which can be found here](#). This outlines details including programme aims, support, progression and duration.

##### 12a. Research-inspired Education

**Students on this programme will advance through the four quadrants of the University of Leicester Research-inspired Education Framework as follows:**

| RiE Quadrant                                                                        | Narrative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Research-briefed</b><br><br>Bringing staff research content into the curriculum. | <p>Our programme offers a solid foundation in fundamental inorganic, organic and physical chemistry topics, before advancing into deeper organic and medicinal chemistry content associated with drug synthesis, analysis, delivery, formulation and other key topics in pharmaceutical science. This, coupled with pharmaceutical science-focussed support in mathematics, critical thinking, problem solving and practical skills, provides a good foundation for the research-focussed modules and research project in later years. All modules are contextualised through real-world examples and application to solve modern challenges in drug discovery, biotechnology and pharmaceutical science.</p> <p><b>Research-briefed</b> – Students experience challenging and inspiring learning in classes informed by cutting-edge research. Our programme leverages the expertise of our core research themes: Chemistry for Health along with other expertise from across the university (notably School of Healthcare). Our staff bring their research straight into the classroom, making learning exciting, relevant and highly contextualised to modern-day issues. Additionally, students are exposed to the research culture of</p> |

|                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                       | the school from their very first year, with a particular highlight being a dedicated series of lectures showcasing the research of selected Leicester academics.                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Research-based</b><br>Framed enquiry for exploring existing knowledge.                             | <b>Research-based</b> – Students engage in a variety of authentic assessments, working both individually and as a team to solve real-world problems and develop the necessary skills for both research and employment suitable for STEM graduates. This will include how to apply theory concepts to unseen problems; practical techniques, programming, data processing, data analysis; and how to effectively communicate science.                                                                                                                                                       |
| <b>Research-oriented</b><br>Students critique published research content and process.                 | <b>Research-oriented</b> – Students will develop the ability to critically appraise their own experimental technique/processes, analyses, and conclusions through lectures, problem classes, laboratory work, computer classes, and authentic assessments. Students receive guidance on evaluating published research and engaging critically with literature through lectures and seminars. Students will also learn to write in the style of scientific research papers, formal reports and populate science articles, enhancing their ability to communicate complex ideas effectively. |
| <b>Research-apprenticed</b><br>Experiencing the research process and methods; building new knowledge. | <b>Research-apprenticed</b> – Our programme provides the training to ensure the students become junior researchers by the end of their degrees. Across the programme students develop crucial transferable skills for both research and future employment, including report writing, group work, presentation skills, reading research papers, and data searching skills. In the final year of the programme students will be able to undertake small research project(s) to practice the transferable skills developed throughout the course and to solve their own research question.    |

**As part of studying at a research-intensive university, students on this programme have the following extra or co-curricular opportunities available to them to gain exposure to research culture:**

In addition to the research-oriented content embedded in the programme's modules, students have several extra-curricular routes to increase their exposure to a global research culture. For example, the School hosts regular academic research seminars throughout the year. These provide all students the opportunity to see Chemistry and Pharmaceutical Science from outside of Leicester and are an effective way to also establish new connections. Refreshments before and after the seminar facilitate this networking and provide the audience time to meet the speaker for informal conversation and questions. Additionally, we offer the opportunity to conduct a summer research internship in one of the School's academic research groups – although availability of such placements is variable, competitive and limited.

**Teaching on this programme will be research-informed (it draws consciously on systematic inquiry into the teaching and learning process itself) in the following way:**

The teaching in our School is underpinned by the *Research in Chemical Education (RICE)* group, whose reading and contribution to global pedagogic literature promotes the high quality and

highly innovative delivery of our programmes. To this end the School has designed an advanced curriculum that promotes excellence, equal opportunity and high performance from its students through innovative practices such as active learning and authentic assessment strategies. These techniques are embedded across all modules in the programme, with all colleagues being regularly briefed and trained to deliver a consistently excellence student experience. The School supports all staff involved in teaching to gain an accredited Higher Education teaching qualification, in which they demonstrate their use of teaching theory to support their own practice and reflect on their current teaching and continuing professional development.

#### **12b. Work-related learning**

The workload of all students on this programme includes the opportunity to engage with *at least* 100 hours of employer informed, work-related learning activity. Further information regarding work-related learning is available [online](#).

#### **13. Indications of programme quality**

Chemistry and Medicinal Chemistry were accredited by the Royal Society of Chemistry in Jan 2016 and reaccredited in January 2022. The Pharmaceutical Science programme shares modules, teaching staff and local teaching policy with those programmes.

Academic Review

(Future) External examiners reports

(Future) Destinations of Leavers from Higher Education (DLHE) survey.

#### **14. External Examiner(s) reports**

The details of the External Examiner(s) for this programme and the most recent External Examiners' reports for this programme can be found at [exampapers@Leicester](mailto:exampapers@Leicester) [log-in required].

## Programme Specification (Undergraduate)

FOR ENTRY YEAR: 2026/27

Date created: n/a

Last amended: 22/07/2026

Version no. Choose an item. Date approved by EQED: Click or tap here to enter text.

### Appendix 1: Programme structure (programme regulations)

The University regularly reviews its programmes and modules to ensure that they reflect the current status of the discipline and offer the best learning experience to students. On occasion, it may be necessary to alter particular aspects of a course or module.

BSc Pharmaceutical Science

**Level 4/Year 1**      **2026/27**

Credit breakdown

| Status   | Year long       | Semester 1      | Semester 2      |
|----------|-----------------|-----------------|-----------------|
| Core     | 90 credits      | 30 credits      | n/a             |
| Optional | Choose an item. | Choose an item. | Choose an item. |

120 credits in total

Core modules

| Delivery period | Code   | Title                               | Credits    |
|-----------------|--------|-------------------------------------|------------|
| Semester 1      | CH1200 | General Chemistry                   | 15 credits |
| Semester 1      | CH1211 | Discovering Drugs and their Targets | 15 credits |
| Year long       | CH1201 | Introductory Organic Chemistry      | 15 credits |
| Year long       | CH1202 | Introductory Inorganic Chemistry    | 15 credits |
| Year long       | CH1203 | Introductory Physical Chemistry     | 15 credits |
| Year long       | CH1204 | Applied Mathematics for Chemistry   | 15 credits |

| Delivery period | Code   | Title                                        | Credits    |
|-----------------|--------|----------------------------------------------|------------|
| Year long       | CH1205 | Introductory Practical, Computing and Skills | 30 credits |

#### Notes

Delivery of Year Long modules is weighted towards Semester 2 to ensure approximate equal student workload between semesters.

#### Level 5/Year 2      2027/28

##### Credit breakdown

| Status   | Year long  | Semester 1 | Semester 2 |
|----------|------------|------------|------------|
| Core     | 60 credits | 30 credits | 30 credits |
| Optional | n/a        | n/a        | n/a        |

120 credits in total

##### Core modules

| Delivery period | Code   | Title                                         | Credits    |
|-----------------|--------|-----------------------------------------------|------------|
| Semester 1      | CH2200 | Spectroscopy Theory and Practice              | 15 credits |
| Semester 1      | CH2211 | Pharmaceutics                                 | 15 credits |
| Semester 2      | CH2206 | Analytical Chemistry and Data Analysis        | 15 credits |
| Semester 2      | CH2214 | Therapeutic Pharmacology and Pharmacokinetics | 15 credits |
| Year long       | CH2213 | Pharmaceutical Physiology and Anatomy         | 15 credits |
| Year long       | CH2216 | Drug Manufacture, Formulation and Dosage      | 15 credits |
| Year long       | CH2201 | Organic Chemistry                             | 15 credits |
| Year long       | CH2255 | Year Two Pharmaceutical Science Practical     | 15 credits |

#### Notes

Delivery of Year Long modules is weighted towards Semester 2 to ensure approximate equal student workload between semesters.

**Level 6/Year 3      2028/29**

## Credit breakdown

| Status   | Year long       | Semester 1      | Semester 2      |
|----------|-----------------|-----------------|-----------------|
| Core     | 45 credits      | 30 credits      | 45 credits      |
| Optional | Choose an item. | Choose an item. | Choose an item. |

120 credits in total

## Core modules

| Delivery period | Code   | Title                                            | Credits    |
|-----------------|--------|--------------------------------------------------|------------|
| Semester 1      | CH3215 | Biotechnology and Diagnostics                    | 15 credits |
| Semester 1      | CH3217 | Pharmaceutical Synthesis and Spectroscopy        | 15 credits |
| Semester 2      | CH3211 | Hit to Lead Drug Discovery                       | 15 credits |
| Semester 2      | CH3213 | Major Therapeutic Areas                          | 15 credits |
| Semester 2      | CH3216 | Pharmaceutical Analysis                          | 15 credits |
| Year long       | CH3260 | Research Skills, Employability and General Paper | 15 credits |
| Year long       | CH3266 | Chemistry Year Three Research Project            | 30 credits |

**Notes**

Delivery of Year Long modules is weighted to ensure approximate equal student workload between semesters

**BSc Pharmaceutical Science with a Year in Industry****Level 4/Year 1      2026/27****Notes**

Year One of BSc Pharmaceutical Science with a Year in Industry is identical to BSc Pharmaceutical Science

**Level 5/Year 2      2027/28****Notes**

Year Two of BSc Pharmaceutical Science with a Year in Industry is identical to BSc Pharmaceutical Science

**Year in Industry      2028/29**

Credit breakdown

| Status   | Year long       | Semester 1      | Semester 2      |
|----------|-----------------|-----------------|-----------------|
| Core     | n/a             | n/a             | n/a             |
| Optional | Choose an item. | Choose an item. | Choose an item. |

120 credits in total

Core modules

| Delivery period | Code    | Title        | Credits |
|-----------------|---------|--------------|---------|
| Year long       | ADCH223 | On Placement | n/a     |

**Level 6/Year 3      2029/30****Notes**

Year Three of BSc Pharmaceutical Science with a Year in Industry is identical to BSc Pharmaceutical Science



## Programme Specification (Undergraduate)

FOR ENTRY YEAR: 2026/27

Date created: n/a

Last amended: 22/07/2026

Version no. Choose an item. Date approved by

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### Appendix 2: Module specifications

See undergraduate [module specification database \[log-in required\]](#) (Note - modules are organized by year of delivery).