

Course Information Form

This Course Information Form provides the definitive record of the designated course

Section A: General Course Information

| Course Title | MSc Pharmacology with Data Analytics - COPY - COPY |
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| Final Award | MSc |
| Route Code | MSPDAAAF |
| Intermediate Qualification(s) | |
| FHEQ Level | 7 |
| Location of Delivery | University Square Campus, Luton |
| Mode(s) and length of study | Full time over 24 months |
| Standard intake points (months) | October, February |
| External Reference Points as applicable including Subject Benchmark | FHEQ (2014) QAA 2020 Masters Degree Characteristics SEEC Credit Level Descriptors (2016) Aspects of QAA subject benchmarking for Pharmacy Masters (2002) and Medicine Masters (2002). |

| Professional, Statutory or Regulatory Body (PSRB) accreditation or endorsement | |
|--|----------------|
| HECoS code(s) | 100250, 100755 |
| UCAS Course Code | N/A |

The aim of the course is to provide you with a fundamental understanding of drug research and development and treatment of relevant human diseases, and practical experience of new technologies including Data Analytics applied to relevant areas of pharmacology at an advanced level, and to provide opportunities for specialisation through a choice of project in one of the four following main themes

Course Aims

| | _ | | |
|-----------------|----|--|--------------------------------------|
| Course Learning | 4 | Show in-depth knowledge and understanding of the therapeutic concepts and general principles relating to, causes, aetiology, epidemiology, and diagnosis of human diseases in current clinical practice, as well as drug adverse effects; | MSc Pharmacology with Data Analytics |
| Outcomes | 5 | Use confident and accurate language to present work both orally and in written form including use of graphs and images to clearly illustrate complex points; | MSc Pharmacology with Data Analytics |
| | 6 | Synthesise and effectively use information from a variety of relevant sources and to independently and critically evaluate current research and advanced scholarship in the relevant subject areas; | MSc Pharmacology with Data Analytics |
| | 7 | Demonstrate originality in the application of knowledge, the development of practical skills and the ability to devise an experimental plan as an independent investigator. Students must demonstrate how established techniques and approaches can be applied to a new problem or a new method devised. | MSc Pharmacology with Data Analytics |
| | 8 | Apply transferable skills (initiative, personal responsibility, effective communications, critical thinking and decision-making) that include a clear demonstration of independent learning commensurate with that expected from postgraduate students. This includes a detailed understanding of the social, moral and ethical considerations associated with any proposed research activity. | |
| | 9 | Demonstrate a deep and systematic knowledge of the key principles, tools and techniques used in the field of Applied Computing and Information Technology including current and emerging theoretical and methodological approaches. | MSc Pharmacology with Data Analytics |
| | 10 | Use an appropriate form of advanced problem solving along with creativity and innovation in order to develop an appropriate solution to complex real-world problems in unfamiliar contexts that require the application of computing and information technology. | MSc Pharmacology with Data Analytics |
| | 11 | Acquire strong technical expertise and a critical awareness of security implications, methodologies and frameworks applied to modern information security management systems to safeguard organisations and their assets. | MSc Pharmacology with Data Analytics |
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| 12 | Flexibly and creatively apply knowledge to further improve and modify existing incident response programmes and demonstrate the ability to critique national and international standards and best practices. | MSc Pharmacology with Data Analytics |
|----|--|--------------------------------------|
| 13 | Demonstrate a systematic understanding of career planning including factors of organisational and personal collaboration that impact on career trajectories, and be able to conduct a self-evaluation of oneself against relevant skills and organisational competences to establish a personal development plan that delivers personal and organisational performance impact. | MSc Pharmacology with Data Analytics |
| 14 | Demonstrate knowledge and understanding of what goes into a research proposal, the rudiments of good research design at masters level and be able to produce work of a standard consistent with research publications in your field of study, communicating conclusions clearly to a specialist and non-specialist audience. | MSc Pharmacology with Data Analytics |

In line with the aspects of QAA Benchmarking statements for Pharmacy Masters (2002) and Medicine Masters (2002), motivation and challenge of the student is through a skilled and balanced selection of teaching and learning techniques, including:

lectures;
practical classes;
workshops;
seminars;
tutorials;
other forms of interactive small-group teaching;
IT-based teaching and learning;
independent assignment-based learning;
auditable, directed private study;
team-working; and
project work.

Delivery is in line with the School's blended learning strategy with regards e-, or network-, based learning which generally makes use of the University's virtual learning environment (VLE). In line with University policy, all units in the School have a VLE site containing unit and assessment briefing documents and details; announcements/notices; lecture notes; PowerPoint presentations.

Students will be provided with training in presentation skills throughout the course during seminars and workshops. This transferable skills training will equip them ahead of their case presentation and description of research progress.

As appropriate the VLE site for a unit will also contain other support material to aid understanding of the course material. This allows it to act as a gateway to other web-based resources. Links are provided to websites containing information such as; similar lecture material; pictures or movie (avi, etc.); clips showing a biological principle in drug action, live or in a model; self-learning/assessment sites on the internet; journal articles or technical sites. These sorts of web-based material along with interactive websites that provide virtual-practical, where students can undertake practical or modelling on their own and view the results, are all methods of supporting independent and blended learning to improve the students

The course supports meaningful learning through a curriculum that is intellectually challenging and of practical relevance to those seeking a future career in areas of Pharmacology and Biotechnology. The course is designed to encourage a reflective, student-centred approach to learning. The course incorporates some of the latest developments in the subject of molecular biology, clinical pharmacology and drug development with students being referred to the latest books and key references in research

Students will be active in their learning through interaction in lectures, seminars, tutorials, workshops, participating in laboratory practical and in preparing the assessments. Students will be encouraged to be reflective in their learning by seeking to integrate the academic content of the different units on the course and reflecting on the implications of pharmacology on society. Students are encouraged to interact with the research active teaching team. Laboratory sessions are also good environments for student communication within the cohort making the learning process a collaborative effort.

Computing and Information Technology is everywhere nowadays. Even before the course you may have been exposed to various information technologies. Our teaching uses this everyday experience as a starting point to embark on systematic analysis and interpretation of these technologies using the right tools. This is done in a variety of ways across all teaching units. Most of the teaching is based on lectures complemented by practical sessions that serve to apply and further develop the contents of the

Teaching, learning and assessment strategies

The assessment philosophy of the MSc Pharmacology with Data Analytics Award conforms to the recommendations of the aspects of relevant QAA Benchmarks and Masters level descriptors. The methods used for the assessment of students achievements will correspond with the knowledge, abilities and skills that are to be developed through degree programme. Both

will be a formative assessment in the beginning of semesters 1 and 2 to help you understand the academic writing and online submission process along with the assessment marking criterion.

Evidence on which assessment of students achievement is based will include:

formal written examinations; summative practical assessments; laboratory and other written Academics;

Students are actively supported through their assessments both directly in subject specific areas by tutors, and by working with the Study Hub to provide targeted workshops to support academic skills development. The focal areas include an introduction to academic integrity, developing good academic practice, scientific writing, use of statistics, and communication of science to

Throughout course delivery workshops and tutorials are used to support the development of academic skills, alongside the learning and the assessment process. All in-course assessments are supported by timetabled, interactive tutorial sessions with formative assessment tasks, as appropriate. In addition, assessments that are based around practical work will involve a briefing before, and a session after the laboratory work to explain further the expectations of the assessment and support specific tasks such as data analysis. Examinations are supported by timetabled revision sessions and by workshop sessions covering examples of past examinations and the expectations of examination questions at each level.

Learning support

To assist our learners, assignment briefs a uniform set of information and a consistent set of assessment criteria across the course. At the start of each level, students are given introductory session(s) that set out the expectations for each year. For entry points, several sessions are used to provide guidance and support to students joining the University. These provide details of support for the development of academic skills and learning from the School, the Study Hub and initiatives such as peer-assisted learning (PASS scheme). For students progressing between levels, introductory sessions are also provided to ensure the students are aware of the change in expectations of learning and assessment. This will flag areas such as expectations for increased self-

| | Approved Variations and Additions to Standard Admission |
|------------------------|--|
| Admissions Criteria | N/A |
| | https://www.beds.ac.uk/about-us/our-university/academic-information |
| | Note: Be aware that our regulations change every year |
| Assessment Regulations | Approved Variations and Additions to Standard Assessment Regulations |
| | N/A |

Section B: Course Structure

| Unit | Unit Name | Level | Credits | Core or Option | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|----------|--|-------|---------|-------------------|----------|-----------|-----------|----------|-----|---------|---------|---------|---------|-----|----|----|-----|-----|----|
| BHS001-6 | Cell and Molecular Biology | 7 | 30 | Core | TA 12 | | | | TA2 | TA 2 | TA 2 | TA 2 | | | | | | | |
| 3HS005-6 | Drug Discovery and Development | 7 | 30 | Core | | | T1A 12 | | TA2 | TA 2 | | | | | | | | | |
| 3HS006-6 | Molecular Pharmacology | 7 | 30 | Core | | T1A 12 | | | TA2 | TA 2 | | | | | | | | | |
| BHS007-6 | Clinical Pharmacology and Therapeutics | 7 | 30 | Core | | | | TA1 2 | TA2 | TA 2 | | | | | | | | | |
| BHS010-6 | Pharmacology Research Project | 7 | 60 | Core | | | | | DA2 | DA 2 | DA 1 | DA 2 | | | | | | | |
| BSS074-6 | Personal Professional Development (10 credits) | 7 | | Core | | | | | | | | | | | | | TA1 | | |
| CIS108-6 | Data Modelling, Management and Governance | 7 | 30 | Core | | | | | | | | | TA 2 | TA1 | | | | | |
| CIS109-6 | Computer Networks and Security | 7 | 30 | Core | | | | | | | | | | | | | | | |
| CIS132-6 | Developing Independent Research (10 credits) | 7 | • | Core | / | <i>-</i> | | | | | | | | | | | | TA1 | |
| Unit | Unit Name | Level | Credits | Core or Option | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 3HS001-6 | Cell and Molecular Biology | 7 | 30 | Core | TA 12 | | | | TA2 | TA 2 | TA 2 | TA 2 | | | | | | | |
| 3HS005-6 | Drug Discovery and Development | 7 | 30 | Core | | | T1A 12 | | TA2 | TA 2 | | | | | | | | | |
| 3HS006-6 | Molecular Pharmacology | 7 | 30 | Core | | TA1 2 | | | TA2 | TA 2 | | | | | | | | | |
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Administrative Information

School

School of Life Sciences