Programme Specification

Doctor of Biomedical Sciences [Jan][PT][Frenchay][6yrs]

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Contents

Section 1: Key Programme Details

Part A: Programme Information

Programme title: Doctor of Biomedical Sciences [Jan][PT][Frenchay][6yrs]

Highest award: DBMS Doctor of Biomedical Sciences

Interim award: PGCert Research Methods in Biomedical Science

Interim award: PGDip Biomedical Science Practice

Awarding institution: UWE Bristol

Teaching institutions: UWE Bristol

Study abroad: No

Year abroad: No

Sandwich year: No

Credit recognition: No

School responsible for the programme: HAS Dept of Applied Sciences, Faculty of Health & Applied Sciences

Professional, statutory or regulatory bodies: Not applicable

Modes of delivery: Part-time

Entry requirements: For the current entry requirements see the UWE public website.

For implementation from: 01 January 2019

Programme code: B90011-JAN-FT-FR-B90011

Section 2: Programme Overview, Aims and Learning Outcomes

Part A: Programme Overview, Aims and Learning Outcomes

Overview: The Doctor of Biomedical Sciences (DBMS) is a strategic initiative of the Faculty of Health and Life Sciences intended to provide highly experienced practitioners employed within Biomedical Science with an opportunity to deepen their knowledge and skills to meet the higher professional practice demands of the NHS through its Agenda for Change and Healthcare Scientists Plan.

The DBMS is designed to provide a high-level set of learning opportunities combining structure, a community of practice and independent research in a practitioner context.

Features of the programme: The DBMS is a professional doctorate, which recognises the 'researching professional'. It supports learning at a doctoral level with emphasis on original thought, empirical research and mastery of a substantial leading-edge body of knowledge.

The structure of the DBMS programme incorporates two aspects; part A and part B. Part A consists of credit-based modules at M level which emphasise the acquisition of competency in research methodology and specific knowledge content. In part A1 the modules support the process of project development and research methodology. The module, Research Theory & Practice, will incorporate seminars which underpin the research methodology and knowledge-base needed to successfully generate and undertake a research proposal and project. It will also cover material focused in the area of bioethics and the correct handling of human participants and materials in clinical research. In addition, the module, Project Development towards a Doctorate, will incorporate one-to-one tutorials, formation of a supervisory team and support towards the production of a research proposal which meets Research Governance guidelines. The Faculty has a strong liaison with many NHS Trusts concerning Research Governance and DBMS students will follow the procedures embedded within the Faculty to ensure appropriate ethical approval is gained for all aspects of the research project. Another aspect of the Project Development towards a Doctorate module is the formation of a supervisory team who will support the doctoral student on an individual basis through the research project. In some instances it is envisaged that an appropriate workplace supervisor will be available to become part of the supervisory team. However, in cases where this is not possible,

the Faculty has sufficient research and supervisory experience in biomedical science to support a student to successful completion. Incorporated with the Project Development towards a Doctorate module is the generation of a reflective essay, which will highlight the dilemmas faced by the doctorate students as they embark on the DBMS and, through self and peer reflection, emphasise how key aspects of the programme will support a successful outcome. Students successfully completing part A1, and not wishing to proceed, have the opportunity to be awarded a PGCert Research Methods Biomedical Science.

Professional Development in Biomedical Sciences runs complementary to the Programme incorporating workshops on research methodology and related aspects, which underpin all stages of the project. A portfolio will be built up encompassing an attendance log, workshop material and evidence of dissemination, which will be completed towards the end of the programme providing evidence of reflective practice. The workshops will be concentrated towards the earlier years of the programme being replaced by supervisory contact and dissemination in the latter years. To facilitate a doctoral level culture, regular attendance at research seminars, within UWE or local universities and/or associated with their hospital workplace will be expected, together with participation in Faculty Graduate School research seminar fora. The Professional Development in Biomedical Sciences module will be completed within 48 months, leaving the final months to focus on thesis completion.

Upon successful completion of Project Development towards a Doctorate, the module, Interim Report, will be enrolled upon and will form the framework to writing up a report which will assess progress and future direction. The utilisation of credit-based modules in the early stages provides a clear, structured path of learning leading to submission of the Interim Report. The Interim Report will be examined by a oral defence and presentation of a research poster with an expectation of an advanced level defence of the research and clear future direction. Students who do not wish to go on with the Research Project will be able, at this stage, to focus on completing Professional Development in Biomedical Sciences and will be able to be awarded the interim award of PGDip Biomedical Science Practice. Due to the cyclical nature of Professional Development in Biomedical Sciences it is possible for the student wishing to be awarded a PGDip to complete the module requirements at

an earlier time point than planned.

The modules in Part A1 and A2 act as a bridge into the doctoral level research project and as a benchmark of how progress is being achieved.

Part B encompasses the doctoral level Research Project – thesis and viva voce examination. This part is complemented and supported by the Research Theory & Practice and Professional Development for Biomedical Sciences modules. Part B is concluded with a thesis of 35,000 total word length and an oral examination, following the same format as the traditional PhD route. It is envisaged that the thesis could comprise 2-3 coherent research studies or one large study, as appropriate to the research project(s) undertaken. During the Project, progression will be monitored through annual reports, which will be completed by the student and supervisory team. In instances where change or loss of employment occurs the supervisory team, together with the Programme leader, will undertake a support review on an individual basis to provide the best path forward. The Faculty has strong experience in PT doctoral projects and the impact work/life changes have on successful completion.

In order to achieve the higher learning required for a doctorate level qualification the DBMS programme has been designed with a number of complementary supporting features;

The beginning of the programme incorporates workshops specifically targeted at increasing the cohort identity to provide a peer support network, which will have a benefit to the cohort operating external to the University. All the ‘students’ will be working senior professionals and therefore workload balance and time management will be reflected upon in order to identify goals for completing the programme successfully.

The Project Development towards a Doctorate module will provide one-to-one support on generating a research proposal therefore enabling the DBMS learners to gain clarity and definition of their proposed research studies at M level.

Each student will be encouraged to create a personal development strategy linked to the DBMS learning needs; work based performance enhancement and wider career development. This will provide the setting of a personal learning contract.

The Faculty has a highly recognised research culture and the approved Faculty Graduate School will consolidate this aspect. The Doctorate learners will be integrated into this culture from the beginning of the programme. This community of practice will value DBMS ‘students’ learning from other research students and from experienced researchers. Routine research seminars from leading international research groups will provide an opportunity to test personal insights against the experience of others.

The Graduate School encompasses a large number of research active staff who will act as mentors and supervisors of the doctorate students’ projects. Selection of the supervisory team will take account of the project subject area and may draw upon expertise from other Faculties and Education as second supervisors.

As part of the Professional Development in Biomedical Sciences module DBMS learners will be required to disseminate e.g. poster, their research findings in an appropriate national/international forum. The abstract of this dissemination activity will provide evidence for the portfolio. The environment of peer review will contribute towards the doctorate level learning.

These structures and support systems have been designed to ensure that the student experience is one of engagement in a supportive community and also recognise the workload pressure on working professionals. Overall providing a clear path through a rigorous and demanding programme towards successful completion of the DBMS.

Educational Aims: Its educational aims are to provide:

Opportunities for senior practitioners and managers from a range of biomedical science-related backgrounds to develop and realise their potential in a supportive and responsive environment.

An understanding of a substantial body of knowledge which is at the forefront of professional practice

An understanding of the strategic issues and external drivers which inform biomedical science practice

Heighten self-awareness with regard to professional practice and personal behaviour in leading and managing teams of biomedical-related personnel, as a basis for improving personal effectiveness in role

Knowledge and skills needed to conduct, at an advanced level, a research project into significant biomedical science issues and present the findings in a coherent cogent form to satisfy peer review and the needs of publication

Knowledge and skills needed to be able to critically reflect on the findings of a research project and evaluate its strengths and weaknesses including validation procedures

Support to challenge and critically review findings in biomedical science

Skills in applying tools, techniques and in-depth analytical skills for exploring biomedical science issues, and contributing to the extension of new knowledge and understanding

Added value for learners in specific knowledge and transferable skills

The ability to translate complex biomedical science research outcomes to inform practice development

A coherent and flexible programme of part-time study at postgraduate level

A programme responsive to feedback from students, external examiners and other stakeholder as part of quality management and enhancement

Appropriate facilities and resources to deliver a quality teaching and learning experience within a research-led environment.

Programme Learning Outcomes:

On successful completion of this programme graduates will achieve the following learning outcomes.

Knowledge and Understanding

A1. Demonstrate an advanced knowledge base of research methodology with a range of transferable skills.

A2. Demonstrate a deep understanding of the contribution of research and scholarship to biomedical professional practice.

A3. Demonstrate a competence to critically review current research in relation to research project and to inform practice.

A4. Undertake research which will be disseminated to the wider scientific community.

A5. Demonstrate an understanding of the external drivers which impact on, and inform, biomedical science practice.

A6. Demonstrate an understanding of the value of continual professional development.

Intellectual Skills

B1. Develop their conceptual, cognitive and analytical skills appropriate to Doctorate level.

B2. Use appropriate information technology to seek and analyse information.

B3. Demonstrate independent and self-directed learning.

Subject/Professional Practice Skills

C1. Develop as doctorate level independent researchers and practitioners.

C2. Demonstrate an advanced understanding of the research process through execution of a research project.

C3. Develop their specific interests by specialising within the programme in relation to their subject or career aspirations.

C4. Critically evaluate information from a range of sources.

C5. Apply practical approaches to the study of selected aspects of biomedical science and demonstrate an awareness of ethics, research governance, safety and good laboratory practice.

C6. Demonstrate an awareness and understanding of the strategic issues which affect the profession.

Transferable Skills and other attributes

D1. Able to communicate and present complex arguments in a logical, articulate and intellectual manner using a variety of methods.

D2. Able to critically analyse data arising from various means of inquiry.

D3. Able to awareness of the impact of strategic issues eg. Research Governance, Intellectual Property and Quality Assurance on biomedical science in research and practice.

D4. Able to manage time and plan work to deadlines.

D5. Able to demonstrate capacity to think critically and creatively.

Assessment strategy: Knowledge and understanding:

Testing of the knowledge base is through completion of a range of differing assessments including reflective Portfolio's, a log incorporating evidence of attendance at specific Workshops and seminars plus assessed project proposal, progression report, project report and oral viva examination.

Intellectual Skills:

A variety of assessment methods are employed. All test a learner’s ability to demonstrate skills (1-3) through reflective portfolio, oral presentations, project proposal, progression report and final thesis.

Subject, Professional and Practical Skills:

Skills 1, 2, 3, 4 and 5 are primarily assessed through the Project proposal, Interim Report and Project report. Vivas for the latter aspects will also assess the acquired skills. Skill 6 would be assessed through a reflective portfolio.

Transferable Skills and other attributes:

All skills will be assessed through a reflective portfolio, interim and final thesis together with the viva examinations.

Student support: .

Part B: Programme Structure

Year 1
The student must take 90 credits from the modules in Year 1.

Year 1 Part A1 (Compulsory Modules)
The student must take 60 credits from the modules in Part A1 (Compulsory Modules).

Module Code	Module Title	Credit
USSJFR-30-M	Project Development Towards a Doctorate 2020-21	30
USSJGX-30-M	Research Theory and Practice 2020-21	30

Year 1 Part A2 (Compulsory Modules)
The student must take 30 credits from the modules in Part A2 (Compulsory Modules).
Please note that module Professional Development for Biomedical Sciences is started in Year 1 and completed in Year 3.

Module Code	Module Title	Credit

USSJGY-30-M	Professional Development for Biomedical Sciences 2020-21	30

Year 2
The student must take 30 credits from the modules in Year 2.

The module Interim Research Report is started in Year 3 and completed during Year 2.
The student carries on completing the module Professional Development for Biomedical Sciences.

Year 2 Part A2 (Compulsory Modules)
The student must take 30 credits from the modules in Part A2 (Compulsory Modules). The module Interim Research Report is started in Year 2 and completed during Year 3.

Module Code	Module Title	Credit
USSJFS-30-M	Interim Research Report 2021-22	30

Year 2 Part B1 Research Project
The Research Project (Part B1) is started in year 2 and completed in Year 6.

Module Code	Module Title	Credit
THESIS	Doctoral Thesis 2021-22	0

Year 3
The student works on the Research Project during Year 3

Year 3 Part B2 Research Project
The student works on the Research Project during Year 3

Module Code	Module Title	Credit
THESIS	Doctoral Thesis 2022-23	0

Year 4
The student works on the Research Project during Year 4

Year 4 Part B2 Research Project
The students work on the Research Project during Year 4

Module Code	Module Title	Credit
THESIS	Doctoral Thesis 2023-24	0

Year 5
The student works on the Research Project during Year 5

Year 5 Part B2 Research Project
The students work on the Research Project during Year 5

Module Code	Module Title	Credit
THESIS	Doctoral Thesis 2024-25	0

Year 6
The student works on the Research Project during Year 6

Year 6 Part B1
The student continues to work on the Research Project during Year 6, culminating in the Viva voce exam (Part B1)

Module Code	Module Title	Credit
THESIS	Doctoral Thesis 2025-26	0

Part C: Higher Education Achievement Record (HEAR) Synopsis

Part D: External Reference Points and Benchmarks

In designing the DBMS, account has been taken of the following;

QAA Framework for Higher Education Qualifications in England, Wales and Northern Ireland (Jan 2001)

QAA Code of Practice for the Assurance of Academic Quality and Standards in Higher Education: Postgraduate Research Programmes (Jan 1999)

UWE Professional Doctorate Framework

Feedback from stakeholders via BMS Advisory Group and RPSG.

Feedback from Faculty Research Degrees Committee (RDC).

Part E: Regulations