

Programme of study for Doctor of Philosophy – Aerosol Science part-time variant 2024/25

School: Chemical and Process Engineering

This programme is no longer recruiting

Entry Requirements: Applicants will normally be required to have obtained a relevant degree *at least* equivalent to a UK upper second class (2:1) honours degree. International PGRs will normally be required to have achieved at least 6.0 on IELTS (with no component below 5.5) or an equivalent English language qualification.

There is normally one entry point for the integrated degrees of PhD and Master in September/October of each academic session.

Year One

The candidate is expected to work on their research degree for periods of time equivalent to 0.5 of a full-time year of study.

- Month 1: Completion of the training plan
- Taught assessed modules: 60 taught credits at the University of Bristol and 30 credit research project (to be assessed by the University of Bristol)

Core Aerosol Science I	30 credits
Core Aerosol Science II	30 credits
Aerosol Science: Thematic Broadening Sabbatical	30 credits*

- Location of study:

Months 1 – 7: University of Bristol
Months 8 – 11: Thematic Broadening Placement

**The Thematic Broadening Sabbaticals in years 1 and 2 may be taken and assessed as a single project or two separate projects at the discretion of the Programme Director and the academic supervisor.*

Year Two

The candidate is expected to work on their research degree for periods of time equivalent to 0.5 of a full-time year of study.

- Taught assessed modules: 60 taught credits at the University of Bristol and 30 credit research project (to be assessed by the University of Bristol)

Aerosol Science: Research Methods	30 credits
Aerosol Science: Professionalism and Translation	30 credits
Aerosol Science: Thematic Broadening Sabbatical	30 credits*

- Location of study:

Months 13 – 19: University of Bristol
Months 20 – 23: Thematic Broadening Placement
Month 24: University of Leeds

Successful completion of the taught elements of the programme in years one and two is required in order for PGRs to progress on the programme.

Year Three

The candidate is expected to work on their research degree for periods of time equivalent to 0.6 of a full-time year of study.

- The candidate will carry out research under the direction of their supervision team and is expected to meet with their supervisors at least 6 times per year.
- Month 24: First Formal Progress Report
- 2 weeks of summer school
- Industrial Placement (or in year 4)

Year Four

The candidate is expected to work on their research degree for periods of time equivalent to 0.6 of a full-time year of study.

- The candidate will carry out research under the direction of their supervision team and is expected to meet with their supervisors at least 6 times per year.
- 2 weeks of summer school
- Industrial Placement (or in year 3)
- Month 48: Candidates will be required to undergo the formal assessment procedure for transfer to PhD status before the end of the fourth year of study.

Year Five

The candidate is expected to work on their research degree for periods of time equivalent to 0.6 of a full-time year of study.

- The candidate will carry out research under the direction of their supervision team and is expected to meet with their supervisors at least 6 times per year.
- Month 60: Annual Progress Review
- 2 weeks of summer school

Year Six

The candidate is expected to work on their research degree for periods of time equivalent to 0.6 of a full-time year of study.

- The candidate will carry out research under the direction of their supervision team and is expected to meet with their supervisors at least 6 times per year.
- Month 72: Annual Progress Review
- 2 weeks of summer school

Year Seven

The candidate is expected to work on their research degree for periods of time equivalent to 0.6 of a full-time year of study.

- The candidate will carry out research under the direction of their supervision team and is expected to meet with their supervisors at least 6 times per year.
- Month 84: Annual Progress Review (unless thesis submitted)
- 2 weeks of summer school

Year Eight

- Overtime year if required.

Year Nine

- Overtime year if required.
- The Final Submission Deadline for the Thesis is the end of Month 108

Exit Award

An MRes in Aerosol Science may be awarded by the University of Bristol to candidates exiting the programme who have successfully completed the taught modular requirements for award in year one of study.

Learning Outcomes / Transferable Key Skills / Learning Context / Assessment for PhD

Learning Outcomes

On completion of the research programme PGRs should have shown evidence of being able:

- to discover, interpret and communicate new knowledge through original research and/or scholarship of publishable quality which satisfies peer review
- to present and defend original research outcomes which extend the forefront of a discipline or relevant area of professional/clinical practice
- to demonstrate systematic and extensive knowledge of the subject area and expertise in generic and subject/professional skills
- to take a proactive and self-reflective role in working and to develop professional relationships with others where appropriate
- to independently and proactively formulate ideas and hypotheses and to design, develop, implement and execute plans by which to evaluate these
- to critically and creatively evaluate current issues, research and advanced scholarship in the discipline
- to demonstrate systematic knowledge of and be able to critically assess, analyse and engage with the ethical and legal context of their research and any ethical and legal implications of their research.

1. Transferable (Key) Skills

PGRs will have had the opportunity to acquire the following abilities through the research training and research specified for the programme

- the skills necessary for a career as a researcher and/or for employment in a senior and leading capacity in a relevant area of professional/clinical practice or industry
- evaluating their own achievement and that of others
- self-direction and effective decision making in complex and unpredictable situations
- independent learning and the ability to work in a way which ensures continuing professional development

2. Learning Context

This will include the critical analysis of, and decision making in, complex and unpredictable professional and/or clinical situations. The structure of the programme will provide research and/or professional training, breadth and depth of study and opportunities for drawing upon appropriate resources and techniques.

Opportunities will be provided for PGRs to:

- develop to a high level interests and informed opinions
- develop to a high level their design and management of their learning activities
- develop to a high level their communication of their conclusions
- make an original contribution to the field

PGRs will be expected to engage in the exercise of autonomous initiative in their study and work in professional environments.

3. Assessment

Achievement will be assessed by the examination of the candidate's thesis¹ and performance under oral examination. Assessment will involve the achievement of the candidate in:

- evidencing an ability to conduct original and independent broad and in-depth enquiry within the discipline or within different aspects of the area of professional/clinical practice normally leading to published work
- drawing on and/or developing a range of research techniques and methodologies appropriate to enquiries into the discipline/area of professional practice
- demonstrating independent critical ability in the application of breadth and depth of knowledge to complex issues within the discipline or specialist area of professional/clinical practice
- drawing on a range of perspectives on the area of study
- evaluating and criticising received opinion
- making reasoned and well-informed judgements on complex issues within the specialism whilst understanding the limitations on judgements made in the absence of complete data
- the written style and overall presentation of the thesis

¹ or alternative form of thesis