

Regulations for the Award of the Certificate of Advanced Study

1 General Regulations

- 1.1 The Certificate of Advanced Study is intended for award on the satisfactory completion, including formal examinations, of a prescribed programme of full-time study on an advanced course beyond the Bachelor's degree level over a period of not less than three months full-time study or its part-time equivalent, or as prescribed by the Senate.
- 1.2 Where a course of study has been specifically established as leading to the award of the Certificate of Advanced Study candidates must follow the designated course of study; individual programme requirements are published in the Academic Regulations.
- 1.3 Candidates for the Certificate of Advanced Study must be able to demonstrate that they have an educational background appropriate to the course they wish to follow: this will be through a minimum of a Second Class Honours degree or a taught Master's degree awarded by a UK institution or a degree of an equivalent standard awarded by a university institution overseas in a subject appropriate to that of the programme to be followed.
- 1.4 English language and other tests may be prescribed by the College.
- 1.5 To be eligible for the award of the Certificate of Advanced Study a candidate must be assessed to the satisfaction of the examiners. The scheme of assessment to be used must be approved by the appropriate Senate Committee.
- 1.6 No award shall be made to students registered for a DIC or for an Imperial College or University of London degree or to students following a course directly after having failed a qualifying examination required for DIC or higher degree registration at Imperial College.
- 1.7 Examiners shall have the discretion to award a result of merit or distinction to candidates who have fulfilled the requirements of these awards as specified in the Examination Regulations.
- 1.8 Candidates who do not at their first entry successfully complete the examination or part of the examination for which they have entered may, subject to the agreement of the Head of Department when such re-entry would involve further attendance at the College, re-enter that examination on one occasion. Such re-entry shall be at the next following examination.
- 1.9 After the examiners have reached a decision every candidate will be notified of the results of their examinations including marks obtained under the authority of the Academic Registrar.
- 1.10 A diploma under the Seal of the College shall be subsequently delivered to each candidate who has been awarded the Certificate of Advanced Study.

2 Progression Rules for Certificate to Master's Programmes, where a Certificate of Advanced Study is also a component of a Master's Course¹.

- 2.1 Students who successfully complete the CAS course and elect to continue to the Master's course will not be awarded the CAS qualification on completion, but will be awarded the Master's qualification on successful completion of the Master's course.
- 2.2 Students who successfully complete the CAS course and elect to continue to the Master's course but who are unsuccessful in the Master's course will not be awarded the CAS qualification retrospectively.
- 2.3 Students who successfully complete the CAS course and elect to continue to the Master's course but who withdraw without completing the Master's course, will be awarded the CAS qualification retrospectively.
- 2.4 Students who do not successfully complete the CAS examination on first entry will be eligible to re-enter the examinations on the next occasion but will not normally be eligible to continue to the Master's course.

Certificate of Advanced Study Course Requirements

Allergy

Additional Entry Requirements

Normally a degree in Medicine or at least an Upper Second Class Honours in a healthcare related subject, typically Nursing, Dietetics, Immunology/Physiology or Biomedical Science.

Curriculum

The curriculum consists of three taught modules covering the following areas: the scientific basis of allergy; diagnosis and treatment of allergic disease; and the cutting edge of allergy. The modules cover both scientific theory and practical clinical aspects of allergic disease. Candidates will attend lectures and clinics, and will be expected to undertake self-directed learning and complete assignments throughout the course via the Web.

Duration of Course of Study

Part-time Nine months

Examination

Modules will be assessed by a combination of essays and reports with a word limit of 2000-2500 words, written and practical examinations. Candidates will also be required to maintain an electronic learning portfolio including a reflective log of their clinical activities and skills.

¹ The Progression Rules for Certificate to Master's Programmes, where a Certificate of Advanced Study is also a component of a Master's Course, can be applied in respect of part-time programmes of study only.

Date of Examination

The scientific basis of allergy (Module 1)	December
Diagnosis and treatment of allergic disease (Module 2)	March
The cutting edge of allergy (Module 3)	June

Industrial Pharmaceutical Chemistry

Additional Entry Requirements

The minimum qualification for admission to the Certificate is normally at least an Upper Second Class Honours degree in Chemistry from a UK academic institution or an equivalent overseas qualification. Candidates must have completed any probationary period at GlaxoSmithKline (GSK) prior to entry to the course, and will be required to be and remain GSK employees throughout the programme. If candidates leave GSK, they may not be able to complete the Certificate programme. Imperial will make every effort, on a case-by-case basis, to allow candidates to use work they have already carried out as credit towards alternative Imperial Certificate or Master's qualifications.

In addition, all applicants must satisfy the College's English Proficiency Requirement.

Prior to submitting Imperial College entry forms, prospective candidates will be required to complete a Candidate Nomination Form on which their managers will confirm that their application is supported and that they will have the opportunities to demonstrate the required competencies as part of their GSK employment. Special cases for admission will be considered initially by the course Programme Management Committee and subsequently by Imperial College London.

Curriculum

All Units are compulsory as described in the Programme Specification:

- Unit 1: Chemistry for Manufacture (7.5 ECTS credits)
- Unit 2: Process and Compliance (5 ECTS credits)
- Unit 3: Application and Tools (7.5 ECTS credits)
- Unit 4: Chemistry of the Process (at expert level) (7.5 ECTS credits)
- Unit 5: Professional Achievement Review (2.5 ECTS credits)

The assessment of the Certificate programme comprises:

Units 1-3

- i. Continuous assessment of the competencies within each Unit
- ii. Assessment of the Imperial College lecture course via online problem sheets
- iii. End of Unit assessments

i. Continuous assessment of competencies

On completion of the elearning training materials, candidates will complete multiple choice questions which will be assessed on-line using the GSK 'My Learning' system. In addition the appropriate GSK manager or expert will evaluate how successfully the candidate has demonstrated that he/she has applied the necessary knowledge, understanding and skills associated with each competence in the workplace. The outcomes will be reported using standard GSK evaluation forms.

The Chemistry of the Process competency will be assessed differently as the elearning training approach with assessment using multiple choice questions would not be suitable. The assessment will include production of a detailed presentation on the chemistry of the process which will be assessed by the Imperial Examiner. This will be sent in advance to Imperial, and the Imperial Examiner will grade it and carry out a viva examination via videoconferencing to test the candidate's understanding.

ii. Assessment via on-line problem sheets

The Imperial College lecture course in Unit 1 will be assessed by a short on-line problem sheet at the end of each lecture, and a synoptic problem sheet which will include a different problem for each student, thus preventing plagiarism.

iii. End of Unit assessments

The candidate will be required to make a written submission showing that he/she has not only understood and applied the individual competencies required for the unit but has also understood how the competencies support each other and do not stand independently in the workplace. This submission of discursive writing should be supported by any relevant reports which have been written at the time of the work. These reports could be project or interim reports written to communicate information to enable management to make decisions on project activity. Copies of the evaluation forms used by managers/supervisors and the printouts of results from the multiple choice questions will also be included. The end of unit assignment would be normally expected to not exceed 1,000 words excluding the attached reports.

Assessment of the end of unit submissions (Units 1, 2 and 3) will be carried out by the Primary Supply Technical Shared Service (PSTSS) Chemistry Lead, the Cork Chemistry Leader and the Jurong Chemistry Leader.

Unit 4

The candidate will be required to produce a presentation summarising the development history of a GSK product which may be the product they are working on. They will also complete a genotoxic risk assessment for a GSK synthetic route which will be provided to them.

This unit will also test candidates' advanced problem solving skills, building on the lecture material in Unit 1. Problem sheets (9 per year) will be set by Imperial teachers. Candidates will be able to submit written solutions via Blackboard by a given deadline. These will be assessed by Imperial and followed by an online problem class to review the solutions and issues arising. Candidates will be required to attain a pass mark in five of these problem sheets.

The candidate will be required to make a written End of Unit assessment submission showing that he/she has not only understood and applied the individual competency required for this unit but has also

understood how this competency is supported by others and that it does not stand independently in the workplace. Candidates should demonstrate in this written submission that they have a good understanding of the chemistry of the process they are working on at an expert level. This submission of discursive writing should be supported by any relevant reports which have been written at the time of the work. These reports could be project or interim reports written to communicate information to enable management to make decisions on project activity. The end of unit assignment would be normally expected to not exceed 1,000 words excluding attached reports.

Assessment of the end of Unit 4 submission would be carried out by the Primary Supply Technical Shared Service (PSTSS) Chemistry Lead, the Cork Chemistry Leader and the Jurong Chemistry Leader with support from GSK product or process specialists.

Unit 5

Unit 5 will comprise two elements of assessment:

i) A final report, supported by appropriate evidence, to demonstrate that the candidate has fully understood the application of the competencies in the workplace. This submission of discursive writing should refer to the end of unit submissions and may reference any of the supporting reports included at the unit level. Other reports may also be attached and referenced. The submission would normally be expected to not exceed 2,000 words, excluding attached reports.

ii) A report referencing the professional attributes/ transferable skills listed in the programme specification and other evidence of technical and professional development. This will be a reflective commentary demonstrating that achievement of the competencies that make up the GSK Primary Supply Chemistry Competency Development framework meet the requirements of the RSC's Professional Attributes (as required for the purpose of achieving CChem/CSci) and to the QAA Benchmark Statement for Chemistry. The commentary will not normally exceed 2,000 words, excluding attached evidence.

Duration of Course of Study

The programme will be part-time and work-based. The duration of the Certificate programme will depend on the number of years of experience of working within the pharmaceutical industry. It is anticipated that recently appointed candidates may take up to three years to achieve the competencies required for the award of the Certificate. Those with more experience will be able to achieve the award in a shorter period of time. The minimum period of registration will normally be one year, and the maximum period will be four years.

There will be four entry points during the year: 1 October, 1 January, 1 April and 1 July.

Examination

There will be no formal examinations in the programme. Candidates must complete all the internal GSK course requirements for demonstrating the required competencies, and must complete the end-of-unit assignments, and the Imperial assessments, to the standards required by the Board of Examiners.

Learning and Teaching

Additional Entry Requirements

Before registering for the full certificate (i.e. the last two of the four modules) the following are required:

Currently teaching (and/or supervising) more than the occasional session (and/or student) and having completed at least two terms of teaching/supervision experience;

Completion, or AP(E)L, of four allowable core workshops for experienced teachers (and five for non-clinical probationary lecturers) in the areas of Communicating Knowledge, Teaching for Learning, Designing for Learning, Supervising Postgraduate Students and Becoming a Personal Tutor. Four core workshops comprise Module 1 for teachers continuing to CAS registration.

Curriculum

The course consists of four modules: the Core Module 1, covering the areas of Communicating Knowledge, Teaching for Learning, Designing for Learning, and either Supervising Postgraduate Students or Becoming a Personal Tutor (approximately 40-45 contact hours); the Options Module 2 covering assessment and areas selected to reflect the participant's interests and discipline (may include six hours from the fifth core workshop when taken) (minimum 12 contact hours); the CASLAT Module 3 that focuses on important contemporary issues in teaching and learning (approximately 15 contact hours); and the CASLAT Assessment Module 4, including as Part 1 two summative observations of teaching and as Part 2 a project portfolio.

Duration of Course of Study

Part-time: Normally 15-20 months in total; Modules 3 and 4 are normally completed in one calendar year, the year of CASLAT registration.

Learning Outcomes

Those completing CASLAT will:

Demonstrate their understanding of the scholarship of how students learn through its impact on the teaching, assessment and course design modes that they employ.

Design a course in their discipline and implement a range of teaching methods. Examine critically the likely advantages and disadvantages of the approaches to teaching employed.

Employ good practice in respect of student support, feedback and assessment, showing due respect for individual learners and their development.

Use and analyse critically the strengths and weaknesses of a range of methods for evaluating teaching.

Be aware of potential uses and the implications of communications and information technology for changing pedagogic practice.

Be constructively critical and reflective about their own pedagogic practice.

Have a working knowledge of the procedures, codes and norms pertaining to educational processes in their department/division, the College and, as appropriate - more widely - in England.

Dates of Examination

Summative Assessment is by:

Part 1. Two successful teaching observations to be completed by November of the year of registration.

Part 2. Written Portfolio, to be completed in early January of the year following registration.

Participants registering for the full CASLAT certificate from January 2009 onwards will, upon successful completion of the programme, have to choose between:

a) Acceptance of the Certificate of Advanced Study in Learning and Teaching

OR

b) Acceptance of a transcript and certificate of completion of CASLAT modules 1-4. (This option is recommended for those considering future registration for the MEd in University Learning and Teaching.)

Progression from CASLAT to the MEd in University Learning and Teaching

- (i) Candidates starting CASLAT in or after January 2009 will be able to opt not to be awarded the CASLAT qualification and go on to take the MEd award. In this case they will be awarded 24 ECTS under the College's APL arrangements and this will meet the entry criteria for the MEd. Under the College's APL arrangements, the CASLAT must have been undertaken no more than five years before the proposed date of entry to the MEd.
- (ii) If, after five years, candidates who have completed the CASLAT programme have not registered for the MEd, they will be awarded the CASLAT certificate.
- (iii) The award of CASLAT will not be made to a candidate who has successfully completed CASLAT but who is subsequently unsuccessful in the MEd programme.
- (iv) Candidates starting CASLAT in or after January 2009 who are awarded the CASLAT qualification cannot then use it under the College's APL arrangements for entry to the MEd course.
- (v) Candidates who have been awarded the CASLAT qualification before January 2009 will be given a period of three years (until 2011) in which to go on to enter the MEd programme with 24 ECTS. They will keep the CASLAT qualification.

Perioperative Specialist Practitioners

Additional Entry Requirements

Candidates must be registered healthcare professionals (Nurse, Physiotherapist, Operating Department Practitioner). Evidence of study at first degree level or equivalent is required. Candidates must have the support of a consultant surgeon or anaesthetist as a clinical supervisor for the duration of the course.

Curriculum

The course comprises two parts, a taught component and a clinical component. The taught component consists of nine one-week intensive modules, and will cover the core knowledge, skills and professional attitudes required by the role. The supervised clinical practice will be carried out at the candidate's home trust, which will allow candidates to consolidate and develop this knowledge and skills within their own clinical team. During the clinical component, regular contact would be maintained with the Programme Manager.

Duration of Course of Study

Part-time One academic year

Examination

Each module will be examined by a combination of multiple choice questions and extended matching questions. Scenario-based assessments of clinical procedural skill will be carried out at intervals throughout the course and formal assessments will be held at modules 4 and 8. Candidates will prepare a detailed written case study (approx 5,000 words) relating to the operative and perioperative care of a surgical patient from their speciality, to be completed by the final module. Candidates will be required to maintain a learning portfolio, including an electronic log of their clinical activities and skills.

Dates of Examination

Written examination	End of each module
Scenario based assessment	End of module 4 and 8
Case Study	By end of final module
Learning Portfolio	By end of final module

Surgical Care Practitioners

Additional Entry Qualifications

A clinical background in nursing or one of the allied health professions and at least two years experience working in a surgical environment. Evidence of academic standards above those of a first degree and evidence of advanced professional development is required. Candidates must be employed and have the support of a consultant surgeon mentor for the duration of the course.

Curriculum

The course consists of nine one-week intensive taught modules, enabling students to acquire the core knowledge, skills and professional attitudes required by the role. This will include fundamental surgical techniques, patient safety issues, medical foundations of surgery, relevant anatomy, anaesthetic pre-assessment, clinical examination and team-working. In addition, supervised clinical practice undertaken at the candidate's home trust will allow the participants to develop core and specialist knowledge and surgical skills required to participate in their own surgical team.

Duration of Course of Study

Part-time One calendar year

Examination

Scenario-based assessments of clinical procedural skill will be carried out at intervals throughout the course and formative assessments will be held at modules 4 and 8. There are four parts to the summative assessment in the final module: a short answer exam paper, a scenario-based assessment, reflective writing and a detailed written case study (approx 5,000 words) relating to the operative and perioperative care of a surgical patient from their speciality. Candidates will also be required to maintain a learning portfolio, including a log of their clinical activities and skills.

Dates of Examination

Written case study	Final module
Short answer paper	Final module
Reflective writing	Final module
Scenario based assessment	Final module