The College requires that, following the ESR, a student’s progress during PhD registration must be formally monitored at one further stage. The Late Stage Review (LSR):

- 18-24 months (full-time students) | 30-36 months (part-time students)

Content

a) You should describe the research problem which is to form the core of your thesis;

b) You should also describe what you have achieved so far on this problem, and what you need to do to complete the work.

c) **Length** – typically 30 pages
   A ‘brain dump’ of 50 or more pages will not be appreciated. It is a useful skill, not only in academic life, to select the key facts which you need to explain, and to write about them concisely.

d) Ideally the report can be turned into a published paper, or into a chapter of your thesis.

e) The report need not be a complete account of all the background you have learned, nor does it need to be a first draft of the final thesis. Provided you make it clear what background your research is based on, and where the argument is intended to go, the assessors should conclude you have a fair idea of what you will need to do.

How does it work?

f) Submit the LSR report through the Maths PhD Milestones online system (you will receive an auto-reminder email with the link to the system, one month prior to the due date).

g) Lists (on the Maths PhD Milestones online system) the 100 hours of courses/activities + the last 2 Graduate School Professional Skills courses (if missing from the time you completed your ESR).

Students progressing from first year in the CDT LSGNT, should have completed 4 courses, unless exemption documents have been emailed to the PG Administrator:

- A copy of the course programme completed in year 1 at UCL
- Proof of attendance (certificate or acknowledgement from the course organiser of your attendance)
- Confirmation of which Graduate School course it is equivalent to; please refer to the list on the Graduate School equivalent courses and exemption page.

h) If applicable, non-native speakers who have not achieved a minimum of 45% in English Assessment 2 at their ESA, will have followed Centre for Academic English recommendations.

i) Your supervisor will appoint two independent academics (your supervisor will not be in the panel) to meet you about the LSR. The assessors will liaise with you to arrange the meeting.
j) **Assessors** will read your LSR report, and after meeting you they will decide:
   - Whether you are in command of the material you need to solve the problem;
   - Whether you understand the problem and are likely to be able to solve it;
   - Whether you can write clearly about an advanced scientific topic;
   - Whether you can explain and defend the work in an oral examination;
   - Whether your plan for completing the work within the deadline is realistic.

k) The assessor will complete their section on the online system, which will then go to your supervisor for their comments, and finally to the Section Tutor for final approval.

**Possible outcomes**

l) **Progress**

If the assessors do not approve the report, there are three possibilities:

m) **Re-submit** (within 3 months of original LSR due date, stated on [Student e-Service](#))

n) **Transfer to MPhil registration and write up** → students who transfer to MPhil at this stage must complete the MPhil within 3-6 months of their initial LSR. The date of MPhil registration will, in this case, be backdated to the date of the initial PhD registration.

o) **Fail/withdraw** → if the College determines that your progress is such that you cannot continue, you may be required to withdraw from the College at this stage.

**Important notes!**

1. You must contact your supervisor and section tutor for feedback.

2. Badly written or badly thought out reports will need to be improved and re-submitted.

3. It is the student responsibility to check that they have indeed passed this milestone, by checking their record on [Student e-Service](#).
100 Hours of Postgraduate Courses/Activities

Note that all students are required to have taken 100 hours of PG courses/activities in their first 2 years of study.

You should aim to take a wider range of courses than just those specific to your thesis topic – Taught Courses in Mathematics – these courses may be taken from the TCC, LTCC, Mathematical Finance Graduate School, Imperial College MSc programmes, summer schools, conferences, seminars, reading groups or similar activities (all appropriately assessed) outside your own specific area of specialisation. **Active participation as a solver at the Math Helpdesk can also count towards the 100 hours (agree it with your supervisor).** The aim is to broaden, as well as deepen, your mathematical education. **Remember to agree on the activities with your supervisor.**

- **LTCC** courses (15 hours)
- **TCC** courses (generally of 20 hours)
- **Mathematical Finance Graduate School** courses (8-15 or 20-30 hours)
- **Imperial College MSc** courses (30 hours of lectures)

Students progressing from the programmes below can count hours from courses taken in year 1 towards these 100 hours:

- MRes in Stochastic Analysis and Mathematical Finance (Imperial)
- CDT Mathematics of Planet Earth (Imperial)
- CDT Geometry Number Theory (UCL)
- CDT Financial Computing Analytics (UCL)

**Professional development skills courses**

All PhD students are expected to complete a programme of professional skills courses as prescribed by the Graduate School. Failure to complete the requisite training may result in a student’s registration being transferred from PhD to MPhil or in a student being barred from entering the PhD (or MPhil) examination. See 4.2 of the **Regulations for the award of PhD and MPhil.**

- Students must complete 4 courses, 2 by the Early Stage Review and another 2 by the Late Stage Review. See the Graduate School Professional Development Skills website for details.

If you have not completed this requirement, the College may transfer your registration to MPhil. If you subsequently fulfil the professional skills development requirement, and have otherwise successfully completed the Early Stage Assessment, the department may request a transfer of registration from MPhil to PhD. The date of PhD registration will, in this case, be taken as the date of your initial PhD registration.