

Assessment and feedback in the Department of Computing

Students studying in the UK are often asked about their experiences with assessment and feedback, but it's not always clear what "assessment" and "feedback" refer to. The objective of this short document is to explain the different types of assessment you will encounter as a Computing student at Imperial and the various ways in which we provide feedback to you.

Assessment types

The educational literature typically refers to two main types of assessment: *formative* and *summative*.

1. Formative

Formative assessment refers to any activity which carries no credit. In other words, it provides you with the opportunity to evaluate how well you are progressing and to learn from your mistakes without impacting your degree total. Formative assessment is wide ranging and comes from activities such as the following:

- Working through unassessed problems set by a lecturer, for which there are specimen solutions that you can compare with your own answers. Past examination questions often feature in these problem sets.
- Unassessed laboratory exercises. Here there is individual feedback in the form of written comments, and a mark, from an Undergraduate Teaching Assistant (UTA).
- Discussions with a lecturer or teaching assistant (Undergraduate or Graduate TA) in a laboratory session or classroom tutorial. The feedback here is typically verbal.
- Ongoing project work where verbal feedback from, and discussions with, your supervisor helps you to gauge your progress so far and plan your future work.
- Impromptu problem solving, discussions, thought experiments etc., with a lecturer, supervisor or TA. Example activities include 'whiteboard programming' with a UTA, or your contributions to in-class discussions on topics for which there may be no clear-cut answer. The feedback in these sessions is typically informal and verbal in nature.
- Peer assessment, where the feedback, which may be formal or informal, comes from classmates. Example activities include pair programming, group coursework/project work, practice presentations etc.
- Discussions with your personal tutor, which often involves verbal feedback on your academic progress so far and advice that can help to inform your future activities and decision making.

2. Summative

Summative assessment refers to an activity where you receive credit for your work that counts towards your degree.¹ The feedback you get is designed to highlight the strengths and weaknesses of your work and how you might have done better given another opportunity, or more time. It may also feed into future assessments, e.g. follow-on coursework, examinations, reports, presentations etc. Summative assessment includes:

¹ Note that summative assessments are arguably also formative in nature, as the act of completing the assessment helps you to acquire a deeper understanding of the material; in turn, that may be useful in future assessments.

- Programming tests. The feedback on these is individual-based and is designed both to explain your mark and help you improve your programming skills, particularly early on in your degree.
- Assessed coursework, which typically comes in the form of written 'homework' or in-class tests. Specimen solutions are typically not provided, but the feedback, which may be individual, class-wide or both, will help to justify the mark that you were awarded.
- Assessed project work, in the form of small-group, team and individual projects. For some projects you may receive detailed written feedback from the supervisor and/or assessment team. In others, the feedback may come from ongoing project meetings and verbal feedback during, or after, the final presentation.
- Technical writing exercises and presentations, where the objective is to assess your ability to communicate scientific information verbally and/or in writing. The feedback may be verbal, or in writing, or some combination of the two.
- Examinations, which may be written, computer-based, or some combination of the two. Feedback on examinations is class-wide and is designed to highlight strengths, weaknesses, common misconceptions etc. in particular questions/parts, taken across all submissions. Where necessary it may also detail any special adjustments made by the marker(s) to address unforeseen problems in the exam.

Summary

The key take-away message is that assessment and feedback is not just centred around coursework, examinations and marks. Instead it is an ongoing process involving many forms of interaction with many individuals, including personal tutors, lecturers, teaching fellows, teaching scholars, GTAs, UTAs, and even at times your own classmates, all of whom are there to help you to master the subject and to realise your academic potential.