**Research Integrity**

Research integrity is about your research practices, how you present the findings of your research and how your research impacts on society and the wider world. At Imperial College London, you will work with internationally renowned academic staff who will guide you to design rigorous, robust, and reproducible research methods. This will ensure that your research is lawful and that any adverse impact your research may have on society, natural environment, or animals is justified and minimised. Research integrity is also about presenting the findings of your research in a responsible manner.

Imperial has adopted the Council for Science and Technology's Universal Ethical Code for Scientists and upholds its three principles, which are:

* Rigour, Honesty and Integrity
* Respect for Life, the Law and the Public Good
* Responsible Communications: Listening and Informing

**The primary way to ensure research integrity is to promote and maintain a culture of honesty, openness and responsibility.**

To support these principles, the Early Career Researcher Institute provides the training courses below, all accessible from its website.

* Plagiarism Awareness, **mandatory training to be completed by the Early-Stage Assessment (ESA)**

[Plagiarism Awareness (Doctoral Students) | Imperial students | Imperial College London](https://www.imperial.ac.uk/students/academic-support/graduate-school/professional-development/doctoral-students/research-integrity/plagiarism-awareness-doctoral-students/) This online course was developed by the Early Career Researcher Institute, in conjunction with the Library. It aims to equip you with a working knowledge of the concept of plagiarism and how to avoid it. It also aims to provide you with information to enable you to use and share information ethically, with academic integrity and in accordance with Imperial’s Academic Integrity Policy:

[www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/academic-integrity/Examination-and-assessments---academic-integrity.pdf](http://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/academic-integrity/Examination-and-assessments---academic-integrity.pdf)

Imperial also requires doctoral students to submit their ESA through Turnitin. See dedicated student guidance here:

https://www.imperial.ac.uk/students/academic-support/graduate-school/guidance-for-students-and-staff/turnitin-guidance-for-students/

To accompany this, there is useful information about [Plagiarism Issues in Theses](https://www.imperial.ac.uk/media/imperial-college/study/graduate-school/public/staff-pages/turnitin--phd-milestones/Plagiarism-issues-in-theses.pdf) which students are encouraged to read:

[www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/research-degree-examinations/Plagiarism-issues-in-theses.pdf](http://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/research-degree-examinations/Plagiarism-issues-in-theses.pdf)

* Copyright

This course aims to convey copyright essentials to Imperial PhD students. It is focused on UK law only. The structure of the course reflects your research lifecycle and aims to provide clarity on copyright issues you will encounter at each of the stages of the lifecycle. This course will equip you with a working knowledge of copyright and licensing so that in your career as a researcher you use and can share information in a copyright safe way.

[www.imperial.ac.uk/students/academic-support/graduate-school/professional-development/doctoral-students/research-integrity/copyright-for-researchers-online-course/](https://www.imperial.ac.uk/students/academic-support/graduate-school/professional-development/doctoral-students/research-integrity/copyright-for-researchers-online-course/)

* Intellectual Property

This course aims to equip you with a working knowledge of the concept of Intellectual Property (IP), and an awareness and understanding of the basic principles surrounding IP rights, such as patents, copyright, design rights, and other forms of IP. An understanding of IP and its application is important for all students; for those intending to continue in academia as well as those intending to enter the commercial world after graduation:

[www.imperial.ac.uk/students/academic-support/graduate-school/professional-development/doctoral-students/research-impact/intellectual-property-online-course/](http://www.imperial.ac.uk/students/academic-support/graduate-school/professional-development/doctoral-students/research-impact/intellectual-property-online-course/)

* Publishing Open Access: Your Research and Thesis

This workshop provides an insight into preparing your thesis to be made Open Access (OA) and the benefits of open access more generally. This workshop will provide you with a general introduction to the topic, with specific reference to your PhD thesis, and related research outputs that may arise from PhD study.

https://www.imperial.ac.uk/students/academic-support/graduate-school/professional-development/doctoral-students/research-impact/publishing-open-access-your-research-and-thesis/

* Research Data Management

Data is a key research asset, underpinning almost all published research conclusions. In recent years, new technology has enabled us to:

1. Generate and record far more data than ever before; and
2. Share, reuse and combine that data in new ways to generate new insights.

Research data is increasingly a first-class research output, and a little bit of planning will enable you to take advantage of this shift.

This course will highlight the key considerations for students and researchers to help them assess when it is appropriate to share your data and how, and how to write a data management plan.

https://www.imperial.ac.uk/students/academic-support/graduate-school/professional-development/doctoral-students/research-integrity/research-data-management/

* Research Data Management Plans

Research data is a key research asset and planning how to manage data outputs is increasingly becoming a requirement of applying for grants and funding. Having a data management plan will help you manage costs and responsibilities, keep your data safe and secure during the project and prepare your data for archiving and (where appropriate) sharing at the end of the project.

This webinar will introduce you to the online data management planning tool DMPonline and cover some of the more practical elements of creating a data management plan.

<https://www.imperial.ac.uk/students/academic-support/graduate-school/professional-development/doctoral-students/research-integrity/research-data-management-plans/>

The webinar is designed to accompany the **Information Landscape: Data Management**workshop. Prior attendance of that workshop is not mandatory but is recommended

* Science, Research and Integrity

The workshop is designed to give researchers a chance to explore and critically analyse the ethics of scientific research in a constructive way. We will critically discuss the structure and implications of specific cases of scientific fraud, and will also look at different moral theories and how they might apply not only to specific moral dilemmas, but also to science in general. The session will aim to forearm you by providing a safe environment within which to formulate and articulate your views on how they might deal with the sorts of dilemmas you are likely to face during your careers..

https://www.imperial.ac.uk/students/academic-support/graduate-school/professional-development/doctoral-students/research-integrity/science-research-and-integrity/

**The San Francisco Declaration on Research Assessment (DORA)**

The College has signed the San Francisco Declaration on Research Assessment (DORA). The ethos behind DORA is to improve the ways in which the output of scientific research is evaluated by funding agencies, academic institutions, and other parties. The outputs from scientific research are many and varied, including: research articles reporting new knowledge, data, reagents, and software; intellectual property; and highly trained young scientists. Funding agencies, institutions that employ scientists, and scientists themselves, all have a desire, and need, to assess the quality and impact of scientific outputs. It is thus imperative that scientific output is measured accurately and evaluated wisely.

As such the College has signalled that it will assess research based on quality rather than where it is published, for example journal impact factor. The Early Career Researcher Institute promotes the ethos behind DORA at the following professional development workshops:

* Publications
* Becoming an effective researcher
* Finish Up Move On retreat
* Understanding impact and how to achieve it
* Bibliometrics and academic impact
* Preprints and open peer review

**References:**

The San Francisco Declaration on Research Assessment DORA [accessed 14.06.23]:

[www.sfdora.org/](https://sfdora.org/)

The UK Concordat to Support Research Integrity – Universities UK [accessed 14.06.23]:

[www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/the-concordat-for-research-integrity.aspx#:~:text=Universities%20UK%2C%20together%20with%20signatories%20to%20the%20concordat,confidence%20in%20UK%20research%20and%20its%20world-leading%20researchers](https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/the-concordat-for-research-integrity.aspx#:~:text=Universities%20UK%2C%20together%20with%20signatories%20to%20the%20concordat,confidence%20in%20UK%20research%20and%20its%20world-leading%20researchers).

The Universal Ethical Code for Scientists [accessed 14.06.23]:

[www.assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/283157/universal-ethical-code-scientists.pdf#:~:text=The%20Universal%20Ethical%20Code%20for%20Scientists%20is%20a,three%20main%20aims%3A%20%E2%80%A2%20to%20foster%20ethical%20research](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/283157/universal-ethical-code-scientists.pdf#:~:text=The%20Universal%20Ethical%20Code%20for%20Scientists%20is%20a,three%20main%20aims%3A%20%E2%80%A2%20to%20foster%20ethical%20research)

The European Code of Conduct for Research Integrity – ALLEA (All European Academies) [accessed 14.06.23]:

[www.allea.org/wp-content/uploads/2017/05/ALLEA-European-Code-of-Conduct-for-Research-Integrity-2017.pdf](https://allea.org/wp-content/uploads/2017/05/ALLEA-European-Code-of-Conduct-for-Research-Integrity-2017.pdf)