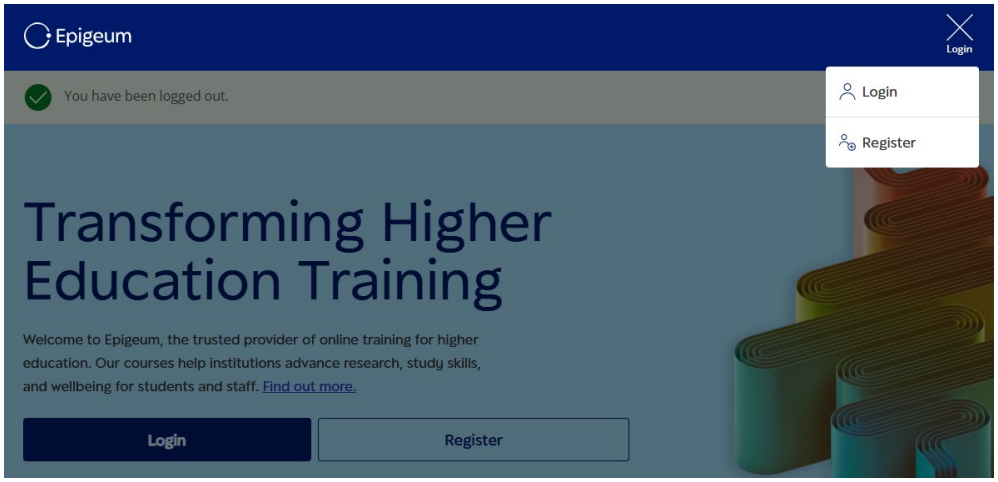
1. Registration

Below are step-by-step instructions for how to access the Epigeum platform to take the Research Integrity training.

a) We recommend using Chrome or Mozilla web browsers, since those are most compatible with Epigeum platforms.

b) Go to the following link: https://courses.epigeum.com/.

c) Click on the user menu (the 'person' icon in the top right hand corner of the screen) and then click on *Register*.



d) Complete the registration form

- You **must** include your student ID number in the 'institution specific field' box
- You **must** use one of the following email domains:

  @manchester.ac.uk
  @postgrad.manchester.ac.uk
  @student.manchester.ac.uk
  @cruk.manchester.ac.uk

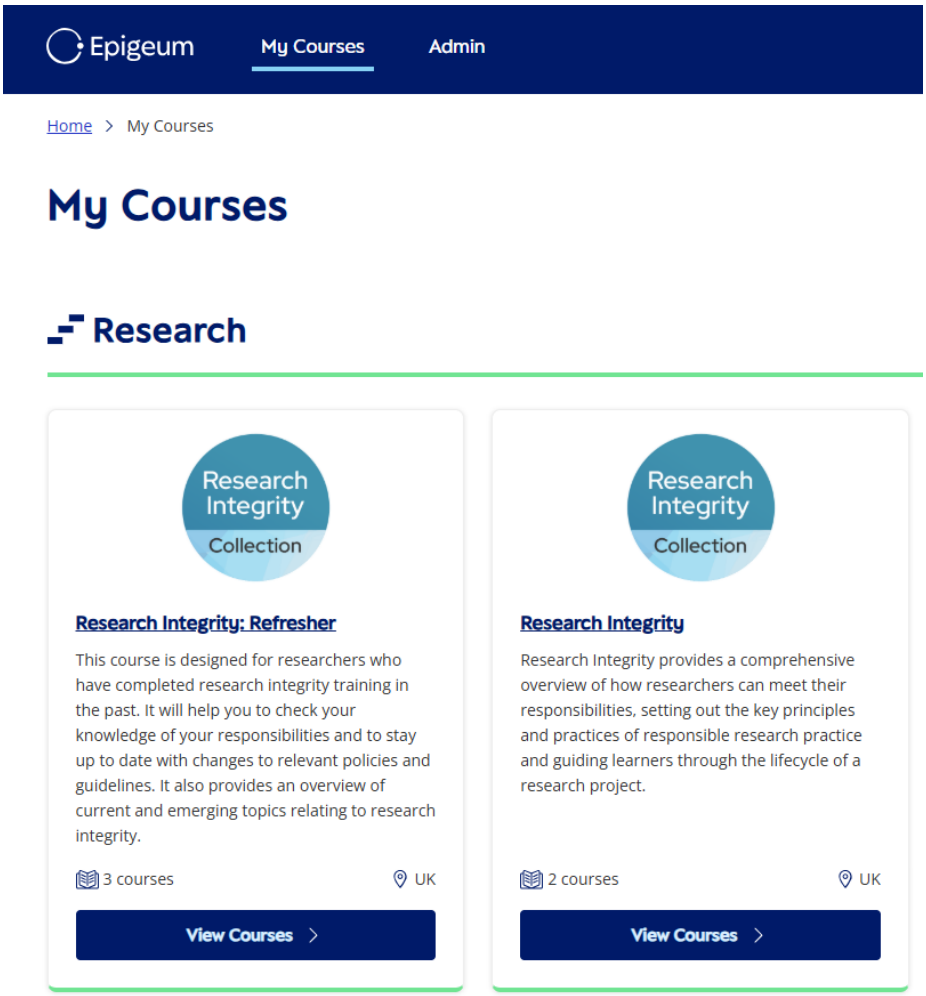
- **Do not** use the password that you use for your University of Manchester IT account.

e) Enter the following token in the relevant field of the registration form: **bba360ea**

f) You will be sent an account activation email to the email address you entered during registration. Please click on the link in the activation email to complete registration and activate your account. **NOTE: If you do not receive the email in your inbox, please check your SPAM/junk mail**. You can also resend the activation email via this link.

g) Once you have activated your account you can login to your account by clicking on the person icon and entering your details at the login screen. Your username is your email address.

h) You will be shown the Epigeum programmes in the *My Courses* screen. Select ***Research Integrity (UK Edition)*** either by clicking on the title or the View Courses button.

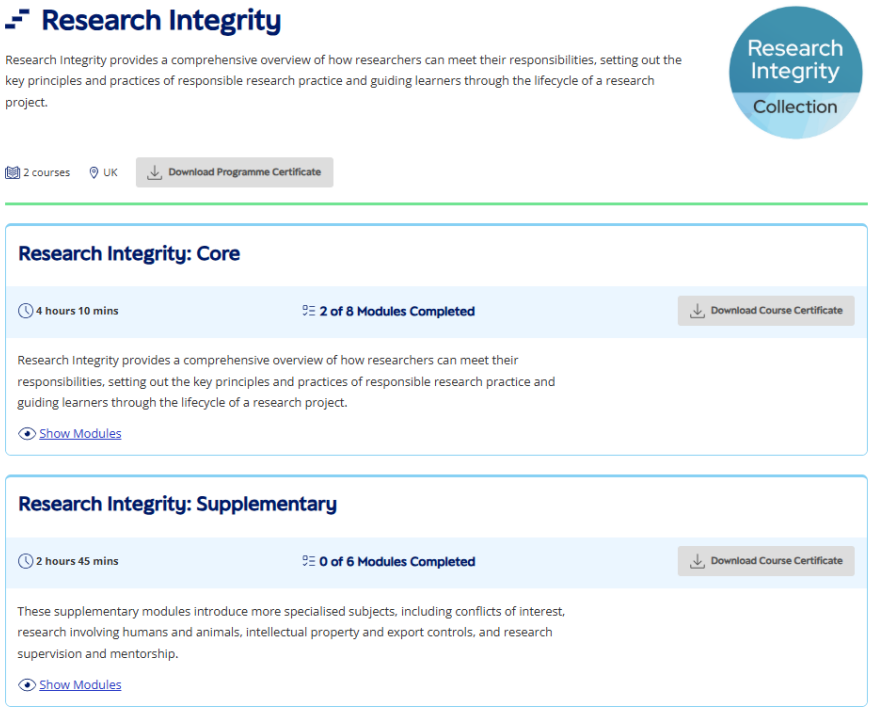


i) If you did not enter the token during registration please use the *Enter Token* button in the user menu. The token is **bba360ea**

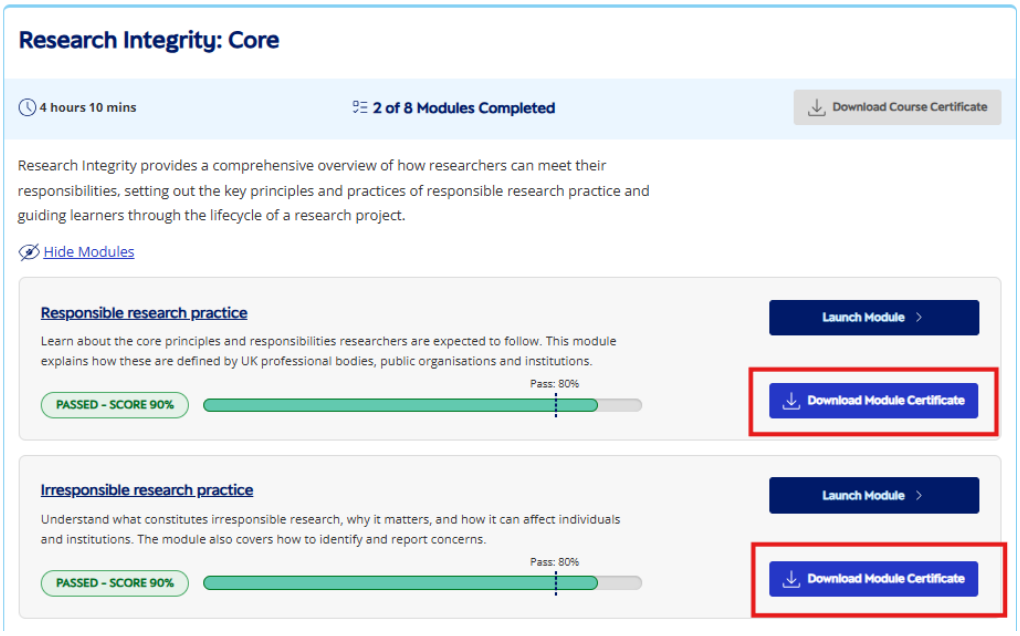
j) The University of Manchester pays a subscription for access to the course. If you are asked for payment details it may be because you have not entered the token.

2. Completing the course

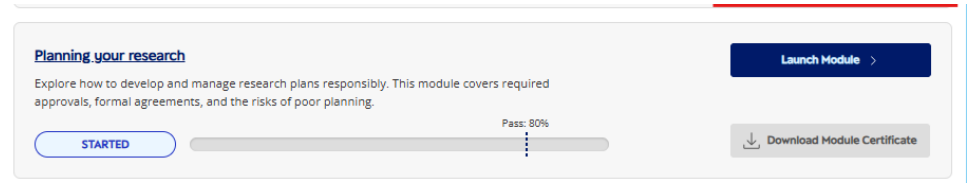
a) The course is split into ***Research Integrity: Core*** and ***Research Integrity: Supplementary***



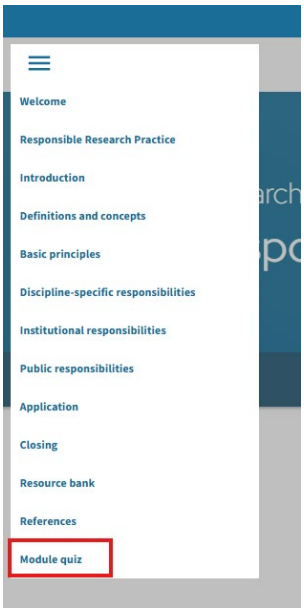
b) Once a module has been successfully completed (i.e. by achieving 80% or higher in the end of module quiz), you will be able to download your unique certificate of completion by clicking on the download icon next to certificate.



c) If you have not passed a module the certificate icon will be shaded out and the completion bar will not turn blue.



d) A module can be retaken as many times as required in order to pass. If you want to go straight to a module quiz, click on the three lines at the top left and scroll to module quiz.

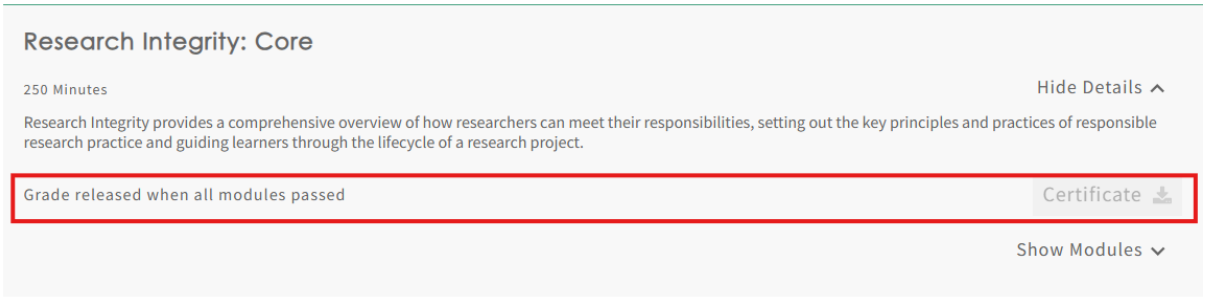


e) The course does not have to be completed in one go. If you return at a later time and wish to continue a module select *My Courses* from the top left of the screen.

3. Monitoring of course/module completion for PGRs

a) Completion of the course is monitored by your Faculty/School.

b) Once you have completed all the modules in the ***Research Integrity: Core*** course you will be able to download an overall certificate.



c) Your PGR team will be able to advise if you need to complete any modules from the ***Research Integrity: Supplementary*** course.

d) Once you have downloaded your certificate you should email it to your School PGR team.

4. Help with registration

If you have issues registering for the course please contact Karen Lythe at research.integrity@manchester.ac.uk. Dr Lythe is **not able to access eProg** to update completion records for this course. This needs to be done via a School PGR team.

5. Learning Outcomes

The learning outcomes for the ***Research Integrity*** core and supplementary modules are appended to this guide.

Learning outcomes

The learning outcomes for the *Research Integrity* modules are as follows:

Module 1: Responsible Research Practice

- Explain the relationship between the responsible conduct of research and research integrity
- List the basic principles used to judge responsible research practice
- Identify sources of guidance on professional responsibility in your field of research
- Explain the role of institutions in promoting responsible research practice
- Explain how researchers' public responsibilities are developed and implemented.

Module 2: Irresponsible Research Practice

- Describe and provide examples of the two approaches that governments and organisations worldwide have taken in defining and responding to irresponsible practices in research
- Explain how 'irresponsible conduct' is defined and handled in the UK
- Be aware of the questions you should ask yourself to avoid irresponsible practices
- Explain the difference between questionable research practices and misconduct
- Discuss the impact of irresponsible practices on research
- Identify the steps to be taken to report irresponsible behaviour in research.

Module 3: Planning Your Research

- Describe the common elements of a research plan
- Discuss the importance of research plans and identify how others might use your research plan
- List the types of governance approval that could be required before beginning a research project, and describe the implications of not having approvals in place
- List the types of agreements that should be in place before beginning a research project and explain the reasons for these agreements
- Describe some of the problems that could arise if a research project is not properly planned.

Module 4: Managing and Recording Your Research

- Be able to create a project management checklist to summarise the main responsibilities in your research project and identify potential problems
- Describe the purpose and importance of keeping a record of your research
- Explain what is required to keep a record that will validate your findings and allow others to replicate your work
- Know and apply the basic standards for storing, protecting and sharing research data.

Module 5: Data Selection, Analysis and Presentation

- Identify responsible and irresponsible practices in data selection
- Describe the role of analysis in the responsible conduct of research
- Explain the principles underpinning best practice in data presentation
- Provide examples of irresponsible practices that researchers have used when selecting, analysing and presenting results.

Module 6: Scholarly Publication

- Discuss the factors that should be considered when making decisions on when and how to publish
- Identify key factors that should be considered when selecting a journal
- Summarise the key elements that need to be considered when drafting a scholarly publication
- Summarise the basic principles for assigning authorship and acknowledging the contributions of others
- Describe the different types of plagiarism and how to avoid plagiarism
- Explain how scholarly publications are submitted and reviewed
- Identify and explain the key post-publication responsibilities authors have.

Module 7: Professional Responsibilities

- Set out the responsibilities that supervisors, students and researchers have when they enter into a supervisory relationship
- Explain the responsibilities of individual researchers engaged in teamwork/collaborations
- Explain the additional responsibilities that can emerge when researchers are involved in larger scale teams/collaborations
- Discuss the primary responsibilities of peer reviewers, and provide examples of the ways in which these responsibilities can be compromised.

Module 8: Communication, Social Responsibility and Impact

- Identify the broader roles researchers can take on over the course of a career and the special responsibilities that come with these roles
- Discuss the challenges researchers face when identifying their audience and developing plans for research communications
- Describe the ways in which poor working relationships between professionals engaged in broader service can be detrimental to research
- Explain why it is important for researchers to separate their personal positions from their professional views when communicating their research
- Explain what is meant by 'impact' and the different views on how impact should be assessed.

Module 9: Conflicts of Interest

- Recognise the importance of disclosing conflicts of interest
- Define and give examples of conflicts of interest
- Describe when and how conflicts of interest should be reported
- Explain how conflicts of interest are handled in the UK
- Explain the expectations that institutions have in relation to conflicts of interest
- Give examples of the consequences of not reporting conflicts of interest.

Module 10: Research Involving Human Participants

- Describe the origin and purpose of the guiding principles set out in the major codes of conduct for research involving human participants
- Explain why research involving human participants requires review and approval before any work is undertaken
- List the main information researchers are expected to provide when applying for approval to conduct research involving human participants
- Summarise how research involving human participants is reviewed and approved in the UK
- Explain what is meant by an 'ethical' study and the primary concerns that research ethics committees (RECs) address when making judgements about the ethics of studies
- Summarise the continuing responsibilities researchers have once a project is approved
- List and provide examples of the major challenges that can be faced in ensuring that human participants in research are protected.

Module 11: The Care and Use of Animals in Research

- Summarise the four basic responsibilities researchers have for the care and use of animals in research
- Describe the purpose and content of the 3Rs (replacement, reduction and refinement)
- Discuss the role and purpose of institutional animal welfare approaches, Animal Welfare Ethical Review Bodies (AWERBs) and government regulation of research involving live animals
- Summarise the information that could be requested when you are seeking approval for a project
- List some of the continuing responsibilities researchers have after receiving AWERB/Home Office approval when conducting research with animals
- Explain why it is important to take public attitudes into consideration when conducting research that involves the use of animals.

Module 12: Intellectual Property

- Define 'intellectual property' as it relates to research
- Explain when and how researchers can copyright their research
- Explain when and how researchers can patent their research
- Discuss some of the limitations on intellectual property protection in research
- Explain the steps that should be taken to establish ownership of intellectual property
- Explain how intellectual property is managed in the UK
- Provide examples of the emerging issues associated with copyright and the patent protection of research.

Module 13: Trusted Research and Export Controls

- Summarise the significance of the Trusted Research agenda
- Explain the purpose of export controls and their role in research
- Describe and provide examples of the major ways in which research could be subject to export controls
- Summarise the steps researchers should follow to identify and manage export controls
- Explain how export controls that could apply to your research are governed and administered in the UK and at your institution
- Provide examples of how export controls affect researchers and some of the consequences of failing to comply
- Explain other ways to protect sensitive technologies.

Module 14: Research Supervision and Mentorship

- Explain the difference between supervision and mentoring
- Summarise the main responsibilities of supervisors and supervisees
- Explain the role research institutions play in fostering responsible supervision
- Explain the reasons supervisors have for taking on supervision and the expectations students have when they enter a supervisory relationship
- Briefly outline how supervisors can foster the scholarly, professional and personal development of supervisees, notably in relation to responsible research practice
- Outline the elements of a personal development plan and explain how this type of plan differs from a research plan
- Provide examples of and discuss the impact of poor supervisory practices.