**Integrated Thesis Guidance**

***This information is provided as supplementary guidance to the ‘Examination Regulations on the preparation and submission of theses’*** ***which students should consult before starting to write their thesis.***

**What is an Integrated Thesis:**

An integrated thesis may either be a hybrid of conventional chapters and high-quality scientific papers, or be fully paper-based. These can be published papers, submitted papers, or drafts that are written as potential papers but have not yet been submitted for publication.

Apart from the inclusion of such materials, an integrated thesis must conform to the same standards expected for a standard thesis, e.g. it must still represent an original contribution to the field of research, demonstrate an understanding of the entire body of work in the thesis, outline the relationship with existing literature and future developments and it must be a coherent body of related work.

Presenting a thesis consisting of academic papers with little or no contextualising or commentary text will very likely result in failure. Submitting an integrated thesis will still require you to write new text to link each of your papers together and produce a coherent overall thesis/argument.

**Who can apply to submit an Integrated Thesis:**

Students registered in the following MPLS departments can apply to submit their thesis in an alternative format, as an integrated thesis; Biology (nee Plant Sciences and Zoology) Chemistry, Earth Sciences, Engineering Science, and Statistics. This includes those registered on the following Doctoral Training programmes: Future Propulsion and Power CDT, Inorganic Chemistry for Future Manufacturing CDT, Synthesis for Biology and Medicine CDT, Theory and Modelling in Chemical Sciences CDT, Wind and Marine Energy Systems and Structures CDT.

**What should you consider before deciding whether to submit an Integrated Thesis:**

One of the major considerations for submitting an Integrated Thesis is the level of contribution that you have made to the papers to be included in the thesis. The level of the student’s contribution must be made explicitly clear within the thesis. Not all research projects will produce material suitable to present in an integrated thesis and consideration should be given to the most appropriate format for the research.

Talk to your supervisor(s) about the way you would like to write up your research findings. Drafting up an outline publication strategy early in the planning stages of your research is a good way to get started. If you need to speak to somebody outside of your supervisory team, you should approach your Director of Graduate Studies.

**How to apply to submit an Integrated Thesis:**

DPhil Students should request to do this when they apply for confirmation of status. There is a section on the Confirmation of status form (GSO.14.MPLS) for you to request this, and for your supervisor to confirm their support, which the DGS will then consider. If approved you will be sent a confirmation letter, which will also be copied to the research degrees examination team, so that they are aware you have been given approval for this. If at the time of applying for confirmation of status you did not request to do this and you then change your mind later, you will need to send an e-mail request to the Director of Graduate Studies (DGS), with confirmation that your supervisor also supports it. A candidate for the Degree of Master of Science by Research should apply directly to the Director of Graduate Studies for permission to be examined in this way six months before submitting their papers for examination.

To revert to being examined by a conventional thesis rather than an integrated thesis, the candidate must inform their department of the change as detailed in the relevant departmental handbook.

**Benefits/Advantages of submitting an Integrated Thesis:**

An Integrated thesis can help to:

* reduce time spent rewriting material from thesis chapters into publications (or vice versa)
* enhance your writing-for-publication skills. These skills will be essential for a career as a researcher. (Note: it is important to recognise that the traditional format thesis will also develop writing skills and consideration should be given to the best approach for the student’s research outcomes and discipline area).
* reduce the potential conflict of interest between the drive to publish papers and timely completion of the thesis as both can be achieved simultaneously.
* encourage faster publication.
* increase your competitiveness upon entering the academic job market, by enhancing your student research profile

**Challenges of submitting an Integrated Thesis:**

Not all Examiners are familiar with the integrated thesis format.

It can be difficult for examiners to determine the student’s individual contribution to publications. However, if the guidance is followed and students clearly document their own contribution throughout the thesis these problems should not arise.

**Structure/Content/Format of an Integrated Thesis:**

Regardless of the format, the content of the thesis should reflect the amount, originality and level of work expected for a conventional thesis. It should not be assumed that the act of publication (in whatever form) means the work is of suitable academic quality and content for inclusion in a thesis, and students should discuss all papers in detail with their supervisor before including.

It would be anticipated that the candidate would be a lead contributor, rather than a minor author, on at least some of the papers in order to consider this format.

There is no minimum, or maximum, number of papers a candidate is expected/allowed to include as part of such a thesis and it will remain a matter for the examiners to conclude whether the contributions are equivalent to that which would be expected of a standard DPhil. However, three to five papers or equivalent results chapters is typical.

Any submitted/published papers should relate directly to the candidate’s approved field of study, and should have been written whilst holding the status of PRS or a student for the MSc (by Research), or DPhil.

Any work submitted within an integrated thesis must be substantially different from any work which may have previously been submitted for any degree at this or any other institution.

The collection of papers must include a separate introduction, a full literature review, discussion and a conclusion, so that the integrated thesis can be read as a single, coherent document. Where students have written a review paper, this could serve as an introduction to the field and in some cases it may not be necessary to write a separate introduction, however, before doing so this should be discussed with the supervisor.

The candidate must ensure all matters of copyright are addressed before a paper’s inclusion. A pre-print version of any published papers should be included as standard.

Where two candidates have worked on a collaborative paper together, both would be entitled to include the paper in their submission, as long as their individual contribution was clearly explained.

Accepted papers should be stylistically integrated into the thesis, matching typeface, margins, and pagination. Any papers intended for future publication and currently in draft form should be treated in the same manner.

Journal-formatted published papers may be included in the thesis if approved by the copyright holder. Where possible, you should alter the page numbers to align with the main document. Where this is not possible, a sheet of A4 may be placed before each published paper, on which is displayed the publication title and the thesis page numbers that it spans.

**Typical features that may be present in an integrated thesis are as follows:**

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| **Introduction chapter,** which in addition to the standard content of an introductory chapter in the discipline, includes: • an account of how the thesis has been constructed, including identification of chapters that are published or in publishable format.• an explanation of how all the papers fit together into a coherent and continuous thesis. |
| **Research chapters, including one or more connected academic papers:** • Including a commentary before and after each academic paper will fully contextualise and integrate the paper into the thesis, in effect forming a chapter. The commentary text is of key importance, as it not only draws together all elements of the thesis but also provides the opportunity for you to convince the examiners that you understand the detail and context of the academic papers presented for examination.• Include any supplementary datasets.• Include a statement of authorship form for each academic paper to guide the examiners about your contribution to the work. • Include a detailed and critical analysis of the methods used, which may be in a separate chapter if the papers formatted for publication do not include this level of detail. |
| **Overall discussion and conclusions chapter(s):** • A brief summary of the research findings in the preceding academic papers/chapters and critical analysis of their relation to international state-of-the-art research within the subject area. • An amalgamation of the discrete conclusions of the individual academic papers /chapters that explores the overall significance of the work and its contribution to the field. The concluding chapter (which should not be a repetition of previous chapters) should bring the thesis together and provide a critical evaluation of the findings, justify decisions made and set out ideas for future work.  |
| **Bibliography of the non-published chapters and commentary text** (each academic paper will contain its own references section).  |

The commentary text is the place to include any preliminary or background data supporting an academic paper, or to discuss methodologies tried and tested, experimental failures and negative results that shaped and developed your research thinking (thesis) along the way. Any research findings not written into an academic paper may be incorporated into the thesis within the commentary text or written as a conventional results chapter.

Students should ensure that the thesis is not weakened by lack of continuity and reasoning between chapters or by the separation of figures from the text they refer to.

All figures and tables should be legible and appear as close to the relevant text in the thesis as possible; this applies to both published and non-published material that is included in the thesis. Sometimes images/figures in published papers need to be placed according to best space fit.

The work must constitute a body of publication tending towards a coherent and continuous thesis, rather than a series of disconnected publications. As such, any publications should be adapted and integrated within the structure of the thesis.

**Examination process for an Integrated Thesis:**

The examination process will be the same as for a traditional thesis. As with standard doctoral theses, examiners should satisfy themselves that the integrated thesis meets the requirement of the doctoral degree as prescribed in the regulations. The fact that a thesis contains material that has been published or accepted for publication does not guarantee that the examiners will recommend the award for which the candidate is being examined. Peer reviewed publications vary in standards and requirements. Examiners are entitled to examine the student on any part of the thesis, and to request revisions to any part of the thesis text presented for examination, including those parts already published or accepted for publication. Examiners will expect students to defend all of the work in any paper that forms part of the thesis, even if the work has been done (and acknowledged as such) by someone else.

A major consideration when preparing an integrated thesis is that the examiners can follow and understand the thesis as a coherent body of work. Students should ensure that their thesis does not lack a full explanation of technical detail and consideration of controls because it is in the publication style format. The examiners will expect the thesis to demonstrate rigour in all aspects of the research.

**Other things to consider when submitting an integrated thesis:**

**- Collaborative work**

Students should explain and fully justify the nature and extent of their own contribution and the contribution of co-authors and other collaborators in the introductory part of the thesis and anywhere else appropriate throughout the body of the thesis. Students should consult University guidance on plagiarism for further guidance.

**- Intellectual Property (IP)/Copyright/Plagiarism**

The University in its statutes claims ownership of certain forms of [intellectual property](https://www.ox.ac.uk/students/academic/guidance/intellectual-property) that students create in the course of, or incidentally to, their studies, but generally does not claim ownership of copyright created by students. Unless IP has been signed over to a third party, and the student has solely created the IP and is not a member of staff, the student owns the IP they have created. However, it is expected that the student obtains permission from all co-authors for any paper that is included in the thesis. A [standard template](https://www.mpls.ox.ac.uk/files/graduate-school/statement-of-authorship-template-2018) is available for this purpose, which should be added at the end of each thesis chapter submitted as an article/paper. Most publishers request that students sign over copyright of any published material once published. Students should seek copyright permission from the publisher for any published work included in the thesis that isn’t published in an ‘open-access’ journal. Where the publisher owns the copyright, permission from collaborators/co-authors would not therefore be needed.

Any sections which are copied from any published materials must be referenced appropriately, otherwise the student would be plagiarising material, even if the student was the original author of this material. If sections of the student’s own papers are used without the appropriate references this will be considered as self-plagiarism.