

Basic details

UID		Cohorts covered	Earliest cohort 2025-26	Latest cohort
Long title	MRes Research Project			
New code	PHYS70050	New short title		
Brief description of module (approx. 600 chars.)	A nine-month research project is the largest core module of the MRes Photonics. You will work on a state-of-the-art problem within a research area of photonics, all embedded within a research group and under the guidance of research-active staff. You will agree a project through discussion with project supervisors at the start of the academic year .			
	352 characters			
Available as a standalone module/ short course?	N			

Statutory details

	ECTS	CATS	Non-credit	HECOS codes
Credit value	60	120	N	
FHEQ level	Level 7			

Allocation of study hours

	Hours	
Lectures	0	
Group teaching	0	Incl. seminars, tutorials, problem classes.
Lab/ practical	800	
Other scheduled	30	Incl. project supervision, fieldwork, external visits.
Independent study	670	Incl. wider reading/ practice, follow-up work, completion of assessments, revisions.
Placement	0	Incl. work-based learning and study that occurs overseas.
Total hours	1500	
ECTS ratio	25.00	

Project/placement activity

Is placement activity allowed?	Rarely
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Module delivery

Delivery mode	Taught/ Campus	Other	
Delivery term		Other	January to September (9 months)

Ownership

Primary department	Physics
Additional teaching departments	

Delivery campus South Kensington

Collaborative delivery

Collaborative delivery? N

External institution N/A
 External department N/A
 External campus N/A

Associated staff

Role	CID	Given name	Surname
Module Leader		Christopher	Dunsby

Learning and teaching

Module description

Learning outcomes	On completion of this module you will be able to: - appraise and interpret the scientific literature to critically review the background of a topic in a particular research area right up to the state-of-the-art, and synthesise this into a written report and associated oral presentation - design a research plan for addressing the problem being pursued - critically assess techniques appropriate to meeting the project's aims - carry out laboratory/computational/theoretical work at the state-of-the-art - evaluate the performance of different methods and their suitability for the problem studied - critique their work in the context of the research group in which the work was carried out and the wider research field - present, by both a written thesis and an oral presentation, on the research problem and work conducted for addressing the problem
Module content	The module will consist of supervised original research in an area of photonics. The students will complete an independent literature review to develop a full understanding of the background to their project work, and its research and development to its current standing. The main project work may be theoretical, laboratory based or computational and is supervised by a member of the academic staff.
Pattern of learning Learning and Teaching Approach	Students will work individually on a research-led project with increasing independence. Initial project choice is decided through discussion between the student and project supervisor. Project work begins at the beginning of term two and runs for 9 months (January to September). During this period students have regular meetings with the project supervisor giving students an opportunity to discuss progress and future plans.
Assessment Strategy	The module assessment is based on a written report on their interim literature review and an associated 15-minute presentation, followed by 5 minutes of questions, to the project's supervisor and an assessor. The final project thesis (dissertation) is submitted in September. The students also give an associated 15-minute presentation, followed by 5 minutes of questions, to the project's supervisor and assessor. Students will also receive formative feedback on a progress and future plans oral presentation (to their peers and the MSc Optics & Photonics students plus supervisor) which they give in July and which does not contribute to the overall mark of the module.

Feedback	Informal feedback will be provided to the students from their project supervisor(s) continuously through the duration of the project. Feedback is also provided to the formative progress and future plans presentation. Students will receive feedback from the supervisor on the structure of their thesis and on any specific areas that they wish to consult their supervisor on.
Reading list	A set of initial reading appropriate to the particular project will be provided by the supervisor.

Quality assurance

Office use only

Date of first approval		QA Lead	
Date of last revision	June 2023	Department staff	
Date of this approval		Date of collection	
Module leader	Christopher Dunsby	Date exported	
		Date imported	
Notes/ comments			

Associated modules

[illegible]

UID	Legacy code	Module title	Requisite type

Assessment details

Grading method	Numeric
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Pass mark

50%

Assessments

[illegible]