Imperial College London

Module Specification (Curricu

Basic details

UID		Cohorts covered (Earliest cohort)	2025-26
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 state-of-the-art problem within a research area of photonics, all embedded within and under the guidance of research-active staff. You will agree a project through project supervisors at the start of the academic year .		
Available as a standalone module/ short course?	N		

Statutory details

	ECTS	CATS	Non-credit	
Credit value	60	120	N	HECOS codes
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 assess*
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

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: - apprasise and interpret the scientific literature to critically review the backgound of a top research area right up to the state-of-the-art, and synthesise this into a written report and presentation - design a research plan for addressing the problem being pursued - critically assess techiniques 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 studie - critique their work in the context of the research group in which the work was carried out research field - present, by both a written thesis and an oral presentation, on the research problem and addressing the problem
Module content	The module will consist of supervised original research in an area of photonics. The stude independent literature review to develop a full understanding of the back ground to ther pr research and development to is current standing. The main project work may be theoretica or computational and is supervised by a member of the academic staff.
Learning and Teaching Approach	Students will work individually on a research-led project with increasing independence. Init decided through discussion between the student and project supervisor. Project work beg of term two and runs for 9 months (January to September). During this period students ha with the project supervisor giving students an opportunity to discuss progress and future
Assessment Strategy	The module assessment is based on a written report on their interim literature review and minute presentation, followed by 5 minutes of questions, to their peers, the MSc Optics a plus the project's superivor and other academic staff . The final project thesis (dissertation) is submitted in September.The students also give an minute presentation, followed by 5 minutes of questions, to their peers, the MSc Optics a plus the project's superivor and other academic staff . Students will also receive formative feedback on a progress and future plans oral present and the MSc Optics & Photonics students plus supervisor) which they give in July and wh contribute to the overall mark of the module.

Feedback	Informal feedback will be provided to the students from their project supervisor(s) continu duration of the project. Feedback is also provided to the formative progress and future pl Students will receive feedback from the supervisor on the structure of their thesis and on 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

Quality assurance

Date of first approval	
Date of last revision	June 2023
Date of this approval	
Module leader	Christopher Dunsby

Office use only

QA Lead	
Department staff	
Date of collection	
Date exported	
Date imported	

Notes/ comments	

Template version

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Latest cohort

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any specific areas

supervisor.

16/06/2017