Imperial College London

Module Specification (Curriculum Review)

Basic details

UID		Cohorts covered	Earliest cohort: 2024-25; Latest cohort:
Long title	Masters Research Project		
New code	PHYS70034	New short title	
Brief description of module *(approx. 600 chars.)*	A 4-month research project on a state-of-the-art problem within the area of optics and photonics. The project will encompass either a laboratory-based practical project, computational project or theoretical project, either within one of our research groups or with an industrial partner and under the guidance of research-active staff. You will be able to choose from a range of projects based on their interests and the background they have developed through their prior studies on the MSc.		
	491 characters		
Available as a standalone module/ short course?	N		

Statutory details

	ECTS	CATS	Non-credit		
Credit value	30	60	N	HECOS codes	
FHEQ level	Level 7				

Allocation of study hours

	Hours	
Lectures	0	
Group teaching	0	*Incl. seminars, tutorials, problem classes.*
Lab/ practical	400	
Other scheduled	20	*Incl. project supervision, fieldwork, external visits.*
Independent study	330	*Incl. wider reading/ practice, follow-up work, completion of assessments, revisions.*
Placement	0	*Incl. work-based learning and study that occurs overseas.*
Total hours	750	
ECTS ratio	25.00	

Project/placement activity

Is placement activity allowed?	Yes

Module delivery

Delivery mode	Taught/ Campus	Other	
Delivery term		Other	May to September (4 months)

Ownership

Primary department	Physics
Additional teaching departments	Projects in other departments or by external companies are possible
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: - 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 - present, by both a written thesis and an oral presentation, on the research problem and work conducted for addressing the problem
Module content	A research-led project in a chosen area of optics and photonics. This is a substantial, open-ended project which tackles an open problem in optics and photonics, or may make a significant, stand-alone contribute to a major research project within the department. It may be theoretical, laboratory based or computational in nature. The project is selected from topics offered by research staff, and is supervised by a member of research staff.
Learning and Teaching Approach	Students will work individually or in pairs on a research-led project with a high degree of independence. Initial project choice is decided through discussion between the student and project supervisor. Project work begins once students have completed their last examinations and runs for 4 months (May 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 is assessed by a written thesis (dissertation) that contributes 80% of the total mark. Each student submits their own individual dissertation. Students working on their own give a 15-minute presentation followed by 5 minutes of questions to the whole MSc class plus the project's superivor(s) and other academic staff that has a weight of 20%. Students supervised in pairs give a joint 23-minute presentation followed by 7 minutes for joint questions. Students will also receive feedback on a progress and future plans oral presentation (to the whole class plus supervisor) which they give approximately 1.5 months into their project 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. Formative feedback is also provided on the 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 2024	Department staff	
Date of this approval		Date of collection	
		Date exported	
Module leader	Christopher Dunsby	Date imported	
Notes/ comments			

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