Université Paris-Saclay

Share

Email destinataire :

Vous devez renseigner un email valide

Envoyer

Une erreur est survenue. Merci de réessayer ultérieurement

Le mail de partage a bien été envoyé.

Add to Compare

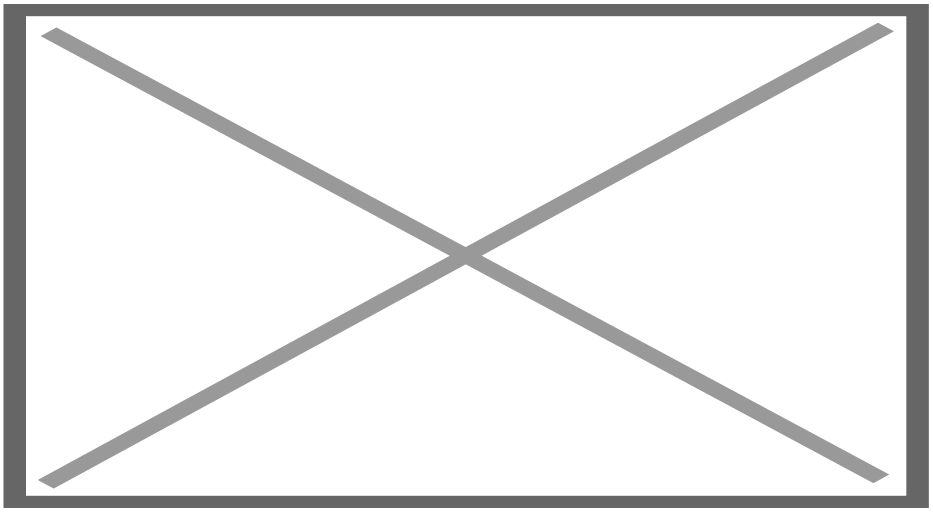
M2 Quantum, Light, Materials and Nano Sciences

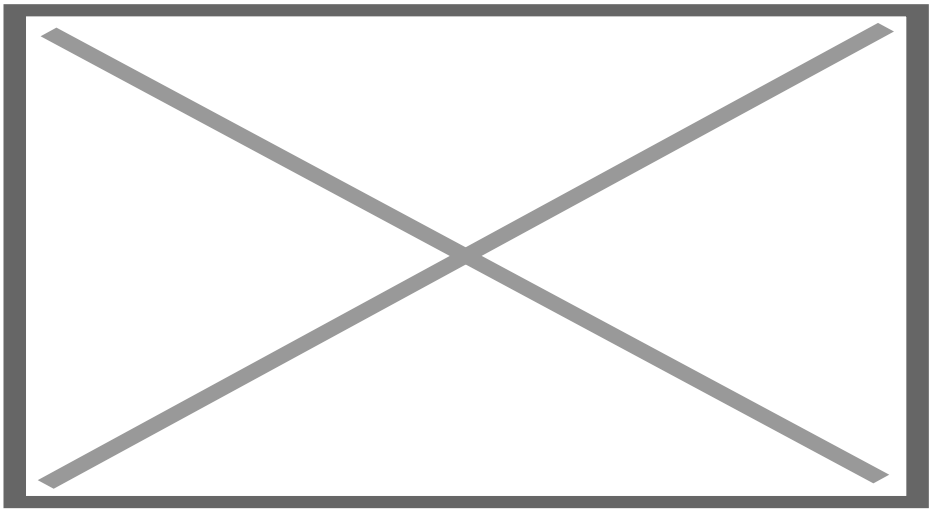
Master's degree
Specialisation Physique fondamentale et applications
Enrolment type
Formation initiale
Language(s) of instruction
English
French

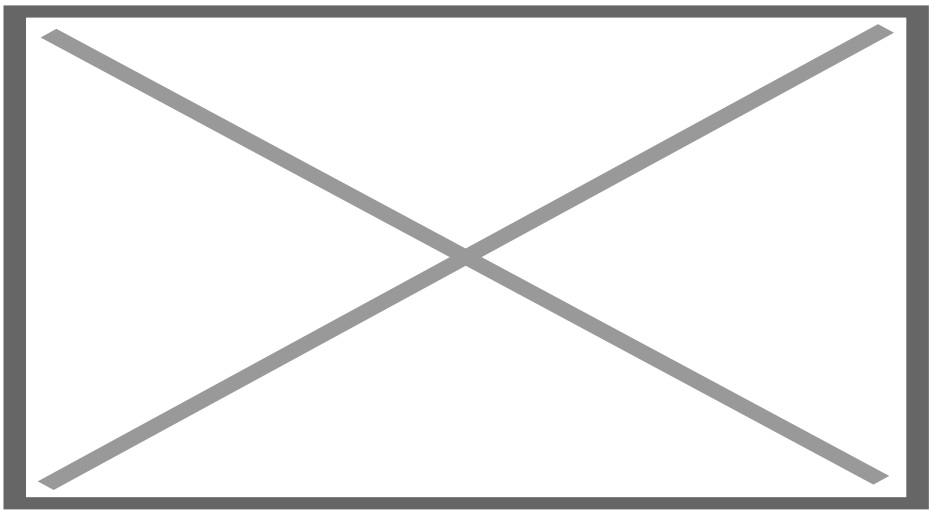
.

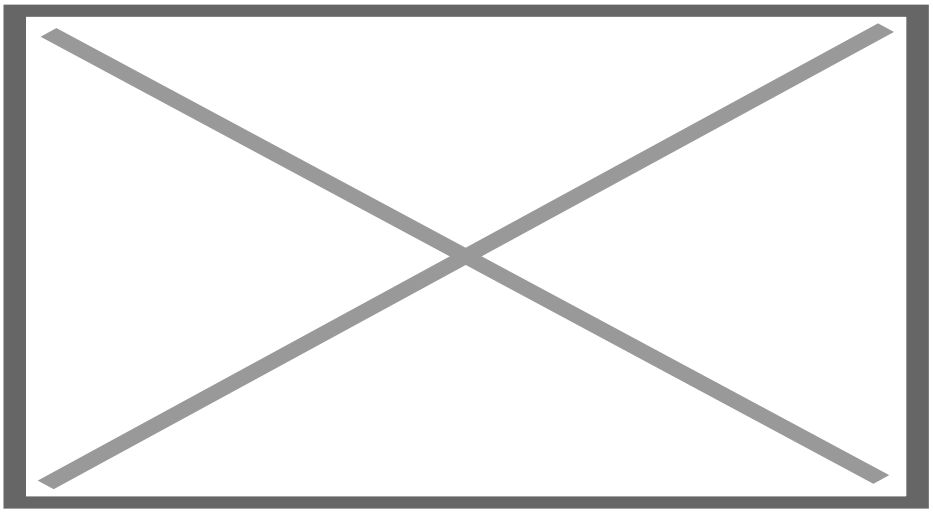
The M2 QLMN : Quantum, Light, Materials and Nano Sciences offers a specialization through three tracks with transversal courses addressing fundamental concepts, and courses more in relation to the chosen orientation: "Light and Matter", "Condensed matter and its interfaces" and "Nanodevices and Technologies" .

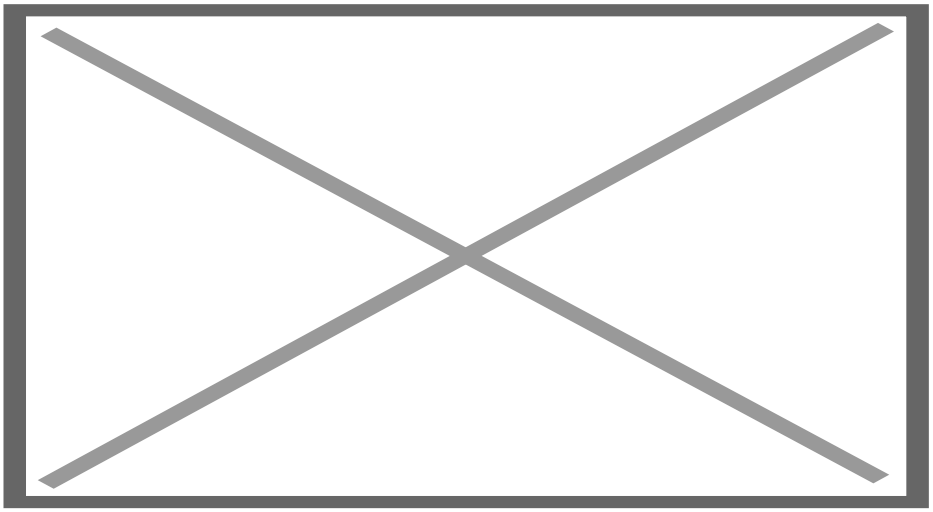
Télécharger la fiche détaillée
Apply Now











Information

- Overview
- Application requirements
- Schedule

Présentation

Skills

• Master and apply specialised knowledge, with the requisite scientific rigour, in the fields of quantum science and technology, light and radiation-matter interaction, condensed matter and nanoscience. • Be able to analyse a scientific article or presentation and understand its implications and limitations. • Draw on conceptual, methodological, numerical, technical and practical knowledge that can be used for modelling and solving problems in physics, engineering or their interfaces. • Create knowledge through a scientific approach. • Adapt to a new environment, work as part of a team and collaborate to achieve common goals. • Synthesise and communicate effectively and appropriately to the target audience.

Objectives

The M2 QLMN : Quantum, Light, Materials and Nano Sciences offers a specialization through three tracks with transversal courses addressing fundamental concepts, and courses more in relation to the chosen orientation:

- "Light and Matter" addresses the major fields of Physics in connection with light, diluted matter (atoms, molecules, solids, plasmas) and their interaction. It focuses on the quantum properties of media interacting with light.
- "Condensed matter and its interfaces" addresses the main fields of Physics related to condensed matter and its interfaces, from fundamental quantum properties to nanomaterials.
- "Nanodevices and Technologies" covers the fundamental courses in the different domains of nanosciences associated to advanced training in micro and nano fabrication techniques and experimental study of physical phenomena.

For each track, it is possible to address both theoretical and experimental aspects, ranging from fundamentals to a wide range of applications in domains as varied as quantum technologies, sources of intense radiation, nanoelectronics, biosciences, nanophotonics, spintronics, optoelectronics, functional materials, or image sciences…The internship, lasting at least 18 weeks, can be carried out in France or abroad.

Admission

Admission Route

Science and Technology

Capacity

Available Places

80

Target Audience and Entry Requirements

The required level is a first year of master in Physics, electrical engineering, or equivalent. This course is open to students from engineering schools wishing to take an M2 in the 3rd year.This program is also open to international students who have already validated an equivalent training.A good knowledge of basic physics (quantum mechanics, electromagnetism, statistical physics, …) is required.

Période(s) de candidature

Inception Platform

From 30/01/2026 to 10/07/2026

Supporting documents

Compulsory supporting documents

List of post-secondary school studies mentioning exclusively the year, course, institution, average grade and your grade or distinction.

Course selection sheet.

Copy of identity document.

Motivation letter.

All transcripts of the years / semesters validated since the high school diploma at the date of application.

Certificate of English level (compulsory for non-English speakers).

Curriculum Vitae.

Additional supporting documents

VAP file (obligatory for all persons requesting a valuation of the assets to enter the diploma).

Recommendation letters.

Supporting documents :
- Residence permit stating the country of residence of the first country
- Or receipt of request stating the country of first asylum
- Or document from the UNHCR granting refugee status
- Or receipt of refugee status request delivered in France
- Or residence permit stating the refugee status delivered in France
- Or document stating subsidiary protection in France or abroad
- Or document stating temporary protection in France or abroad.

Programme

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	dista lear cou
M2 QLMN- Track « Light and Matter" Core UE - Choice of 6 UE among 9	0	9	22,5	7,5					
M2 QLMN- Track « Light and Matter" Elective UE - Choice of 7 UE among 23	0	22	22,5	7,5					
M2 QLMN- Research Internship	0	1	22,5	7,5					

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	dist lear co
M2 QLMN- Track « Condensed Matter and its Interfaces" Core UE	0	2	22,5	7,5					
M2 QLMN- Track « Condensed Matter and its Interfaces" Elective UE - Choice of 5 UE	0	2	22,5	7,5					
M2 QLMN- Research Internship	0	1	22,5	7,5					

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	c l
M2 QLMN- Track « Nanodevices and Technologies" Core UE	0	2	22,5	7,5					
M2 QLMN- Track « Nanodevices and Technologies" Electives UE - Choice of 2 among 8	0	8	22,5	7,5					
M2 QLMN- Research Internship	0	1	22,5	7,5					

Teaching Location(s)

ORSAY
PALAISEAU

Contact

- **Pierre SENEOR**

  PR
- **Rosa TUALLE-BROURI**
- **Sylvia MATZEN**

http://www.universite-paris-saclay.fr/formation/master/physique-fondamentale-et-applications/m2-quantum-light-materials-and-nano-sciences-site-orsay