Université Paris-Saclay

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Add to Compare

M2 Radiophysique Médicale

Master's degree

Specialisation Physique fondamentale et applications

Enrolment type

Formation initiale

Formation continue

Language(s) of instruction

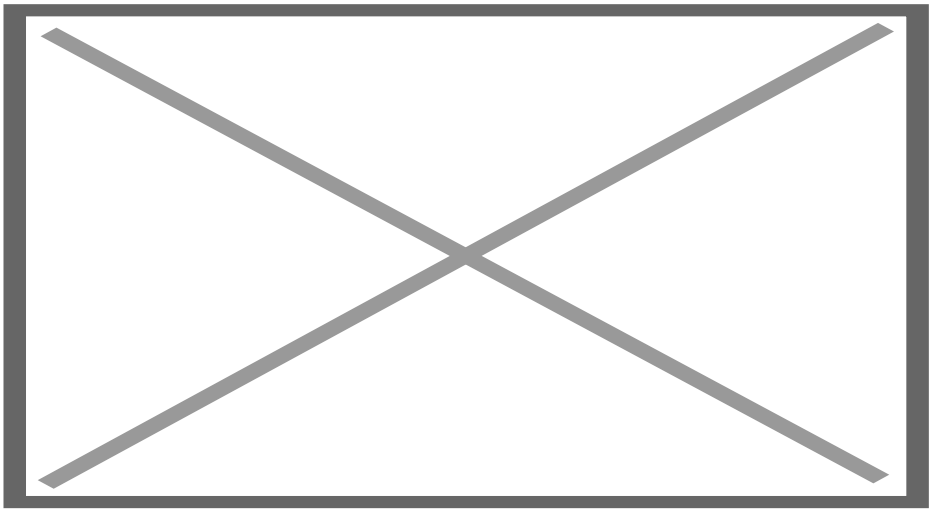
French

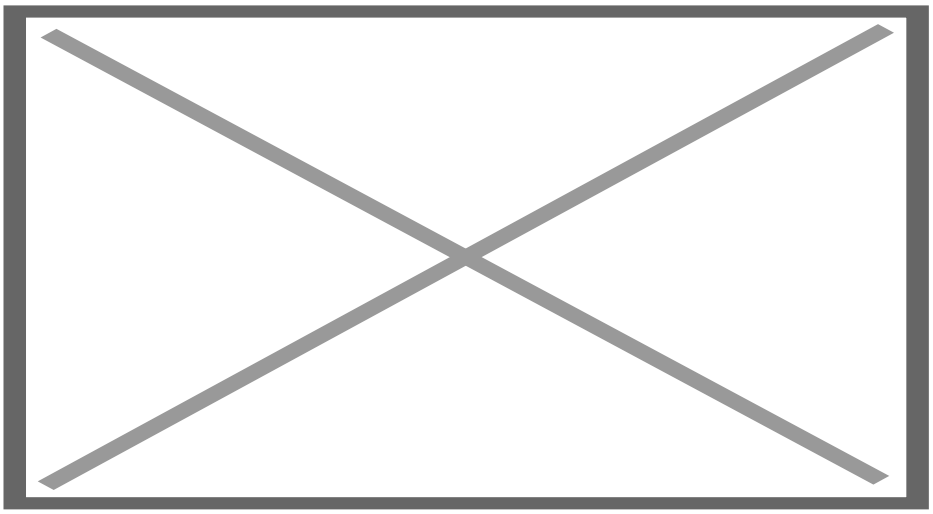
The Master’s Degree (M2) in Medical Radiophysics trains specialists in the field of physics applied to medicine, with a particular focus on the use of ionizing radiation for diagnostic and therapeutic purposes. This program, which combines theoretical courses, tutorials, practical sessions, and internships in laboratories, industry, or hospitals, prepares students for both academic and applied research, and is a prerequisite for the professional training of medical physicists.

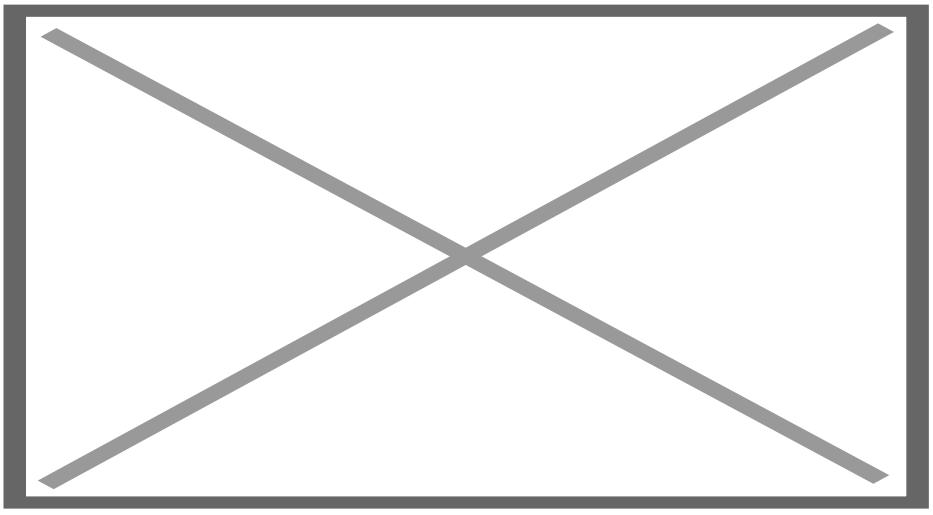
The first semester begins with core courses in medical physics: radiation–matter interactions, the physical principles of medical imaging and radiotherapy, medical image processing and quantification, as well as modeling and stochastic simulations. These modules aim to bridge theory and practice while developing transverse skills such as scientific rigor, critical thinking, work organization, and teamwork through group projects. Practical sessions further strengthen programming and modeling skills. Two additional courses in radiobiology and radiation protection complete the semester. In the second semester, a dedicated module focuses on research methodology, including written and oral communication and professional English, along with an introduction to artificial intelligence applied to medicine. The program concludes with a six-month internship.

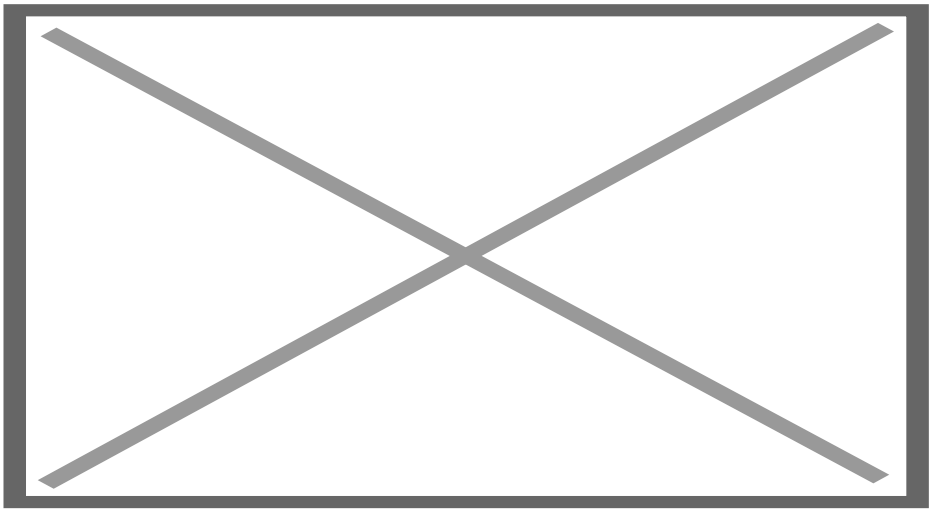
Télécharger la fiche détaillée

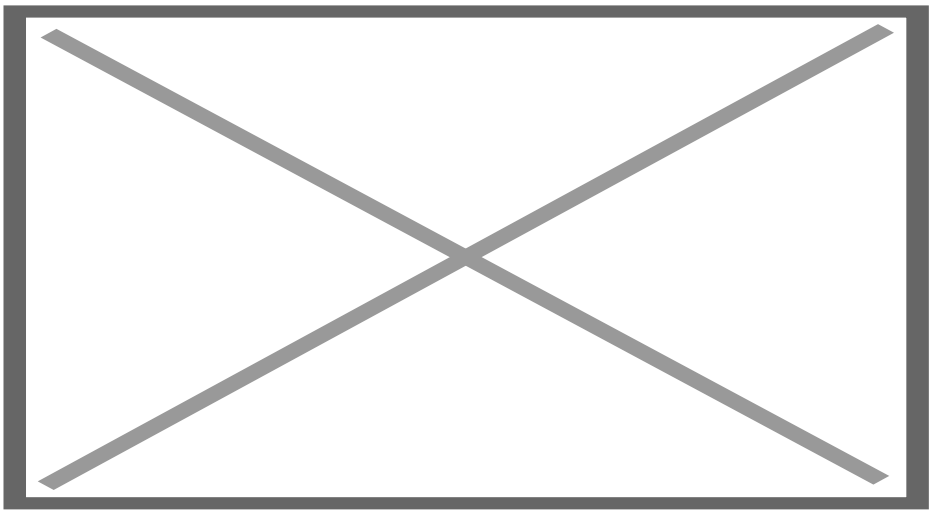
Apply Now











Information

- Overview
- Application requirements
- Schedule

Présentation

Objectives

Acquire the essential scientific knowledge in medical physics, namely: radiation–matter interactions, the physical principles of medical imaging, medical image processing and quantification, radiotherapy physics, the mathematical foundations of Monte Carlo simulations, radiobiology, radiation protection, and artificial intelligence.

Admission

Capacity

Available Places

25

Période(s) de candidature

Inception Platform

From 15/03/2026 to 15/06/2026

Supporting documents

Compulsory supporting documents

Motivation letter.

Letter of recommendation or internship evaluation.

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

Curriculum Vitae.

Additional supporting documents

Document at your convenience.

Certificate of French (compulsory for non-French speakers).

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

Recommendation letters.

Document indicating the list of local M2 choices available here : https://urlz.fr/i3Lo.

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	distan learni cour
mise à niveau en médecine	1	Semestre 1							

Charger le détail

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practica class
Bases méthodologiques de l'imagerie médicale	6	Semestre 1						

Charger le détail

Interactions rayonnement-matière	4	Semestre 1	28	11	8			

Charger le détail

Quantification en imagerie médicale	4	Semestre 1	25		6			

Charger le détail

Modélisation et simulations aléatoires	4	Semestre 1	24	3	12			

Charger le détail

Dosimétrie fondamentale et physique de la radiothérapie	6	Semestre 1	44.5	4	3			

Charger le détail

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class
Radiobiologie	2	Semestre 1	20		6			

Charger le détail

Radioprotection	3	Semestre 1	15	3	3.5			

Charger le détail

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	di le
Introduction à l'intelligence artificielle	2	Semestre 2							
Charger le détail									
Méthodologie de la recherche scientifique	3	Semestre 2							
Charger le détail									
UE libre S2	3	Semestre 2							
Charger le détail									

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	distan learni cours
Stage	25	Semestre 2							
Charger le détail									

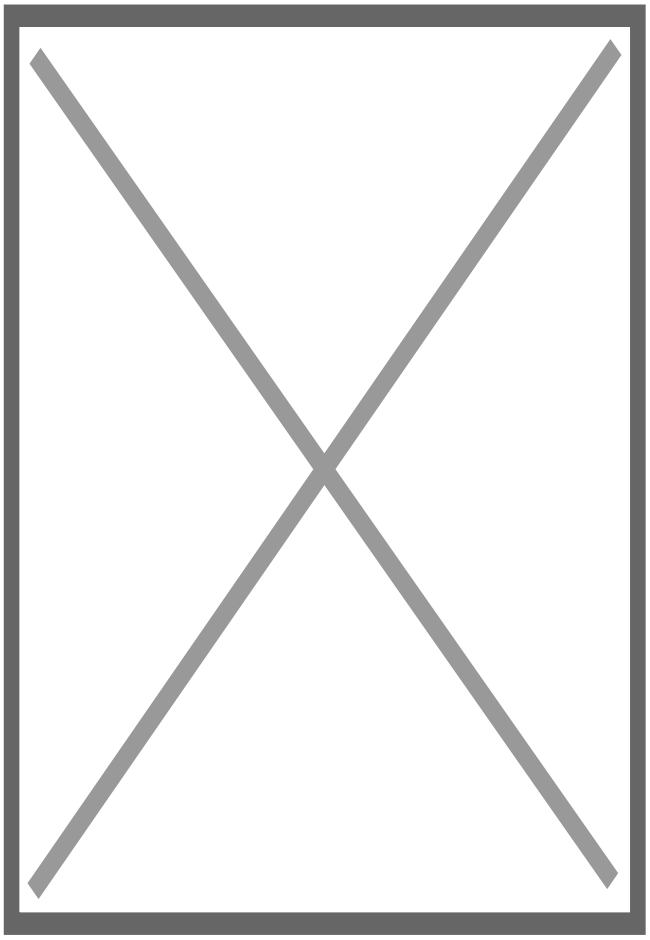
Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	distan learni cours
Semaine révisions DQPRM	0	Annualisé	24						
Charger le détail									

Teaching Location(s)

ORSAY
SACLAY
LE KREMLIN BICETRE

Training campus

Javascript est requis pour visualiser cette carte.



Kremlin-Bicêtre

Kremlin-Bicêtre
Bus 125, 186, 323
Métro 14 Hôpital Bicêtre
Voir
Student restaurant (CROUS)

Contact

- **Charlotte ROBERT**
- **Erika Porcel**
- **Cecilia COLETTA**

http://www.universite-paris-saclay.fr/formation/master/physique-fondamentale-et-applications/m2-radiophysique-medicale