

## **Graduate Program in Physical Sciences (PCF)**<sup>1</sup>

## **Doctorate in Science (Physics)**

# Instructions for the Call for Admissions for entry in the 2025-1 semester, which begins on August 5, 2024.

#### **OFFER**

The Doctorate in Science (Physics) at the National Autonomous University of Mexico (UNAM), which is the subject of this call, is taught in a face-to-face mode and lasts 8 semesters (full time), including graduation.

It is offered in the following fields of knowledge:

- Quantum, Atomic and Molecular Physics
- High Energy Physics, Nuclear Physics, Gravitation and Mathematical Physics
- Statistical Physics and Complex Systems
- Medical and Biological Physics
- Condensed Matter and Nanosciences
- Continuous Media
- Optics and Photonics

NOTE: The Program requires from its students the commitment and dedication to graduate within the time frame established in the curriculum.

#### STAGES OF THE SELECTION PROCESS

IMPORTANT: Before starting your registration, you must read completely and accept the terms and conditions of the Call for Admissions and these Instructions, which will be understood to have been accepted by you at the moment you register in the admissions process

The selection process includes four serial stages:

**STAGE 1.** Registration of applicants and submission of documentation online through the system of UNAM's General Directorate for School Administration (DGAE).

**STAGE 2.** Selection process conducted by PCF's Academic Committee.

STAGE 3. Publication of results (on Registration of applicants for graduate studies at UNAM).

STAGE 4. Delivery of physical documents to DGAE, for enrollment

<sup>&</sup>lt;sup>1</sup> The following nine academic entities within UNAM are co-responsible for the studies taught in the Program: School of Sciences, Institute of Astronomy, Institute of Applied Sciences and Technology, Institute of Physical Sciences, Institute of Nuclear Sciences, Institute of Physics, Institute of Materials Research, Institute of Renewable Energies, Centre for Nanosciences and Nanotechnology

#### **DESCRIPTION OF THE FOUR STAGES**

Before you begin your registration, you should read the curriculum of the Doctorate in Science (Physics), available at http://www.posgrado.fisica.unam.mx and make sure that you meet the administrative and academic requirements, and fulfill for each the necessary specifications

STAGE 1. Registration of applicants and uploading of documentation online through the system of the General Directorate for School Administration (DGAE).

1.A. Registration of applicants: you must enter the webpage for Registration of applicants for graduate studies at UNAM (<a href="https://posgrado.dgae.unam.mx/ingreso">https://posgrado.dgae.unam.mx/ingreso</a>). The registration system will be open from 10:00 am on Monday January 29 to 7:00 pm on Monday February 12, 2024 (Mexico Central Time).

### Considerations for registration on the page Registration of applicants for graduate studies at UNAM

- It is **important** that you personally carry out the registration and procedures requested in these instructions. Avoid omissions or inconsistencies, as **no later changes will be allowed** in the fields or data marked as "required" on the applicant registration page.
- Registration is done online, and the page will be open **24 hours** a day, so distance or time are not an impediment for you to personally register.

# 1.B. Uploading of documents online: Begins at 10:00 a.m. on Monday January 29 and ends 7:00 pm on Monday February 12, 2024 (Mexico Central Time).

- It is necessary to have the **requested documents (see tables 1 and 2)** at hand and in good physical condition to scan them and upload them to the system, in PDF format, and of a size not exceeding 4 *Megabytes* (MB). They should be scanned on both sides if necessary, be legible and understandable for the review of your record, taking care to place them in the corresponding section. Please check that the text of the documents you upload is not too dark or faint. If it is a document of more than one page, they should all be part of the same file. Do not scan the pages separately.
- In the **Basic Information** section, upload your recent and formal photograph, in jpg or png format and no larger than 1.5 MB, in frontal view, in color, with a white background (it does not have to be from a photo studio). The photograph is essential to conclude your registration.
- The system allows you to enter as many times as necessary to make changes in your registration or documentation, within the period from 10:00 am on January 29 to 7:00 pm on February 12, 2024, as long as you only log out and do not terminate your registration by clicking on the Send application button ("Enviar solicitud").
- To conclude your registration, you must click on the **Send application** button ("Enviar solicitud"). Once sent, print your **proof of registration** ("Comprobante de registro") and, finally, close your session in the system. (If you do not see the button *Send application* to print the proof of submission, check that the fields or data to be filled, as well as the documents to be uploaded to the system, are complete.)

- It is important that you consider the time it will take to complete your registration and upload the documentation into the system. Consider that if you register in the last minutes of the last day, the system may become saturated due to the high demand of applicants. Once the period and time has concluded, the system will automatically close, preventing you from carrying out any further actions, and you will not have another opportunity to complete it later.
- The Admissions Call is published with enough time in advance so that you can have your complete documents.
- All documents requested must be uploaded to the system during the established period and time, unless
  a different date is explicitly indicated for some document. Submitting the documents does NOT
  guarantee your continuity in the selection process.

You can consult the registration procedure for applicants, in the Instructions section of the page <a href="https://posgrado.dgae.unam.mx/ingreso">https://posgrado.dgae.unam.mx/ingreso</a>

**Table1. Administrative documents** 

Documents	Additional considerations
1. Birth certificate*.	If you are admitted into the program, your birth certificate will have to have been issued no more than
	6 months prior to your enrollment date.
2. Updated CURP (national individual identification number), in letter size sheet, using only one side	For foreign applicants, the CURP is not necessary at the time of registration. If you are accepted, you will
of the sheet (not dark or too light, nor blurred; the	be able to obtain this document after entering the
text must be fully legible). The CURP obtained	country. See:
online is admissible.	http://www.saep.unam.mx/static/ayuda/manual_tra
	mite_curp.pdf
<b>3. Original, current official identification,</b> where the	Accepted identification for foreigners: current
text and photograph are completely legible	passport or FM immigration form.
(accepted identifications: passport, driver's	
license, voter registration card, national military service card or professional certificate).	
4. Master's Degree Diploma*, or certificate of final	
master's degree examination, in physics or in a	
discipline within the Physical-Mathematical	
Sciences and Engineering related to the	
knowledge fields of the doctoral program.	
- Applicants who completed their Master's at	
UNAM will be able to enroll with their	
certificate of the degree examination (acta de	
examen de grado), with a "pass" result.	
- Applicants who completed their Master's at	
other institutions will be able to enroll with	
the official certificate* that proves their	
Master's diploma is in the process of being	
issued.	

Documents	Additional considerations
Scan both sides (front and back) in a single letter-	
sized PDF file.	
5. Final Master's Degree Transcript* in physics or in a discipline within the Physical-Mathematical Sciences and Engineering related to the knowledge fields of the doctoral program, with an grade average equal to or higher than 8.0 (eight point zero on a scale of 0 to 10), certifying 100% of the credits covered, courses taken, grades obtained in each of these, overall average, and photograph. Under no circumstance will you be allowed to enter with a lower average.	If you carried out your studies outside of Mexico, you must attach the certificate of equivalence of the general grade average, issued by UNAM's General Directorate of Incorporation and Revalidation of Studies (DGIRE).  Consult the website: <a href="https://www.dgire.unam.mx/webdgire/equivalencia-de-promedio/">https://www.dgire.unam.mx/webdgire/equivalencia-de-promedio/</a>
When the transcript does not indicate the average, the applicant must additionally attach an official certificate of average issued by the institution of provenance.	The procedure is personal and independent of the admission process, and must be requested far in advance of enrollment.

<sup>\*</sup> In case you are admitted into the program, if your documents 1, 4 and/or 5 of Table 1 have been issued in a country other than Mexico, then, for their submission in STAGE 4, you must get for each of them the corresponding apostille or legalization. If they are written out in a language other than Spanish, they must additionally be accompanied with an official translation by an accredited Mexican expert translator. No exceptions will be allowed, nor will commitment letters be issued to allow delivery of documents at a later date.

- Apostille. Documents issued in the countries that are part of the Hague Convention.
- Legalization. Documents issued in other countries that are not part of the Hague Convention. Legalization is done at the Ministries of Education and Foreign Affairs of the country, as well as by the Mexican Embassy or Consulate in the location of issue.
- Guide for apostille, legalization and translation

https://posgrado.dgae.unam.mx/static/ayuda/guia apostille aspirantes.pdf

NOTE: If admitted, the documents in Table 1 will be physically delivered in STAGE 4, Delivery of physical documents to DGAE, on the date and time that will be indicated to you at the Registration of applicants for graduate studies at UNAM website (<a href="https://posgrado.dgae.unam.mx/ingreso">https://posgrado.dgae.unam.mx/ingreso</a>). No exceptions will be allowed, nor will commitment letters be issued to allow delivery of documents at a later date. The documents must be legible and in good condition, with no mutilations, erasures, amendments, deterioration or alterations that would prevent legal certainty of their validity

**Table 2. Academic documents** 

Documents	Additional considerations
1. Updated Curriculum Vitae (without supporting	Applicants who are not native Spanish speakers can
documentation).	submit their CV in English.
2. In the case of having it at the time of registering,	Additionally, if they have it already, non-native
certificate of text comprehension in the English	Spanish-speaking foreign applicants must upload
language, issued by UNAM's National School of	proof of their mastery of Spanish, equivalent to or
Languages, Linguistics and Translation (ENALLT), by	above B1 level of the Common European Framework
another language center within UNAM, by	of Reference for Language (CEFR), issued by UNAM's
institutions with agreements with ENALLT, or some	Learning Center for Foreigners (CEPE, Centro de
instance deemed to be equivalent by PCF's	Enseñanza para Extranjeros) or organisms with which
Academic Committee.	

<sup>\*\*</sup> If you are admitted into the program, you must submit the missing documentation at STAGE 4.

Documents	Additional considerations
In the case of institutions external to UNAM, the certificate must be equivalent to level B1 of the Common European Framework of Reference for Languages.	UNAM has agreements of academic collaboration for this purpose. Consult in advance procedures at: <a href="https://www.cepe.unam.mx/certificaciones/exeleaa">https://www.cepe.unam.mx/certificaciones/exeleaa</a> )  Note: If you are admitted, it will be a requirement for
<b>Note:</b> If you are admitted, it will be indispensable to have the certificate with the indicated characteristics.	enrollment to have the Spanish Language Certificate with the indicated characteristics.
3. Academic Certificate of Sufficiency in Research <sup>2</sup>	If you do not yet have this certification, you must instead upload the "proposal" (proposed project to be developed) in the field of knowledge of their interest with the approval of the prospective tutor (see item 6 below), to follow the process as described in Stage 2. Non-Spanish-speaking foreign applicants can submit this and related documents in English.
<ol> <li>Cover letter for the application, addressed to PCF's Admissions Subcommittee.</li> </ol>	In the format available at www.posgrado.fisica.unam.mx/aspirantes#DCFE. Non-Spanish-speaking foreign applicants can submit the letter in English.
5. Two academic letters of recommendation. Addressed to the Admissions Subcommittee.	You must supply each recommender with PCF's email address, pcf@posgrado.unam.mx, in order for him to directly send his letter to us in the format available at www.posgrado.fisica.unam.mx/aspirantes#DCFE. In DGAE's online system, you must only upload simple statements where the recommenders commit to writing a recommendation for you, using the format also available on the same webpage. Non-Spanish-speaking recommenders can submit their letter in English.
6. <b>Proposal of a project</b> to be developed in the field of knowledge of your interest, with the signed approval of your prospective advisor (see the description in Stage 2).	To arrive at this proposal (and the subsequent protocol, described below in Stage 2), you ought to contact your prospective advisor ahead of time. See <a href="CASIGuidelinesForApplicants23-2.pdf">CASIGuidelinesForApplicants23-2.pdf</a> (unam.mx) Your prospective advisor must be authorized as a doctoral advisor for new incoming students in PCF's Advisor Roster, available at <a href="http://www.posgrado.fisica.unam.mx/PadronTutores">http://www.posgrado.fisica.unam.mx/PadronTutores</a> If this is not the case, then she/he must request this authorization to PCF's Academic Committee (Rule 41 of the Operating Rules of PCF), and consideration of

<sup>&</sup>lt;sup>2</sup> The goal of the process of academic certification is to evaluate the knowledge of the applicant in basic physics and in the corresponding field of specialty (knowledge field), such that she or he is able to understand and analyze in depth the topic that is proposed as the initial doctoral research project. To this aim, she or he will prepare a write-up centered on a current research topic, to be defended later in an oral exam (see Stage 2). The chosen topic must have the approval of the prospective Doctoral Advisor. In the oral exam, the jury will consider the clarity and organization of the presentation, and will appraise the potential of the applicant for carrying out doctoral-level research.

Documents	Additional considerations	
	your application will be conditioned on her/his	
	success. You can only be admitted if your prospective	
	advisor still has slots available to take on new	
	students, according to PCF's Rule 45.	
	A student who has already obtained the Academic	
	Certification of Sufficiency in Research (CASI) does not	
	need to submit a proposal.	
	Non-Spanish-speaking foreing applicants can submit	
	the proposal and related documents in English.	

#### **CLARIFICATIONS AND QUESTIONS:**

- With respect to administrative documents, or problems with DGAE's online registration system for graduate applicants (https://posgrado.dgae.unam.mx/ingreso), see FAQ at https://posgrado.dgae.unam.mx/ingreso/frequent\_questions, once you have logged in, and thereafter please contact the telephone number: (52-55) 56 23 23 00, at extensions 37065. The hours of operation will be Monday through Friday (working days) from 9:30 to 14:30 and from 17:00 to 18:00 (Mexico central tiime). Zoom sessions will be held every other day, announced in the FAQ section between 10:00 and 14:30.
- With respect to the documents in Table 2, please communicate with PCF via email, at pcf@posgrado.unam.mx. Hours of operation will be Monday to Friday (working days) from 10:00 to 15:00 (Mexico central time). Due to the large number of emails received, we will ordinarily not be able to reply before 1-2 working days.

#### STAGE 2. SELECTION PROCESS CONDUCTED BY PCF'S ACADEMIC COMMITTEE.

You ought to bear in mind that, at any stage in the process, your participation may be terminated if you do not meet the requirements or procedures described in these Instructions or in the webpages here provided.

The Academic Committee, in the context of the corresponding Call for Admissions, and with the purpose of verifying that the applicant meets the required entrance profile, will review the applicant's file, determining whether she/he must cover any pre-requisites prior to being considered further, in the form of courses of PCF's Master of Science (Physics), or the fulfillment of other academic activities, which will have no value in credits.

Applicants graduating from the PCF's Master of Science (Physics) will be exempt from covering prerequisites, provided that no more than two years have elapsed since their graduation. If this is not the case, the Academic Committee will review your case and determine if you must undertake pre-requisites, in the form of courses in the Master's program, or the fulfillment of other academic activities that the Academic Committee deems to be necessary.

After March 11, 2024, PCF will publish the list of applicants who continue in the admissions process, at: Registration of applicants for graduate studies at UNAM website (https://posgrado.dgae.unam.mx/ingreso). To consult your status, you must have at hand your assigned application number ("folio"), which can be found in the proof of registration.

The admission exam is based on obtaining the Certificate of Sufficiency in Research (CASI). You must consult the detailed guidelines for this exam, available in the second-to-last paragraph http://www.posgrado.fisica.unam.mx/aspirantes#DCFE. As a first step, at the moment of online registration (deadline February 12, 2024), you must upload a short "proposal" for the project to be developed in the field of knowledge of your interest, which will subsequently be written up as a longer "protocol" that will be evaluated by the corresponding jury. Your proposal must include the signed approval of your prospective advisor, belonging to the PCF's roster of doctoral advisors, with a slot available to take you on as a new student (as defined in PCF's Rule 45). This proposal will consist of a 1-2 page summary containing the title of the topic, a brief summary, general objectives and a short bibliography with about 5 references on the topic. The Admissions Subcommittee will review the proposed project and approve or reject it, or provide feedback as necessary.

From **April 1 to 5, 2024**, you must **email to** pcf@posgrado.unam.mx **a pdf file with the written research protocol** for the project approved by the Admissions Subcommittee, taking into account any recommended changes.

Your *protocol* will be presented to the jury in a write-up 8-10 pages long, with the signed approval of your prospective advisor, belonging to the PCF's register of doctoral tutors, describing the research project of a current topic in physics in the selected field of knowledge, in a project capable of leading to a published and indexed research paper.

The *protocol* must contain at least the following elements: Title, Background and justification (supported by an wide bibliographic search that shows as clearly as possible the state of the art of the research topic), Objectives, Strategy of the research proposal, and Bibliography. The write-up must evidence the feasibility of developing the research project (here it will be very important to consider the coherence, foundations and originality of the project).

At the beginning of the *protocol*, the applicant should indicate the 2 specific Introductory Courses on which the jury will center its evaluation of your understanding of the selected field of knowledge.

From May 6 to 21, 2024, at a time that will be later notified to you by email, you must present and defend the project in an **oral examination**, which will include as well the evaluation of the essential ideas of two graduate-level courses related with the project. The vast majority of oral exams will be applied online. If your location and your jury's makes it feasible, the exam could be scheduled in person.

The oral presentation should be short and concise (20-25 minutes). It should reflect the elements of the written protocol mentioned above. It should clearly illustrate the state of the art and the contribution that you are proposing to advance research on the proposed topic. The foundations of the research project that you wish to carry out should be clearly stated in this part. For more details on the overall procedure, download from <a href="https://www.posgrado.fisica.unam.mx/aspirantes#DCF">www.posgrado.fisica.unam.mx/aspirantes#DCF</a> the exam Guidelines (you will find one version for you as an applicant, and another for your prospective advisor). The presentation, interrogation and oral reply must not exceed 2 hours.

In case you wish to request a deferral to take the entrance exam the following semester, you may do so up to **April 5, 2024 at the latest**, by sending an informal letter with your signature, in pdf, eto <a href="mailto:pcf@posgrado.unam.mx">pcf@posgrado.unam.mx</a>

#### STAGE 3. PUBLICATION OF RESULTS.

On Tuesday June 11, 2024 the results of the admissions process will be published on registration system for graduate applicants (<a href="https://posgrado.dgae.unam.mx/ingreso">https://posgrado.dgae.unam.mx/ingreso</a>) in the section of applications ("Solicitud(es) de ingreso").

### STAGE 4. DELIVERY OF PHYSICAL DOCUMENTS TO DGAE, FOR ENROLLMENT.

Once you have been admitted by PCF, you must enter on June 26, 27 and 28, 2024 to the page Registration of Applicants for Graduate Studies at UNAM (https://posgrado.dgae.unam.mx/ingreso), in the section of applications ("Solicitud(es) de ingreso"), select the program where you were accepted, and download the appointment for document delivery ("Cita para entrega documental"), which contains the specifications for the physical delivery of documents for enrollment in the graduate program. It will take place between July 29 and August 2, in accordance with the assigned appointment.

Admitted applicants must carry out the enrollment process in accordance with the Enrollment Instructions that will be published on the PCF's website (http://www.posgrado.fisica.unam.mx/)

### The beginning of the semester will be on August 5, 2024

In accordance with the provisions of Article 8, section III of the General Regulations for Graduate Studies, those who have not completed the corresponding procedures and submitted the established documentation, iwill be deemed **not to have fulfilled the requirements** to enter the graduate program.

#### Notes:

- A. **WE WILL SEND YOU PERSONALIZED INFORMATION OR REMINDERS.** Therefore, you must be aware of your e-mail and possible changes in all information related admissions on PCF's website.
- B. The dates and sites indicated in this call for admissions are subject to adjustments due to events beyond PCF's control.
- C. We will not provide you with any information or feedback on your performance in the admissions process.
- D. Applicants who are accepted and officially enrolled are required to know the **Doctorate in Science** (Physics) Curriculum and the Operational Rules of the Program, as well as the University Legislation.
- E. If you are a foreign applicant and are accepted, you must comply with the immigration provisions for your internment and stay in Mexico, the renewal of your immigration document (www.gob.mx/tramites), as well as submit your Mexican identification number (CURP) to DGAE.
- F. UNAM will not issue *ad hoc* documents during any of the stages of the the selection process, including those that are required for academic, administrative or immigration processes.
- G. Once admitted, your enrollment in the Doctorate in Science (Physics) will be conditional on the review of your documentation by DGAE.
- H. Admission to PCF's Doctorate program does not guarantee the granting of a scholarship or any other form of economic support.
- I. Non-working: December 1, 2023; February 5, March 18, 25 to 29; May 1, 10 and 15, 2024.
- J. Administrative holidays: December 18, 2023 to January 5, 2024 and July 1 19, 2024.
- K. See the privacy notice at <a href="https://www.dgae.unam.mx/aviso\_privacidad.html">https://www.dgae.unam.mx/aviso\_privacidad.html</a>

#### Calendar

ACTIVITY	<b>DATE AND TIME</b> (Mexico Central Time)	PLACE
<b>Stage 1.</b> Registration of applicants and uploading of documentation.	From January 29 to February 12, 2024 at 7:00 pm	https://posgrado.dgae.unam.mx/ingreso
Stage 1. Listo f applicants who meet administrative requirements	March 11, 2024 at 4:00 pm	http://www.posgrado.fisica.unam.mx/
Stage 2. Admission exam, written part (submission of the written research protocol)	From April 1 to 5, 2024	By email: pcf@posgrado.unam.mx

ACTIVITY	DATE AND TIME (Mexico Central Time)	PLACE
Stage 2. Admission exam, oral part	May 6 to 21, 2024 The schedule will announced later via email	UNAM or online
<b>Stage 3.</b> Publications of results	Tuesday June 11, 2024	https://posgrado.dgae.unam.mx/ingreso
Stage 4. Consult and download the specifications for the physical delivery to DGAE of enrollment documents	From June 26 to 28, 2024	https://posgrado.dgae.unam.mx/ingreso
Beginning of semester 2025-1	August 5, 2024	

# ANY SITUATION NOT FORESEEN IN THIS CALL FOR ADMISSIONS WILL BE RESOLVED BY THE ACADEMIC COMMITTEE OF THE GRADUATE PROGRAM IN PHYSICAL SCIENCES (PCF)

#### THE SELECTION PROCESS AND THE RESULTS WILL BE UNAPPEALABLE

Program or entity: Institute of Physics

Address: Circuito de la Investigación Científica s/n, Ciudad Universitaria, 04510, Mexico City

Opening hours: Monday to Friday from 9:00 to 14:00

Phones: (52) 55 56 22 51 34 and 56 23 70 16

Emails: pcf@posgrado.unam.mx

Website: <a href="http://www.posgrado.fisica.unam.mx">http://www.posgrado.fisica.unam.mx</a>

Institute of Renewable Energies

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Universidad Av. s/n, Col. Chamilpa, Cuernavaca, Morelos, 62210, Mexico.

E-mail address: <a href="mailto:secacademica@icf.unam.mx">secacademica@icf.unam.mx</a>

"FOR MY RACE SHALL THE SPIRIT SPEAK"
Approved by the Academic Committee on Octuber 16, 2023.

ACADEMIC COMMITTEE OF THE GRADUATE PROGRAM IN PHYSICAL SCIENCES