

Graduate Program in Physical Sciences¹ PhD in Science (Physics)

Instructions for the Call
for admittance in the 2021-2 semester, which begins on February 15, 2021.

OFFER

The PhD in Science (Physics), which is the subject of this call, is taught in a face-to-face mode and lasts 8 semesters (full time), including graduation.

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 Material 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 you start the registration, you must read completely and accept the terms and conditions of the Call and these Instructions.

The selection process includes four serial stages:

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

STAGE 2. Selection process of the Academic Program Committee

STAGE 3. Publication of results (on the Program website)

STAGE 4. Submission of documents to the DGAE.

¹ The following academic entities 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 PhD in Science (Physics), and make sure that you meet the administrative and academic requirements requested and comply with the specifications required in each one.

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

1.A. Registration of applicants: you must enter the page **Registration of applicants for the graduate program of the UNAM** (<https://posgrado.dgae.unam.mx/ingreso>) from **10:00 am** on **August 26** to **7:00 pm** on **September 9, 2020** (Mexico Central Time).

Considerations for registration on the page *Registration of applicants for the graduate program at UNAM*

- It is **important** that you personally carry out the registration and procedures requested in these instructions. Avoid omissions or inconsistencies, as **there will be no changes** 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 register in person.

1.B. Submission of documentation online: Begins at **10:00 a.m.** on **August 26** and ends at **7:00 p.m.** on **September 9, 2020** (Central Mexican 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 front, 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 **August 26** to 7:00 pm on **September 9, 2020 as long as you only log out and do not terminate your registration by clicking on the *Send request* button.**
- To conclude your registration, you must click on the **Send request** button. Once sent, print your **proof of registration** and, finally, close your session in the system (if you do not see the button *Send application* to print the proof, 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 send 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 demand of applicants. **Once the period and time has**

concluded, the system will automatically close, preventing you from carrying out any management, and you will not have another opportunity to complete it later.

- The Call is published with enough time in advance so that you can have your documents complete.
- All documents requested must be uploaded to the system during the established period and time, unless a different date is expressly indicated for any 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, on the page <https://posgrado.dgae.unam.mx/ingreso/>

Table 1. Administrative documents

Documents	Additional considerations
1. Birth certificate*	If accepted, the certificate will be required to be issued no more than 6 months prior to the registration date.
2. Updated CURP , in letter size sheet, using only one side of the sheet (not dark or too light, nor blurred, the text must be fully legible, enlarged to 200% if it has the previous format). CURP obtained on-line is accepted.	For foreign applicants it is not necessary for registration, if they are accepted, they will be able to obtain this document when entering the country. Consult website : http://www.saep.unam.mx/static/ayuda/manual_tramite_curp.pdf
3. Original, current official identification , where the text and photograph are completely legible (accepted identifications: voter registration card, passport, driver's license, national military service card or professional certificate).	Accepted identification for foreigners: current passport or FM migration form
4. Master's Degree* or professional certificate of a master's degree in physics or in a discipline of the Physical-Mathematical Sciences and Engineering.	If you do not have the document, it is suggested that you load into the system an official certificate, signed and sealed** by the corresponding educational organization or institution, indicating that you have a degree and/or graduate, as well as the reasons why you do not have the document.
5. Master's Degree Certificate* in physics or in a discipline of the Physical-Mathematical Sciences and Engineering, with an average equal to or higher than 8.0 (eight point zero), certifying 100% of the credits covered, subjects taken, grades obtained in each of these, overall average and photography. Under no circumstances may you enter with a lower average. When the certificate does not indicate the average, an official certificate of average issued by the institution of origin must be attached.	In case you do not have the document, it is suggested that you load into the system an official certificate, signed and sealed** by the corresponding educational organization or institution, indicating that you have completed 100% of credits and/or all academic activities at the level of study specified as your academic background, as well as the overall average obtained. Studies carried out abroad must attach the certificate of equivalence of the general average , issued by the General Directorate of Incorporation and Revalidation of Studies (DGIRE) of the UNAM.

Documents	Additional considerations
	Consult website : http://www.dgire.unam.mx/contenido_wp/equivalencia-de-promedio/ The procedure is personal and independent of the program admission process and must be requested in advance.

* If accepted into the program, if **documents 1, 4 and/or 5 of Table 1** were issued in a country other than Mexico, they must have the apostille or legalization and, if applicable, a Spanish translation by an expert witness and be submitted at **STAGE 4**. Documentary delivery to the DGAE.

- **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 Consul in the place of issue.
- **Guide** for apostille, legalization and translation
https://posgrado.dgae.unam.mx/static/ayuda/guia_apostille_aspirantes.pdf

** If you are accepted into the program, you must submit the missing documentation at **STAGE 4**.

NOTE: If accepted, the documents in Table 1 will be physically delivered at **STAGE 4**. Documentary delivery to the DGAE, on the date and time indicated on the **Registration of applicants for the UNAM graduate program** (<https://posgrado.dgae.unam.mx/ingreso>). 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 documents.	
2. In the case of having it at the time of registration, Certificate of text comprehension in the English language, issued by the National School of Languages, Linguistics and Translation (ENALLT) of the UNAM, another language center of the UNAM, by institutions with agreements with the ENALLT or an equivalent in the opinion of the Academic Committee. In the case of institutions outside the UNAM, the certificate must be equivalent to level B1 of the Common European Framework of Reference for Languages. Note: If accepted, it will be indispensable to have the certificate with the indicated characteristics	Additionally, if they have it, non-Spanish speaking foreign applicants must submit proof of their mastery of Spanish, corresponding to the Examination of Spanish as a Foreign Language for Academic Purposes (EXELEAA), issued by the Learning Center for Foreigners (CEPE) <i>Centro de Enseñanza para Extranjeros</i> of the UNAM (Consult in advance procedures at: http://www.cepe.unam.mx/ , section Certification). Note: In case of being accepted, it will be a requirement of registration to have the Spanish Language Certificate with the characteristics indicated.

Documents	Additional considerations
3. Certificate of Proficiency in Research²	Those who do not yet have this certification must instead submit the proposed topic to be developed in the Field of Knowledge of their interest with the approval of the potential tutor, to follow the process as described in Stage 2. Non-Spanish speaking foreign applicants may submit related documents in English.
4. Explanatory letter to the Sub-Committee on Admission	Non-Spanish speaking foreign applicants may submit the letter in English.
5. Two letters of academic or employment recommendation. Addressed to the Admissions Subcommittee.	Non-Spanish speaking foreign applicants may submit letters in English. The applicant should give the electronic address of the program to the recommending persons for them to send the letters directly to the program, uploading simply compromise letters to the system.
6. Proposal of topic to develop in the field of knowledge of your interest with approval of possible tutor.	Whoever has the Certificate of Proficiency in Research, should not submit the proposal of the subject to be developed. Non-Spanish speaking foreign applicants may submit related documents in English.

CLARIFICATIONS AND DOUBTS:

- About **administrative documents** or problems with the **UNAM registration system for graduate candidates** (<https://posgrado.dgae.unam.mx/ingreso>), please contact the telephone number: (55) 56 23 23 00, at extensions 80245, 37072, 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 (Central Mexico Time).
- In relation to the **documents in Table 2**, please communicate to the Graduate Program, through the following means: telephone numbers: (01 55) 56 22 51 34 and 56 23 70 16, e-mail: posgradocienciasfisicas@pegaso.fisica.unam.mx. **The opening hours will be from Monday to Friday (working days) from 9:00 a.m. to 5:00 p.m. (Central Mexican Time).**

STAGE 2. SELECTION PROCESS OF THE PROGRAM'S ACADEMIC COMMITTEE.

The Academic Committee, in the framework of the corresponding call and with the purpose of verifying that the applicant meets the required entrance profile, will review the applicant's file, determining whether it must

² The academic certification aims to evaluate the applicant's knowledge in basic physics and in the corresponding field of knowledge, in such a way that it shows his/her capacity to understand and analyze in depth the subject he/she proposes to develop. To do so, the applicant must prepare and present a written paper that develops a current topic in Physics, with oral examination reply. The chosen topic must have the approval of the tutor that the applicant has proposed to work under his direction. The oral exam will take into account the clarity and organization of the presentation and will assess the potential of the applicant to carry out research at doctoral level. Preferably, but not necessarily, the proposed topic will be related to the research project to be developed during the doctorate.

cover pre-requisites, through the approval of academic activities of the Master of Science (Physics) of the PPCF or the fulfillment of other academic activities, which will have no value in credits.

Applicants graduating from the PCF Master of Science (Physics) program will be exempt from covering pre-requisites, provided that no more than two years have passed since their graduation. If this is not the case, the Academic Committee will review your case and determine if you must meet pre-requisites, through the approval of courses in the Master of Science (Physics) program of the PCF or the fulfillment of other academic activities that the Academic Committee determines.

The program will publish the list of applicants who continue in the selection process after October 2, 2020 at <http://www.posgrado.fisica.unam.mx/>. You must have the assigned sheet at hand on the proof of registration.

Consider that your participation may be terminated at any stage of the process.

The entrance exam is based on obtaining the Certificate of Proficiency in Research. In a first step, at the moment of registration (deadline **September 9, 2020**), the applicant must upload his proposal for the topic to be developed in the Field of Knowledge of his interest, for the **writing or protocol** that will be evaluated by the corresponding jury, with the approval of the possible main tutor, belonging to the PCF's register of doctoral tutors. This proposal will consist of the delivery, via electronic, of a one- or two-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 Admission Subcommittee will review and approve or propose modifications to the proposed topic.

From **19 to 23 October 2020**, from 10:00 a.m. to 1:00 p.m., applicants must **submit electronically the written or research protocol** on the current topic in physics in the Field of Knowledge of their interest approved by the Subcommittee on Admission.

The applicant's research proposal will be presented to the jury in a writing or protocol of 10-15 pages, signed with the Vo. Bo. of the possible main tutor, belonging to the PCF's register of doctoral tutors, describing the research proposal of a current topic in physics in the selected Field of Knowledge, in a project able to deliver a research paper.

The brief must contain at least the following elements: Title, Background and justification (supported by an extensive bibliographic search that shows as clearly as possible the state of the art of the research topic), Objectives, Goals, Methodology and Schedule (tentative), Development of the research proposal, Bibliographic references. The writing must evidence the feasibility of developing the research proposal (here it will be very important to consider the coherence, foundations and originality of the proposal). At the beginning of the protocol, the applicant should indicate the two specific courses from the selected Field of Knowledge to be taken into account during the oral exam.

From **November 23 to December 4 2020**, at a time to be defined, applicants must submit an **oral reply to the written or protocol**.

The oral presentation should be short and concise (20-30 minutes). It should reflect the elements of the written part mentioned above. It should clearly illustrate the state of the art and the contribution it is proposing to advance research on the proposed topic. The fundamentals of the research topic you wish to develop should be clearly stated in this part. The presentation, questioning and oral reply should not exceed two hours.

Applicants may request an extension no later than **October 9, 2020**, to take the admission exam, by means of an informal letter signed by the applicant, in pdf format, sent by e-mail to posgradocienciasfisicas@pegaso.fisica.unam.mx

STAGE 3. PUBLICATION OF RESULTS.

On January 25, 2020, from 15:00 hours, the results of the selection process will be published on the Program website: <http://www.posgrado.fisica.unam.mx>

STAGE 4. DOCUMENTAL DELIVERY TO THE DGAE.

Once you have been accepted by the Graduate Program, you must enter on January 26 and 27, 2021 to the page Registration of Applicants to the Graduate Program of the UNAM (<https://posgrado.dgae.unam.mx/ingreso>) in the section Application(s), select the program where you were accepted, and download **the Appointment for document delivery, which contains** the specifications for the physical delivery of documents for entry to the Graduate Program.

The beginning of the semester is February 15, 2021.

Accepted applicants must carry out the registration process in accordance with the Registration Instructions that will be published together with the list of accepted applicants on the Program's website.

Those who have not completed the corresponding procedures and submitted the established documentation, in accordance with the provisions of Article 8, section III of the General Regulations for Graduate Studies, will be deemed not to have fulfilled the requirements set out in the study plan to enter a graduate program.

Notes:

- A. **WILL NOT BE SENT PERSONALIZED INFORMATION OR REMINDERS.** Therefore, all applicants must be aware of their e-mail and the information related to it on the Program's website.
- B. The dates and places indicated in this call are subject to adjustments due to events beyond the Coordination of the Graduate Program in Physical Sciences.
- C. No information or feedback will be given on the applicant's performance in the selection process.
- D. Ph.D. in Science (Physics) applicants who do not have their master's degree certificate approved before the beginning of the 2021-2 semester **WILL NOT BE ABLE TO REGISTER**, even if they have passed the selection process.
- E. Applicants accepted and officially registered are required to know the **PhD Science (Physics) Curriculum** and the **Operational Rules** of the Program, as well as the **University Legislation**.
- F. Foreign applicants, if accepted, must comply with the immigration provisions for their internment and stay in the country, the renewal of their immigration document (www.gob.mx/tramites), as well as submit the CURP to the DGAE.
- G. Enrollment in the Ph.D. in Science (Physics) curriculum will be conditional on the review of documentation by the DGAE, once accepted.
- H. Ph.D. in Science (Physics) belongs to the National Graduate Program of Quality of the National Council of Science and Technology (CONACYT), therefore, its full-time students can be benefited with a scholarship or economic support for the realization of their graduate studies granted by the CONACYT, provided that they meet the requirements established for that purpose by that Council.

- I. The number of scholarships or economic support is determined by CONACYT itself, based on the budget sufficiency it has, so that acceptance into the Graduate Program in Physical Sciences does not guarantee the granting of a scholarship or economic support.
- J. Non-working days: September 15 and 16, November 1 and 2, and December 12, 2020; February 1, 2021
- K. Administrative holidays: December 14 to 31, 2020.
- L. See the privacy notice at https://www.dgae.unam.mx/aviso_privacidad.html

Calendar

ACTIVITY	DATE and TIME (Mexico Central Time)	PLACE
Stage 1. Registration of applicants and electronic sending of documentation.	From August 26 to September 9, 2020 at 2:00 pm	https://posgrado.dgae.unam.mx/ingreso
Stage 1. List of applicants who meet administrative requirements (proposed research adjustments already requested and delivered)	October 2, 2020 at 2:00 pm	http://www.posgrado.fisica.unam.mx/
Stage 2. Selection process Admission test, written part (delivery of the written document or research protocol)	From October 19 to 23, 2020	Via email posgradocienciasfisicas@pegaso.fisica.unam.mx
Stage 2. Selection process Admission test, oral part (oral answer)	From November 23 to December 4, 2020. The schedule will be announced later via email	University City UNAM or online
Stage 3. Sending results	January 18, 2021	Via email
Stage 3. Publication of results	January 25, 2021, from 2:00 pm	http://www.posgrado.fisica.unam.mx/
Stage 4. Consult and download the specifications for the physical delivery of entry documents to the Graduate Program	January 26 and 27, 2021	https://posgrado.dgae.unam.mx/ingreso
Beginning of semester 2021-2	February 15, 2021	

ANY SITUATION NOT FORESEEN IN THIS CALL WILL BE SOLVED BY THE ACADEMIC COMMITTEE OF THE GRADUATE PROGRAMME IN PHYSICAL SCIENCES

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: (01 55) 56 22 51 34 y 56 23 70 16

Emails: posgradocienciasfisicas@pegaso.fisica.unam.mx

Website: <http://www.posgrado.fisica.unam.mx>

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"FOR MY RACE SHALL THE SPIRIT SPEAK"
Approved by the Academic Committee on May 29, 2019

ACADEMIC COMMITTEE OF THE GRADUATE PROGRAM IN PHYSICAL SCIENCES