

Graduate Study in Physics at NMSU



The Department of Physics at New Mexico State University (NMSU) offers both Ph.D. and master's degrees. There are about 50 graduate students in our Department, mostly working on their Ph.D. degrees and receiving financial aid in the form of Graduate Assistantships (Teaching Assistantships and Research Assistantships). Each year, the Department makes offers to approximately 30 applicants, and 10–15 students accept our offers and come. All of our graduate students found jobs in university research groups and in government and industrial research laboratories after obtaining their Ph.D. or master's degrees.

Graduate students may choose areas of specialization from a variety of experimental and theoretical/computational research programs in the Department. The current major research areas of the Department include condensed matter physics/materials science, geophysics, particle and nuclear physics, physics education, optics, and others. These research projects are supported by multimillion-dollar funding by various federal agencies and two national laboratories within the New Mexico State: Los Alamos National Laboratory and Sandia National Laboratories. In addition to the in-house research, the Department conducts many collaborative research programs with many national and local laboratories.

New Mexico State University is located in Las Cruces, a small but rapidly growing sunbelt city (population: 80,000) near the large multicultural metropolitan of El Paso, Texas. Las Cruces offers an excellent quality of life, including mild and sunny climate, clean air, moderate cost of living, low crime rate, and abundant cultural and recreational opportunities. The expansive, attractively landscaped NMSU campus is set in a spectacular natural setting of rugged mountains, the green Rio Grande valley, and high desert vistas. The cultural advantages of a major university, the friendly atmosphere of a small college town, and abundant outdoor recreation are all available to students at NMSU.

Application

Admission is based on undergraduate and/or previous graduate grade-point averages, performance on the Graduate Record Examination (GRE), and references. The Department requires the general GRE test and recommends the physics GRE test. The University requires TOEFL test for international applicants.

To apply for admission to NMSU and our physics program, please follow the instructions (next page) carefully; Different forms and mailing addresses are used for U.S. applicants and international applicants.

Education Requirements

The M.S. degree can be obtained with or without a thesis. The requirements include course work and passing a written qualifying exam and an oral final exam. These can be satisfied within two years.

The Ph.D. degree requires some additional course work, passing qualifying, comprehensive and final exams, and writing a dissertation based on original research in an area of physics. The time required for a Ph.D. degree varies but is close to the national average.

More information about the requirements for physics M.S. and Ph.D. degrees can be found in the Department's *Graduate Student Requirements*.

Contact

Our web site at <http://physics.nmsu.edu/> provides much more information about our Department and University. It also provides links where you can apply for graduate admission and financial support online.

You may request a paper application package by contacting the Physics Department Office (telephone: 505-646-3831, fax: 505-646-1934, e-mail: physics-graduate-application@nmsu.edu). The above telephone number and e-mail address can also be used for inquiry about admission and financial support.



Instructions (for U.S. Students)

A U.S. applicant should apply for graduate admission through the Graduate School at NMSU (**step 1**) as well as the Department of Physics (**step 2**). Your application package sent to the Graduate School, when complete, will be forwarded to the Department of Physics.

If you need financial support in the form of a teaching or research assistantship, you need to apply for it (**step 3A**). Most of our current graduate students have financial support.

The Department of Physics also provides fellowship (Burris Graduate Fellowship and Gardiner Graduate Fellowship) to exceptional graduate students. Each fellow receives regular teaching or research assistantship, plus \$3000 additional stipend each year for a period of up to 3 years. Higher priority is given to U.S. citizens and U.S. permanent residents working towards Ph.D. To apply, complete the *Application for Financial Support* form and write "I would like to apply for a fellowship" at the top of the form.

If you will, partially or in whole, finance graduate study through a non-NMSU sponsor and/or using own funds, please send relevant official documentation to the Graduate School (**step 3B**).

APPLICATION DEADLINES: FALL SEMESTER: MARCH 1, SPRING SEMESTER: OCTOBER 1
APPLICATIONS RECEIVED AFTER THE ABOVE DEADLINES WILL BE PROCESSED AS TIME PERMITS.

1. Graduate Admission, part 1 (for all U.S. applicants)

- Complete, sign and mail the *Application for Admission to Graduate School* form. Alternatively, You may fill the form using the Internet at <http://www.nmsu.edu/~gradcolg/>.
- Pay US\$15 Application Fee. (It is not refundable and will not be waived or deferred.)
- Official Transcripts from all colleges/universities you have attended in the U.S. and overseas. (These documents must be sent directly from each college or university you attended. These documents must bear the institution's official stamp or seal. Photocopies will not be accepted.)
- If applicable, certified English translation of all foreign transcripts. Certified photocopies will be accepted.

The mailing address for the above documents is: NEW MEXICO STATE UNIVERSITY, THE GRADUATE SCHOOL
BOX 30001, MSC 3G, LAS CRUCES, NM, 88003-8001

2. Graduate Admission, part 2 (for all U.S. applicants)

- Ask 3 teachers acquainted with your education and academic abilities to provide *Letter of Reference*. You teachers should mail the letters directly to the Department of Physics at NMSU, or give you the letters in sealed and signed envelopes so that you could mail them together with your other application material.
- Mail a photocopy of all your college/university transcripts to the Department of Physics at NMSU.
- Mail a photocopy of your GRE reports to the Department of Physics at NMSU. The Department requires the general GRE test and recommends the physics GRE test.
- Other information, if any, you wish us to consider.

The mailing address for the above documents is: NEW MEXICO STATE UNIVERSITY, DEPARTMENT OF PHYSICS
BOX 30001, MSC 3D, LAS CRUCES, NM, 88003-8001

3A. If an applicant will need financial support from the Department of Physics:

- Complete, sign and mail the *Application for Financial Support* form to the Department of Physics at NMSU. Alternatively, You may fill the form using the Internet at <http://physics.nmsu.edu/aidform.html>.

3B. If an applicant will finance graduate study through a non-NMSU sponsor and/or using own funds:

- Send official documentation of amount and source of finances to the Graduate School.

Instructions (for International Students)



An International applicant should apply for graduate admission through the Center for International Programs (CIP) at NMSU (**step 1**) as well as the Department of Physics (**step 2**). Your application package sent to the CIP, when complete, will be forwarded to the Department of Physics; the Graduate School will not process incomplete packages.

If you need financial support in the form of a teaching or research assistantship, you need to apply for it (**step 3A**). Most of our current graduate students have financial support.

If you will, partially or in whole, finance graduate study through a non-NMSU sponsor, please send relevant official documentation to the CIP (**step 3B**).

APPLICATION DEADLINES: FALL SEMESTER: MARCH 1, SPRING SEMESTER: OCTOBER 1
APPLICATIONS RECEIVED AFTER THE ABOVE DEADLINES WILL BE PROCESSED AS TIME PERMITS.

1. Graduate Admission, part 1 (for all international applicants)

- Complete, sign and mail the *International Student Application* form. Alternatively, You may fill the form using the Internet at <http://www.nmsu.edu/~cip/Admissions/admissions.html>.
- Pay US\$35 Application Fee. (It is not refundable and will not be waived or deferred by the CIP.)
- Official TOEFL Score Report sent directly to NMSU. [The minimum TOEFL score: 530 (paper based) or 197 (computer based).]
- Official Transcripts from all colleges/universities you have attended in the U.S. and overseas. (These documents must bear the institution's official stamp or seal. Photocopies will not be accepted.)
- Certified English translation of all foreign transcripts. Certified photocopies will be accepted

The mailing address for the above documents is: NEW MEXICO STATE UNIVERSITY, CIP/FOREIGN ADMISSION
BOX 30001, MSC 3567, LAS CRUCES, NM, 88003-8001, USA

2. Graduate Admission, part 2 (for all international applicants)

- Ask 3 teachers acquainted with your education and academic abilities to provide *Letter of Reference*. You teachers should mail the letters directly to the Department of Physics at NMSU, or give you the letters in sealed and signed envelopes so that you could mail them together with your other application material.
- Mail a photocopy of all your college/university transcripts to the Department of Physics at NMSU.
- Mail a photocopy of your GRE and TOEFL reports to the Department of Physics at NMSU. The Department requires the general GRE test and recommends the physics GRE test.
- Other information, if any, you wish the Department of Physics to consider.

The mailing address for the above documents is: NEW MEXICO STATE UNIVERSITY, DEPARTMENT OF PHYSICS
BOX 30001, MSC 3D, LAS CRUCES, NM, 88003-8001, USA

3A. If an applicant will need financial support from the Department of Physics:

- Complete, sign and mail the *Application for Financial Support* form to the Department of Physics at NMSU. Alternatively, You may fill the form using the Internet at <http://physics.nmsu.edu/aidform.html>.

3B. If an applicant will finance graduate study through a non-NMSU sponsor and/or using own funds:

- Send official documentation of amount and source of finances to the CIP.



APPLICATION FOR FINANCIAL SUPPORT

1. Student Information: Last/family Name: _____, First/given Name: _____

Mailing Address: _____

E-Mail Address: _____, Telephone: _____

Date of Birth: _____, Place of Birth: _____, Sex: [] male, [] female

List All Colleges/Universities Attended and Degrees Awarded or Expected:

College/University	Major	From (month/year)	To (month/year)	Degree	GPA* (overall)	GPA* (physics)
		/	/		/	/
		/	/		/	/
		/	/		/	/

* Specify the base. You should use the base used in your college/university (such as 4.0, 10, or 100).

GRE scores: Verbal (required): _____ (For international students only)
 Quantitative (required): _____ TOEFL score: _____
 Analytical (required): _____
 Physics (recommended): _____

2. Primary Research Interest: A: (choose one or more):
 Condensed-matter/materials physics
 Geophysics
 Particle and nuclear physics
 Physics education
 Optics
 Other (specify): _____
 Not Decided

B: (choose one):
 Experiment
 Theory
 Not Decided

3. Final Degree Expected at NMSU (choose one): [] Ph.D., [] M.S.

4. References: Information of 3 college/university teachers whom you have requested to fill out the reference forms.

Name	Institution	Department

5. Signature of the Applicant: _____ **Date** _____



LETTER OF REFERENCE

Instruction to the Applicant:

Please fill out your name and then give this form to a teacher acquainted with your education and academic abilities.

Last/family name

First/given name

Instruction to the Teacher:

- A. The person named above is applying for admission to the Graduate Program in the Department of Physics at New Mexico State University.
- B. Please complete this form and mail it directly to the Department of Physics using the address at the top. Alternatively, you may place this form in a sealed and signed envelope, and then ask the student to return it together with other application material.
- C. The information given in this recommendation will be considered confidential and will be used in the selection process only.

1. Please rank the applicant against other _____ (please specify; *e.g.*, 40) students in a comparison group that consists of _____ (please specify; *e.g.*, undergraduate physics students at XYZ University):

	Outstanding (top 10%)	Superior (11-25%)	Above average (26-40%)	Average (41-60%)	Below average (bottom 40%)	Inadequate knowledge to rank
Intellectual ability						
Mastery of physics knowledge						
Ability in research						
Ability in oral expression						
Ability in written expression						
Motivation and drive						
Work ethic						

2. How far do you think this applicant will progress? (Check one)

- Will probably complete the doctoral degree.
- Will probably complete the master's degree.
- Is not likely to complete a graduate degree without excessive help.
- Is not likely to complete any graduate degree.
- It is difficult for me to predict because I do not know the applicant well.

3. I would be pleased to have the applicant work under my direction as a (check all that apply):

- Graduate teaching assistant. Graduate research assistant. Doctoral candidate.
- Master's candidate. Other. Please specify: _____

4. It would be helpful if you could cite special indications bearing upon the applicant's qualification as cited above.

The back of this form or another sheet of paper may be used.

(For a non-U.S. applicant, please also evaluate the English proficiency of the applicant for teaching duties.)

5. I have been acquainted with this applicant during the period from _____ (month, year) to _____

as a _____ (teacher, supervisor, other). Name: _____

Institution: _____ Position: _____

E-mail: _____ Telephone: _____

Signature: _____ Date: _____