SAN DIEGO STATE UNIVERSITY

INFORMATION FOR GRADUATE PHYSICS PROGRAMS

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DEGREES OFFERED IN THE DEPT. OF PHYSICS

- Master of Science, Physics (thesis)
- Master of Arts, Physics (non-thesis; graduation by exam)
- Master of Science, Medical Physics, accredited by Commission on Accreditation on Medical Physics (CAMPEP)
- Joint Ph.D. in Computational Science through the Computational Science Research Center (for more information contact Dr. Weber above or the director of the CSRC, Dr. Jose Castillo, jcastillo@sdsu.edu)

PROGRAM HIGHLIGHTS

- MS Physics students are successful in industry, national labs, and Ph.D. programs.
- MS Medical Physics students are successful in residency programs, Ph.D. programs, and the medical devices/technology industry.
- PhD Computational Science students are successful in national labs and academia.
- Favorable student-to-faculty ratio with graduate physics courses averaging about 10 students. Full-time faculty teach all graduate lectures and laboratory courses.
- Close student-faculty contact.
- Financial support is available for most of our qualified Master's students as Teaching Assistants (TAs) or Research Assistants (RAs).
- Master's students co-author journal publications, present at national/international conferences: many have won awards at national labs, SDSU and CSU research symposia, AIP travel awards.
- Physics and Computational Science students intern with local industry and national

labs (Los Alamos, Lawrence Livermore, Lawrence Berkeley, Oak Ridge).

- Strong industry affiliations: e.g., ASML (San Diego-based optics technology leader) donated $300,000 to Physics and recruit students from our program each year.
- More than 50% of our graduates go on to nationally recognized PhD programs.
- MS program in Medical Physics is one of only two CAMPEP accredited graduate programs in California. A state-of-art 3T MR scanner is available at SDSU for training and for research.
- Multi-site Residency training in Medical Physics provides a pathway for students graduating from the MS in Medical Physics program.

STUDENT RESEARCH ROJECTS

All students in MS (Physics) and MS (Medical Physics) choosing the Thesis option undertake a research project culminating in a research thesis. Each project is undertaken under the supervision of our faculty in the following research fields:

- **Experimental Optics**: Electro-optics, ultrafast lasers and quantum optics, non-linear optics, nanophotonics.
- **Theoretical and Computational**: Polymers & biophysics, nuclear & particle, nuclear/relativistic astrophysics/ general relativity, optical.
- **Experimental Condensed Matter**: Superconductivity, magnetism, quantum materials synthesis, 2D optoelectronics, photophysics of moiré materials, physics of solar cells.
- **Medical and Radiological Physics**: Functional and structural magnetic resonance imaging and image processing, radiation biology, radiation therapy, CT dose.

GENERAL REQUIREMENTS

Masters Students must complete core courses as well as elective requirements and all-university graduation requirements. Details can be found in the San Diego State University Catalog available at https://catalog.sdsu.edu/

DEADLINES FOR GRADUATE APPLICATIONS

The deadlines for the applications to the Masters programs in Physics, Medical Physics and the Joint PhD program are available at: https://admissions.sdsu.edu/graduate/