The UNSW School of Physics is one of the leading Physics schools in Australia and well recognised internationally. The school has more than 60 staff, including 29 academic and 32 research staff, and more than 50 postgraduate students from all over the world who are engaged in a variety of research projects. Many of the projects have strong international collaborations and links. The School receives significant external research funding each year from various Australian and international funding agencies. Postgraduate students have access to first-rate laboratories, equipment and projects, which have been independently judged to be of the highest quality. Research projects are available in all areas of the School, including Astrophysics, Biophysics, Condensed Matter Physics, Music Acoustics, Theoretical Physics, and in the Australian Centre of Excellence for Quantum Computation and Communication Technology. Current research projects within the School include: searching for extra-solar planets; astronomy from Antarctica; protein structures; high-temperature superconductivity; quantum properties of black holes; acoustics of brass and woodwind instruments; semiconductor nanostructures; high speed quantum devices. Study areas vary over time.

Research Degrees

**Master of Philosophy**
- **Program Code:** 2475 (Physics)
- **Length of study:** 1.5 to 2 years of advanced study leading to the submission of a thesis. Minimum duration for completion is 1.5 years.
- **Entry Requirements:** An undergraduate Bachelor of Science degree majoring in Physics, with a credit or higher average (or equivalent).

**Master of Science (by Research)**
- **Program Code:** 2930 (Physics)
- **Length of study:** 1.5 to 2 years of advanced study leading to the submission of a thesis. Minimum duration for completion is 1.5 years.
- **Entry Requirements:** A four year Bachelor degree with first or upper second class honours (or equivalent).

**Doctor of Philosophy**
- **Program Code:** 1890 (Physics)
- **Length of study:** 3 to 4 years of advanced study leading to the submission of a thesis. Minimum duration for completion is 3 years.
- **Entry Requirements:** A four year Bachelor degree with first or upper second class honours (or equivalent).

Advanced training and experience in scientific research. 48 units of credit (UOC) are gained by the completion of a research project and 18-24 UOC are gained by coursework. Postgraduate courses can be taken in the School of Physics, or in other schools at UNSW. Research projects are available in all departments in the School. It is expected that this qualification will allow entry to a higher degree program for students without an Honours degree.

This program requires the completion of an original piece of research, more limited in scope and nature than PhD. Candidates develop mastery of appropriate methodology and learn the fundamentals of research. Findings are presented in a thesis that places the work in the wider context of their discipline. Research projects are available in all departments in the School.

A PhD requires the completion of a piece of research that demonstrates a significant and original contribution to knowledge in the field of study. Candidates acquire advanced specialist research training under academic supervision. The candidate’s thesis summarises the research and provides evidence for independent thought and critical analysis, effective communication and expert knowledge of the discipline in the international context. Research projects are available in all departments in the School.

Information about applying for research degrees is available from UNSW Graduate Research School www.grs.unsw.edu.au
The Graduate Diploma (Research) in Physics consists of 24 UOC of advanced coursework, and a research project worth 24 UOC. Postgraduate courses can be taken in areas such as quantum physics, astrophysics, electromagnetism, quantum field theory, and statistical mechanics. Research projects are available in all Departments of the School: Astrophysics; Biophysics; Condensed Matter Physics; Theoretical Physics; and Music Acoustics. Full-time and part-time projects are available, subject to the discretion of the supervisor.