Master of Medical Physics
Graduate Diploma of Medical Physics

Master of Applied Nuclear Science
Graduate Diploma of Applied Nuclear Science

Admission Requirements
A bachelor’s degree in Science or Engineering with a major in Physics, or an equivalent degree qualification.

Course Requirements
Masters degree – satisfactory completion of 72 credit points.
Graduate Diploma – satisfactory completion of 48 credit points.

Minimum Course Duration – Full Time
Masters degree – 3 semesters
Graduate Diploma – 2 semesters

Minimum Course Duration – Part Time
Masters degree – 6 semesters
Graduate Diploma – 4 semesters

Units of Study
The Medical Physics coursework units include radiotherapy physics, medical imaging, instrumentation and anatomy and physiology. The Applied Nuclear Science coursework units include reactor physics and systems, nuclear instrumentation, nuclear chemistry and fuel cycle, and energy options and environment. In addition, the following units of study are common to both award courses: radiation physics and dosimetry, nuclear physics, health physics and radiation protection.

Full course details are available at

Of Further Interest
The Australian College of Physical Scientists and Engineers in Medicine

Australian Nuclear Science and Technology Organisation (ANSTO)

Australian Institute of Nuclear Science and Engineering (AINSE)
http://www.ainse.edu.au/

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Overview

The MMedPhys/GradDipMedPhys and MAppNucSci/GradDipApplNucSci postgraduate award courses are designed to meet the growing demand both within Australia and globally for individuals with specialist postgraduate education and training in the highly technical areas of medical physics and nuclear science and technology. These programs are being offered through the School of Physics, the Institute of Medical Physics and the Institute of Nuclear Science within the School, at Australia’s oldest and most prestigious university, the University of Sydney, founded in 1850.

The University has a longstanding tradition of excellence in both teaching and research. The School of Physics attracts highly experienced teaching staff and has access to world class research and training facilities. These include medical facilities within University teaching hospitals in the greater Sydney area and the OPAL facility, Australia’s first and only research nuclear reactor, operated by the nearby Australian Nuclear Science and Technology Organisation (ANSTO). Students undertaking the Masters program may be given the opportunity to gain research experience at one of these facilities.

Course Expectations

Students undertaking one of the Medical Physics award courses should expect to gain sufficient knowledge, skills and training to enable them to find employment, often in a hospital environment, in an area of medical physics applied to cancer therapy, medical imaging or medical electronics. Students undertaking one of the Applied Nuclear Science award courses should expect to gain sufficient knowledge, skills and training in the areas of nuclear physics, chemistry, radiation protection and energy for a competitive edge in the nuclear science and technology industry. Students of the Masters programs will gain, in addition, research experience.

Mode of Delivery

The Masters degrees consist of eight coursework units of study (which by themselves constitute the Graduate Diploma) plus a research project, which could be undertaken at the School of Physics or offsite at one of the affiliated research facilities.

Self-directed, interactive learning and flexible delivery are integrated aspects of the courses on offer. Lectures and practical classes are conducted during weekdays.