Medical technology is increasingly being used to diagnose and treat a range of medical conditions. There is a growing need to educate and develop physical scientists in Medical Physics to ensure the safety and efficacy of these technologies and explore new diagnostic and therapeutic approaches. The new Master of Science (Medical Physics) is a two-year (full-time) program offering a pathway into this fulfilling and expanding field.

**Course overview**

The Master of Science (Medical Physics) course is intended to give physical scientists the relevant knowledge and appropriate problem solving skills suitable for entry into an accredited medical physics training program in radiation oncology, nuclear medicine or radiology.

Students will undertake a major research project on an appropriate medical physics topic that will develop their independent research and analytical abilities and expose them to current diagnostic and therapeutic technologies used in the medical system.

A series of coursework units will provide students with relevant background knowledge in topics such as human biology, radiation biology, medical imaging and radiotherapy.

**Where will the Master of Science (Medical Physics) take you?**

The course will prepare students for work in the following areas:

- Tertiary Public Hospitals – e.g. Medical Physicist
- Private Sector – e.g. Radiation Physicist
- Research – e.g. Tertiary education institutions or private scientific companies
- Education – e.g. Radiation Safety Officer

**Medical Physicist Trainee Program**

Western Australia has established a local training program for Medical Physicists to address workforce shortages in Radiation Oncology, Nuclear Medicine and Medical Imaging. This program will assist with the sustainability of state-wide cancer diagnostic and therapy services. Medical Physicists require a minimum of a Master of Science (Medical Physics) or equivalent, plus completion of a competency based clinical, research and examination regime of three to five years duration.

As part of an agreement between the Department of Health and Ageing and WA Health, there will be four offers of employment to Radiation Oncology Medical Physicist (ROMP) trainees also undertaking the MSc (Medical Physics) course. Please email CHPO@health.wa.gov.au for details on these trainee positions.

**Admission requirements**

The Master of Science (Medical Physics) is intended to build upon existing knowledge and skills that applicants bring to the course. You will be eligible for admission into the program if you possess:

- a relevant bachelor’s degree in Physical Science or Engineering of this University as determined by the Faculty of Life and Physical Sciences with first class or second class (division A) honours, or equivalent as recognised by the Faculty; or
- a relevant Graduate Diploma in Physical Science or Engineering of this University, which includes a research component, and with an average mark of at least 65 per cent, or equivalent as recognised by the Faculty of Life and Physical Sciences; or
- a relevant degree in Physical Science or Engineering, as determined by the Faculty of Life and Physical Sciences, requiring at least four years of full-time study which, in the view of the Faculty of Life and Physical Sciences, provides adequate research preparation.
Course duration
The course can be completed in two years of full-time study or part-time equivalent.
You may commence the program in either February or July.

Extra information for international students
International students should also visit:
www.international.uwa.edu.au
which gives more information about the study environment, course fees and refund policy, support services, and schooling obligations for dependent children.

Course content
The course consists of 8 units, comprising 4 units from the following table:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Unit Code</th>
<th>Unit Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>ANHB8451</td>
<td>Human Biology for Medical Physicists</td>
</tr>
<tr>
<td>S1</td>
<td>PHYS8402</td>
<td>Radiation Biology and Protection</td>
</tr>
<tr>
<td>S2</td>
<td>PHYS8401</td>
<td>Medical Imaging Physics</td>
</tr>
<tr>
<td>S2</td>
<td>PHYS8403</td>
<td>Radiotherapy Physics</td>
</tr>
</tbody>
</table>

Plus 4 units from the following table:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Unit Code</th>
<th>Unit Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>PHYS8411*</td>
<td>Medical Physics Thesis Part 1</td>
</tr>
<tr>
<td>S2</td>
<td>PHYS8412*</td>
<td>Medical Physics Thesis Part 2</td>
</tr>
<tr>
<td>S1</td>
<td>PHYS8413*</td>
<td>Medical Physics Thesis Part 3</td>
</tr>
<tr>
<td>S2</td>
<td>PHYS8423*</td>
<td>Medical Physics Thesis Part 4</td>
</tr>
</tbody>
</table>

* Owing to the limited number of Medical Physicists available to supervise research projects, these units are quota restricted to six students per year.

How do I apply for the course?
Complete the application form for the course using the appropriate web link below, and attach all relevant documentation.
The course code is 51630.

Australian Students
www.studyat.uwa.edu.au
Follow the links to Postgraduate courses and then Master's degree by research (How do I apply?).
Completed application forms and support documents should be submitted to:
The Postgraduate Administrator
Faculty of Life and Physical Sciences, M011
The University of Western Australia
35 Stirling Highway, Crawley
Western Australia 6009

International Students
www.studyat.uwa.edu.au
Follow the links to Postgraduate courses and then Master's degree by research (How do I apply?).
Completed application forms and relevant support documents should be submitted to:
Manager, Postgraduate Admissions
International Centre, M352
The University of Western Australia
35 Stirling Highway, Crawley, Perth
Western Australia 6009, Australia

For further information please contact:
Research Associate Professor Michael House
Tel:    +61 8 6488 1138
Email: mhouse@physics.uwa.edu.au
CRICOS Provider Code: 00126G

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