University of Massachusetts Lowell

EXAMPLE ACADEMIC PLAN FOR PhD in PHYSICS - MEDICAL PHYSICS OPTION
Entering with MS in Physics

This sequence assumes the entering student has advanced preparation in the core Physics courses, which are part of the requirements for the PhD degree in Physics. This includes those in sections A.2.a.2–3 and a thesis. The Advanced Project may be waived if the appropriate conditions are met.

Year 1, Semester 1 (Fall)
98.501 Radiation Safety and Control – I (3)
98.509 Nuclear Instrumentation (3)
98.605 Radiation Interactions and Transport (3)
98.711 Radiological Sciences Seminar (0)
96.701 Physics Colloquium (0)

Year 1, Semester 2 (Spring)
98.596 Introduction to Medical Imaging (3)
98.562 Radiation Biology (3)
98.565 Radiation Therapy Physics (3)
98.712 Radiological Sciences Seminar (0)
96.702 Physics Colloquium (0)

Year 1, Summer Trimester
34.651 Sectional Human Anatomy (3)
34.659 Sectional Human Anatomy Lab (1)

—— TARGET DATE FOR GRADUATE RESEARCH ADMISSION EXAM ——

Year 2, Semester 3 (Fall)
98.597 Advanced Medical Imaging Physics (3)
98.676 Graduate Medical Physics Internship (1)
98.533 External Dosimetry and Shielding (3)
IB.520 Ethical Issues in Biomedical Research (1)
98.711 Radiological Sciences Seminar (1)
96.701 Physics Colloquium (0)

—— TARGET DATE FOR COMPREHENSIVE EXAMINATION ——

Year 2, Semester 4 (Spring)
98.665 Advanced Radiation Therapy Physics (3)
98.606 Monte Carlo Simulation of Radiation Transport (3)
98.686 Advanced Medical Physics Internship (1)
98.541 Radiochemistry or other Approved Elective (3)
98.712 Radiological Sciences Seminar (0)
<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
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<tr>
<td>96.702</td>
<td>Physics Colloquium</td>
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**Year 3, Semester 5 (Fall)**
- Approved Elective (3)
- 96.756 PhD dissertation Research (6)
- 98.711 Radiological Sciences Seminar (1)
- 96.701 Physics Colloquium (0)

**Year 3, Semester 6 (Spring)**
- Approved Elective (3)
- 96.756 PhD dissertation Research (6)
- 98.712 Radiological Sciences Seminar (0)
- 96.702 Physics Colloquium (0)

**Year 4, Semester 7 (Fall)**
- 96.756 PhD dissertation Research (9)
- 98.711 Radiological Sciences Seminar (0)
- 96.701 Physics Colloquium (0)

**Year 4, Semester 8 (Spring)**
- 96.756 PhD dissertation Research (9)
- 98.712 Radiological Sciences Seminar (0)
- 96.702 Physics Colloquium (0)

The schedule in Year 4 may be continued in subsequent years, as appropriate within the time limit set by the University and the Department, depending on the progress of the student’s dissertation research.

--- TARGET DATE FOR DISSERTATION DEFENSE ---