

# CHEMICAL PHYSICS, MASTER OF SCIENCE (M.S.)

**Thesis option:** 30 credits

**Non-thesis option:** 30 credits

Course	Title	Credits
<b>Thesis or Non-Thesis Requirements</b>		
Select one of the following:		30
Thesis:		
Select 24 credits of coursework including an advanced laboratory course		
CHPH799	Master's Thesis Research	
Non-Thesis:		
Complete 30 credits of coursework. Students must pass a written qualifying exam at the M.S. level and submit a scholarly paper.		
<b>Total Credits</b>		<b>30</b>

Admission to the program is limited to Ph.D. students. Students can earn a thesis or a non-thesis M.S. degree while working towards the Ph.D. degree. In order to earn a non-thesis M.S. degree in Chemical Physics, students must pass the written Qualifying Examination at the M.S. level, maintain a B average, scholarly paper, 30 graduate credits of which 24 must be course credits including:

1. Advanced laboratory course
2. Two credits of seminar, can be included in the non-course credits
3. Advanced course at the 600 level or above
4. Two laboratory rotations

The Examining Committee consists of at least two faculty members, who will read the scholarly paper and attend the oral presentation. The paper should provide an informative review of the research topic selected by the candidate in consultation with his/her academic and research advisors. The bibliography is a particularly important part of the paper and should include the most significant references to the topic. The length of the paper is expected to be approximately 20 double space pages (12-point font) with 1-inch margins. The presentation is to last approximately one hour and can be part of regularly scheduled seminar series such as the Informal Statistical Mechanics Seminar or the Nonlinear Dynamics Seminar. Two faculty must be present and there should be sufficient time for questions and discussion.

For the thesis M.S. degree, students must complete a written masters thesis, maintain a B average, a scholarly paper and complete 30 graduate credits including:

1. Six credits of CHPH799
2. 24 course credits
3. Two credits of seminar, can be included in the non-course credits
4. Advanced laboratory course
5. Advanced course at the 600 level or above
6. Two laboratory rotations

The Thesis Examining Committee is to consist of at least three faculty members including the research advisor. The Examination Committee will review the M.S. thesis, attend the oral presentation and participate in the defense of the thesis. The thesis is to consist of an introduction to

the field of research with which the student is engaged, a clear statement of the problem under study, the objectives of the research, the approach taken, original results, interpretation, discussion, and conclusions. A concise review of the literature, and a bibliography of the most important literature should also be included. The M.S. thesis has no set length, but is typically 30 to 40 pages. The format of the thesis (font, margins, etc.) must follow the University of Maryland Thesis and Dissertation Style Guide.