

# Master of Science Program in the Physical Sciences

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## Director

- James E. Pilcher

## Program Description

The Master of Science Program in the Physical Sciences Division (MS-PSD) (<http://msspsd.uchicago.edu>) at the University of Chicago is a program designed for students who wish to broaden or deepen their knowledge of the physical and mathematical sciences. It should be especially valuable to those seeking to prepare for further graduate work, including those who wish to prepare for a graduate program in a field outside of their undergraduate major. MS-PSD students have the opportunity to work with faculty members in Astronomy & Astrophysics (<http://astro.uchicago.edu>), Biophysical Sciences, (<http://biophysics.uchicago.edu>) Chemistry (<http://chemistry.uchicago.edu>), Geophysical Sciences (<http://geosci.uchicago.edu>), Mathematics (<http://www.math.uchicago.edu>), Physics (<http://physics.uchicago.edu>), and to take supplemental coursework in Computer Science (<http://www.cs.uchicago.edu>), Financial Mathematics (<http://finmath.uchicago.edu>), and Statistics. (<http://www.stat.uchicago.edu>) The MS-PSD program allows students, in consultation with the Faculty Director, to design programs of study to meet individual student needs. This flexibility combined with the rigor of UChicago courses makes the program unique.

Students normally complete the M.S. in Physical Sciences in nine-months (three quarters). The program is administered by the PSD Dean of Students office and directed by Professor James E. Pilcher, Professor Emeritus in the Department of Physics, Enrico Fermi Institute, and the College.

## Courses and Master's Project

MS-PSD students are required to complete nine courses, including a master's thesis project. Students choose from quarterly course offerings ([https://coursesearch.uchicago.edu/psc/prdguest/EMPLOYEE/HRMS/c/UC\\_STUDENT\\_RECORDS\\_FL.UC\\_CLASS\\_SEARCH\\_FL.GBL](https://coursesearch.uchicago.edu/psc/prdguest/EMPLOYEE/HRMS/c/UC_STUDENT_RECORDS_FL.UC_CLASS_SEARCH_FL.GBL)) in physical sciences departments. At least four of the courses must be graduate-level courses in a single department or associated with a specific interdepartmental track, such as environmental science, biochemistry/physics, computational methods in physical science, and optics/imaging. To accommodate students who seek to broaden their knowledge of the physical sciences as well as those seeking to transition to a new field, students may be allowed to take as many as three advanced undergraduate courses in fields outside of their undergraduate majors. In all cases the Director must approve the chosen curricula.

For experimentalists, a typical master's project might consist of performing or assisting with a laboratory research experiment. For theorists, a typical master's project might consist of performing some numerical simulation experiments. Students normally choose their projects in the winter quarter, carry them out during the spring quarter, and summarize their projects' results in a required master's paper.

## Questions

Prospective or current students should contact the Associate Dean of Students in the Physical Sciences Division with questions about the program and/or the application process:

Emily Easton  
773-702-9708  
[eweaston@uchicago.edu](mailto:eweaston@uchicago.edu)





### Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Trajan.

Times was used instead of Palatino.

The editor may contact Leepfrog for a draft with the correct fonts in place.