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## COMPUTATIONAL SCIENCE GRADUATE MINOR

## **Minor Requirements**

Requirements listed here are in addition to requirements for minors in Graduate Council policies listed under GCAC-600 Research Degree Policies (https://gradschool.psu.edu/graduate-education-policies/) and GCAC-700 Professional Degree Policies (https://gradschool.psu.edu/graduate-education-policies/).

The minor offers an opportunity for students in all colleges and majors to pursue a focused set of courses that emphasize computational science. The minor requires 9 credits in computational science courses for a master's degree and 15 credits for a doctoral minor.

|   | Code  | Title  | Credits |
|---|---|--|---------|
|   | Required Courses  |  |         |
|   | Select at least or  | ne of the following courses:                           | 3       |
|   | AERSP 424   | Advanced Computer Programming                          |         |
|   | CMPSC 450   | Concurrent Scientific Programming                      |         |
|   | NUCE 530  | Parallel/Vector Algorithms for Scientific Applications |         |
|   | CSE 557   | Concurrent Matrix Computation                          |         |
|   | Select at least or  | ne of the following courses:                           | 3       |
|   | MATH 523  | Numerical Analysis I                                   |         |
|   | MATH/CSE<br>550   | Numerical Linear Algebra                               |         |
|   | STAT 500  | Applied Statistics                                     |         |
|   | STAT/IST 557  | Data Mining I  |         |
| , | Select additional credits from a list of approved courses 1 |  | 3-9     |
|   | Total Credits   |  | 9-15    |

The additional credits will be chosen from a list of approved courses maintained by the graduate minor program.

In addition, for the Master's Minor and Ph.D. Minor the students can use at most 6 and 9 credits, respectively, from (or cross-listed with) their home department.