

Course Requirements for MISE doctoral programs

Science Cognate 24 credits	Doctoral Core 21 credits	Research Tools 12 credits	Optional Study Credits 3-6 credits	Dissertation 15 credits
From master's degree	SCI 6140 Hist/Phil of Science SCI 6150 Hist/Phil of Sci Ed SCI 6160 Models of Teaching & Learning SCI 6170 Research Genres SCI 6170 Research Genres (individual assignment with professor) SCI 6180 College Science Teaching* <i>One** of the following:</i> SCI 6180 College Science Teaching (second time) Or, SCI 6260 Science Curriculum	See Research Tools document	SCI 6200 3-6 credits are <i>recommended</i> in preparation for the doctoral qualifying exams	SCI 7300
Total:				72-78 credits

*For a College Teaching Focus, SCI 6180 is typically taken twice in consecutive fall semesters.

**SCI 6260 is required for the Science Teacher Education focus and also may be taken for the Science Education Research focus instead of taking SCI 6180 for a second time.