

# Teacher Education and Learning Science (PhD): Elementary Education in Mathematics and Science (EEMS)

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## Degree Requirements

Degrees will be distributed as "Doctor of Philosophy" with certification specifications listed on the transcripts.

Code	Title	Hours
<b>College Scholar Leader Core Courses</b>		<b>6</b>
In consultation with their advisor, students may select other courses to meet this 6 hour requirement		
ED 755	Scholar Leader: Diversity and Equity in Schools and Communities	
ED 756	Scholar Leader: Systemic Change in Education	
<b>College Research Methods Courses</b>		<b>15</b>
Required Introductory Research Methods Courses		6
ED 710	Applied Quantitative Methods in Education I	
ED 730	Introduction to Qualitative Research in Education	
Advanced Research Methods Courses (Select one course from the list below)		3
ED 711	Applied Quantitative Methods in Education II	
ED 731	Advanced Qualitative Research and Data Analysis in Education	
ED 750	Mixed Methods Research in Education	
Advanced Research Methods Electives		6
Select two courses from the list above or other advanced research methods courses approved by the student advisor.		
<b>Dissertation Research</b>		<b>9</b>
ECI 895	Doctoral Dissertation Research	
<b>Elementary Education in Mathematics and Science (EEMS)</b>		
<b>Teacher Education and Learning Sciences (TELS) Core Courses</b>		<b>6</b>
ECI 735	Seminar on Teaching and Teacher Education	
ECI 736	Seminar on Learning Sciences	
<b>Elementary Education in Mathematics and Science (EEMS) Required Courses</b>		<b>12</b>
ECI 723	Elementary STEM Learning in Informal Settings	
ECI 724	Professional Learning in Elementary STEM Education	
ECI 725		
ECI 726	Action and Cognition in Elementary STEM Teaching & Learning	
<b>Free Electives</b>		<b>12</b>
Free Electives chosen in consultation with academic advisor.		
<b>Total</b>		<b>60</b>