

Master's (MS) in Curriculum & Instruction with a major in Science Education

Categor and suggested courses	SCHs	Category Description
<p>Curriculum</p> <p>SCE 5336. Instructional Strategies that Promote Learning in Science</p>	3	<p>This category addresses critical issues of PK-12 curriculum. A broad range of scope, sequence, and integration issues would include: 1.) The historical, philosophical, psychological, and social foundations upon which curriculum is constructed; 2.) The development and use of national and state standards; and 3.) Applications in contemporary design (aims, goals, implementation, and assessment alternatives).</p>
<p>Teaching and Learning</p> <p>SCE 5430 Science Learning and Teaching</p>	3	<p>This category addresses considerations and decisions addressing the needs of learners, selection of teaching methods, and the social interactions necessary to enhance the quality of the learning environment. Tenets of learning theory applied as best practice (e.g., Universal Design for Learning, Response to Intervention, etc.) would be represented in this core category.</p>
<p>Instructional Technology</p> <p>MAE 5658 Using Technology STEM</p>	3	<p>This category addresses considerations, decisions, and critical issues relevant to enhancing instructional effectiveness and efficiency through the use of web tools, social media, and immersive environments, productivity tools, project-based learning, et al. Consideration is also given to effective online/asynchronous teaching and learning best practices.</p>
<p>Research and Scholarship</p> <p>EDF 5481 Methods of Educational Research, SCE 5905 Directed Individual Studies</p>	3-6	<p>This category broadly addresses the interpretation, use, and conduct of research. Masters candidates will design studies, collect relevant information in a field-based environment, and interpret results that lead to instructional improvement and enhanced student achievement. Candidates specifically interested in continuing studies at the doctoral level will, in addition, complete EDF5481 (Methods of Educational Research, 3 SCH).</p>
Majors- 18-21 semester credit hours		
<p>Specialization courses in Science Education, Sciences (min 9 hours, 18 required for eligibility for community college teaching) or other areas (e.g., GRADUATE courses in SCE, EDF, EDG, etc.)</p> <p>SCE 8966 Comp Exams</p>	18-21	<p>In addition to core program categories (required of all students), master's degree candidates will complete a major that reflects an individual specialty area (e.g., Science Education).</p>