Courses marked with an asterisk (*) are new courses, and will be listed as EDCI 689 until the approval process for these courses is complete.

**EDCI 656: How People Learn Science**
Synthesis of the scientific basis for learning science, with emphasis on memory and structure of knowledge, problem-solving and reasoning, early foundations of learning, regulatory processes and how symbolic thinking emerges from the culture and community of the learner.

**EDCI 689: Exemplary Technology for Science Education** *
Emphasis is placed on identifying the common design principles of all exemplary technologies, investigation of current instruments for identifying exemplary technologies and the design of novel exemplary technologies.

**EDCI 660: Research on the High School Science Teacher Professional Continuum**
Various models of high school teacher preparation and renewal are compared.

**EDCI 689: Broader Impacts of Scientific Collaboration** *
Explore the institutional contexts and social significance of broader impacts of scientific collaboration; design education and outreach projects and/or develop research studies for science education programs in collaborative, multidisciplinary outreach/research teams.

**EDCI 663: Scientific Inquiry in K–16 Classrooms**
Various models of science learning environments emphasizing inquiry.

**EDCI 664: Advanced Methods of Secondary Science Education**
Strategies for teaching secondary school science; design and evaluation of secondary school science instruction; recent developments in secondary school science teaching.

**EDCI 665: Science Curriculum**
Critical exploration of the trends and issues in school science programs; consideration of the foundations and strategies for the design, selection and evaluation of science curriculum.
EDCI 667: Research and Foundations of Science Education
Analysis of research in science education that relates the historical and philosophical basis of science and science teaching; emphasis on implications for improved instruction, especially on the nature of science.

EDCI 668: The History and Culture of Science Education—1900 to the Present
An analysis of the evolution of science education as a discipline, a profession, a culture and a component to the education of K–16 students during the last 100 plus years in the U.S. and selected developed nations.

EDCI 669: Science Education in Sociological Context
Explores science and its endeavors from a sociological perspective in order to make inferences on school science practice and science teaching.

For more information about the Graduate Program Area, Science Education, please visit our [website](https://tlac.tamu.edu/degrees-and-programs/graduate-degree-programs/science-education).