The Ohio State University and Aligarh Muslim University (AMU) have established a Centre of Excellence in Science, Technology, Engineering, Mathematics - Education and Research (STEM-ER) in India as part of the Indo-US 21st Century Knowledge Initiative. This is the first such Center in India. The primary goal of the STEM-ER project is to train PhD students in Indian universities to become world class teachers and researchers at the university level.

The center is the culmination of the pilot project between the universities that initially developed a dual degree program for students to earn a doctoral degree from AMU and a master’s in education with STEM specialization from Ohio State. The program involves the College of Education with research advisors from the Colleges of Arts and Sciences, Engineering and Medicine. Ohio State and AMU hope the center will become an “innovation incubator” for advanced teaching and learning in STEM subjects and contribute to the local, state, national and international STEM education outreach efforts.

A pioneering group of four research students in science and engineering at AMU was selected to participate in the dual degree program in 2014. They enrolled at Ohio State for two semesters and studied state-of-the-art teaching methodologies and advanced scientific research in their respective STEM disciplines, while retaining their status as AMU PhD students. The students returned to AMU for field experience in undergraduate teaching, implementing the acquired training in advanced pedagogical techniques, including digital instruction, while continuing the remainder of their doctoral research.

Another group of four AMU students has also been supported in 2016 by the USIEF grant for one semester of research in respective STEM disciplines under the supervision of Ohio State faculty. Research carried out at Ohio State constituted one chapter in the PhD theses for all AMU students under the program.

Also as a result of the initiative, the Indo-US STEM-ER Consortium was created to serve as a forum for universities in India and the United States on STEM education-related issues. An AMU-Ohio State Symposium was held recently under the direction of Anil Pradhan, professor at Ohio State and director, Sultana Nahar, professor at Ohio State and associate director, with Craig L. Dicker, Counselor, Cultural Affairs, U.S. Embassy, in New Delhi serving as the keynote speaker.

Under the auspices of the Ohio State Office of International Affairs, and in coordination with the Ohio State India Gateway in Mumbai, the joint Center at AMU also aims to serve as a base for student and faculty exchanges.