Summer Undergraduate Mathematical Science Research Institute (SUMSRI)

SUMSRI, conducted under the guidance of Miami University’s Department of Mathematics and Statistics, is aimed at talented undergraduate students in the mathematical sciences who are interested in pursuing advanced degrees. Because of the shortage of minorities and women in the mathematical sciences, the program is especially focused on, but not limited to, African Americans and other underrepresented minorities and women.

The main goals of SUMSRI are to encourage minority students and women to become mathematical research scientists, and to help the students improve their research abilities. In addition, SUMSRI aims to foster the students’ ability to work in groups, to give them a long-term support group, and to provide them with professional role models. In the program, students increase their technical writing skills and are given an opportunity to write a technical research paper and present a talk at a mathematics conference. They also receive information about available financial aid, opportunities for graduate school, and career opportunities in the mathematical sciences.

SUMSRI runs for seven weeks on Miami University’s campus in Oxford, Ohio. During that time, students participate in problem seminars in mathematics and statistics. The program also includes a technical writing seminar, a GRE preparation workshop, two short courses on algebra and real analysis, and colloquium talks given by well-known mathematical scientists. In addition, there are panel discussions about graduate school and career opportunities. SUMSRI pays for participants’ travel, room, board, and supplies and provides each student with a stipend. Funds are available for travel and support to selected national meetings.

The ideal candidate for SUMSRI is a sophomore or junior student who has completed with distinction the calculus series and, at least, one proof-based mathematics or statistics course. All SUMSRI students return to their home institution as undergraduates after participating in the program.