

North Carolina State University offers many pre-college programs in a variety of academic disciplines - each aimed at helping students prepare for college while experiencing NC State life. Programs are available for students at elementary, middle, and high school levels.

Visit each program website for more information.

Scholarships and are available for students who qualify.

Summer Programs for High School Students **(9th–12th graders)**

Ag-DISCOVERY

Ag-DISCOVERY is a two-week residential camp for students designed to help high school students (**age 14-17**) learn about careers in plant science and veterinary medicine. Students live on the college campus and learn about science from university professors and practicing entomologists, botanists, and plant pathologists. Participants gain experience through hands-on labs, workshops, and field trips. Students also participate in character and team-building activities and diversity workshops. www.science-house.org/student/agdiscovery

Design Camp (Day & Residential)

Design Day Camp exposes **rising 10th and 11th grade** students and Design Residential Camp exposes **rising 11th and 12th grade** to career choices in design, experience in creative problem solving, and exposure to design study at the college level. Students will be exposed to creative problem solving and will design projects in Architecture, Art & Design, Graphic Design, Industrial Design, or Landscape Architecture.

http://ncsdesign.org/content/index.cfm/fuseaction/page/filename/design_camp.html

Engineering Summer Programs

The College of Engineering offers **rising high school juniors and seniors** the opportunity to experience engineering, science, and technology through week-long residential programs in a variety of disciplines: Aerospace Engineering, Autonomous Robotics, Biological Engineering, Chemical & Biomolecular Engineering, Civil & Construction Engineering, Computer Science, Materials Science & Engineering, and Wolfpack Motorsports.

www.engr.ncsu.edu/summerprograms/

EnviroTech: Exploring Environmental Science

EnviroTech provides an opportunity for **rising 11th and 12th graders** to spend two weeks of their summer at NC State University using computers and field and laboratory equipment to investigate the science of our environment. Students learn to design their own original research project, execute their design, and report their findings to family, friends and NC State researchers. www.science-house.org/student/envirotech

Shelton Leadership Challenge Institute

The Shelton Leadership Challenge Institute is for **rising 9th – 12th graders** with a grade point average of 3.0 or better. The program is an intense week experience for youth who are current leaders and aspire to be greater leaders in the future. Participants will explore areas of values-based leadership, integrity, team building, public speaking, and social responsibility. www.ncsu.edu/extension/sheltonleadership/leadership_programs.htm

Summer College in Biotechnology and Life Sciences (SCIBLS)

SCIBLS is an opportunity for outstanding **high school students** interested in a career in science to participate in a college level program. SCIBLS participants take coursework for college credit - challenging students beyond high school academics. Participants will work in state of the art laboratories and practice cutting edge research techniques and skills. www.cifr.ncsu.edu/scibls/tuition.htm

Summer Exploration Camp - Department of Forestry and Environmental Resources (DFER)

The DFER summer camp is an opportunity for **rising high school juniors and seniors** who are interested in natural resources to spend a week exploring the majors within the College of Natural Resources' Forestry and Environmental Resources department. The DFER camp raises the awareness of the impact of natural resources on the world. <http://cnr.ncsu.edu/2007HighSchoolSummerCamp.htm>

Summer Textile Exploration Program (STEP)

STEP is a residential program for rising **high school juniors and seniors** to experience a taste of NC State life by working with professors in a project area of their interest. The project choices include apparel design, business/marketing, chemistry, computer science, and engineering. www.tx.ncsu.edu/student_services/step.html

Teen Writers' Workshop

The Teen Writers' Workshop offers a lecture and small-group environment for teens interested in developing their creative writing skills. Students who will **enter the 9th - 12th grades in the fall** are eligible. For more information, contact Daun Daemon at 919-515-4128 or at ddaemon@unity.ncsu.edu.

Young Investigators in Nuclear Technology

Young Investigators in Nuclear Technology is a residential experience that engages participants in the role that nuclear technologies play in meeting the needs of society and solving everyday problems. The program is open to **rising juniors and seniors** and **graduating seniors**. Participants will learn about: the development of energy sources for the U.S.; the detection of environmental pollutants; and how are nuclear methods revolutionizing medical diagnostics and treatments. www.ne.ncsu.edu/outreach/summerprogram

Programs Throughout the Year for High School Students **(9th–12th graders)**

Photonics Explorers

Photonics Explorers is a program designed to encourage **9th and 10th grade** students to take advanced mathematics and science courses throughout high school. The program provides hands-on scientific learning experiences in photonic concepts like robotics, electronics, optics, networking, and technology. Participants are exposed to the rigor of science, technology, engineering, and mathematics (STEM) careers.

www.science-house.org/student/photonics/

Photonics Leaders

The Photonics Leaders program for **11th and 12th graders** guides and prepares students for success in college-level programs in science, technology, engineering, and mathematics. Participants investigate photonic concepts and engage in internship experiences designed to equip participants to behave and think like real scientists.

www.science-house.org/student/photonics

Upward Bound

The Upward Bound Program is for students in **9th – 12th grades**. The mission of this program is to provide participants with equal access to quality education by supporting the development of the academic skills and motivation necessary for persistence and success in secondary and post-secondary education. This is a federally funded program and students must meet the federal admissions criteria, attend one of the targeted schools, and demonstrate a genuine interest in pursuing education beyond high school.

http://www.ncsu.edu/student_affairs/upward_bound/

Summer Programs for Elementary and Middle School Students **(3rd-8th graders)**

Algebra Camp

Algebra Camp is a one-week camp for **middle school students** who would like to develop the skills necessary to succeed in Algebra. www.science-house.org/student/imhotep

Discover Engineering

Discover Engineering is a week-long day camp for middle school students (**rising 6th – 9th graders**). Students experience engineering through hands-on, creative investigations and building activities. The camp will show students what engineering is about including how engineers are involved in everyday products like CD's, shampoo, and food.

www.engr.ncsu.edu/summerprograms

Imhotep Academy

Imhotep Academy introduces under-represented students (African-American, Hispanic, Native American, and Women) in **6th – 8th grades** to science, mathematics and technology at NC State University. The program uses laboratory experiments, research projects, classroom instruction, and field trips to introduce students to the rigorous and exciting worlds of chemistry, mathematics, marine, earth and atmospheric sciences, physics and statistics.

www.science-house.org/student/imhotep

Engineering is Elementary

Engineering is Elementary is a day camp for **rising 3rd - 5th graders**. Students will experience engineering through hands-on, creative investigations and building activities. The camp will show students what engineering is about including how engineers are involved in everyday products like CD's, shampoo, and food. www.engr.ncsu.edu/summerprograms

Environmental Science Program for Middle School Students

The Environmental Science Program for Middle School Students is designed to stimulate interest in the environment and in the applications of scientific principles and techniques for the understanding and solving of environmental problems. Students will participate in a variety of laboratory exercises and field trips to learn about environmental problems and issues while conducting a group research project.

<http://ncsu.edu/project/bio-outreach/index.php?page=programs>

Girls on Track Summer Camp

Girls on Track (GoT) is a summer math camp for **middle school girls** that encourages young women to study mathematics through high school and college. Day campers investigate community problems using computer technologies and participate in other math and science enrichment activities. GoT is sponsored by NC State and Meredith College and is held at Meredith College. For more information and an application, call Joanne Frisch at 919-515-2013 or visit the website at <http://ontrack.ncsu.edu>

Kyran Anderson Academy

The Kyran Anderson Academy is designed to enhance a student's enthusiasm for science and mathematics. The program demonstrates that science and mathematics can be fun and are important to everyday life. The program features scientists and inventors from underrepresented groups. Students in **grades 3 – 8** are eligible to attend.

www.pams.ncsu.edu/kyranandersonacademy/index.htm

Study Skills Course for Middle School Students

The Study Skills Course focuses on organization, learning strategies, and test-taking skills. The course is one-week long, and students are grouped by grade (**6th – 8th**). For more information and to register, call Athena Franks at 515-1713 or visit the website at

www.ncsu.edu/psychology/studyskills

Young Writers' Workshop

The Young Writers' Workshop, a nonresidential writing camp, brings **4th – 8th grade** students to the NCSU campus to study creative writing with published NC writers. The two-week, afternoon workshop offers classes in fiction, poetry, and drama every summer. Other classes in science fiction and creative nonfiction are offered when teachers are available.

www.chass.ncsu.edu/youngwriters

Programs Throughout the Year for Elementary and Middle School Students (3rd-8th graders)

(ETS) Educational Talent Search Program

The ETS Program provides programming to **middle and high school** students. The program's mission is to provide equal access to quality education and facilitate retention and promotion from middle and high school through college. This program is federally funded and students must meet federal admissions criteria, attend one of the targeted schools, and demonstrate a genuine interest in pursuing education beyond high school.

http://www.ncsu.edu/student_affairs/talent/

Expanding Your Horizons

A conference to encourage eighth grade girls to consider careers in science, mathematics, or engineering. An exciting day in which over 400 girls, 70 teachers and 50 women scientists will gather to learn about and do science. Participants are identified by their schools to attend.

www.science-house.org/student/eyh

Imhotep Academy

Imhotep Academy introduces under-represented students (African-American, Hispanic, Native American, and Women) in **6th – 8th grades** to science, mathematics and technology at NC State University. The program uses laboratory experiments, research projects, classroom instruction, and field trips to introduce students to the rigorous and exciting worlds of chemistry, mathematics, marine, earth and atmospheric sciences, physics and statistics.

www.science-house.org/student/imhotep

NC-MSEN (North Carolina Math and Science Education Network)

NC-MSEN is for students in **6th – 12th grades**. The program's mission is to increase the numbers of underrepresented students pursuing careers at the university level in science, technology, engineering, and mathematics. Learning experiences include a Saturday Academy, a Middle School Enrichment Class, a High School Summer Research Program, an Academic Club of Excellence, a Summer Scholars Program, MSEN Day, and an Awards Ceremony. Students must attend a participating middle or high school to apply for the program.

<http://www.ncsu.edu/crmse/programs/msen/>

SPACE (Saturday Program for Academic and Cultural Education)

SPACE is designed for **6th, 7th, and 8th graders**. SPACE focuses on: exposing students to a core curriculum designed to challenge and inspire excellence; developing assertive, young leaders; and promoting a positive self image. SPACE supplements the instruction that students receive during the school year through a concentration on the following academic focus areas: Cultural and Historical Awareness, Communication Skills, Mathematics and Computer Science, and Physical and Life Sciences.

<http://www.ncsu.edu/provost/offices/diversity/space.html>

**For more information about pre-college programs at NC State,
contact Kelly Laraway, Director, Office of Pre-College Programs at
919-513-1370, kelly_laraway@ncsu.edu, www.ncsu.edu/precollege**