

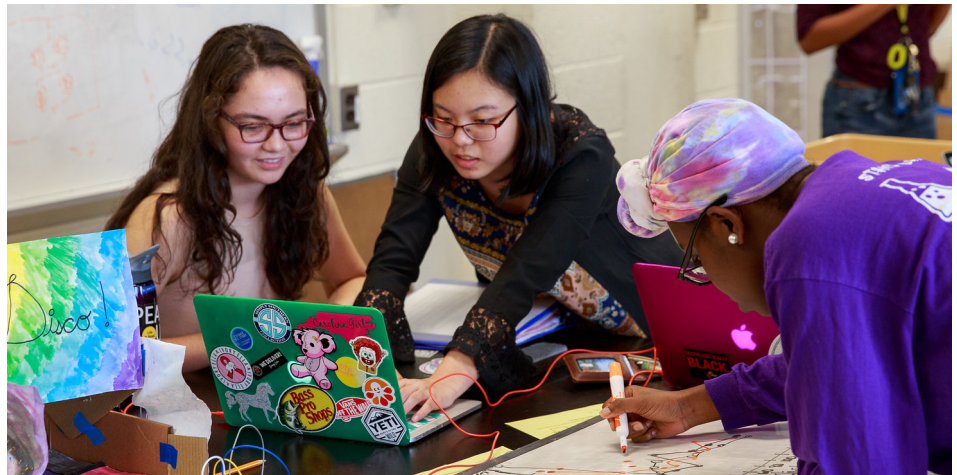


North Carolina
School of Science
and Mathematics



NCSSM Residential Program

2017-2018 Profile



WELCOME TO NORTH CAROLINA SCHOOL OF SCIENCE AND MATHEMATICS

North Carolina School of Science and Mathematics is a public, residential high school for juniors and seniors with high intellectual ability and commitment to scholarship. Established to provide challenging educational opportunities for students with special interest and potential in the sciences and mathematics, NCSSM opened in 1980 as the first school of its kind. We welcome students from across the state to study a specialized curriculum emphasizing science and mathematics but also offering humanities courses, athletics, and extracurricular opportunities.

With a student body that represents North Carolina's 13 congressional districts, NCSSM's students vary widely in their backgrounds, yet are similar in their motivation to achieve academically and in their determination to prepare for professional careers and positions of leadership.

STUDENT SELECTION

Students apply to NCSSM during 10th grade. They are selected through a competitive process that considers each applicant's interest in science and mathematics, standardized test scores, past academic performance, special talents, accomplishments, and extracurricular interests. The selection committee also looks for evidence of potential, particularly in science and mathematics. In order to assure NCSSM the benefits of a diversified student body, the committee also considers extenuating circumstances, as well as geographic and other demographic variables in its review process.

Due to limited capacity, the application process is highly competitive. NCSSM is legislatively mandated to enroll a roughly equal percentage of students from each of the state's congressional districts. Applicants thus compete for enrollment with other students in their congressional district rather than competing with every applicant from across the state. This ensures that applicants with access to the same community resources are competing with one another.



Currently, 680 11th- and 12th-grade students from across North Carolina live and learn at NCSSM.

INSTRUCTIONAL PROGRAM

The instructional program at NCSSM takes advantage of a residential learning environment, a well-trained and dedicated staff, and a highly motivated and talented student body. The school's philosophy is to ensure that each student obtains a thorough grounding in the sciences, mathematics, language arts, history, and a world language; that each student becomes proficient in the use of computers, laboratory facilities, and other means by which knowledge is acquired and processed in the sciences and mathematics; and that each student adopts a sequence of study that includes investigating areas of academic interest in-depth through high-level course offerings and such activities as mentorship, research courses, independent studies, seminars, and Mini-Term.

Students in the Class of 2017 were typically enrolled in 4-5 core academic courses during their first trimester and at least 5 in subsequent trimesters. These include the following minimal requirements of trimester credits earned:

- 6** Science
- 5** Mathematics
- 5** English
- 3** Social Science
- 3-6** World Language (varies with competency)
- 1** Engineering/computer science
- 1** Physical Activity & Wellness
- +** Electives to equal the required number of credits

In addition to these requirements, each student completes two Mini-Term sessions, two years of campus work service, a service learning requirement, and the Residential Education curriculum. Students participate in their choice of elective offerings, including extensive fine arts and music opportunities, in which approximately one quarter to one third of NCSSM students participate each year.

CLASS OF 2017 DEMOGRAPHICS

Race/Ethnicity	Students	Percent
African American/Black	25	7.3%
American Indian or Alaska Native	2	0.6%
Asian	100	29.2%
Hispanic/Latino	16	4.7%
Unknown	18	5.2%
White	166	48.3%
Two or More Races	15	4.4%
Total	343	100%

Under federal guidelines, students report race/ethnicity in a two-step process. First, students designate whether they are of Hispanic/Latino ethnicity, and secondly, they designate their race. Students may self-identify as many races as apply. Students who designated more than one race are counted in the "Two or More Races" category.

Gender	Students	Percent
Female	164	47.8%
Male	179	52.2%
Total	343	100%

QUALITY POINTS AND GPA

All NCSSM courses are honors level or higher. Mini-Term, physical activity/wellness courses, residential education courses, work service, and summer service learning are graduation requirements. These courses, along with special study options, carry no quality points and are not computed in the GPA. Quality point value of courses is reflected in the NCSSM course numbering system.

NOTE: Beginning with the Class of 2019, NCSSM will align our quality points with NC public high schools, as established by the NC Board of Education, retaining "C-" as our lowest creditable grade and our unique level of courses between "Honors" and "AP/College level":

Scale for **Classes of 2001–2018:**

Course	Quality points awarded by letter grade			
	A+,A,A-	B+,B,B-	C+,C,C-	D
300-349	5.00	4.00	3.00	0.00
350-399	5.50	4.50	3.50	0.00
400-499	6.00	5.50	4.50	0.00

Scale for **Class of 2019 and beyond:**

Course	Quality points awarded by letter grade			
	A+,A,A-	B+,B,B-	C+,C,C-	D
300-349	4.50	3.50	2.50	0.00
350-399	4.75	3.75	2.75	0.00
400-499	5.00	4.00	3.00	0.00

NCSSM graduates are well prepared for learning in a collegiate environment. Across the curriculum, they are expected to develop independent investigative skills, solve novel problems, function as leaders and participants on project teams, and appreciate the learning advantages that a diverse community offers.

College readiness for NCSSM students is also enhanced by articulation agreements with 19 colleges and universities. These agreements award university credit for courses taken at NCSSM without requiring an Advanced Placement exam or other placement or exemption testing.

CLASS OF 2017 STATISTICS

NATIONAL MERIT

91 National Merit Finalists

The Merit status is based on the PSAT, which students take in October of their junior year. Nearly a quarter of our senior class qualified as National Merit Finalists. Most schools have only a handful per class.

SAT TEST PERFORMANCE

	READING	MATH	COMPOSITE*
MEAN:	688	715	1390
MEDIAN:	700	720	1390

100% of students took the SAT exam. SAT statistics were compiled using the best verbal and best math scores reported for each student. New SATs (3/2016+) were converted to old SAT values for consistency. *Denotes median of best overall composite SAT scores, which does not necessarily equal the sum of SAT Reading mean plus SAT Math mean.

ACT TEST PERFORMANCE

ENGLISH	MATH	READING	SCIENCE	COMPOSITE
31.5	31.7	31.9	31.2	31.7

A total of 391 ACT exams were taken by 265 students. 86.3% of the Class of 2017 took the ACT exam.

AP EXAM PERFORMANCE

SCORE:	5	4	3	2	1
	34.7%	34.6%	23.4%	6.4%	0.9%

265 students (77.3%) took 841 exams. 94.7% scored a 3, 4, or 5 on at least one exam (does not necessarily equal the sum of percents for scores of 3, 4, and 5).

FINAL GRADES

A	B	C	D
67.7%	28.4%	3.9%	0.0%

Of 343 graduates, 27 (7.9%) had all As during their junior and senior years.

RESEARCH & MENTORSHIP

NCSSM offers a variety of options for focused research. Research Experience courses provide research skills development and the opportunity to complete a comprehensive research project in science, humanities, mathematics, or computer science.

More advanced courses in a specific scientific discipline — Research in Biology, Chemistry, Computational Science, Mathematics, or Physics — allow students to initiate or continue an in-depth research project of their own design. Students can also earn a research credential in mathematics by successfully completing an advanced sequence in statistics or mathematical modeling. Mentorship offers students the opportunity to work in an off-campus lab or other real-world setting under the guidance of a research professional at an area university or in a Research Triangle Park lab.

Many students also participate in summer research programs on campus or in the Triangle area and/or enter their work in state, national and international competitions.

MINI-TERM

Mini-Term is a two-week session each winter that allows NCSSM students to engage in educational experiences outside of the regular curriculum and classroom context. In 2017, students traveled abroad to places like China and Greece, hiked the Appalachian Trail, studied geological wonders in Arizona, and tackled topics ranging from DNA studies and quantum mechanics to sound art, Spanish cinema, and software designs.

Learn more: ncssm.edu

COLLEGE ACCEPTANCES & ENROLLMENTS FOR THE CLASSES OF 2015 THROUGH 2017

A = Accepted :: E = Enrolled

	A	E		A	E		A	E
Agnes Scott College	3	0	Lee University	1	0	Tulane University	3	1
Allegheny University	1	0	Lees-McCrae College	2	0	Tuskegee University	2	1
American University	7	0	Lehigh University	2	0	Union College	2	0
Amherst University	14	5	Lenoir-Rhyne University	10	0	United States Air Force Academy	9	5
Appalachian State University	50	10	Lewis Clark University	1	0	United States Coast Guard Academy	1	0
Arcadia University	3	0	Liberty University	7	1	United States Military Academy - West Point	2	2
Arizona State University	2	0	Long Island University	1	0	United States Naval Academy	5	2
Auburn University	2	0	Loyola University	1	0	University of Alabama - Birmingham	8	1
Averett College	2	1	Lynchburg College	3	1	University of Alabama - Huntsville	5	1
Bard College	3	0	Macalester College	3	0	University of Alabama - Tuscaloosa	10	4
Barnard University	5	2	Marquette University	2	0	University of Alaska - Fairbanks	1	0
Barton College	1	1	Mars Hill College	1	0	University of Arkansas	1	0
Bates College	1	0	Mary Baldwin College	1	0	University of British Columbia	1	0
Baylor University	2	0	Maryland Institute College of Art	1	0	University of California - Berkeley	38	11
Belmont-Abbey College	1	0	Marymount College	1	0	University of California - Davis	4	0
Benedictine College	2	0	Massachusetts Institute of Technology	31	16	University of California - Irvine	1	0
Bob Jones University	1	0	McGill University, Canada	6	0	University of California - Los Angeles	13	1
Boston College	5	0	Mercer University	8	0	University of California - San Diego	8	0
Boston University	26	3	Meredith College	9	2	University of California - Santa Barbara	2	0
Bowdoin College	2	1	Methodist College	8	0	University of Central Florida	8	0
Brandeis University	3	0	Miami University	3	0	University of Chicago	15	6
Bridgewater College	2	0	Middleburg College	4	1	University of Colorado - Boulder	2	1
Brigham Young University	2	1	Minerva Schools	1	0	University of Connecticut	2	0
Brown University	15	3	Montreat College	1	0	University of Florida	2	0
Bryn Mawr College	3	0	Morehouse College	2	0	University of Georgia	4	0
Bucknell University	1	0	Mount Holyoke	3	1	University of Illinois - Urbana-Champaign	18	1
Butler University	2	0	National University of Ireland	1	0	University of Kentucky	3	1
California Institute of Technology	18	6	New College of South Florida	2	0	University of Maryland - Baltimore County	6	0
California Polytechnic State University	2	0	New England Conservatory of Music	1	0	University of Maryland - College Park	3	0
Campbell University	20	4	New York Institute of Technology	2	0	University of Massachusetts - Boston	4	0
Cape Fear Community College	2	0	New York University	24	0	University of Massachusetts - Lowell	2	0
Capital College	2	0	Niagara University	1	0	University of Miami	17	2
Carleton College	4	0	North Carolina A & T State University	11	3	University of Michigan	9	3
Carnegie-Mellon University	38	9	North Carolina Central University	10	1	University of Minnesota	8	0
Case Western Reserve University	27	2	NC State University	539	184	University of Missouri - Kansas City	2	0
Catawba College	2	1	Northeastern University	18	1	University of Nebraska	1	0
Champlain College	1	0	Northwestern University	6	0	University of New Mexico	2	0
Chicago State University	1	0	Nova Southeastern University	1	0	University of North Carolina - Asheville	31	5
Christopher Newport University	1	1	Oberlin College	8	0	University of North Carolina - Chapel Hill	613	312
Clark University	1	0	Oglethorpe University	3	0	University of North Carolina - Charlotte	73	9
Clemson University	36	6	Ohio University	3	0	University of North Carolina - Greensboro	20	8
College of Charleston	6	0	Oregon State University	2	1	University of North Carolina - Pembroke	6	1
Colorado School of the Mines	9	2	Oxford College of Emory University	2	1	University of North Carolina - Wilmington	55	9
Colorado State University	1	0	Pennsylvania State University	14	1	University of North Florida	1	0
Columbia University	31	9	Pfeiffer University	1	1	University of Notre Dame	8	1
Connecticut College	1	0	Pomona College	8	3	University of Oklahoma	4	0
Cornell University	48	20	Pratt Institute	2	1	University of Oregon	2	0
Dartmouth College	12	3	Presbyterian College	2	1	University of Pennsylvania	23	11
Davidson College	12	2	Princeton University	16	7	University of Pittsburgh	14	2
Denison University	1	0	Purdue University	23	5	University of Richmond	6	0
DePaul University	1	0	Queens College	1	0	University of Rochester	10	3
DigiPen Institute of Technology	1	0	Queens University of Charlotte	2	0	University of San Diego	1	0
Drake University	1	0	Radford University	1	0	University of South Carolina	28	3
Drexel University	11	1	Randolph College	6	0	University of South Florida	2	0
Duke University	118	49	Randolph-Macon College	2	0	University of Southern California	19	3
East Carolina University	137	26	Reed College	6	1	University of S. Cal. of Cinematic Arts	1	1
East Tennessee State University	1	0	Regent University	1	0	University of Tampa	2	0
Eckerd College	4	0	Rensselaer Polytechnic Institute	13	1	University of Tennessee	2	0
Eindhoven University of Technology	1	1	Rhodes College	1	1	University of Texas - Austin	7	1
Elizabeth City State University	2	0	Rice University	12	2	University of Texas - Dallas	7	1
Elon University	26	6	Rochester Institute of Technology	3	0	University of Toronto	6	1
Embry-Riddle Aeronautical University	4	1	Rollins College	1	0	University of Utah	1	0
Emerson College	1	1	Rose Hulman Institute of Technology	4	0	University of Vermont	3	0
Flagler College	1	0	Rutgers University	1	0	University of Virginia	33	3
Florida Institute of Technology	6	0	Saint Lawrence University	1	1	University of Washington	1	0
Florida State University	3	1	Saint Louis University	3	1	University of Waterloo, Canada	3	1
Fordham University	3	0	Salem College	4	1	University of Wisconsin-Madison	3	0
Franklin W. Olin College of Engineering	1	1	Samford University	1	0	Ursinus College	1	0
Furman University	11	0	Santa Clara University	1	0	Vanderbilt University	30	6
George Mason University	2	0	Sarah Lawrence University	2	0	Vassar College	9	3
Georgetown University	15	3	Savannah College of Art and Design	3	0	Virginia Commonwealth University	7	1
Georgia Institute of Technology	70	13	School of Art Chicago	1	0	Virginia Polytechnic Institute	35	4
Georgia State University	1	0	Scripps College	2	1	Virginia Wesleyan University	2	0
Gettysburg College	1	1	Seattle University	1	0	Wake Forest University	73	13
Grinnell College	4	1	Sewanee: The University of the South	4	1	Warren Wilson College	4	0
Grove City College	1	1	Simmons College	1	0	Washington & Jefferson College	2	0
Guilford College	6	1	Smith College	4	1	Washington & Lee University	7	1
Hamilton College - NY	1	1	SOKA - University of America	1	1	Washington College	1	0
Hampden-Sydney College	3	0	Spelman College	10	2	Washington University in St. Louis	25	6
Hampshire College	6	1	St. John's University	4	0	Wellesley College	4	2
Hampton University	6	1	St. Lawrence University	1	0	Wesleyan University	3	0
Hanover College	1	0	St. Vincent University	1	0	Western Carolina University	9	2
Harvard University	13	11	Stanford University	13	11	Wheaton College	4	0
Harvey-Mudd College	11	6	Stetson University	3	1	William Peace University	1	0
Haverford College	5	1	Stevens Technology University	1	0	Williams College	5	2
High Point University	15	2	Stony Brook University	2	0	Wingate University	26	3
Hofstra University	8	0	Swarthmore College	5	2	Wofford College	3	0
Hollins University	10	2	Syracuse University	4	4	Worcester Polytechnic Institute	2	0
Howard University	19	3	Texas A & M University	3	1	Xavier University in Louisiana	1	0
Illinois Institute of Technology	1	0	The Art Institute of Charlotte	1	0	Xavier University	1	0
Indiana University Bloomington	3	1	The Catholic University of America	1	0	Yale University	24	13
Jacksonville University	1	0	The College of William & Mary	12	1			
Johns Hopkins University	21	4	The Cooper Union	2	0			
Johnson & Wales University	3	0	The George Washington University	15	3			
Kaohsiung Med University	1	0	The Ohio State University	13	3			
Kent State University	1	1	Trinity College	1	0			
Knox College	1	0	Tufts University	7	3			

During this three-year period, 14 NCSSM students took a gap year, a year off before entering college.

STUDENT LIFE

NCSSM is committed to creating a nurturing setting for the holistic development of every student. The residential environment increases the depth and breadth of all students' experiences as they take advantage of the rich opportunities and support that are available within the NCSSM community. The Counseling Services Department provides personal, academic, college, and career counseling. The Physical Activity and Wellness Department offers a wide variety of core and elective courses from archery and fencing to sports medicine courses; an 18-sport interscholastic program; an intramural program, and many other recreational opportunities. The school also offers more than 70 student-led clubs, including academic, social, and service-related groups.



The Residential Education Department offers a required course that students complete in the first trimester junior year. Students must also complete at least three additional Residential Education courses over the remaining five trimesters of enrollment.

Through the Student Services Department, students are required to perform 60 hours of service learning for a non-profit organization in North Carolina before their senior year. Each student is also required to perform three hours of work service each week for an area like cafeteria or grounds or in a student leadership position on campus.

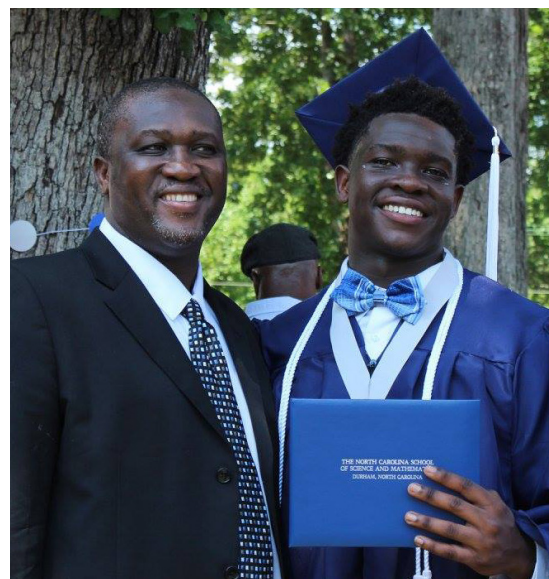
OUR ALUMNI

The Class of 2017 represents NCSSM at 80 total schools throughout the United States.

MOST COMMON COLLEGE & UNIVERSITY ENROLLMENTS: NCSSM's CLASS OF 2017



UNC-Chapel Hill	115	UC Berkeley	7
NC State	65	Harvard	5
Duke	15	MIT	5
Cornell	8	Yale	5
East Carolina U.	7	Georgia Institute of Tech.	4



North Carolina School of Science and Mathematics

1219 Broad Street, Durham, NC 27705

Counseling Services • 919-416-2835 • ncssm.edu/counseling