



FACT SHEET

What is the Virginia STEAM Academy?

The Virginia Science, Technology, Engineering, and Applied Mathematics (STEAM) Academy is an investment in student talent. The Academy is intended to be a uniquely challenging experience for students with ability and potential in science, engineering or mathematics.

The Academy has three components:

- (1) a public, residential (boarding) academy for approximately 1,000, 9th-12th grade students from across the Commonwealth
- (2) a summer residential academy for highly able middle school students, grades 6-8, and
- (3) high-quality professional development for K-12 teachers and administrators across the Commonwealth, and digital on-demand classroom instruction for middle and high school students across the Commonwealth.

Why do we need an Academy?

"If we're going to compete [in the global economy], we've got to start producing those who can compete."¹ The Academy offers a long-term, sustainable solution for 21st century knowledge worker needs. It ensures we nurture an exceptionally well-prepared high school graduate who can enter higher education or the workplace with the knowledge, skills, leadership and creativity needed to excel.

Students will benefit from a rigorous, internationally benchmarked and 21st century relevant curriculum that offers (1) honors and advanced level courses, and (2) core and elective classes in science, engineering, mathematics, wellness (PE), social science, English, world languages, and fine arts. There will be opportunities for interdisciplinary study and creative individual study and research.

Students will earn a high school diploma and pursue advanced college credit; routinely collaborate with their peers, faculty, and field experts to address real-world challenges; experience sustained apprenticeships with partner organizations in STEAM-related occupations; and produce culminating projects that demonstrate STEAM-related outcomes.

Has this been done before?

Yes! North Carolina was the first to offer a public, residential academy for highly able science and mathematics students. The North Carolina School for Science and Mathematics (NCSSM) was founded in 1980. The Virginia STEAM Academy is patterned after the internationally acclaimed Illinois Mathematics and Science Academy, founded in 1985. Today, there are more than

100 schools across 29 states offering some version of a public, specialized high school for students who show exceptional talent in science, technology, engineering and mathematics. These schools comprise the National Consortium for Specialized Secondary Schools of Mathematics, Science and Technology. Many are residential schools.

Who can attend?

Any rising 9th grade student in the Commonwealth may apply to attend the Academy. The admissions criteria and selection process will use a large number of judgment criteria (school records, essays, references, exams, interviews, etc.).

How many students will attend the school?

The Academy will serve approximately 1,000, 9th-12th grade students. Two hundred and fifty ninth graders will be admitted each year. In the summer, the Academy will serve approximately 250 middle school residential students, grades 6-8.

Who will teach at the Academy?

The Academy's faculty will be drawn from industry, higher education, and certified secondary school teachers. A significant number will hold masters or doctoral degrees. Approximately 75 faculty will be hired. The student:teacher ratio will be 24:1 in non-lab classes; 12:1 in lab classes.

Will students have the opportunity to participate in extracurricular and co-curricular activities?

Yes. Among the co-curricular and extracurricular programs to be considered are: Sports (golf, lacrosse, field hockey, tennis, wrestling, swimming) and Co-curricular (instrumental and vocal music, debate, drama, social service, campus newspaper, campus government, seminars).

How much will it cost?

The Academy's estimated annual operating budget is \$19 million. This includes the residential component and professional development outreach.

Start up construction and operational costs are estimated at \$65 million. These costs will be significantly reduced if land and buildings are gifted or repurposed.

When will the Academy open?

The Academy will receive its inaugural freshman class in fall 2014. The summer residential camp for middle schoolers will open the preceding summer.

¹ E. Dana Dickens, III, president and CEO, Hampton Roads Partnership