Are You Ready for the Challenge?

We live in a fast-paced world that requires a society and workforce with strong science and technology backgrounds. The SSMV seeks highly competent and motivated MNPS students who are:

• Passionate about science and math,
• Ready to apply themselves as problem solvers,
• Interested in becoming tomorrow's leaders.

The SSMV prepares students to engage successfully in college studies at an accelerated rate; promotes the pursuit of graduate, postgraduate, and professional study; and provides the strong foundation crucial for career success. Every SSMV graduate has been accepted to a four-year college or university, 52% of graduates are currently pursuing STEM majors.

How Do I Apply?

All eighth graders who will attend MNPS high schools are eligible to apply. Applications and instructions are available online at vanderbilt.edu/cso/ssmv/prospective

Important Dates

Applications available ................ Monday, January 1, 2018
Application deadline .................. Friday, February 16, 2018
Interviews with top candidates ...... Check online
Acceptances announced .............. Late April/Early May

• Complete applications and recommendations must be received by the deadline in order to be considered.
• Please be sure to request teacher recommendations early.
• Top applicants will be contacted for interviews; not all applicants will be contacted.

Visit us on the Web at:
vanderbilt.edu/cso/ssmv

Or contact: Amanda Dixon, Admissions Coordinator
amanda.dixon@vanderbilt.edu
(615) 322-7132

The School for Science and Math at Vanderbilt has received funding from Vanderbilt University Medical Center, Metropolitan Nashville Public Schools, the Nashville Alliance for Public Education, the National Center for Research Resources of the National Institutes of Health, and other generous donors.
IT ALL BEGINS WITH A QUESTION.

What Is the School for Science and Math at Vanderbilt?

The School for Science and Math at Vanderbilt (SSMV) is a joint venture between the Vanderbilt Center for Science Outreach (CSO) and Metropolitan Nashville Public Schools (MNPS). The SSMV is a four-year, high school program held on the Vanderbilt campus and is led by a team of Ph.D. scientist instructors.

What Do Students Study at the SSMV?

Students pursue a curriculum that connects sciences, technology, engineering, and mathematics through meaningful and engaging hands-on exploration with increasing depth and independence.

The curriculum integrates cutting-edge, real-world content such as:

- Conducting water quality evaluation of local waterways using research tools such as multiprobes, student-built velocity meters, and chemistry tests,
- Visiting Vanderbilt facilities such as the LASIR lab, then building and testing devices using engineering principles and materials (Arduinos, concrete composites) in class,
- Examining the microbiology of our food, our bodies, and our surrounding environment through laboratory experiments that analyze genetics and diversity of life.

In the summer, students will build critical thinking skills through completion of research projects and internships.

Who Makes Up the SSMV?

School for Science and Math students are among the top students in MNPS high schools. The SSMV has served students from fifteen high schools and thirty-four MNPS middle schools. Twenty-six students are selected for each freshman cohort.

Ph.D. scientist instructors lead daily instruction and numerous Vanderbilt faculty, postdoctoral fellows, and graduate students contribute instructional time as well.

How Does the SSMV Work?

Each week, SSMV students attend class one day on the Vanderbilt campus and their regular high schools the other four days. SSMV students also complete all missed work at their high schools.

School runs from 8:00 a.m. to 2:00 p.m. with an optional three-hour study period from 2:00 to 5:00 p.m. MTA bus access is provided to all students. SSMV is free of charge to MNPS students.

Days on Vanderbilt's Campus

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<tr>
<th>Grade</th>
<th>Academic Year</th>
<th>Summer</th>
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<tbody>
<tr>
<td>9</td>
<td>Interdisciplinary Science I</td>
<td>Research I (3 weeks)</td>
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<td>Taking a hands-on approach to explore questions through interactions with research scientists in various fields</td>
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<tr>
<td>10</td>
<td>Interdisciplinary Science II</td>
<td>Research II (3 weeks)</td>
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<td></td>
<td>Implementing group research projects to investigate scientific questions</td>
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<tr>
<td>11</td>
<td>Interdisciplinary Science III</td>
<td>Research III (6 weeks)</td>
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<td>Carrying out an internship with a Vanderbilt research laboratory and investigating various implications and outputs of scientific research</td>
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<tr>
<td>12</td>
<td>Advanced Research</td>
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<tr>
<td></td>
<td>Communicating research outcomes to the scientific and global public through national science competitions and community-based research projects</td>
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“IT THINKS that the SSMV is such a unique opportunity. Not only do students get to excel in a highly academic scientific environment, we build communication and collaboration skills, which are extremely valuable in the professional world.”

Grayson, Class of 2018