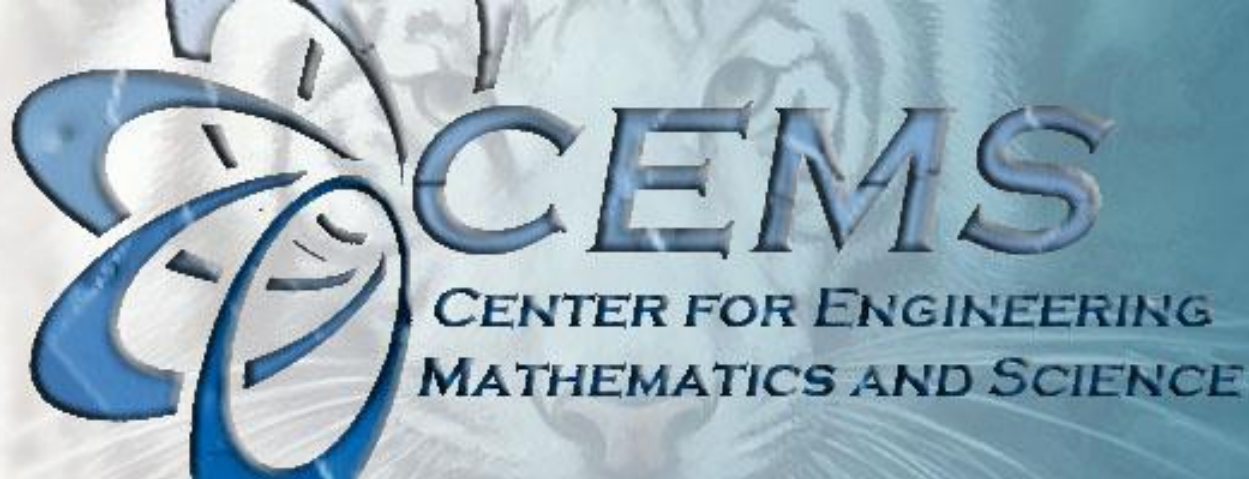


VISIT THE CEMS WEBSITE

www.ahschools.us/bhscems





**BLAINE HIGH SCHOOL
PRESENTS....**

**CENTER FOR ENGINEERING,
MATHEMATICS, AND
SCIENCE**

WHAT IS CEMS?

Our Mission

CEMS is a Math, Science, and Engineering Program at Blaine High School.

This program prepares students for a post-secondary education and many career options.

INTRODUCTION OF CEMS STAFF

- × Jason Paske- Principal
- × Jenny Birkmeier- Coordinator
- × Susan Flemming- Assistant Principal
- × Allison Fjeld- Counselor
- × MaryAnn Adams/Lyssa Oldre-Counselor
- × Melody Anderson - Attendance Secretary

INTRODUCTION OF CEMS STAFF

- ✘ Engineering teacher/Senior Capstone course- Jeff Fedor
- ✘ Engineering teacher/Senior Capstone course- John Bayer
- ✘ Engineering teacher/Senior Capstone course- Calla Athman
- ✘ Engineering teacher/Senior Capstone course- Doug Gerick
- ✘ Engineering teachers- Tim Riordan/Kevin Overgaard
- ✘ Engineering/Computer Science teachers- Holly Boisjolie
- ✘ CEMS Computer teacher – Rachel Bausman/Cathy Lund-Ziebarth
- ✘ CEMS Math teachers –Shawn Everson/Anna Morley
- ✘ CEMS Physics teachers- Gretchen Kulas
- ✘ CEMS English teachers- Jonathan Loo/Nathan Schultz/Sarah Reisdorf

WHO CAN JOIN CEMS?

- ✘ Incoming 9th and 10th graders
- ✘ Students that live in one of these 7 districts
(Transportation provided)
 - + Anoka-Hennepin ISD 11
 - + Brooklyn Center Schools
 - + Buffalo-Hanover-Montrose Schools
 - + Elk River Area Schools
 - + Fridley Public Schools
 - + ISD 279 Osseo Area Schools
 - + Rockford Area Schools



**NORTHWEST SUBURBAN
INTEGRATION SCHOOL DISTRICT**

A Global Community Learning and Growing Together

CEMS DEMOGRAPHICS

Total Enrollment = 595

Male 402 67.5%	Female 193 32.5%	Ethnicity 179 28.2%
Out of District 72 12.1%	In District (Non Blaine) 64 10.8%	9 th grade - 152 10 th grade - 157 11 th grade - 151 12 th grade - 135

STUDENT COMMITMENT

- × CEMS is a one year commitment
- × Most coursework is at the honors level
- × CEMS students are required to take
 - + Math, science, and engineering every year
 - + CEMS Sections of Honors English 9 & 10
 - + CEMS Computer Skills for Engineers in first year
 - + Programming course in second year

CEMS PROGRAM OVERVIEW

The program begins with two Foundation Engineering courses



Introduction to Engineering Design

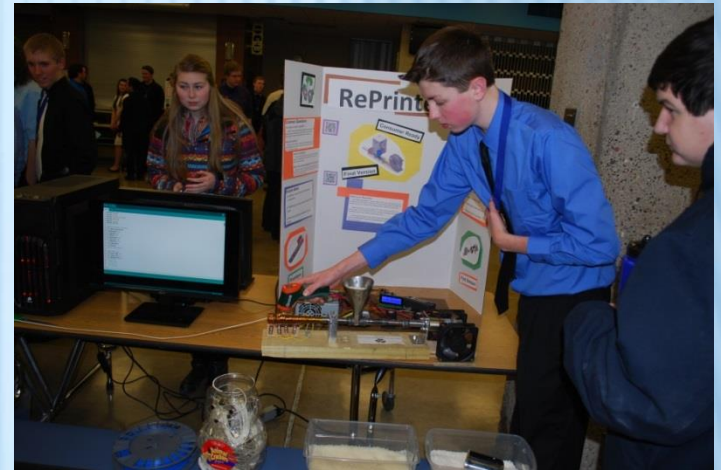
Principles of Engineering



Engineering Course Options

- × Aerospace Engineering
- × Digital Electronics
- × Environmental Sustainability
- × Civil Engineering & Architecture
- × Computer Integrated Manufacturing
- × Computer Science Principles
- × Computer Science A
- × Cybersecurity

PLTW Engineering Design and Development - senior capstone class



PLTW COLLEGE CREDIT

- ✘ Students can earn credits through St. Cloud State for a small fee
 - + Maintain 80% in class
 - + Proficient on the PLTW final
- ✘ Credit is also available at various other colleges
- ✘ Scholarships

CURRICULUM – 9TH GRADE

CEMS Block

- × Science
 - + Honors Physics 9
 - × (No Science Fair Projects)
 - × Engineering
 - + PLTW Introduction to Engineering Design (Arts credit)
 - × CEMS Honors English 9
-
- × Math
 - × HS Intermediate Algebra
 - × HS Geometry or HS Honors Geometry
 - × HS Algebra 2
 - × or next appropriate Math Course
 - × Business
 - + CEMS Computer Skills for Engineers (one trimester)



9TH GRADE SCHEDULE - CLASS 2025

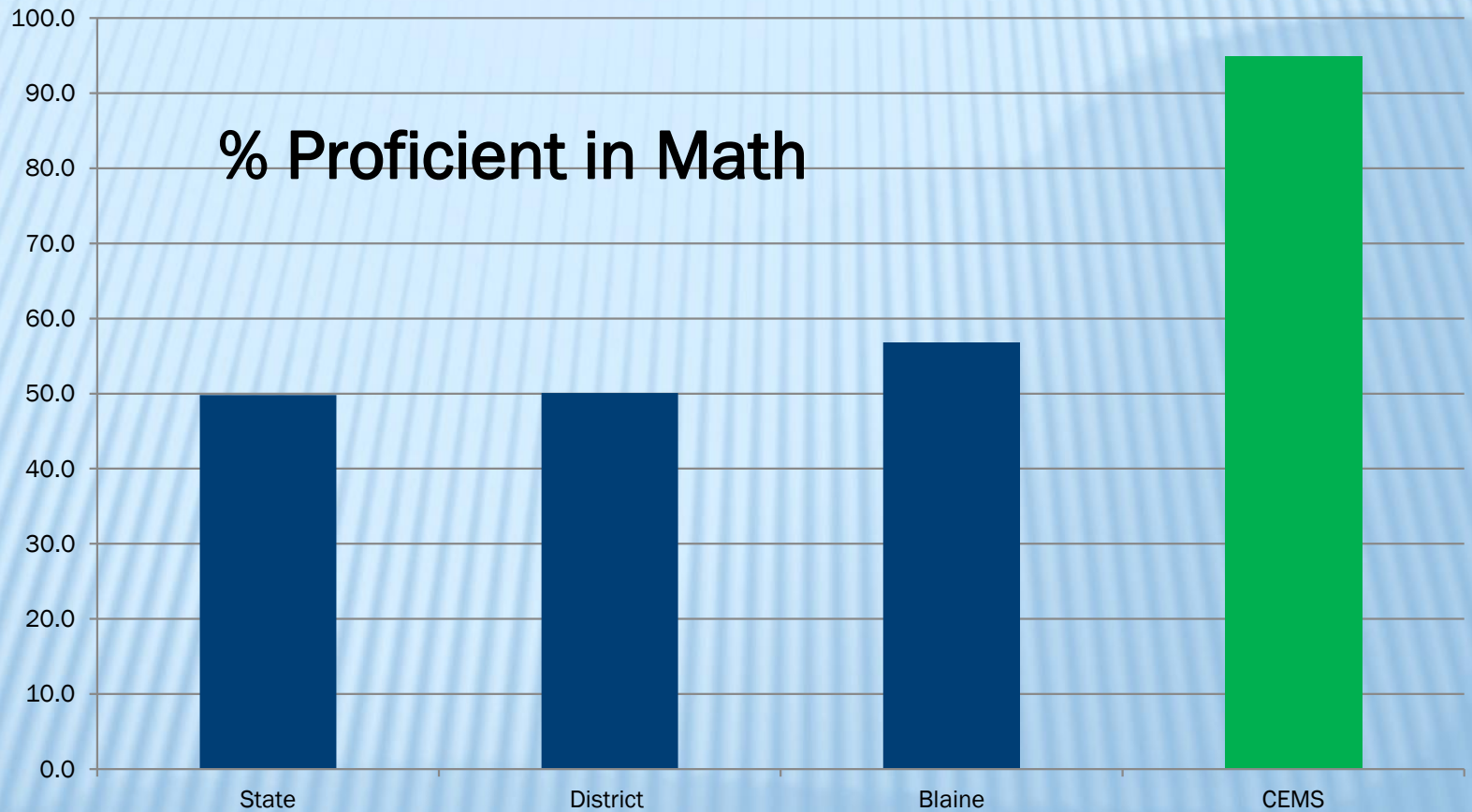
Non-Music Student

Honors CEMS English 9 Physics 9 PLTW Intro Engineering Design		
PE I	CEMS Comp Skills for Engineers	Geography
Civics	Math	Math
Math/Elective	Elective	Elective

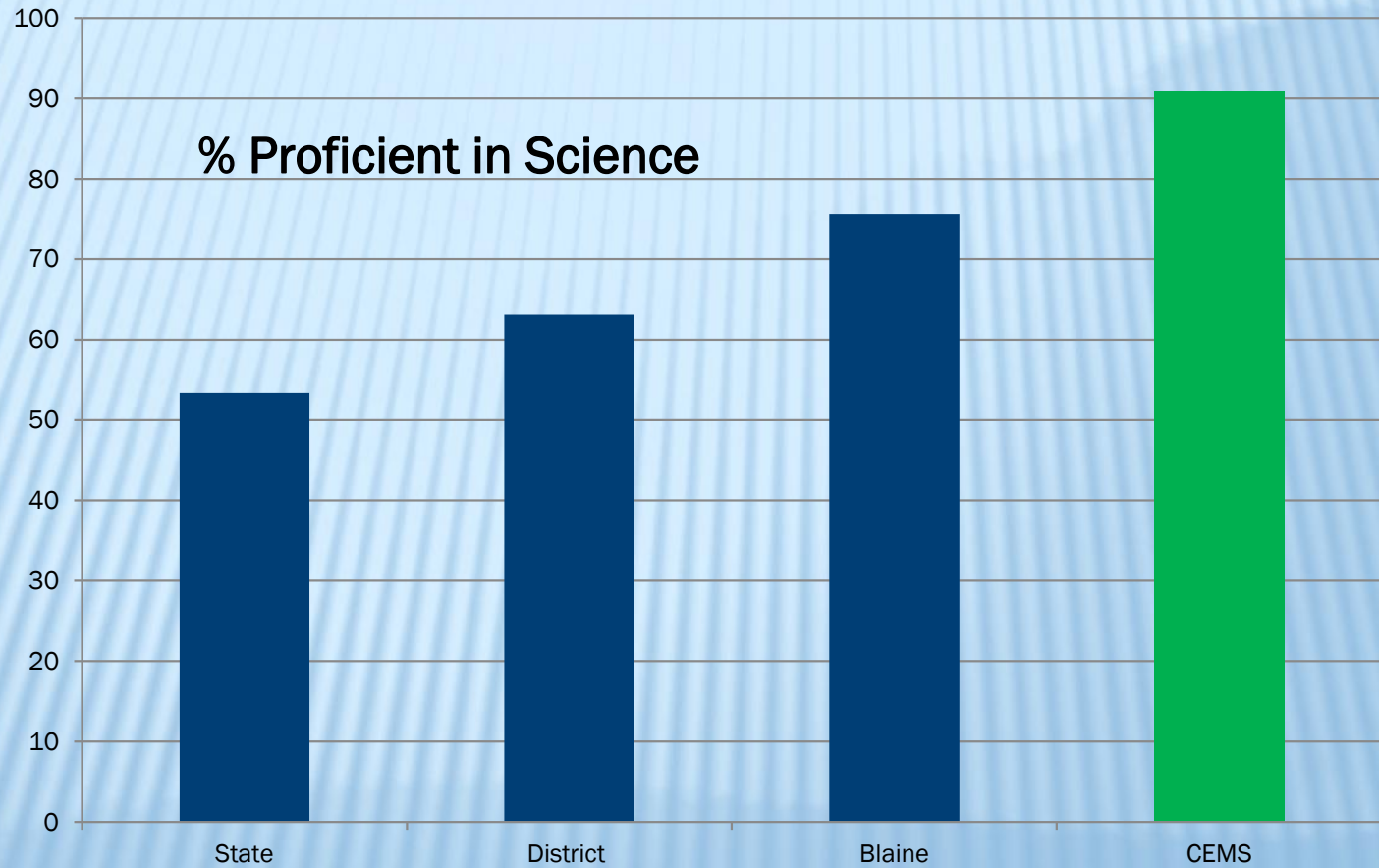
Music with Electives Student

Honors CEMS English 9 Physics 9 PLTW Intro Engineering Design		
Math	Math	Geography
Civics	Math/Elective	Music/Elective
CEMS Comp Skills for Engineers	Music	Music

CEMS MCA DATA- MATH



CEMS MCA DATA- SCIENCE



SUCCESSFUL STUDENTS

- × Current successful CEMS students have these qualities
 - + Exceptional work habits
 - × Good organization system
 - × Good time management skills
 - × Complete and turn in work on time
 - × Seek extra help when needed
 - + Strong interest and high performance in Math/Science
 - × Skills at or above grade level
 - + Basic computer skills- keyboarding

SUPPORT FOR CEMS STUDENTS

- × CEMS Program Coordinator
- × CEMS Counselor, Assistant Principal, Secretary
- × CEMS Support Teacher
- × Intervention Teachers
 - + After school Intervention
- × iTime
- × Career Specialist
- × Student Achievement Advocates (SAA)
- × School Psychologist
- × Bengal Pride Program (9th graders)
- × After School Tutoring Program- Bengal Junction
- × Industry Mentors

OPPORTUNITIES FOR CEMS STUDENTS

- ✘ Scholarships available only to students in our program
- ✘ Internship opportunities for Engineering Students

APPLICATION PROCESS

- ✘ Applications must be submitted online
- + Deadline is December 31st

www.nws.k12.mn.us

The screenshot shows the homepage of the Northwest Suburban Integration School District. At the top, the district's logo features a stylized tree with leaves, and the text reads "NORTHWEST SUBURBAN INTEGRATION SCHOOL DISTRICT" with the tagline "A Global Community Learning and Growing Together". Below the logo are navigation links: "About NWSISD", "NWSISD Staff Resources", "Internal Use", and "Print View".

The main content area is titled "Welcome to Northwest Suburban Integration School District". It features a central image of a woman, Cindy McKay, with the text: "Congratulations! Cindy McKay, Transportation Director for Fridley was named Transportation Administrator of the Year for 2016 by The Minnesota Association for Pupil Transportation (MAPT). Read more here." To the right of this image is another announcement: "Congratulations! Anoka Middle School's Jolanda Dranchak recognized for administrative excellence! Dranchak has been named the 2016-2017 Art Educators of Minnesota Administrator of the Year. Read the entire story here."

Below these announcements are three news items:

- Fridley Fatherhood Partnership (read more)**: The Partnership provides an avenue for fathers to get together and learn how they can continue to support and contribute to their children's educational success.
- Students from Jackson Middle School and Fridley Middle School joined together for leadership training at Base Camp.**
- Jackson Middle School students take part in leadership training**: A photograph shows a group of students sitting around a table, engaged in a discussion.

On the right side of the page, there are three additional sections:

- NWSISD Postcard to all District Families**: A small image of a postcard.
- Upcoming Events with NWSISD**: A section titled "Upcoming Events:" with the text: "I Am Anishinaabe - the History of Great Lake Indigenous Culture and Language, Wednesday, January 4, 2017, 8:30 a.m. - 11:30 a.m."
- College Visits 2016**: A section titled "Join Northwest Suburban Integration School District on college visits throughout the school year. Below are fliers and sign up instructions for both high school and middle school. Email or call Ayanna for openings at 763-466-1531 or ajews@nws.k12.mn.us. High School College Visit Flyer High School Sign-Up Middle School College Visit Flyer Middle School Sign-Up

At the bottom left, there is a link: "Magnet Lottery Priority Application Access the Magnet Lottery Priority Application here."

A sidebar on the left contains a list of navigation links: Home, Magnet Schools, Magnet School Application, Magnet School Informational Night Calendar, NWSISD Events Calendar, Transportation, Step-Up Mentorship Program, Educators Rising, Family and Community Empowerment, Multicultural Resource Center, AVID (Advancement Via Individual Determination), Contact Information, Driving Directions, Employment Opportunities, En Español, Trong tiếng Việt, and In Russian.

WHAT'S NEXT

- ✘ You will receive acceptance letter early January
- ✘ Registration information will be communicated at that time