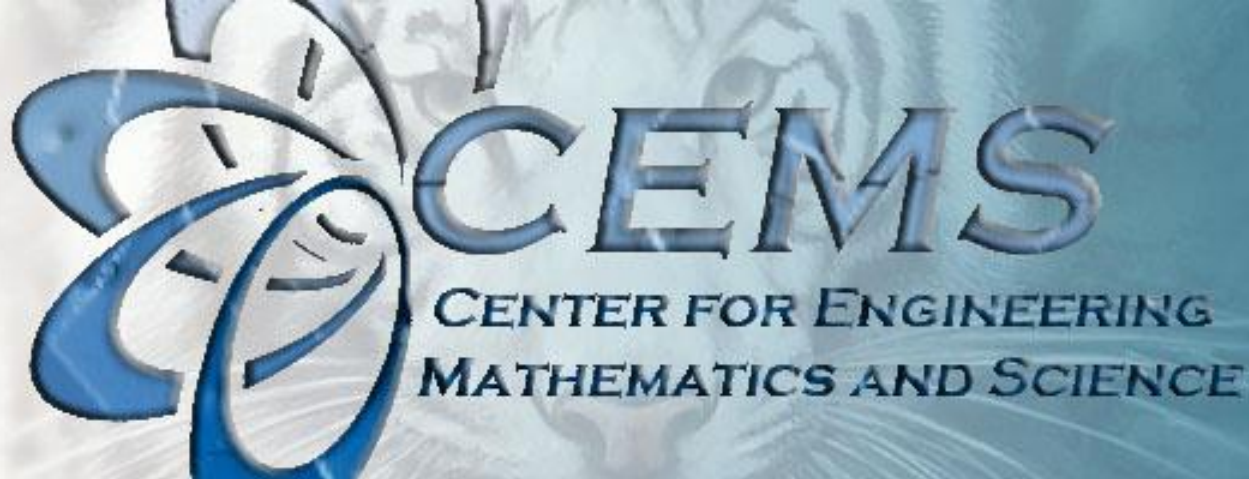


VISIT THE CEMS WEBSITE

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
- × Katie Zimba-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/Christian Way
- ✘ CEMS Computer teacher – Rachel Bausman
- ✘ 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 = 645

Male 427 66.2%	Female 218 33.8%	Ethnicity 179 27.8%
Out of District 90 14%	In District (Non Blaine) 115 17.8%	9 th grade - 168 10 th grade - 164 11 th grade - 141 12 th grade - 172

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

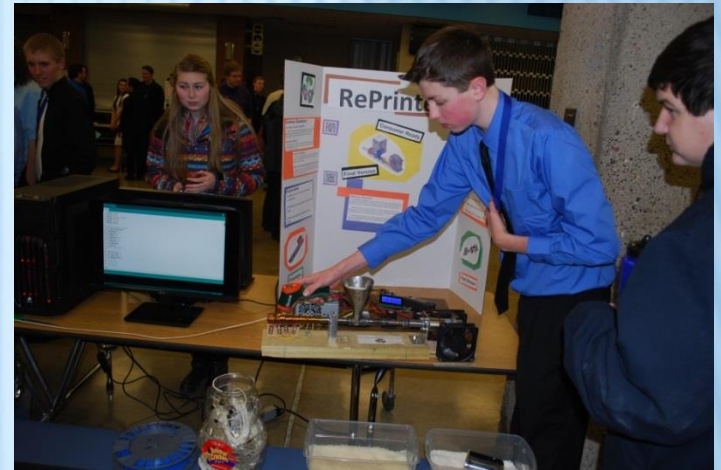
Principles of Engineering



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 up to 6 credits through the U of MN and/or St. Cloud State for a small fee
 - + Maintain 85% 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

- × More information on the Math requirements will be presented at the January 14th Registration Night

× Business

- + CEMS Computer Skills for Engineers (one trimester)

9TH GRADE SCHEDULE - CLASS 2024

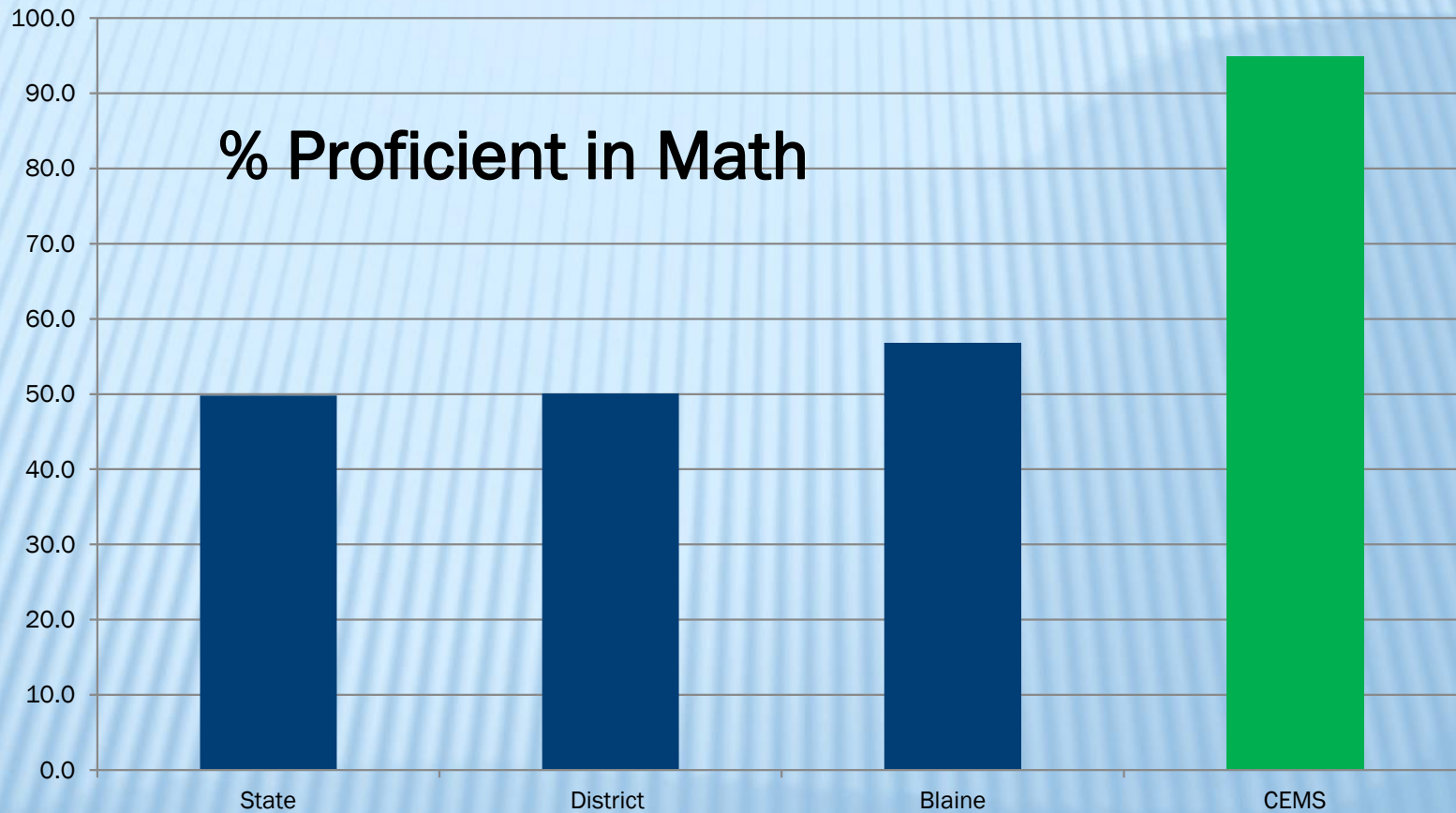
Non-Music Student

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

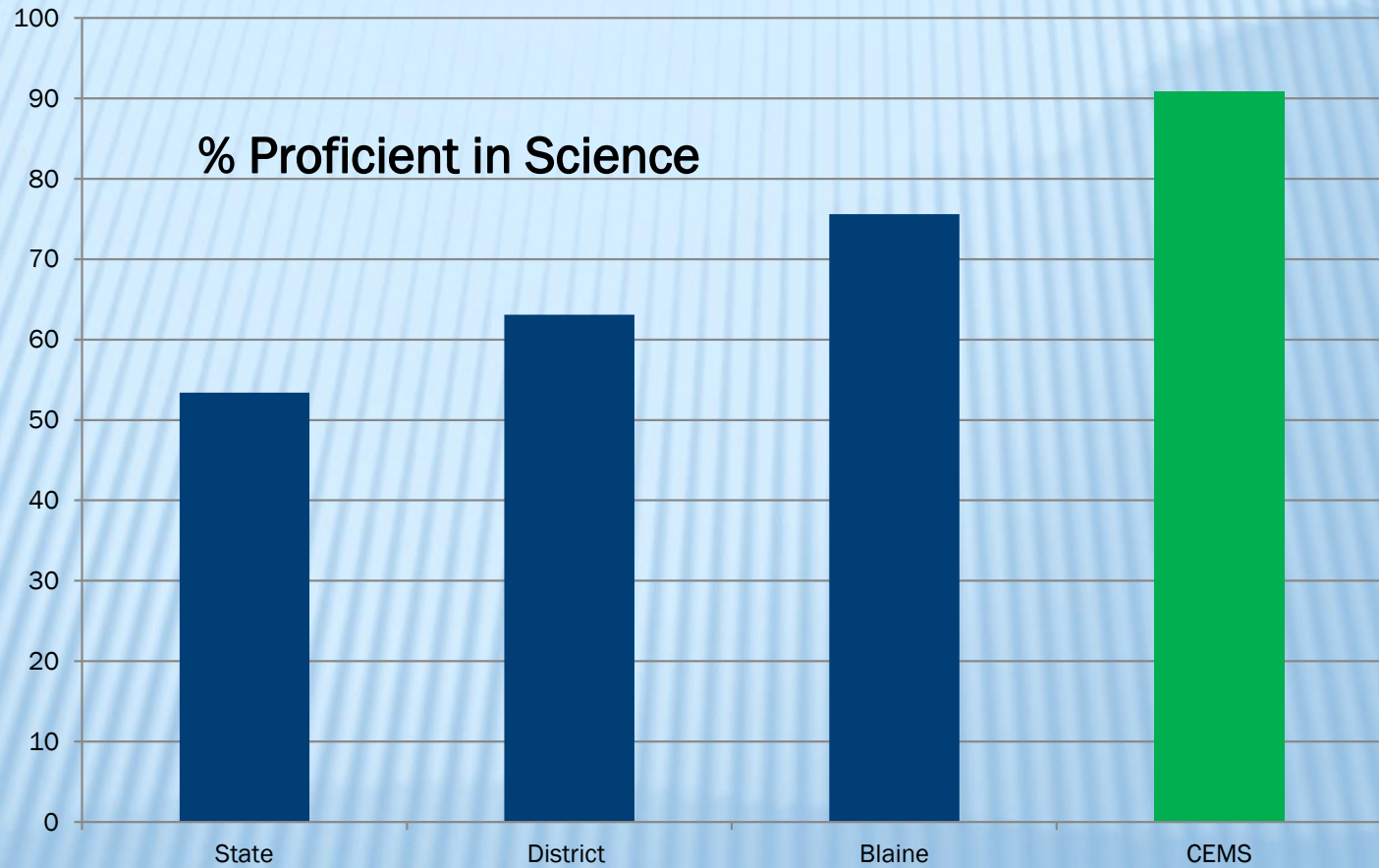
Music/World Language Student

Honors CEMS English 9 Physics 9 PLTW Intro Engineering Design		
World Language	World Language	Geography
Civics	CEMS Math	CEMS Math
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

SPEAKERS

- ✘ Lucia Hadsall – 10th Grade CEMS student
- ✘ Andrew Huynh – 11th grade CEMS student

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 large photo of a woman, likely a staff member, standing in front of a decorative wall. To the right of the photo, there are several news items:

- Schools in the news!** Check out our schools, districts, staff, and students that are doing great things!
- 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.](#)
- 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.](#)

Below the news items, there are sections for "Upcoming Events with NWSISD" and "College Visits 2016".

On the left side of the page, there is a vertical navigation menu with the following 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
- Tiếng Việt
- In Russian

At the bottom of the page, there is a link: "Magnet Lottery Priority Application Access the Magnet Lottery Priority Application [here.](#)"

WHAT'S NEXT

- ✘ You will receive acceptance letter early January
- ✘ Registration materials will be mailed, e-mailed or delivered to schools
 - + Roosevelt – January 10th
 - + Northdale – January 13th
- ✘ January 14th – Incoming 9th grade Registration Night - 6:00 pm CEMS presentation in Auditorium

THANK YOU FOR ATTENDING

✘ Tours available

+ Please go with your assigned group

