

CENTER FOR ENGINEERING, MATHEMATICS, AND SCIENCE

CEMS STAFF

- ✖ John Phelps- Principal
- ✖ Coordinator- Jenny Birkmeier
- ✖ CEMS Assistant Principal – Jason Paske
- ✖ CEMS Counselors – Annette Pare and Katie Zimba
- ✖ Engineering teachers- Calla Athman, John Bayer, Doug Gerick, Tim Riordan, Holly Boisjolie, Jeff Fedor
- ✖ Engineering Design and Development teachers- Jeff Fedor, John Bayer
- ✖ Math Teachers –Beth Dorsing and Shawn Everson
- ✖ Computer Skills/Programming teacher- Holly Boisjolie
- ✖ Physics Teachers- Dave Ross, Gretchen Kulas
- ✖ English Teachers- Jonathan Loo, Sarah Reisdorf, and Tim Connors

ENROLLMENT

	Male	Female	Ethnicity
2016-17 incoming class Total = 225	146 64.8%	79 35.1%	68 30.0%

PRELIMINARY 2016-17 ENROLLMENT

	Male	Female	Ethnicity
Total Students (9-12)= 755	502= 66.5%	253= 33.5%	190= 25.8%
Out of District= 149 (19.7%)	In District (non-Blaine) = 214 (28.3%)		9 th grade - 222 10 th grade - 212 11 th grade - 186 12 th grade - 135

4 YEAR PLANS

9th Grade

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

10th Grade

Math	Math	PE II
Science	Science	PLTW Principles of Engineering
PLTW Principles of Engineering	Programming Option	US History
US History	CEMS Honors English 10	CEMS Honors English 10
Health	Elective	Elective

11th Grade

Math	Math	Elective
Science	Science	CEMS* Elective
CEMS* Elective	English 11	English 11
World History	World History	Elective
Elective	Elective	Elective

12th Grade

Math	Math	US Gov't & Politics
Science	Science	Economics
PLTW Eng Design and Development	PLTW Eng Design and Development	PLTW Eng Design and Development
English 12	English 12	Elective
Elective	Elective	Elective

9th Grade

Physics 9 PLTW Intro to Engineering Design CEMS Honors English 9		
Math	Math	Comp Skills for Engineers
Geography	Civics	World Language
World Language	Music	Music

10th Grade

Math	Math	World Language
Science	Science	PLTW Principles of Engineering
PLTW Principles of Engineering	Programming Option	US History
US History	CEMS Honors English 10	CEMS Honors English 10
World Language	Music	Music

11th Grade

Math	Math	Health
Science	Science	CEMS* Elective
CEMS* Elective	English 11	English 11
World History	World History	PE I
Music	Music	Music

12th Grade

Math	Math	US Gov't & Politics
Science	Science	Economics
PLTW Eng Design and Development	PLTW Eng Design and Development	PLTW Eng Design and Development
English 12	English 12	PE II
Music	Music	Music

FIRST YEAR IN CEMS

- × Everyone is in

- + CEMS Block (Full Year)

- × PLTW Introduction to Engineering Design

- × CEMS Honors English 9

- × Honors Physics 9

- + Computer Skills for Engineers (1 trimester)

- × Math

- + CEMS Intermediate Algebra

- + CEMS Advanced Algebra/Stats or AP Statistics

- + AP Statistics

SECOND YEAR

- ✖ PLTW Principles of Engineering
- ✖ Programming Option
- ✖ CEMS Honors English 10

- ✖ Math and Science class
 - + Recommended- H. Chemistry
 - + Recommended- H. Geometry, AP Statistics, Pre Calculus

THIRD YEAR

- ✖ Engineering Elective Choice
 - + PLTW Aerospace Engineering
 - + PLTW Environmental Sustainability
 - + PLTW Civil Engineering & Architecture
 - + PLTW Digital Electronics
 - + PLTW Computer Science Principles
 - + PLTW Computer Science A
 - + PLTW Computer Integrated Manufacturing

- ✖ Take subsequent math and science classes

FOURTH YEAR

- ✖ Mandatory class- PLTW Engineering Design and Development
 - + Teams of 4-5 students will work together on a capstone project
 - + Each group has at least one community mentor
- ✖ Take subsequent math and science classes

COLLEGE CREDIT FOR PLTW COURSES

- ✖ To qualify for credit
 - + 80-85% in course work
 - + Final exam with minimum score of 4

STUDENT READINESS

- ✖ Issues to discuss with your student
 - + Organization skills
 - + Work ethic
 - + Communication skills
 - + Honors classes
 - + Importance of grades and GPA
- ✖ Tools for parents
 - + AH Connect
 - + Teacher Websites and Email

ACADEMIC ASSISTANCE

- ✖ Teachers – available before/after school
- ✖ Bengal Junction – after school tutoring program
+ Monday through Thursday
- ✖ Tutor Connect – district sponsored tutoring program
- ✖ Student organized study groups

WHAT STUDENTS SAY ABOUT CEMS

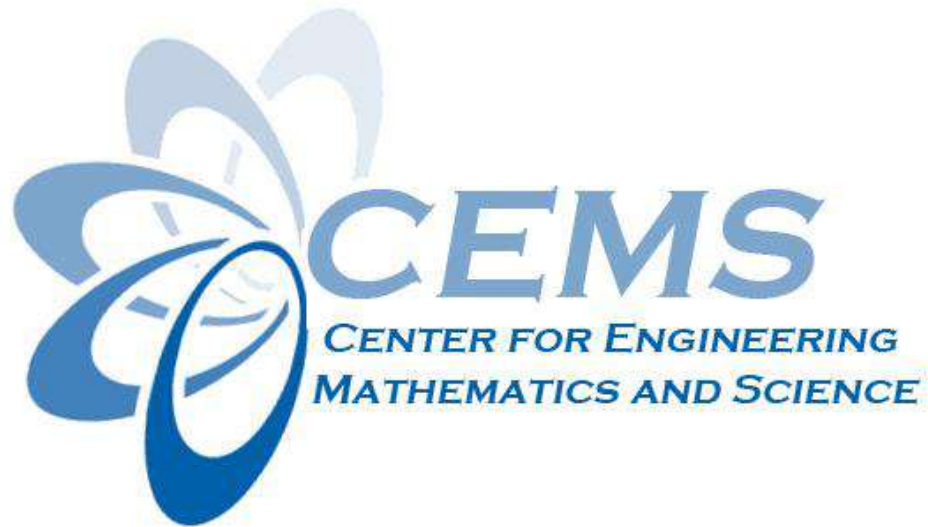
- ✖ I have really enjoyed CEMS, it has taught me a lot about engineering. During CEMS I also improved teamwork in a problem solving situation.
- ✖ I learned how to truly think critically and apply logic to subjects other than CEMS courses.
- ✖ CEMS has showed me multiple career paths that I would have never been exposed to without this program. I am grateful that this program showed me opportunities for a higher future, and helping me narrow down my career path.

DATES TO REMEMBER

- ✖ Tuesday, August 9; 9 a.m. to 7 p.m.
 - + Students pick up schedules, activities information and have photos taken
- ✖ Monday, August 29; 7:40 am – 11:45 am
 - + 9th grade orientation (buses pick up at regular time)
- ✖ Wednesday, August 31; 6:30 pm – 8:30 p.m.
 - + Open House

QUESTIONS??

JENNIFER.BIRKMEIER@ANOKA.K12.MN.US



**THANK YOU FOR
ATTENDING**

Blaine High School