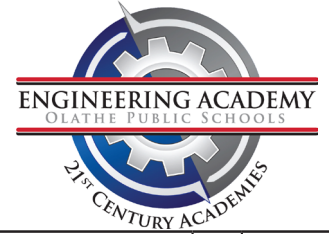


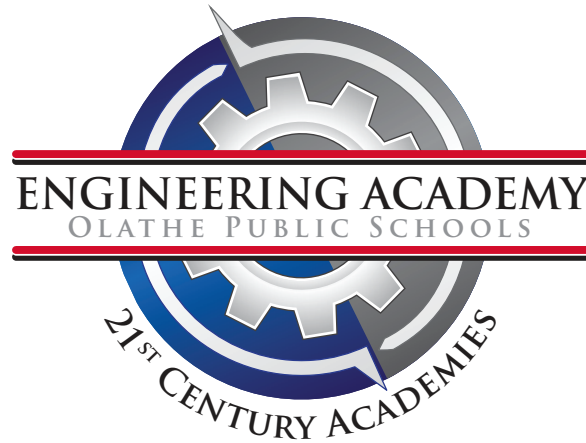


**USD #233 Individual Plan of Study**  
 Electronic file located in Xello - "Course Planner"  
 Located at Olathe Northwest  
[engineering.olatheschools.org](http://engineering.olatheschools.org)  
 X: @OlatheEngineer  
 Apply at: [21stcentury.olatheschools.com](http://21stcentury.olatheschools.com)

# Engineering Academy



Graduation Requirements	9th Grade	Credits	10th Grade	Credits	11th Grade	Credits	12th Grade	Credits	Y 13	
English (x4 credits)	English 9 <b>OR</b> Honors English 9	1	English 10 <b>OR</b> Honors English 10	1	English 11 <b>OR</b> AP English Language	1	English 12 <b>OR</b> College Prep English <b>OR</b> AP English Literature	1		
Math (x3 credits)	Algebra I <b>OR</b> Geometry	1	Geometry <b>OR</b> Honors Algebra II	1	Honors Algebra II/Trig <b>OR</b> Pre-Calculus	1	AP Calculus <b>OR</b> Pre-Calculus	1		
Science (x3 credits) (1 Life; 1 Physical; 1 Elective)	Honors Biology	1	Honors Chemistry	1	Required: AP Physics I  Optional: Materials Science & Engineering	1+	Required: Any College or AP level Science Course  Optional: Materials Science & Engineering	1+		
Social Studies (x3 credits) (1 World; 1 US; 0.5 Govt; 0.5 elective)	World History <b>OR</b> Honors World History	1	Student Choice	.5	US History <b>OR</b> AP US History	1	US Govt <b>OR</b> AP US Govt	.5		
Communications (0.5 credit)	All Academy <b>Capstone Courses</b> will fulfill the Communications Requirement								Y 14	
Financial Literacy: (0.5 credit)	See PPG for Financial Literacy Options									
Fine/Performing Arts (1 credit)	Student choice - any year(s) 1+ <i>Recommended: Drawing I</i>									
Health: (0.5 credit)	Health Education <i>Optional: Health may be taken online through eAcademy if space is needed in student's schedule.</i>									
Applied Language: (1.0 credit)	Using the PPG - Identify courses that fulfill this requirement									
Life Studies: (0.5 credit)	Using the PPG - Identify courses that fulfill this requirement									
Physical Education (0.5 credit)	PE Concepts <b>OR</b> Cheer/Drill Team <b>OR</b> Strength & Conditioning	.5	<i>Optional: P.E. Concepts may be taken online through eAcademy if space is needed in student's schedule. This can be scheduled during the summer or as an 8th hour during the school year - grades 10-12 only. Other online classes are available at <a href="http://eacademy.olatheschools.com">eacademy.olatheschools.com</a></i>							
STEM (1.0 credit)	<i>Students fulfill STEM graduation requirement through 21st Century Academy Courses</i> Recommend: CAD III, Materials Science & Engineering									
Individual Focus (5.5 credits) <b>21st Century Academy Coursework</b>	Introduction to Engineering	1	Engineering Drafting CAD I & II	1	Principles of Applied Engineering	1	Engineering Senior Capstone	1		
Total Credits: (24 total needed for graduation)	9th grade total:	7	10th grade total:	7	11th grade total:	7	12th grade total:	3+		
<b>NOTE: Credits beyond requirements in any category will fall under individual focus.</b>										
Students may earn an endorsement on their transcript for completing all Academy requirements, including successful completion of coursework, outside-the-classroom learning opportunities, field experiences, and capstone projects. Refer to the Academy's Endorsement Requirements provided by facilitator or found on the web at <a href="http://www.21stcentury.olatheschools.com">www.21stcentury.olatheschools.com</a>										



*Olathe Northwest High School*

*Real world solutions through engineering design*

## Who We Are:

Empower students to use informed engineering design practices to collaboratively create responsible and innovative solutions to **their** current and future challenges, both individual and global. Students in this four-year program:

- Engage in socially relevant design challenges that make core engineering concepts accessible from the start while illustrating how engineers solve problems for human benefit.
- Collaborate to complete a series of design challenges that require purposeful application of relevant STEM concepts.
- Utilize the engineering approach to solving problems, regardless of whether they decide to pursue engineering as a career.
- Explore engineering fields and professions such as Mechanical, Electrical, Chemical, Civil, Computer Science, and much more!

## What We Do:

- Explore the breadth of engineering fields and professions so students can decide if engineering is right for them.
- Learn authentic engineering practices in a project-based setting.
- Work in a deeply collaborative environment.
- Discover engineering's potential to impact human lives and the world around us.
- Build resilient problem-solving skills and empowerment skills.
- Learn to "think like engineers."
- Design, create, and improve solutions to solve existing real-world problems.

[Engineering@olatheschools.org](mailto:Engineering@olatheschools.org) • 913.780.7150 •  @OlatheEngineer

*Explore careers in this field with the Occupational Outlook Handbook at <https://www.bls.gov/ooh/>*