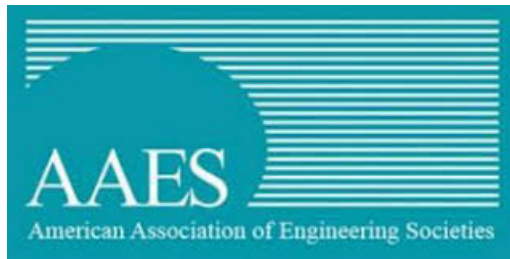


Student Organizations

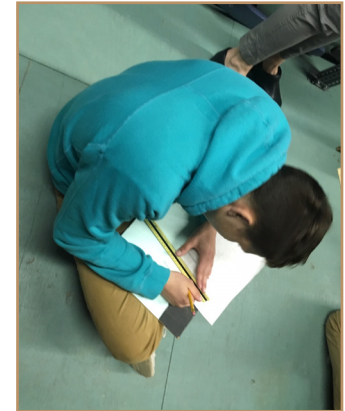
TSA (Technology Student Association), Robotics Student Council, Link Crew, Scholastic Books Competition, LEAP Legacy Challenge, TEAMS (Technology, Engineering, Aptitude, Mathematics and Science), UNITE (Army Educational Outreach Program)



INDUSTRIAL DESIGN AND MANUFACTURING



CONSTRUCTION & INDUSTRIAL DESIGN



Career Pathway: Industrial Design & Manufacturing

Career Cluster: Construction and Industrial Design

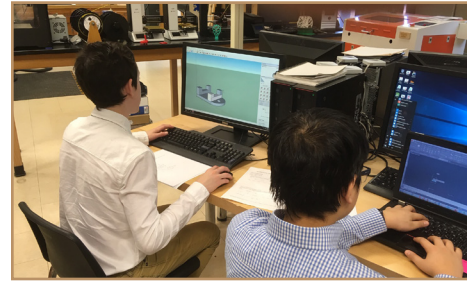
To complete the **Industrial Design Career Pathway**, students must complete all of the required courses within Section 1, as well as 2 credits from Section 2.

To complete this **Advanced Pathway**, students must complete all required courses in Section 1 and earn a total of 3 credits from Section 2.

Section 1- Required Courses	Credits Earned at KHS	College Credits Earned
Mechanical Drafting	.5	
Principles of Engineering	.5	
Mechanical Engineering I	.5	
Advanced Engineering Design & Development	.5	
PGR 1.8 – Job Shadow in Industrial Design & Engineering	(This requirement will be implemented for all students in the graduating class of 2021 and beyond)	
Section 2- Additional Courses	Credits Earned at KHS	
Intro to Prin. of Manufacturing	.5	
Adv. Prin. of Manufacturing	.5	
Mechanical Engineering II	.5	
Advanced Technology – Robotics (Honors)	1	
Marketing	.5	
Business Management	1	
Entrepreneurship	.5	
Introduction to Programming	1	
Essentials of Geometry	1	
App Creators	.5	
Graphic Design I	.5	

Construction, Manufacturing and Engineering Teachers:
 Mr. James Hutson, Room 1513, jhutson@killinglyschools.org
 Mr. Patrick Barrett, Room 1713, pbarrett@killinglyschools.org

INDUSTRIAL DESIGN AND MANUFACTURING



Occupations Related to the Architecture Pathway: CAD Designer/Specialist, Architect, Machinist, Production Specialist, Robotics, Automation Programmer, Logic Control Programmer, CNC Operator, Industrial Welder, Industrial Designer, Metal Fabricator, Industrial Database Management.



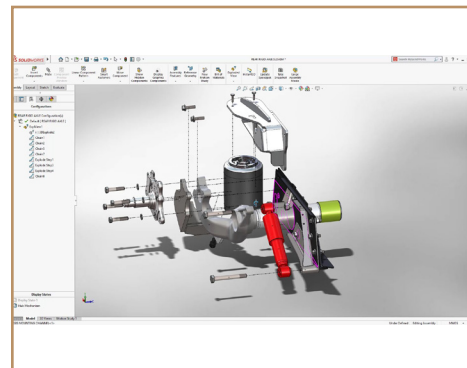
In the Industrial Design and Manufacturing pathway courses students will learn the general principles of design and manufacturing through the use of traditional and computer aided drafting in Solidworks. Through the completion of this coursework student will have the opportunity to pursue a professional certification in Solidworks which can be used to further their education experience to apply for a job in a manufacturing field.



Units Covered: Mechanical Drafting, 3 Dimensional Part and Assembly Design, Computer Generated Technical Drawing, Additive/Subtractive Manufacturing, Material Properties, Computer Simulated Material Testing

Solidworks Associates Certification (SWCA)

Professional Organizations This Pathway Opens to You: *American Association of Engineering Societies



Local Businesses Partnered With This Pathway: * Putnam Plastics, BGR Radiator, Rodgers Corp, SPIROL International Corp, Westminster Tools Inc, Whitcraft Corp, Electric Boat, Pratt and Whitney, Sikorsky Aircraft