

MANUFACTURING and DESIGN (MaD)



John F. Kennedy Manufacturing & Design High School

www.jfk.scusd.edu

916-433-5200

Vision

M.a.D. graduates are knowledgeable about global manufacturing industries and processes, and the technologies associated with them; are skilled in computer-aided engineering, CNC machining and automotive technology; and can work collaboratively to solve problems with creativity, ingenuity and attention to precision and detail while making ethical decisions.

Mission

Our mission is to teach a rigorous sequence of courses and classroom experiences infused with cross curricular problem-based projects and practical applications; to encourage outcome-based learning and celebrate all students' achievements; provide students with the skills, experiences and opportunities to access a wide range of post-secondary education and workforce development options.

Description

The MaD Pathway uses problem solving projects in the manufacturing and design sectors to teach students 21st century skills in computer aided design and engineering, manufacturing processes, mechanical and electrical processes, materials handling, and machining techniques including: CNC machining, laser cutting engraving, 3D printing, composite materials, molding.



Increasing
creative confidence
through
Linked Learning

WHAT I LIKE
ABOUT **my**
pathway



3D Printing



““Last year we **built a robot** that plays basketball! How awesome is that? You can't get this **kind of education** from a textbook.”
—Student

“The JFK Manufacturing & Design Pathway will give you **skills that will prepare you** to be an industrial designer, mechanical, manufacturing, biomechanical, or electrical engineer, CNC machinist, CAD/CAM specialist, welder, auto technician, or a career in robotics. Our classes provide you the opportunity to **express yourself** through the design and building of cool things!”
—Instructor

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SUBJECT	HIGH SCHOOL COURSES			COLLEGE COURSES			RELATED OCCUPATIONS
	9 th	10 th	11 th	12 th			
English	English 9	English 10*	English 11	English 12			<ul style="list-style-type: none"> • Engineering Mechanical Manufacturing Electrical Industrial
Math	Integrated Math I	Integrated Math II	Statistics	Calculus or AP Calculus or Statistics			<ul style="list-style-type: none"> • Commercial/Industrial Designer • CAD/CAM Designer or Specialist • CNC Machinist • Metal Fabricator/Welder • Materials/Supply Management • Quality Assurance Technician • Automotive
Science	Biology	Chemistry	Automotive Physics (Proposed)	AP Physics			
History and Social Science	Geography	World History or World History	U.S. History or AP U.S. History	Economics / Government			
Language Other Than English		Spanish, French, Mandarin, Japanese	Spanish, French, Mandarin, Japanese	Spanish, French, Mandarin, Japanese			
Visual & Performing Arts/PE	Physical Education		Physical Education				
Technical Courses	Architectural Design	Manufacturing	Automotive Physics	Automotive Physics			

For more information on SCUSD's Linked Learning Pathways, visit www.scusd.edu/linkedlearning

PARTNERS

JBB Forklift Service
DeVry University



No person shall be subjected to discrimination on the basis of disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other characteristic that is contained in the definition of hate crimes set forth in Section 422.55 (ed. Code).

