## **MANUFACTURING and DESIGN (MaD)**

#### John F. Kennedy Manufacturing & Design High School

6715 Gloria Drive | Sacramento, CA 95831 Robert Greene, Program Coordinator: Robert-Greene@scusd.edu



#### MISSION

Manufacturing and Design (MaD) is a four-year program with a focus on both college and career readiness. Students learn how to use industry level technology while taking advanced classes and earning college credits. MaD not only prepares students for college, but also gets them ready to join the workforce.

#### DESCRIPTION

MaD offers many diverse opportunities for students interested in product design and development processes, the principles of design, computer aided design, fabrication and manufacturing process, sustainability, and the principles of business and entrepreneurship. This rigorous sequence of courses and classroom experiences infused with cross curricular problem-based projects and practical applications encourage outcome-based learning and celebrate all students' achievements. This program also provides students with the skills, experiences and opportunities to access a wide range of post-secondary education and workforce development options.





Increasing creative confidence through Linked Learning

### what i like about **my pathway**

#### **Pathway Student Outcomes**

- All MaD Career Technical Education (CTE) Courses are college articulated
- MaD students can earn up to 12 college credits
- Paid Internships
- MaD students competed in state, national and world robotics competitions

""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



LINKED

LEARNING'

MANUFACTURING AND DESIGN (MaD	AND DESIGN		John F. Kennedy High School	hool	Sacramento City Unified School District	LINKED Learning:
		PROGRAN	PROGRAM OF STUDY			
	9th GRADE	10th GRADE	11 <sup>th</sup> GRADE	12 <sup>th</sup> GRADE	RELATED CAREERS	RS
CAREER Education courses	Architecture Design	<ul> <li>Principles of Engineering</li> </ul>	<ul> <li>Intro to Engineering and Energy</li> </ul>	<ul> <li>Advanced Engineering and Energy</li> </ul>	Engineering     Mechanical     Manufacturing	ng
ACADEMIC CORE Courses	<ul> <li>Advanced English 9</li> <li>Integrated Math 1</li> <li>Physical Science</li> <li>Contemporary Global Issues/Geography</li> </ul>	<ul> <li>Advanced English 10</li> <li>Integrated Math II</li> <li>Biology</li> <li>World History</li> </ul>	<ul> <li>English 11</li> <li>Integrated Math III</li> <li>Chemistry</li> <li>US History</li> </ul>	<ul> <li>English 12</li> <li>Integrated Math III+</li> <li>Physics</li> <li>US Government/Economics</li> </ul>	<ul> <li>Electrical Industrial</li> <li>Commercial/Industrial Designer</li> <li>CAD/CAM Designer or Specialis</li> <li>CNC Machinist</li> <li>Metal Fabricator/Welder</li> </ul>	Crectifical Industrial Commercia/Industrial Designer CAD/CAM Designer or Specialist CNC Machinist Metal Fabricator/Welder
ADDITIONAL GRADUATION REQUIREMENTS	2 years	2 years World Language, 1 year Art Elective, 2 years of Physical Education	clective, 2 years of Physi	cal Education	<ul> <li>Materials/Supply Management</li> <li>Quality Assurance Technician</li> <li>Automotive</li> </ul>	Materials/Supply Management Quality Assurance Technician Automotive
WORK-BASED Learning opportunities	<ul> <li>7th period Robotics Club</li> <li>Peer tutors</li> <li>Robotics Competitions</li> <li>Internships</li> <li>Work Site Tours</li> </ul>	9				
		For more inform:	ation on SCUSD's Linl	For more information on SCUSD's Linked Learning Pathways, visit www.scusd.edu/linkedlearning	it www.scusd.e	du/linkedlearning

Sacramento

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