

ENGINEERING



The Westside Engineering Academy offers a unique chance for students to gain perspective and insight into the engineering field. Students in this academy are engaged in rigorous academics and hands-on projects. Teamwork and leadership skills are emphasized throughout the program, and organization is stressed from the beginning as essential for success. Problem based learning and critical thinking skills are fostered, as they are essential to the engineering profession.



COURSE SEQUENCE

9 th Grade*	Intro to Engineering Design *
10 th Grade	Computer Integrated Manufacturing
11 th Grade	Digital Electronics
12 th Grade	Engineering Design & Problem Solving
	Engineering Science Elective
	Principles of Technology

ADDITIONAL INFORMATION

Competitions	PetroChallenge, Offshore Technology Conference Energy Challenge, Spellman HV Clean Tech Challenge
Internships	Opportunities at Marathon Oil and Shell Oil Company through GenesysWorks program
Externships	Opportunities through IPAA/PESA during the summer between junior and senior year for students who join the WEGA program
Field Experiences	Energy Day, Wiess Energy Hall at HMNS, Ocean Star Museum, Turkey Creek Wastewater Treatment Plant, Bureau of Economic Geology
Industry Needs/Trends/Vacancy Rate	Employment of engineering occupations is projected to grow 7 percent from 2016 to 2026, about as fast as the average for all occupations.
Typical College Majors	Mechanical engineering, electrical/electronics engineering, civil engineering, petroleum engineering, biomedical engineering, chemical engineering, industrial engineering, nuclear engineering
Typical Occupations	Engineer (bachelor's degree), engineering technician (associate's degree)
Industry Certifications earned in HS	Certified SolidWorks Associate, Autodesk Certified User (for qualified students)

Westside Engineering & Geosciences Academy – WEGA

All Westside Magnet students are encouraged to apply for WEGA – For application information contact Dean Toni Tinker, TTINKER@houstonisd.org

FRC – First Robotics Club Sponsor Felipe.Resendez@houstonisd.org

Drone Club Sponsor Abigail.Morris@houstonisd.org

Math/Science UIL Competition Sponsor MWadih@houstonisd.org LSchlaud@houstonisd.org

**JOIN
THE
CLUB!**