

McClymonds High School - Engineering Pathway - Program of Study

Industry Sector: Engineering

Industry Partners: Intel, Chevron, Pixar, Autodesk



OAKLAND UNIFIED SCHOOL DISTRICT

Community Schools, Thriving Students

Pathway Vision	McClymonds High School Engineering Pathway provides transformative learning experiences that empower students to personalize their pathways to success and take ownership of their education. Through engaging and rigorous engineering courses, students build connections with companies, colleges, and communities for hands-on experience in the workplace, experiential learning opportunities, and mentoring. Graduates are equipped with high demand skills that lead to opportunities for continued education and careers in competitive STEAM industries across the globe.			
Grade Levels	10th Grade Program	11th Grade Program	12th Grade Program	Graduate Pathway Outcomes (Student Learning Outcomes)
Academic Core Student Cohort Integrity (Replace with course names linked to course descriptions)	English 10 World Language (Spanish) Chemistry PE2	English 11 World Language (Spanish) US History Physics	English 12 World Language (Spanish) Government/Econ Physiology/Scientific Research	A-G Requirements Met Engineering Program Learning Outcomes College/Career Ready Careers Community Engaged Action Research Work-based learning
Math	Geometry/Algebra II	Algebra II/Math Analysis	Pre-Calc/AP Calculus	
Technical Core/Theme (CTE Sequence) CTE Course Resources	Intro to Engineering Design	Principles of Engineering	Engineering Design and Development	
Dual Enrollment [Link to Dual Enrollment]	In exploration	In exploration	In exploration	
Integrated Projects/ Common Performance Assessments	Link to Integrated Project Folders	Link to Integrated Project Folders	Engineering Design and Development (Engineering Capstone Course)	
Other Courses / Electives (Graduation Requirements)	<ul style="list-style-type: none"> - AVID - Drama - African American Music History - Physical Education & Advanced Sports - African-American Female Achievement (AAFA) - African-American Male Achievement (AAMA) 	<ul style="list-style-type: none"> - AVID - Drama - African American Music History - Physical Education & Advanced Sports - African-American Female Achievement (AAFA) - African-American Male Achievement (AAMA) 	<ul style="list-style-type: none"> - AVID - Drama - African American Music History - Physical Education & Advanced Sports - African-American Female Achievement (AAFA) - African-American Male Achievement (AAMA) 	
Defenses or Capstones			Graduate Capstone	
Supplemental dual enrollment courses	<ul style="list-style-type: none"> - Computer Science (2-course sequence) 	<ul style="list-style-type: none"> - Computer Science (2-course sequence) 	<ul style="list-style-type: none"> - Computer Science (2-course sequence) 	
Other Student Experiences (post-session, intersession, rituals, class trips, assemblies)	Classroom guest speakers East Bay STEM Awareness Day Maker Faire, Autodesk Gallery	Mentoring offered by PG&E employees Intel Mentoring East Bay STEM Awareness Day Maker Faire Autodesk Pier 9 Makerspace	OUSD Graduate Capstone course outline with resources Capstone implementation guide PLTW capstone course Intel Mentoring Maker Faire	
Work-Based Learning	Job Shadowing Industry Career Study Tours	Job Shadowing Career Study Tours	Job Shadowing Career Study Tours	

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<p>[reference documents: WBL Continuum WBL Costs Calculator]</p>	<p>Internships (OUSD Pathway/ECCO) Intel site visit BART site visit</p>	<p>Internships (OUSD Pathway/ECCO, Intel, PG&E) Mock Interviews Career Expo (OUSD) <ul style="list-style-type: none"> • Women in Trades Day • Manufacturing Day Mentoring (PG&E) Guest speakers Experts Intel Mentoring BART site visit Faith Network STEM Intern @ West Oakland Elementary Schools (MLK, Prescott, Lafayette)</p>	<p>Internships (OUSD Pathway/ECCO, Intel) Career Expo (OUSD) <ul style="list-style-type: none"> • Women in Trades Day • Manufacturing Day Mentoring (PG&E) Guest speakers Experts Intel Mentoring Faith Network STEM Intern @ West Oakland Elementary Schools (MLK, Prescott, Lafayette)</p>	
<p>Student Leadership</p>	<p>AAMA Leadership Class Student Leadership College Summit Student-Leaders Pathway Leaders</p>	<p>AAMA Leadership Class Student Leadership College Summit Student-Leaders Pathway Leaders</p>	<p>AAMA Leadership Class Student Leadership College Summit Student-Leaders Pathway Leaders</p>	
<p>Summer Learning (Summer Bridge, summer learning, credit recovery)</p>	<p>Credit Recovery</p>	<p>Credit Recovery</p>	<p>Credit Recovery</p>	
<p>College Exposure</p>	<p>College Tours (4-5x/year) College Days on Campus College Fairs (4-5x/year) Cal Computer Science Engineering Day</p>	<p>UC Berkeley College Tours (4-5x/year) Intel College Fairs (4-5x/year) Cal Computer Science Engineering Day</p>	<p>College of Alameda Laney College College Tours (4-5x/year) Intel College Fairs (4-5x/year) College Application Marathons (2x/year) College Representative Visits Transfer to Making It Happen (Peralta Colleges) Cal Computer Science Engineering Day Safe/Match/Reach Schools related to interested majors & programs</p>	
<p>Personalized Supports</p>	<p>Tutoring Translation Mental Health Mentoring Advisory Goal Setting/Monitoring & updating 10-Year Plan <ul style="list-style-type: none"> - Semester goal setting - Test & assessment scores & monitoring - Career goals - Secondary through post-secondary trajectory - College applications organization - Scholarships organization </p>	<p>Tutoring Translation Mental Health Mentoring Goal Setting/Monitoring & updating 10-Year Plan <ul style="list-style-type: none"> - Semester goal setting - Test & assessment scores & monitoring - Career goals - Secondary through post-secondary trajectory - College applications organization - Scholarships organization </p>	<p>Tutoring Translation Mental Health Mentoring Goal Setting/Monitoring & updating 10-Year Plan <ul style="list-style-type: none"> - Semester goal setting - Test & assessment scores & monitoring - Career goals - Secondary through post-secondary trajectory - College applications organization - Scholarships organization </p>	