Learning that works for Michigan
CTE™
Statewide Articulation Grant
Oakland Schools Region 18

YEAR: 2015	PSN: _____

State Approved CTE Program:
15.1301 Drafting and Design Technology/Architectural

Post-Secondary Program: Mechanical Engineering **Prgm. Degree:** BS: Bachelor of Science **Post CIP Code:** _____

School/College/University: Baker College **Notes:** _____

A well thought out Program of Study is merely a way for parents, students, and counselors to map out career/college readiness after high school for ultimate career success. All secondary coursework should meet graduation requirements; align with academic skills and interests, which may be pursued at the post-secondary level resulting in a certificate, apprenticeship, associate (2yr) degree or bachelor's (4yr) degree.

SECONDARY

Grade	English	Math	Science	Social Studies	Other Required or Related Courses / Electives	CTE Program Courses
9	English 9	Algebra 1	Biology	World History	PE / Health /WL	Drafting & Design Technology/Architectural
10	English 10	Geometry	Chemistry	US History	WL 2 or replace with full CTE Course	
11	English 11	Algebra 2	Physics	Economics		
12	English 12	4th Math	Anatomy	Government		

Articulated Credit(s)

ACT 101*
EGR 101*

*Post secondary credit earned
(Not all classes may apply to this Post Secondary program)

Post-Secondary Courses

Below is a sample representing courses within the program. Note: The order of offerings may vary. Please consult with the post-secondary counselor.

POST-SECONDARY

Year	GENERAL EDUCATION COURSES		PROGRAM MAJOR COURSES	
	1st Semester	2nd Semester	1st Semester	2nd Semester
13	ENG 101 Composition I MTH 111 Intro. Algebra MTH 112 Intermediate Algebra SCI 246 Chemistry I	ENG 102 Composition II PSY 111 General Psychology SOC 201 Sociology Global & Cultural Elective	EGR 101* Engineering Graphics EGR 105 Intro to Eng. & Design EGR 111 Technical Communications for ES EGR 171 Computing for Engineers EGR 321 Engineering Economy I ME 107 Intro to 3-D Modeling MTH 124 Trigonometry MTH 141 Calculus I SCI 247 Chemistry II	ISE 311 Manufacturing Processes ME 281 Materials Science ME 301 Intro to CAE MTH 142 Calculus II MTH 401 Statistical Methods SCI 251 General Physics I SCI 252 General Physics II
14	PSY 231 Org. Psychology SOC 341 Global Perspectives SPK 201 Oral Communication 4 Technical Electives	HUM 401A Philosophy of Ethics SOC 321 Cultural Diversity SPK 211 Group Dynamics or SPK 401 Presentational Speaking WRI 115 Workplace Comm.	EE 311 Circuit Analysis ME 201 Statistics ME 211 Solid Mechanics ME 321 Dynamics ME 325 Kinematics ME 331 Thermodynamics ME 361 Dynamic Systems & Control MTH 143 Calculus III MTH 244 Calculus IV MTH 261 Linear Algebra SCI 253 General Physics III	ISE 401 Industrial Cooperative Ed. ME 341A Fluid Mechanics I ME 351 Mechanical Design I ME 352 Mechanical Design II ME 371 Heat Transfer ME 376 Thermo Systems Lab ME 421 Vibrations ME 491 Engineering Project Management ME 498 Senior Design Project I ME 499A Senior Design Project II MTH 251 Intro to Differential Equations WRK 291B Prof. Career Strategies
15 16	***If continuing on for a Bachelor's Degree:*** The **Michigan Transfer Agreement** (www.macrao.org) allows many General Education requirements to be transferred between postsecondary institutions. **Minimum Requirements:** Successfully complete at least 30 credits of coursework in six defined areas with at least a grade of 2.0 in each course. 1 course in English Composition / 1 additional course in English Composition or 1 course in Communication / 2 courses in Social Science/ 2 Courses in Humanities and Fine Arts / 2 Courses in Natural Science (1 with lab) / 1 course in Mathematics			

Related Occupations

- ►Architect
- ►Building Code Official
- ►Building Designer
- ►Civil Engineer
- ►Code Official
- ►Cost Estimator
- ►Drafter
- ►Electrical Engineer
- ►Electronic Engineer
- ►Environmental Designer
- ►Environmental Engineer
- ►Fire Prevention and Protection Engineer
- ►Industrial Engineer
- ►Interior Designer
- ►Landscape Architect
- ►Materials Engineer
- ►Mechanical Engineer
- ►Regional and Urban Planner/ Designer
- ►Safety Director
- ►Specification Writer
- ►Structural Engineer
- ►Surveying and Mapping Technician

Related Certifications

Related Work Experience