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: Industrial 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 Global & Cultural Elective	ENG 102 Composition II PSY 111 General Psychology SOC 201 Sociology SPK 201 Oral Communication	CQI 311 Statistical Process Control I EET 111A Electrical Technology EGR 101* Engineering Graphics EGR 105 Intro to Eng. & Design ISE 421 Intro to Op. Research LMN 411 Six Sigma Basics-Green Belt ME 107 Intro to 3-D Modeling MTH 124 Trigonometry MTH 141 Calculus I SCI 251 General Physics I	CQI 312 Statistical Process Control II ECN 201 Principles of Macroeconomics EGR 111 Techn. Communication for ES ISE 311 Manufacturing Processes ISE 331 Intro to Ind. & Systems Eng. ME 201 Statics MTH 142 Calculus II MTH 401 Statistical Methods SCI 247 Chemistry II SCI 253 General Physics III
14	HUM 401A Philosophy of Ethics PSY 231 Org. Psychology SOC 321 Cultural Diversity SPK 401 Presentational Speaking	SOC 341 Global Perspectives WRI 115 Workplace Communication WRI 301A Report Writing	CQI 421 Design of Experiments EGR 321 Engineering Economy I EGR 322 Engineering Economy II or ISE 435 Manf. Strategies ISE 335 Work Analysis & Design ISE 411 Computer Integrated Manf. ISE 431 Facilities Design ME 281 Materials Science ME 350 Ergonomics for Engineers MTH 143 Calculus III SCI 451 Environmental Science	ISE 401 Industrial Coop. Ed. ISE 498 Senior Design Project I ISE 499A Senior Design Project II MGT 211 Management & Supervision MTH 244 Calculus IV MTH 261 Linear Algebra WRK 291B Prof. Career Strategies
15	***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.			
16	**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