

## Sinclair/Tech Prep Career Field Options for AY 2017-18

### Engineering & Science Technologies – Engineering (PLTW)

#### F6 Engineering & Design

Course		Course Name	Semester Hours
<b>Proficiency Credits</b>			
BTN	1110	Biotechnology & Bioethics (Medical Intervention – MI)	3
CAT	1161	Introduction to Civil & Architectural Technology (CEA)	2
CAT	1201	Construction Methods & Materials	4
EET	1198	Digital Technology (DT)	2
EGR	1128	Robotics in Computer Integrated Manufacturing (CIM) Systems	3
<b>MET</b>	<b>1231</b>	<b><i>Introduction to Drafting &amp; Design Using Inventor</i></b> (formerly MET 1101 and MET 1201)	<b>4</b>
MET	1241	Principles of Engineering (POE)	2
MET	1281	Engineering Design & Development (EDD)	2
<b>Please note: Credit for PLTW courses is processed via a PLTW form only.</b>			
<b>Articulated Credits</b>			
CAM	1107	Principles of Manufacturing	3
CAM	1109	Fundamentals of Tooling & Machining	3
CAM	1141	Shop Floor Calculations I	3

### Engineering & Science Technologies – Engineering & Design

#### F6 Engineering & Design

Course		Course Name	Semester Hours
<b>Proficiency Credits</b>			
CAT	1201	Construction Methods & Materials	4
<b>MET</b>	<b>1231</b>	<b><i>Introduction to Drafting &amp; Design Using Inventor</i></b>	<b>4</b>
<b>Articulated Credits</b>			
CAM	1107	Principles of Manufacturing	3
CAM	1109	Fundamentals of Tooling & Machining	3
CAM	1110	Advanced Machine Operations <b>NEW</b>	3
CAM	1141	Shop Floor Calculations I	3
MET	1301	*SolidWorks Basics	3

## CTAG Sinclair Alignments

### F6 Engineering & Design

CTE Pathway	Pathway Code	ODE Course #	ODE Course Name	Sinclair Course	Sinclair Course Name	Semester Hours
Engineering and Design	F6	178019	Plan Reading	CAT 1141	Architectural Blueprint Reading	2
Engineering and Design	F6	175011 or 175002 and/or 175004	DC and AC Electronic Circuits, or Engineering Principles, or Robotics	EET 1150	DC Circuits	4
Engineering and Design	F6	175007	Digital Electronics	EET 1131	Digital Electronics	5
Engineering and Design	F6	175004	Robotics	EET 2281	Programmable Logic Controllers	3
Engineering and Design	F6	145030	Computer Software	CIS 1107	Introduction to Operating Systems	3
Engineering and Design	F6	175003	Manufacturing Operations	OPT 2205	Manufacturing Processes	3
Engineering and Design	F6	175001	Engineering Design	MET 1371	CAD Concepts using AutoCAD	3
Engineering and Design	F6	No course match at this time.	No course match at this time.	CAT 1431	OSHA Construction Standards 10 Hour	1
Engineering and Design	F6	010715	Energy Systems Management	EGV 1101	Alternate and Renewable Energy Sources	3