



PROGRAM OF STUDY PATHWAY TEMPLATES 2011-2012
 — OPERATIONS TECHNOLOGY – MANUFACTURING (WELDING) *

COLLEGE: **Sinclair Community College**

CAREER FIELD: **Engineering & Science Technologies**

HIGH SCHOOL(S): **Bellbrook, Centerville, Ponitz CTC, Greene CCC,**

PATHWAY: **Engineering Technology**



**Kettering Fairmont, Stebbins, Butler Tech, Oakwood,
 Miami Valley CTC, Warren CCC, Wayne**

PROGRAM: **Operations Technology - Manufacturing (Welding)**

108 Credit Hours - Associate of Applied Science

HIGH SCHOOL	Freshman	English I (1)	Integrated Algebra & Geometry or Algebra I (1)	Physical Science (1)	Social Studies (1)	Health (.5) P E (.5)	Career Exploration	Elective (1)
	Sophomore	English II (1)	Geometry or Algebra II (1)	Biology (1)	American History (1)	Intro to Engineering Design (1)	P E (.5)	Elective (1)
	Junior	English III (1)	Algebra II / Adv Algebra II & Trigonometry (1)	Physics I (1)	Am Govt (.5) Social Studies Elective (.5)	College Tech Prep Engineering Technology (1)	College Tech Prep Engineering Technology (1)	Technology: Word, PowerPoint, & Excel (.5) Art (.5)
	Senior	English IV (1)	Integrated College Math or Calculus (1)	Chemistry (1)	Economics (1)	College Tech Prep Engineering Technology (1)	College Tech Prep Engineering Technology (1)	Elective (1)

Take Accuplacer (reading, math, and writing). Visit Sinclair academic advising. Earn high school diploma. Complete pathway as designed.

COLLEGE	1st Quarter	• ENG 111 (3) English Comp I	• MAT 131 (5) Technical Math I	OPT 101 (3) Intro to Operations	OPT 125 (3) Intro World-Class Operations	OPT 126 (3) Supervision & Team Leadership	SCC 101 (2) Student Success Experience	
	2nd Quarter	• ENG112 (3) English Comp II	OPT 100 (2) Tooling & Machining Metrology	OPT 112 (3) Ergonomics	OPT 130 (3) Lean Operations	■ ETD 198 (2) PC Apps for Engineering	■ ETD 128 (3) Print Reading with GD&T	OPT 225 (2) Design & Process Failure Modes & Effects Analysis
	3rd Quarter	• ENG 113 (3) English Comp III	OPT 113 (3) Coordinate Measurement	OPT 110 (2) Operations Work Measurement	OPT 212 (3) Operations Project Management	CHE 120 (4) Intro to Chemistry	■ ETD 199 (2) Intro to Computer Aided Drafting	OPT 105 (1) Intro to OSHA Gen Industry Standards
	4th Quarter	• COM206 or 211 (3) Interpersonal Comm or Effective Public Speaking	OPT 207 (3) Operations Systems Analysis	OPT 201 (3) Statistical Process Control	OPT 205 (3) Manufacturing Processes	ETD 121 (2) Ethics for Engineering	OPT 209 (3) Operations Cost Analysis	
	5th Quarter	• Arts & Humanities Elective (3)	OPT 132 (2) Metallurgy	OPT 208 (3) Engineering Tech Economics	OPT 251 (5) Supply Chain Operations & Logistics	OPT 240 (3) Six Sigma - Green Belt	Operations Tech Elective (3)	
	6th Quarter	• Arts & Humanities Elective (3)	OPT 206 (3) Value Analysis	OPT 216 (3) Facilities Planning	OPT 223 (3) ISO9000/16949 Quality Sys Auditing	OPT 278 (3) Operations Tech Capstone	OPT 133 (2) Non-Metallic Materials	



Sinclair converts to semesters in 2012-2013. Visit www.sinclair.edu/semesters for new course names and credit hours.

Credit-Based Transition Programs, such as dual enrollment, articulated courses 2+2 (+2)
 ♦ = high school to college • = community college to 4 year institution ■ = opportunity to test out
Required Courses (credit hours)
Recommended Elective Courses