





Neil M. O'Leary, Mayor
Kathleen Ouellette, Superintendent of Schools

Four Industry Sector Career Pathway Options

Manufacturing- Healthcare -Information Technology

Human Services

* selected on basis of Labor Market Information confirming that these 4 strands are the drivers in the regions economy.

Industry leaders at the table during planning and curriculum development

By-in from each industry sector for job shadowing, mentoring internships and externships for each strand.

Business Advisory Committee for each Strand to assure curriculum is and remains aligned with the needs of the employers

Manufacturing

Local industry has played an integral role with education to promote the ongoing development and growth of a manufacturing workforce

Other Education Partners

- NVCC Advanced Manufacturing Technology Program
- W.F. Kaynor Vocational Technical High School Manufacturing Program
- College Connections- NVCC, Waterbury Board of Education and Local Workforce Board
- Working with CT DOL Office of Apprenticeship Training

MANUFACTURING STRAND – Two Year College Track and/or Career after High School

Grade 9	Grade 10	Grade 11	Grade 12
Algebra I	Geometry	Linear Quad	Functions Beyond
English 9	English 10	English 11	English 12
World History	US History I/Civics	US History II	NVCC CNC 1 & CNC 2 MFG 156-MFG256 (5)
Physical Science	Biology	Chemistry	NVCC Lath 2 (3) & Milling 2 (3)
Spanish I	Spanish II	BLUEPRINT READING	NVCC Prin. Quality Control QUA H 114 (3)
Physical Education	Elective Art/Music	NVCC Lathe 1 (2) & Milling 1 (2)	NVCC Manufacturing Processes MFG*H104 (4)
Career Exploration	CAD I NVCC CAD H 110 (3)	NVCC Bench Work 1 (2) & NVCC Grinding 1 (2)	Internship/ Capstone Project

MANUFACTURING/ENGINEERING/ADVANCED STEM Four Year College Track

Grade 9	Grade 10	Grade 11	Grade 12
Geometry Honors	NVCC Algebra II Honors	Trigonometry/Statistics	Pre. Calculus
English 9 Honors	English 10 Honors	English 11 Honors	English 12 Honors
World History Honors	US History I/Civics Honors	US History II Honors	Psychology/Sociology Honors
Physical Science Honors	Pre AP Biology	Chemistry Honors	Physics Honors
Spanish I Honor	Spanish II Honors	Spanish III Honors	NVCC CNC 1 & CNC 2 MFG 156-MGG256 (5)
Physical Education	Elective Art/Music	BLUEPRINT READING	NVCC Prin. Quality Control QUA H 114 (3)
Career Exploration	CAD I NVCC CAD H 110 (3)	NVCC Bench Work 1 (2) & NVCC Grinding 1 (2)	Internship/ Capstone Project

Waterbury Career Academy NIMS CERTIFICATIONS: (College & Career Tracks)

Grade 9	Grade 10	Grade 11	Grade 12
	Machining L1- Measurement, Materials & Safety	, Machining L1- Manual Milling Skills 1	Machining L1- CNC Milling: Programing Setup & Operations
		Machining L1- Turning	Machining L1- CNC Turning:
		Operations: Turning Chucking Skills	Programming Setup & Operations
		Machining L1- Job Planning, Bench work & Layout	Machining L1- Turning Operations: Turning Between
R		Work & Layout	Centers
		Machining L1	
		Drill Press Skills 1	

Waterbury Career Academy INDUSTRY COMMITMENT

*FIELD TRIPS

*JOB SHADOWING

*MENTORING

*INTERNSHIPS

*EXTERNSHIPS

*APPRENTICESHIPS



Manufacturing Shop Floor



CAD LAB

Chemistry Lab



