



Carpentry

CIP 46.0201

PROGRAM OF STUDY

CURRICULUM MAPPING WITH CERTIFICATION OUTCOMES

Mon Valley Career & Technology Center prepares all students to attain their fullest potential for employment, to be life long learners, and to be productive and responsible members of an ever-changing society.

Objective:

This document has been prepared to project student learning outcomes in a linear fashion over the approved 3-year program of study.

Overview:

This document provides a Pennsylvania Department of Education and Mon Valley CTC Occupational Advisory Committee approved list of tasks and learning objectives that are broken out into a linear form for a better understanding of learning outcomes over a three year period within each program. It also serves as curriculum map as students work towards completing knowledge and skill-based tasks in pursuit of industry credentials. The end goal within each program is to work towards completing all tasks at proficient and advanced levels, earning multiple (stackable) industry credentials, and successfully complete the NOCTI exam. Student's progression and completion of task(s) and industry certification(s) may vary.

Navigation:

Unit / Task # - This column indicates the Pennsylvania Department of Education or Mon Valley CTC local unit or task numbers given to each task within a given duty area.

Task Description – This column explains what knowledge-based or skill-based task that a student is working on for completion.

Level / Marking Period – This column indicates the learning level and timeframe at which the specific task(s) will be introduced to the student(s). Note that some tasks may be taught and completed individually while others may be taught in groups. (i.e. 1.1 would signify a first year student being introduced to this task(s) in the first marking period, 2.3 would signify a second year student being introduced to this task(s) in third marking period, etc.)

Industry Certification:

Students successfully progressing through the curriculum and tasks have opportunity to test for industry credentials. Industry credentials are listed on the right side of the document at the appropriate time within the curriculum that a student would be fully prepared to test for that certification.



Carpentry / Carpenter

Classification of Industrial Programs 46.0201

Unit / Task #	Task Description	Level / Marking Period
101	Follow basic, lab and construction industry safety practices and procedures.	1.1
104	Follow procedures in Safety Data Sheets (SDS) system.	1.1
201	Use and maintain small hand tools.	1.1
202	Use and maintain sawing tools.	1.1
203	Use and maintain fastening tools.	1.1
204	Use and maintain measuring tools.	1.1
205	Use and maintain cutting tools.	1.1
505	Stake out a building foundation using the Pythagorean theorem.	1.1
506	Layout and construct batter boards.	1.1
602	Use of leveling instruments.	1.1
105	Identify and follow all OSHA safety standards at the construction site.	1.2
207	Use and maintain ladders.	1.2
301	Use and maintain stationary electric power tools.	1.2
410	Interpret Americans with Disabilities Act (ADA) regulations.	1.2
703	Layout and install sill plates.	1.2
802	Layout and construct a wall.	1.2
804	Layout and construct door openings.	1.2
805	Layout and construct window openings.	1.2
806	Layout and construct solid headers.	1.2

**Certification test for:
 SP/2 - Construction**



1203	Estimate the cost and amount of materials to finish an exterior wall.	1.2
208	Use and maintain finishing tools.	1.3
210	Construct scaffolding.	1.3
303	Use and maintain portable electric power tools.	1.3
607	Layout and construct forms for concrete slabs.	1.3
704	Layout and install floor joists, including manufactured floor joists.	1.3
807	Layout and install sheathing.	1.3
808	Plumb, align and brace walls.	1.3
1103	Layout, install and finish drywall.	1.3
1204	Estimate the cost and amount of materials to finish an interior wall.	1.3
302	Use and maintain pneumatic tool systems.	1.4
401	Interpret blueprints.	1.4
407	Interpret details and section views.	1.4
408	Interpret floor, wall and roof framing plans.	1.4
706	Construct and install cross and solid bridging.	1.4
707	Layout and install sub-flooring.	1.4
605	Layout and construct forms for footers.	2.1
708	Layout and construct floor openings.	2.1
1005	Install windows.	2.1
1105	Layout and install interior doors.	2.1
402	Interpret and comprehend standard symbols and abbreviations.	2.2
403	Interpret building specifications.	2.2
404	Interpret a plot plan.	2.2
405	Interpret a foundation plan.	2.2
406	Interpret elevation plans.	2.2
409	Interpret building and zoning codes.	2.2

**Certification test for:
 OSHA**

**Certification test for:
 Ladder Certifications**



608	Install reinforcing bars.	2.2
1106	Layout and install door trim, casings and hardware.	2.2
1107	Layout and install window trim, casings and hardware.	2.2
1108	Layout and install baseboard and molding.	2.2
601	Determine footer type.	2.3
609	Construct vertical and horizontal framework.	2.3
1109	Layout and install flooring materials.	2.3
1003	Install house wrap.	2.4
1004	Install exterior doors.	2.4
1006	Layout and install siding.	2.4
1007	Layout and install soffits and fascias.	2.4
1008	Layout and install gutters and downspouts.	2.4
1207	Estimate the cost and amount of materials to install siding for a house.	2.4
501	Determine factors needed to be considered before the start of a building project.	3.1
502	Acquire a building permit.	3.1
503	Use PA One Call System, Inc.	3.1
1009	Layout and install exterior stair systems.	3.1
1110	Layout and install interior stair systems.	3.1
1205	Estimate the cost and amount of materials to construct a finished floor.	3.1
504	Establish elevations and grades from benchmarks using leveling instruments.	3.2
603	Establish footer lines and elevations.	3.2
705	Layout and install joists for a cantilever floor.	3.2
903	Layout and install a ridgeboard.	3.2
904	Layout and install common rafters.	3.2
905	Layout and install hip and jack rafters.	3.2
906	Layout and install roof trusses.	3.2

Certification test for:
 NCCER Carpentry



907	Layout and install roof sheathing.	3.2
908	Layout and construct roof openings.	3.2
910	Layout and install roofing paper.	3.2
911	Layout and install roofing materials.	3.2
912	Layout and install capping.	3.2
606	Layout foundations.	3.3
809	Layout and install metal studs.	3.3
1104	Layout and install suspended and tile ceilings.	3.3
1201	Estimate the cost and amount bricks and blocks needed to complete a given task.	3.3
1202	Estimate the cost and amount of concrete needed to complete a given task.	3.3
1111	Install various types of insulation.	3.4
1206	Estimate the cost and amount of materials to construct a finished roof.	3.4
MVCTC	Task Remediation / NOCTI Test Prep	3.4