

Maryland CTE Program of Study

STEP 2D: Program Sequence Matrix (Include the program sequences for High School, Associate’s Degree, and Bachelor’s Degree programs)

Identify the pathway options. Complete the program matrix for the 9-12 program, plus, for Tech Prep programs include the matrix for the two- or four-year college program of study. Indicate which courses receive CTE credit by placing the number of credits in parentheses after each CTE course title. Place an asterisk (*) next to the course identified as the concentrator course indicating that the student has completed 50% of the program.

The program matrix defines a planned, sequential program of study that consists of a minimum of four credits in CTE coursework including work-based learning and/or industry-mentored projects. Work-based learning experiences or industry-mentored projects must be included in the program to obtain approval. The program matrix includes the recommended academic and CTE courses identified for the pathway and postsecondary linkages (i.e., dual enrollment, Tech Prep, transcribed and articulated credit).

CTE programs typically begin after ninth grade and do not include career exploration courses. Courses such as computer applications and keyboarding are not included in the completer sequence because they provide prerequisite skills for both academic courses and CTE programs. Academic courses are counted only if they are tailored to serve mainly CTE students and have been revised to reflect industry skill standards. Technology Education or Advanced Technology Education courses are not acceptable for credit in the career and technology education program sequence.

The LSS program title should be the same one that appears on the cover page. If more than one pathway option is offered in the program, complete a matrix for each program option (MSDE will insert the CIP number). Example: An Academy of Information Technology program may include options in web design & programming.

Pathway/Program:	Construction Maintenance/ HVAC Construction Maintenance/Welding		CIP Number (for MSDE Use)	47.5200 47.5300
Graduation Requirements	Grade 9	Grade 10	Grade 11	Grade 12
English - 4				
Social Studies - 3				
Mathematics - 3	Algebra I	Geometry	Algebra II	Trig./Pre-Calc.
Science - 3	Earth Science (or) Biology	Biology (or) Chemistry	Chemistry (or) Physics	Physics
Physical Education -.5 Health Education -.5				
Fine Arts - 1				
Technology Education – 1				
CTE Completer Program – 4 *concentrator course		Construction Core (1) All pathways start with 1 credit foundation	HVAC I (1 credit)*	HVAC II (2 credits)*
Foreign Language - 2 and/or Advanced Tech Ed - 2				

Provide a list of examples of careers students are preparing to enter and postsecondary options:

Both program options provide documentation through the NCCER national registry for articulation of program requirements for registered apprenticeship programs across the country. All programs identify an industry sponsor and apprenticeship options as part of the NCCER Certification process. Additional A.A.S. programs are available at several Maryland Community Colleges.

HVAC – HVAC Technician, Industrial Maintenance Technician, Building Management, Construction Management

