

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 matrix for the 9-12 CTE program of study, and the articulated program sequence in 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 CTE program matrix defines a planned, sequential program of study that consists of a minimum of four credits in CTE coursework in high school including work-based learning and/or industry-mentored projects.

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 Design and Management (CDM)		CIP Number (For MSDE Use)	<u>15.1350</u>
Graduation Requirements	Grade 9	Grade 10	Grade 11	Grade 12
English - 4	English 9	English 10	English 11	English 12
Social Studies - 3	US Government	World History	US History	Government and Economics
Mathematics - 3	Algebra 1	Geometry	Algebra 2	Trigonometry or Pre-calculus
Science - 3	Physical Science	Biology	Chemistry	Physics
Physical Education - .5 Health Education - .5	Physical Education (.5)	Health (.5)		
Fine Arts - 1	Fine Arts (.5)	Fine Arts (.5)		
Technology Education - 1	Foundations of Technology			
CTE Completer Program - 4 *concentrator course		Introduction to Construction Design & Management (1 credit)	Principles of Construction Design (1 credit)	* Advanced Design & 3-D Modeling (1 credit) and Advanced Construction Management (1 credit)
Foreign Language - 2 and/or Advanced Tech Ed - 2	Foreign Language	Foreign Language		

Two Year College Program Sequence – Program Overview

Many local school systems provide postsecondary matrices in their program of study guides to inform students, parents, and counselors of the opportunities available to those enrolled in the program. Section 2E must be completed before an articulated CTE program of study can be approved. *A copy of the Articulation Agreement is also required to be submitted with the proposal prior to program approval.*

Describe the program to be developed in detail based on what students are expected to know and be able to demonstrate as a result of participating in the program.

Program Title: Construction Management, AAS

College/Institution: Montgomery College

Recommended Sequence – Complete the program matrix for the postsecondary sequence for the articulated CTE program of study. Indicate which courses receive articulated or transcribed credit by PLACING THE NUMBER OF CREDITS IN PARENTHESES after each course title.

Semester 1		Semester 2	
EN 101	Technical Read/Writing	EN 201	Technical Read/Writing
PHYS 203	General Physics I	PHYS 204	General Physics II
MA 180	Pre-Calculus	MA 181	Calculus
CT 130	Constr. Methods & Materials (3)	CT 190	Comp. Applications in Const. (3)
CT 131	Construction Plan Reading (3)	CT 212	Construction Methods
CT 183	CAD	CT 271	Surveying
Semester 3		Semester 4	
AR 103	Arts/Humanities	Econ 201	Princ. Of Econ I
EN 201	English Lit.	SP 108	Speech Foundations
Elective	Behavioral Science	Elective	Business Course
CT 286	Construction Plan/Scheduling	CT 299	Professional Practicum
CT 283	Mechanical/Electrical Systems	CT 284	Construction Estimating.

Provide a list of career options for students who complete the program:

Draftsperson/Designer
 Engineering (Field, Project, Civil, etc)
 Architect (landscape, residential)
 Equipment Operator Estimator
 Foreman Inspector
 Project Coordinator Project Manager
 Safety Officer Scheduler
 Supervisor Surveyor

Four Year College Program Sequence – Program Overview

Complete this matrix if the program includes a four year degree option

Many local school systems provide postsecondary matrices in their program of study guides to inform students, parents, and counselors of the opportunities available to those enrolled in the program. Section 2E must be completed before an articulated CTE program of study can be approved. *A copy of the Articulation Agreement is also required to be submitted with the proposal prior to program approval.*

Describe the program to be developed in detail based on what students are expected to know and be able to demonstrate as a result of participating in the program.

Program Title: Construction Management Technology

College/Institution: University of Maryland – Eastern Shore (UMES)

Recommended Sequence – Complete the program matrix for the postsecondary sequence for the articulated CTE program of study. Indicate which courses receive articulated or transcribed credit by PLACING THE NUMBER OF CREDITS IN PARENTHESES after each course title.

Semester 1

ENGL 305 – Technical Writing
CMTE 313 – Statics
CMTE 316 – Environmental Technology II

Semester 2

CMTE 314 – Strength of Materials
CMTE 342 – Estimating
CMTE – Soils in Construction

Semester 3

CMTE 395 – Const. Management Internship
CMTE 413 – Structural Design I
CMTE 425 – Const. Management I
CMTE 445 – Construction Estimating II

Semester 4

CMTE 454 – Const. Site Development
CMTE 414 – Structural Design II
CMTE 426 – Const. Management II
CMTE 488 – Green Building Technology

Provide a list of career options for students who complete the program:

Draftsperson/Designer
Engineering (Field, Project, Civil, etc)
Architect (landscape, residential)
Equipment Operator Estimator
Foreman Inspector
Project Coordinator Project Manager
Safety Officer Scheduler
Supervisor Surveyor