SCIENCE, TECHNOLOGY, ENGINEERING & MATH (STEM) CAREER CLUSTER DESIGN

Approved Pathway:

1) Includes minimum of three secondary-level credits.
2) Includes a work-based element.
3) Consists of a sequence: Introductory-level, Technical-level, and Application-level courses.
4) Supporting documentation include Articulation Agreement(s) and a Program of Study.
5) Technical-level and Application-level courses receive .5 state-weighted funding in an approved CTE pathway.

Concentrator Requirement

For a student to be a concentrator, at least 2 of 3 required secondary level credits taken must be a combination of technical and application levels.

Computer Science Engineering Pathway – CIP Code 11.0701

INTRODUCTORY LEVEL

Computing Systems (8-9)	10002/60002	1 credit	ΦO Engineering Applications	21002/71002	1 credit
Computer Applications (8-9)	10004/60004	1 credit	ΦO Engineering Technology	21003/71003	1 credit

TECHNICAL LEVEL

O Technical Introduction to Computer Science (ICS)	41010	1 credit	O Computer Science Applications (CSA)	41020	1 credit
O Computer Science and Software Engineering (CSE)	41011	1 credit			

APPLICATION LEVEL

O Simulation and Modelling (SAM)	41030	1 credit	O Cybersecurity (SEC)	41036	1 credit
Particular Topics in Engineering	21015	1 credit	O Artificial Intelligence (AI)	41034	1 credit
O Computational Problem Solving (CPS)	41037	1 credit	Workplace Experience	21048	1 credit
Project Management and Resource Scheduling	21205	1 credit			

OCourse appropriate for Project Lead the Way Programs; competencies may be utilized by any/all schools.
Φ Course appropriate for Engineering by Design Programs; competencies may be utilized by any/all schools
✓Course is eligible for Regents Qualified Admissions – Natural Science

ALL ONE CREDIT COURSES MAY BE TAUGHT AS TWO .5 CREDIT COURSES.