STEM

Within the requirements of the 26 credits to earn an endorsement, including Algebra II, chemistry, and physics, a student must complete one of the following course areas below to meet the STEM endorsement criteria.

A Career and Technical Education (CTE)

Complete a coherent sequence of STEM CTE courses, preferably within the same program of study, for four or more credits that consists of at least two courses in the same STEM career cluster and at least one advanced STEM CTE course.

PROGRAM OF STUDY	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
AGRICULTURE, FOOD, AND NATURAL RESOURCES				
ANIMAL SCIENCE	Principles of Agriculture, Food, and Natural Resources	Small Animal Management	Equine Science Livestock Production A Veterinary Medical Applications A	Honors Scientific Research and Design A Practicum in Agriculture, Food, and Natural Resources A
APPLIED AGRICULTURAL ENGINEERING	Principles of Agriculture, Food, and Natural Resources		Agricultural Mechanics and Metal Technologies	Agricultural Structures Design and Fabrication A Practicum in Agriculture, Food, and Natural Resources A Honors Scientific Research and Design A
PLANT SCIENCE	Principles of Agriculture, Food, and Natural Resources	Landscape Design and Management Turf Grass Management	Floral Design A Horticultural Science A	Advanced Floral Design A Honors Scientific Research and Design A Practicum in Agriculture, Food, and Natural Resources A
ARCHITECTURE AND CONSTRUCTION				
ARCHITECTURAL DESIGN			Architectural Design I Interior Design	Architectural Design II A Career Prep I with Extended Career Prep A
HEALTH SCIENCE				
HEALTH INFORMATICS	Principles of Health Science	Medical Terminology	Business Information Management (BIM)	World Health Research A
HEALTHCARE DIAGNOSTICS	Principles of Health Science	Health Science Theory A Medical Terminology	Anatomy and Physiology A Practicum in Health Science I (Clinical Rotation I) A	Practicum in Health Science II (Clinical Rotation II) A
HEALTHCARE THERAPEUTIC	Principles of Health Science	Health Science Theory A Medical Terminology	Anatomy and Physiology A Practicum in Health Science I (Clinical Rotation I) A	Pharmacology A Practicum in Health Science II (Clinical Rotation II) A
MEDICAL THERAPY	Principles of Health Science	Health Science Theory A Medical Terminology	Practicum in Health Science I (Clinical Rotation I) A	Practicum in Health Science II (Clinical Rotation II) A
NURSING SCIENCE	Principles of Health Science	Health Science Theory A Medical Terminology	Anatomy and Physiology A	Pharmacology A
INFORMATION TECHNOLOGY				
NETWORKING SYSTEMS	Computer Science I	AP Computer Science Principles Principles of Information Technology	Internetworking Technologies I	Career Prep I and Extended Career Prep A Internetworking Technologies II A
WEB DEVELOPMENT	Principles of Information Technology	Computer Science I	Web Design A	Career Prep I and Extended Career Prep A
SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH				
CYBERSECURITY	Computer Science I	AP Computer Science Principles Principles of Information Technology	AP Computer Science A A Internetworking Technologies I	Internetworking Technologies II A
ENGINEERING	Introduction to Engineering Design (PLTW)	Engineering Science (PLTW) A	Aerospace Engineering (PLTW) A Digital Electronics (PLTW) A	Engineering Design and Development (PLTW) A Honors Scientific Research and Design A
PROGRAM AND SOFTWARE DEVELOPMENT	Computer Science I	AP Computer Science Principles	Computer Science II A AP Computer Science A A	Career Prep I and Extended Career Prep A Computer Science III Honors A

A – Advanced Science Credit Math Credit Fine Arts Credit Meets Health Graduation Requirements

B Math

Three credits in mathematics including Algebra II and two additional math courses for which Algebra II is a prerequisite (for a total of 5 math credits)

	Credit 1	Credit 2	Credit 3	Credit 4	Credit 5
	Algebra I *-or-* Algebra I Honors	Geometry *-or-* Geometry Honors	Algebra II *-or-* Algebra II Honors	• Precalculus or Precalculus Honors • AQR • MIS • AP Computer Science A - CTE • AP Calculus AB (must be taken after Precalculus) • AP Calculus BC (must be taken after Precalculus) • AP Statistics (must be taken after or concurrently with Precalculus) • Digital Electronics (PLTW) - CTE	
IBHL	Algebra I Honors *-or-* Algebra I IH	Geometry Honors *-or-* Geometry IH	Algebra II IH	Precalculus IH	Math HL Year I (BC Calculus)	Math HL Year 2
IBSL	Algebra I Honors *-or-* IH	Geometry Honors *-or-* IH	Algebra II *-or-* Algebra II IH	Precalculus *-or-* Precalculus IH	Math SL	

**if in the IB program, must also satisfy requirements of the IB diploma*

C Science

Four credits in science, including chemistry, physics, and two additional science courses (for a total of 5 science credits)

	Credit 1	Credit 2	Credit 3	Credit 4	Credit 5
	Biology *-or-* Biology Honors	Chemistry *-or-* Chemistry Honors	**Physics or Physics Honors**, and any two courses selected from: • Anatomy and Physiology - CTE • AP Biology (1.5 AP Biology + 0.5 Honors Research & Design) • AP Chemistry (1.5 AP Chemistry + 0.5 Honors Research & Design) • AP Physics 1/2 • AP Physics C • Engineering Design and Problem Solving - CTE • Environmental Systems • AP Environmental Science • Honors Scientific Research and Design - CTE • Food Science - CTE • Forensic Science – CTE • Engineering Science (PLTW) - CTE		
IB	Biology IH	Chemistry IH	Physics, IB Physics SL *-or-* Physics Honors	Any two courses selected from— IB Physics HL IB Biology SL IB Biology HL IB Chemistry SL IB Chemistry HL Environmental Systems SL	

E Combination

In addition to Algebra II, chemistry, and physics, a coherent sequence of three additional credits from no more than two of the categories above.

It is the policy of Plano ISD not to discriminate on the basis of race, color, national origin, gender, or handicap in its programs, services, or activities, including vocational programs. Lack of English language skills will not be a barrier to admission and participation in all educational and vocational programs. Plano ISD will take steps to ensure cost will not prevent access to programs.

All courses may not be offered on every campus. Check with campus counseling department for more information.