

Industrial and Engineering Technology DESIGN AND PRE-CONSTRUCTION – PATHWAY

Drafting – Architectural workers design buildings and other structures focusing on aesthetics and functionality. They use computer-aided design and drafting software to apply building codes and specifications, as well as concepts and principles of design.

Secondary Career Development Schedule (Pathway courses are listed in bold type.)

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	POSTSECONDARY ASSOCIATE DEGREE PROGRAM (builds upon certificate program)	BACCALAUREATE DEGREE PROGRAM
General Education Requirements	English I	English II	English III	English IV	<ul style="list-style-type: none"> ◆ Required English course ◆ Required Mathematics course ◆ Required Social Science course ◆ Required Science course ◆ Required Communications/Technology course 	courses/credits as designated by the postsecondary institution
	Algebra I or Contextual Mathematics	Geometry or Technical Math	Algebra II or Tech Math II	Advanced Function & Modeling or Physics		
	Physical Science or Contextual Science	Biology	Physics or Principles of Technology I	Elective suggest Principles of Technology II		
	American History	World History	Civics & Economics	Industrial & Engineering Technology Advanced Studies		
	Health/PE	Electives Career & Family Leadership	Elective (Technical Advanced Studies recommended)			
Specialization	Housing & Interiors I Fundamentals of Technology Elective	Drafting I Construction Technology I Structural Systems	Drafting II – Architectural Construction Technology II (2 credits)	Drafting III – Architectural Construction Technology III (2 credits) Career Development/Entrepreneurship	Intro to Physics Technical Computer Programming Mat. For mfg. & construction Materials Testing Mechanics of Materials Mechanical Measurements Reinforced Concrete Design Production Planning & Control Construction Estimating Construction Blue print Reading Design I, II, III Drawing I, II	
Recommended Other/Electives	Art I Physical Education	Computer Applications				

* This suggested schedule meets the graduation requirements for the Missouri College Preparatory Certificate and High Schools That Work.

◆ Suggested program of study for secondary and postsecondary programs are models only; specific high school and college/university course catalogs should be consulted for complete degree requirements, and course listings.