Career and Technical Education – State Approved Clusters, Pathways, Embedded Credit and/or Fulfillment of Requirement, and Programs of Study – Alphabetical

Program of Study	Cluster	Cluster	Pathway	Transition ELA for Seniors Embedded Credit	Technical Transition Mathematics Embedded Credit	Transition Mathematics for Seniors Embedded Credit	Other Mathematics Embedded Credit	Fulfillment of Required Course *(not transcribed)*
Agribusiness Systems	AG0120	Agriculture, Food and Natural Resources	Agribusiness Systems					Animal & Plant Biotechnology Course 0164 fulfills the third Science credit Principles of Agricultural Science Plant Course 0166 fulfills the third Science credit
Allied Health Sciences	HE0715	Health Science	Therapeutic Services	Completer: 2 required courses 0711 and 0715 **AND** 2 specialization courses 0746 & 0743 *OR* 0792 & 0732 *OR* 0737 & 0733 *OR* 0771 & 0615 *OR* 0771 & 0772				3 required courses 0711, 0715, and any Clinical Specialty fulfills third Science credit
Animal Systems	AG0220	Agriculture, Food and Natural Resources	Animal Systems					Animal & Plant Biotechnology Course 0164 fulfills the third Science credit
Automotive Technology	TR1620	Transportation, Distribution and Logistics	Facility & Mobile Equipment Maintenance			Completer: 4 required courses 1631, 1623, 1625, and 1637		
Biomedical Science (PLTW)	HE0780	Health Science	Biotechnology Research & Development	Completer: 4 required courses 0727, 0766, 0780, and 0795				Human Body Systems course 0766 fulfills the third Science credit
Building Maintenance and Operations	AR1800	Architecture and Construction	Maintenance/ Operations			Completer:		

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						4 required courses 1774, 1775, 1776, and 1777		
Careers in Education	ED1300	Education and Training	Teaching/ Training	Completer: 4 required courses 1301, 1302, 1304, and 1135				
Carpentry	AR1820	Architecture and Construction	Construction			Completer: 4 required courses 1842, 1843, 1844, and 1845		
Coding, App and Game Design	IT1442	Information Technology	Interactive Media				2 required courses 1431 and 1456 Computer Science & Mathematics credit	Digital Imaging/ Multimedia I 1431 fulfills 1 Art credit
Collision Repair Technology	TR1670	Transportation, Distribution and Logistics	Facility & Mobile Equipment Maintenance		Completer: 4 required courses 1671, 1675,1677, and 1679			
Computer Aided Drafting and Design	AR1720	Architecture and Construction	Design/ Pre-construction			Completer: 4 required courses 1729, 1727, 1725, and 1721		Drafting Techniques 1727 fulfills 1 Art credit
Diagnostics Services	HE0718	Health Science	Diagnostic Services	Completer: 4 required courses 0711 and 0715 **AND** 2 specialization courses 0755 & 0756 or 0810 & 0825				3 required courses 0711, 0715, and any Clinical Specialty Course fulfills the third Science credit
Electrical Technician	AR1760	Architecture and Construction	Construction		Completer: 4 required courses 1756, 1757, 1758, and 1759 Transition Mathematics for Seniors **OR** Technical Transition Mathematics	Completer: 4 required courses 1756, 1757, 1758, and 1759 Transition Mathematics for Seniors **OR** Technical Transition Mathematics		

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Emergency and Firefighting Management Services	LA2200	Law, Public Safety, Corrections and Security	Emergency and Firefighting Management Services		Completer: 4 required courses: 2203, 2205, 0792, and 0732	Completer: 4 required courses: 2202, 2203, 2205 and 0792		
Energy, Power and Engineered Systems (Advanced Careers)	ST2175	Science, Technology, Engineering and Math	Engineering & Technology			Completer: 4 required courses 2485, 2486, 2487, and 2488 Transition Mathematics for Seniors **OR** Advanced Mathematical Modeling	Completer: 4 required courses 2485, 2486, 2487, and 2488 Transition Mathematics for Seniors **OR** Advanced Mathematical Modeling	Completer: 4 required courses 2485, 2486, 2487, and 2488 fulfills the third Science credit
Graphic Design	AV1850	Arts, A/V Technology and Communications	Visual Arts					Fundamentals of Illustration 1851 **OR** Graphic Design Applications 1859 **OR** Fundamentals of Graphic Design 1857 **OR** Illustration 1861 fulfills the third Art course
Health Informatics	HE0742	Health Science	Health Informatics	Completer: 4 required courses 0711, 0715 and 1443 **AND** 1 specialization course 1411, or 0769, or 0768, or 0777				
HVAC Technician	AR1600	Architecture and Construction	Maintenance/ Operations			Completer: 4 required courses 1752, 1753, 1754, and 1755		

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Industrial Equipment Maintenance	MA1870	Manufacturing	Maintenance, Installation, & Repair			4 required courses 1873, 1875, 1871, and 1985		
Information Management	IT 1450	Information Technology	Interactive Media					Digital Imaging/ Multimedia I 1431 fulfills 1 Art credit
Innovations in Science and Technology (Advanced Career)	ST2205	Science, Technology, Engineering and Math	Engineering & Technology					Completer: 4 required courses 1545, 1546, 1547, and 1548 fulfills the third Science credit
Integrated Production Technologies	MA2235	Manufacturing	Manufacturing Production Process Development		Completer: 4 required courses 1575, 1576, 1577, and 1578			
JROTC	GO1070	Government and Public Administration	National Security					1065 and 1066 fulfills 1 PE credit

Completer: 4 required courses 1065, 1066,1080, and 1081 fulfills 1 Social Studies credit (not Civics) |
Law and Public Safety	LA1020	Law, Public Safety, Corrections and Security	Law Enforcement Services	Completer: 4 required courses 1225, 1226, 1039, and 1035				
Machine Tool Technology	MA1900	Manufacturing	Production			Completer 4 required courses 1903, 1905, 1907, and 1909		
Marketing Management	MK0420	Marketing	Marketing Management	Completer: 2 required courses 0422 and 0425 **AND** 2 specializations courses				Digital Imaging/ Multimedia I 1431 fulfills 1 Art credit

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				1401, or 1431, or 1455, or 0407, or 0437, or 0428, 0441, or 0434				
Masonry	AR1910	Architecture and Construction	Construction		Completer: 4 required courses 1846, 1847, 1848, and 1849			
Natural Resources Management	AG0170	Agriculture, Food and Natural Resources	Natural Resources Systems					Natural Resource Management 0200 fulfills the third Science credit
Pre-Cosmetology	HU2310	Human Services	Personal Care Services	Hairstylist Completer: 4 required courses 1734, 1735, 1736, 1737, **AND** 4 elective courses 1730, 1738, 1740, 1750				
Plant Systems	AG0210	Agriculture, Food and Natural Resources	Plant Systems					Floriculture 0213 fulfills 1 Art credit

Animal & Plant Biotechnology Course 0164 fulfills the third Science credit

Principles of Agricultural Science Plant Course 0166 fulfills the third Science credit |

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Power Equipment Systems	TR1960	Transportation, Distribution and Logistics	Facility & Mobile Equipment Maintenance		Completer: 4 required courses 1962, 1964, 1966, and 1968			
Pre-Engineering – Project Lead the Way	ST2460	Science, Technology, Engineering and Math	Engineering & Technology				3 required courses 2461, 2463, and 2464 Advanced Mathematical Modeling	Principles of Engineering 2463 fulfills the third Science credit
ProStart Restaurant Management	HO1010	Hospitality and Tourism	Restaurants & Food/ Beverage Services	Completer: 4 required courses 1013, 1014, 1019, and 1020				
Robotics	MA1630	Manufacturing	Manufacturing Production Process Development		Completer: 2 required courses 1866, 1867 **AND** 2 Drone Specialization Courses 1887 and 1888			
Therapeutic Services	HE0723	Health Science	Therapeutic Services	Completer: 4 required courses 0711, 0715, 0789, and 0790				3 required courses 0711, 0715, and any Clinical Specialty course fulfills the third Science credit
Virtual Simulation and Game Development	IT 1445	Information Technology	Interactive Media					Digital Imaging/ Multimedia I 1431 fulfills 1 Art credit
Welding	MA1980	Manufacturing	Production			Completer: 4 required courses 1862, 1863, 1864, and 1865		Ornamental Metalwork 1982 fulfills 1 Art credit