

## COURSE SELECTION LIST

Below are several examples of various types of courses which will fulfill the area of study under which each is listed. Some areas of study are required for each year of highschool as well specific courses which fall into an area of study. For ex. English is required as an area of study for each year of highschool and, within that requirement, students must take British/English Literature and World Literature. In the Advanced Technology Education area of study, students should choose courses that encourage skills in problem solving, design, and ingenuity. These courses can be traditional “text book” courses and/ or courses that involve real world application and experience. This is not intended to be a comprehensive list. If you are unsure a class fulfills a certain area of study or course requirement, talk to your advisor, they can help you. Some courses can fulfill more than one area of study. For ex. many Trade courses could also count as Advanced Tech Ed credit or as a Science credit.

<b>Advanced Tech Ed</b> (2 credits needed)	<b>Advanced Tech Ed</b> (cont.)
Aerodynamics	Optics
Aeronautics	Physics – Advanced
Agriculture	Programming Courses (Java, Basic, C++, etc...)
Architecture	Product Design
Audio Engineering	Principles of Design
Automotive Engineering	Robotics
Automotive Mechanics	Simulation Engineering
Biomedical Science	Statics
Biochemistry	Systems Engineering
Cabinet & Furniture Making	Thermodynamics
Cartography	Vibrations
Civil Engineering - Infrastructure	
Chemistry- organic	<b>Advanced Tech Ed for Career &amp; Trade</b>
Computer Engineering	Aromatherapy
Computer Design	Business Administration
Computer Science	Carpentry /Cabinet & Furniture Making
Computer Assisted Drafting & Design (CADD)	Civil Air Patrol
Construction Technology	Construction
Conservation Research & Development	Cosmetology
Cyber Security	Culinary Arts
Digital Video & Animation	Dance (ballet, jazz, tap, etc..)
Drafting	Digital Video & Animation
Dynamics	Electrician
Electronics	Extreme Sports (Parkour, rock climbing, etc...)
Electrical Engineering	Health Care
Energy/Power Technology (Solar, Geothermal, etc..)	Husbandry
Engineering Design	HVAC Systems
Engineering Resources	Manufacturing
Fashion Design & Development	Martial Arts
Forensic Science	Masonry
Fluid Dynamics	Military Training/ ROTC
Graphic Design	Office Worker
Human Body Systems	Pharmacology
Information Systems (Cisco, MSCE, etc...)	Pharmaceutics
Manufacturing Technology	Photography
Materials Science	Plumbing
Mechanical Engineering	Project Management
Nuclear Engineering	Secretary

Steam Fitter	<b>Science</b> (3 credits needed)
Surveyor	*Earth Science or Physical Science
Transportation	*Biology (basic biology)
Veterinary Training	Chemistry
Welding	Physics
Work study	
<b>Math</b> (non- trivial) (3 credits required, 4 recommended)	Anatomy & Physiology
*Algebra I	Astronomy
*Algebra II	Botany
*Geometry	Cartography
Precalculus	Ecology
Trigonometry	Forensic Science
Calculus	Genetics
Differential Equations	Homeopathy
Statistics	Husbandry
	Laboratory Science
<b>Financial Literacy</b> (1 credit needed)	Microbiology
Accounting	Molecular Biology
Budgeting	Marine Biology
Financial Planning	Naturopathy
Money management	Nutrition
Investing	Pharmacology /Pharmaceutics
	Physics
<b>Physical Education</b>	Topography
Aerobics	Veterinary Science
Baseball	Zoology
Basketball	<b>Social Sciences</b> (3 credits needed)
Dance	*Government (1 full credit)
Gymnastics	*World History
Martial Arts	*United States History
Soccer	Ancient History
Swimming	Criminal Justice
Tennis	Communications
Track & Field	Cultural Studies
Walking	Economics
Weight Lifting	Forensic Science
	Mapping
<b>Health</b>	Micro/Macro Economics
CPR/First Aid	Political Science
Family Dynamics	Psychology, Counseling
Nutrition	Sociology
Meal Planning & Preparation	World Geography