

# HIGH SCHOOL PLANNER

## AGRICULTURE

This information should serve as a guide, along with other career planning materials, as you continue your career path. Courses listed within this guide are only recommended coursework and should be individualized to meet each learner's education and career goals. All plans should meet high school graduation requirements as well as college entrance requirements.

HIGH SCHOOL	9th		10th		11th		12th		
	Core Requirements		Core Requirements		Core Requirements		Core Requirements		
	English 9 Secondary Math 1 Science World Geography		English 10 Secondary Math 2 Science World Civilizations		English 11 Secondary Math 3 (PreCalculus) Science U.S. History		English 12 Calculus or Statistics Science American Government & Citizenship		
	Required Electives								
	PE, The Arts, CTE, Computer Tech., Health, Financial Literacy								
Career Electives (Choose Three Credits)									
9th		10th		11th		12th			
Animal Science, Floriculture and Greenhouse Management Equine Science		Animal Science, Floriculture and Greenhouse Management Veterinary Assistant Agricultural Biotechnology Equine Science		Animal Science Equine Science Floriculture Greenhouse Management I Intro. To Horticulture Agricultural Biotechnology Veterinary Assistant		Animal Science Equine Science Floriculture & Greenhouse Management Intro. To Horticulture Agricultural Biotechnology Veterinary Assistant			
Career Enhancement Options	GTI		STATE CTE CAREER PATHWAYS			Work Based Learning		CTSO Participation	
	Biotechnology I, II Also see Career Electives next row above for GTI classes		The state CTE Agriculture pathway has the following study plans to consider: Agricultural Systems Technology Natural Resource Systems Animal Systems Plant Systems Food Production and Processing Systems For more information see <a href="http://www.schools.utah.gov/cte/ag/">http://www.schools.utah.gov/cte/ag/</a>			See your Career Center Coordinator for information about: Job-Shadowing Internship Apprenticeship Seminars		You are strongly advised to actively participate in Career and Technical Student Organizations. The CTSO for Agriculture is FFA (Future Farmers of America)	
Post Secondary	SLCC School of Applied Technology			Tech Training/ AS Degree (Snow)			College/University (USU)		
	Welding Machinist Heavy duty Diesel Mechanic For information visit <a href="http://www.slcc.edu/sat">www.slcc.edu/sat</a>			Agriculture, Animal Science, Veterinary Science, Agriculture Economics, Agriculture Business, Farm and Ranch Management, Dairy Science, Plant Science, Agriculture Education, Agribusiness Technology (One Year Certificate) For more information visit: <a href="http://www.snow.edu">www.snow.edu</a>			Agriculture, Animal Science, Bio-Veterinary Science, Agriculture Economics, Agriculture Business, Farm & Ranch Management, Dairy Science, Plant Science, Agriculture Education, Plants, Soils & Biometeorology, Crop Science, Agronomy, Horticulture, Landscape Maintenance & Construction, Turf grass Management, Environmental Science/Water Science, Biotechnical Science. For information visit: <a href="http://www.usu.edu">www.usu.edu</a>		



The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

Sample Career Specialties / Occupations	<p>Agricultural Sales • Agricultural Communications Specialists • Business-Educators • Food Scientists • Meat Processors-Toxicologists • Biochemists-Nutritionists-Dieticians • Food Brokers-Food Inspectors • Meat Cutters-Meat Graders • Meat Science Researchers • Food Meal Supervisors • Cheese Makers • Microbiologists • Produce Buyers • Bacteriologists • Food &amp; Drug Inspectors • Bioengineers • Biochemists • Food &amp; Fiber Engineers • Food Processors • Storage Supervisors • Fieldman • Quality Control Specialists</p>	<p>Bioinformatics Specialists • Plant Breeders and Geneticists • Biotechnology Lab Technician • Soil &amp; Water Specialists • Crop Farm Managers • Agricultural Educators • Plant Pathologists • Aquaculturalists • Sales Representatives • Botanists • Tree Surgeons • Education &amp; Extension Specialists • Agricultural Journalists • Commodity Marketing Specialists • Grain Operations Superintendents • Custom Hay/Silage Operators • Forest Geneticists • Golf Course Superintendents • Greenhouse Managers • Growers • Farmers • Ranchers</p>	<p>Agricultural Educators • Livestock producers • AI Technicians-Aquaculturalists • Animal Caretakers-Poultry Managers • Equine Managers-Veterinarians • Veterinary Assistants-Feedlot Specialists • Animal Scientists • Embryo Technologists • Livestock Buyers • Feed Sales Representatives • Vivarian Technicians • Wildlife Biologists • Livestock Geneticists • Animal Nutritionists • Dairy Producers • Livestock Inspectors • Feed Sales Specialists • Animal Health Salespersons • Meat Science Researcher • Reproductive Physiologists • Embryo Transfer Technicians • Pet Shop Operators • USDA Inspectors</p>	<p>Machine Operators • Electronics Systems Technicians • Agricultural Engineers • Agricultural Extension Engineering Specialists • Heavy Equipment Maintenance Technicians • Recycling Technicians • Waste Water Treatment Plant Operators • Equipment/Parts Managers • Welders • Machinists • Communication Technicians • Agricultural Applications Software Developers/Programmers • Database Administrators • Computer Service Technical Support Technicians • Information Lab Specialists • GPS Technicians • Remote Sensing Specialists</p>	<p>Cartographers • Wildlife Managers • Range Technicians • Ecologists • Park Managers • Environmental Interpreters • Fish and Game Officers Loggers • Forest Technicians • Log Graders • Pulp and Paper Manager Soil Geology Technician • Geologists • Mining Engineers Fisheries Technicians • Water Monitoring Technician • Hydrologists • Fish Hatchery Manager Commercial Fishermen • Fishing Vessel Operators • Vessel Crew</p>	<p>Pollution Prevention and Control Managers • Pollution Prevention and Control Technicians • Environmental Sampling and Analysis Scientists/Technicians • Health and Safety Sanitarians • Environmental Compliance Assurance Managers • Hazardous Materials Handlers • Hazardous Materials Technicians / Managers • Water Environment Managers • Water Quality Managers • Waste Water Managers • Toxicologists • Solid Waste Disposers / Recyclers • Solid Waste Technician • Solid Waste Managers • Solid Waste Specialists</p>	<p>Salesperson • Sales Manager • Banker/Loan Officer • Field Representative for Bank, Insurance Company or Government Program • Farm Investment Manager • Agricultural Commodity Broker • Agricultural Economist • Farmer /Rancher/Feedlot Operator • Farm Manager • Livestock Rancher / Breeder • Dairy Herd Supervisor (DHIA) • Agricultural Products Buyer • Animal Health Products Distributor • Livestock Seller • Feed and Supply Store Manager • Produce Commission Agent • Ag Lenders • Agricultural Chemical Dealer • Field Service Representative • Chemical Sales Representative</p>
Pathways	<p><b>Food Products and Processing Systems</b> (Food Processing and preserving, Packaging, Distribution, Government monitoring &amp; regulation)</p>	<p><b>Plant Systems</b> (Agronomic, Horticulture, Forestry, Turf, Viticulture, Soils, etc.)</p>	<p><b>Animal Systems</b> (Large animals, small animals, wildlife animals, and research animals)</p>	<p><b>Power, Structural &amp; Technical Systems</b> (Power, Structures, Controls, Geospatial Technology, Computer Systems, Electronics, Hydraulics, Pneumatics, etc.)</p>	<p><b>Natural Resources Systems</b> (Habitat Conservation, Forest Products, Parks and Recreation, Mining, Environmental Services, Fisheries, Soil Conservation, etc.)</p>	<p><b>Environmental Service Systems</b> (Pollution Prevention, Water &amp; Air Quality, Hazardous Materials, Solid Waste Management, Health &amp; Safety Sanitation, etc.)</p>	<p><b>Agribusiness Systems</b> (Sales, Service, Farm and Ranch Management, Entrepreneurship, Economics, etc.)</p>
Cluster K&S	<p align="center"><b>Cluster knowledge and skills</b></p> <p align="center">◆ Academic Foundations ◆ Communications ◆ Problem Solving and Critical Thinking ◆ Information Technology ◆ Systems ◆ Safety, Health and Environment ◆ Leadership and Teamwork ◆ Ethics and Legal Responsibilities ◆ Employability and Career Development ◆ Technical Skills</p>						

