# Tuloso-Midway High School Four Year Plan

## AGRICULTURE, FOOD AND NATURAL RESOURCES

***Cluster Overview:*** Focuses on careers in the planning, implementation, production, management, processing, and/or marketing of agricultural commodities and services.

# Power, Structure and Technical Systems; Welding

**Student Name**_____

**ID** _____ **Grade :** 9 10 11 12

**Entered 9th grade: 20_____- 20_____**

**Diploma Plan:** RHSP DAP* MHSP TEXAS SCHOLAR

***Note 1*** *: Health and technology Applications locally required* ***Note 2****: Entered 9th grade in 2010 - 2011 and thereafter must include Fine Arts*

## SUGGESTED COURSEWORK

| | | | |
|---|---|---|---|
| Middle School | 8th | *HS Courses:* | |
| High School | 9th | *Core Courses:* | English I / PAP; Algebra I / Geomery / PAP; Biology / PAP; World Geography / PAP; Spanish I; P. E.; Fine Arts / Tech App (BIM) |
| | | *Career-Related Electives:* | Principles of Agriculture or Food and Natural Resources (BIM) |
| | 10th | *Core Courses:* | English II / PAP; Geometry / Algebra II / PAP; Chemistry / PAP IPC; World History / PAP; Spanish II; (BIM)Tech App / Fine Arts; Elective:; Elective: |
| | | *Career-Related Electives:* | Agricultural Mechanics and Metal Technologies |
| | 11th | *Core Courses:* | English III / AP; Adv. Math IV; Algebra II* /MMA/ Pre-Cal / PAP/ DC; Physics* PTI; Chemistry / PAP; United States History / AP / DC; Professional Communications / Comm Appl / Health; Spanish III / DC |
| | | *Career-Related Electives:* | Welding I or Practicum in Agriculture |
| | 12th | *Core Courses:* | English IV / AP / DC; Algebra II/ Adv Math IV / Pre-Cal /PAP; Calculus AP/ Math DC; Physics / PTI; Fourth Science:; Government/ AP/ DC; Economics / AP/ DC; Electives: |
| | | *Career-Related Electives:* | Advanced Welding (CTC) or Practicum in Agriculture |
| Postsecondary | On-the-Job Training | Metal Erector's Helper; Shop Helper; Welding Assistant | NOTE: These experiences may be started and/or completed as part of the high school experience. |
| | Certificates | AWS Welder; NCCER Welding Technician; OSHA CareerSafe | NOTE: Students may earn all or part of these certificates as part of the high school experience. |
| | Associate Degrees | Agricultural Systems Management; Construction Technician; Metal Technology | |
| | Bachelor Degrees | Agricultural Engineering; Agricultural Systems Management; Construction Science | |
| | Graduate Degrees | Agricultural & Biological Engineering; Agricultural Mechanization | |

## EXTENDED LEARNING EXPERIENCES

***Curricular Experiences:***
Skills USA
Texas FFA Association

***Extracurricular Experiences:***
Agricultural Mechanics Exhibition
Agriscience Fair
Farm Bureau Exchange Programs
National Engineering Design Competition
Student Government
UIL Academic Competitions

***Career Learning Experiences:***
Apprenticeship
Career Preparation
Internship
Job Shadowing

***Service Learning Experiences:***
Boy/ Girl Scouts
Campus Service Organizations
Community Service Volunteer
4-H
Habitat for Humanity
Peer Mentoring / Peer Tutoring

## *COLLEGE CREDIT OPPORTUNITIES -- High School*

Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technical Credit (ATC), or locally articulated courses (Tech Prep), if possible. List those courses that count for college credit on your campus.

***Career Options:*** (Certificates)
Welder
Fitter
Remote Sensing Specialist
Quality Assurance Manager

***Career Options:*** (Associate Degrees)
Welder
Foreman
Estimator

***Career Options:*** (Bachelor Degrees)
Site Manager
Contractor
Agricultural Engineer
Extension Engineering Specialist
Project Engineer

***Career Options:*** (Graduate Degrees)
Project Developer
Risk Management Specialist

***Professional Associations:***
American Society of Agricultural and Biological Engineers
American Welding Society
Associated General Contractors of America
ASTM International
Collegiate FFA
Post-Secondary Agricultural Students Association

**Students may select other elective courses for personal enrichment purposes.**

**This plan of study serves as a guide, along with other career planning materials, for pursuing a career path and is based on the most recent information as of 2010. All plans meet high school graduation requirements as well as college entrance requirements.**