



Information Support and Services

Career Goal (O*NET Code): Geographic Information Specialist (TBD), Mapping Technician (17-3031.02), Geographer (19-3092), Cartographer (17-1021).

Cluster Overview: Information Technology careers encompass entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services.

SUGGESTED COURSEWORK

EXTENDED LEARNING EXPERIENCES

High School	9th	Core Courses	English I Algebra I Biology	World Geography Languages other than English I Health/PE or Equivalent	<p>Curricular Experiences: Business Professionals of America Future Business Leaders of America SkillsUSA Texas Technology Student Association</p> <p>Career Learning Experiences: Career Preparation (Paid/Unpaid) Internship Job Shadowing Apprenticeship</p>	<p>Extracurricular Experiences: Academic Decathlon UIL Computer Tutor Student Council School Newspaper Yearbook</p> <p>Service Learning Experiences: Boy Scouts of America Community Service Volunteer Girl Scouts of the USA</p>
		Career-Related Electives	Business Computer Information Systems I** or Introduction to Information Technology or Introduction to Geographic Information Systems or Introduction to GIS Careers in Agriculture			
	10th	Core Courses	English II Geometry Chemistry	World History Languages other than English II Technology Applications		
		Career-Related Electives	Database Fundamentals, Cartography in Geographic Information Systems Global Positioning and Global Positioning Systems, or Spatial Technology and Remote Sensing			
	11th	Core Courses	English III Algebra II Physics	United States History Communication Applications PE or Equivalent		
		Career-Related Electives	Database Programming or Geographic Information Systems or Raster Based Geographic Information Systems			
	12th	Core Courses	English IV Precalculus Earth and Space Science	Government/Economics Fine Arts		
		Career-Related Electives	GIS/GPS Applications for Agriculture or GIS Internship in Agriculture or related Career Preparation program* or Independent Study or Statistics or AP Human Geography or AP Comparative Government and Politics or Social Studies Advanced Studies or AP Environmental Systems			
Postsecondary	On-the-Job Training	Records Clerk Survey Assistant	Information Technician Administrative Assistant	<p>Professional Associations: Accreditation Board for Engineering and Technology, Inc. Association of American Geographers Association for Women in Computing Computer Technology Industry Association Geosciences Information Society IEEE Computer Society Information Technology Association of America National Society of Professional Engineers Population Association of America Texas Board of Professional Engineers</p>		
	Certificates	Oracle Certified Database Associate OSHA CareerSafe NOTE: Students may earn all or part of these certificates as part of the high school experience				
	Associate's Degrees	15 Hours Core Curriculum including Mathematics for Business and Social Sciences I and II (MATH 1324/1325) Basic Computer Aided Drafting (DFTG 1309/1409) Engineering Graphics I (ENGR 1304)				
	Bachelor's Degrees	Technology-Surveying and Mapping Petroleum Engineering Petroleum Land Management Environmental Science	Computer Information Systems Management Information Systems Natural Resource Management Geomatics or Geological Sciences			
	Graduate Degrees	Computer Science Geospatial Information Science Information Science or Systems Geography	Natural Resource Development Aquatic Resources Information Technology and Management Computational and Applied Mathematics			

*May substitute for the required credit for Physical Education
**Satisfies the required credit for Technology Applications
***May substitute for the required credit for Health Education

Students should take Advanced Placement (AP), International Baccalaureate (IB), dual credit, Advanced Technical Credit (ATC), or locally articulated courses, if possible.

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 2007. All plans should meet high school graduation requirements as well as college entrance requirements. Students may select other elective courses for personal enrichment purposes.