

**COMPLETER: [Homeland Security and Emergency Preparedness-
Geographic Information Systems and Technology](#)**

CREDITS: 4

- Guideline for Course Selections
- Refer to Graduation Requirements in the Program of Studies for specific course requirements in each content area

Grade →	9	10	11	12
Exact scheduling depends on student's plan and school's master schedule.	English 9 (1)	English 10 (1)	✦AP Language and Composition	English 12 (1)
	US Government (1)	US History (1)	World History (1)	
	Conceptual Physics (1)	Chemistry (1)	Biology (1)	
	Algebra I (1)	Geometry (1)	Algebra II (1)	Higher Level Math (1)
	PE (.5) / Health (.5)		PE (.5) / Financial Literacy (.5)	
	Fine Arts (1)	Foundations of Technology (1)		
	World Language (1)	World Language (1)		
Completer Program Requirements (4 minimum credits)			Foundations of Homeland Security and Emergency Preparedness (1) S.T.A.R.S. Course 1 and 2 (1)	S.T.A.R.S. Course 3 and 4 (1) Homeland Security and Emergency Preparedness Capstone (1)
Career Specific Electives (may be taken any year offered after prerequisites have been satisfied)	✦Recommended AP Connections: AP Psychology (1), AP Human Geography (1) Business Communications & Keyboarding (1), World Language III (1), Peer Facilitating (.5), Science Research I or Honors Science Research I (1), World Geography (.5), Internship (.5-1) Issues in American Society (.5), Public Speaking (.5), Sociology (.5), World Geography (.5), Political Science (.5), Psychology I or Honors Psychology I (1), Honors Economics (.5), AP Government (1), Speech and Debate (.5), AP Macroeconomics (1), AP Stat. (1), Business Law (1), AP Human Geography (1), Honors Law, Citizenship & Society(.5)			
8 credits possible per year				
End of Program Test:	S.T.A.R.S. Entry-Level Technician Exam			
Industry:	GIS (Geographic Information Systems)			
Taken:	At the end of Homeland Security and Emergency Preparedness Capstone			
Value Added:	Certification(s) Geospatial Center of Excellence			
From:	NASA Stennis Space Center			
Program:	GIS/RS Certification			



**[HOMELAND SECURITY AND EMERGENCY PREPAREDNESS – GEOGRAPHIC
INFORMATION SYSTEMS AND TECHNOLOGY](#) – Four Credit Completer**

FOUNDATIONS OF HOMELAND SECURITY AND EMERGENCY PREPAREDNESS

Course: 540617 (Articulated) 1 credit

Homeland security and emergency preparedness guidelines, concepts, and action plans are key concepts in this course. Emphasis will be placed on unique aspects of public safety and public health. Various methodologies for intelligence gathering and dissemination will be examined. Students will identify various local, state, and federal assets and prepare an action plan that includes initial notification, emergency response (on and off scene), and recovery.

Prerequisites and other notes: This course is the foundation course for both options in the Homeland Security and Preparedness completer program.

Continued on next page...

SPATIAL TECHNOLOGY AND REMOTE SENSING (S.T.A.R.S.) COURSE 1 AND 2

Course: 541117 (Articulated) 1 credit

This class will introduce students to Geographic Information System (GIS) and Remote Sensing (RS) technology through academic study and applied instruction. This course provides the foundation of the *STARS Entry-Level GIS Technician Certification*. Teachers and students will use a locally customized Geographic Information System (GIS) to learn about their local community. They will use the same data, imagery and software that NASA uses to study their state, county and school. Students will also learn the skills required to work on and/or build a Geographic Information Systems/Remote Sensing project. Through hands-on instruction students will learn skills ranging from introductory digital mapping to image analysis. In this course students are introduced to each skill with a real world application and led in the problem solving process. Follow-up applied practice application will direct the student to apply acquired skills to cases in the local community using the supplied data.

Prerequisites and other notes: Foundations of Homeland Security and Emergency Preparedness is a prerequisite or may be taken concurrently. This course is a part of the Geographic Information Systems and Technology option in the Homeland Security Emergency Preparedness completer program.

SPATIAL TECHNOLOGY AND REMOTE SENSING (S.T.A.R.S.) COURSE 3 AND 4

Course: 541217 (Articulated) 1 credit

This course will provide students with skills required to work on and/or build a Geographic Information Systems/Remote Sensing project. Through hands-on instruction students will learn to apply skills ranging from introductory digital mapping to image analysis. Students will learn and apply Spatial Analyst and 3D Analyst. Students will also learn methods of integrating external hardware in order to incorporate real time data from GPS units in order to accurately survey a community. Students will choose final projects designed to apply geospatial skills.

Prerequisites and other notes: Spatial Technology and Remote Sensing Course 1 and 2 are a prerequisite. This course is part of the Geographic Information Systems and Technology completer program. Students are required to take the STARS certification assessment.

HOMELAND SECURITY AND EMERGENCY PREPAREDNESS CAPSTONE

Course: 541317 (Articulated) 1 credit

This is the final course in the Homeland Security and Emergency Preparedness completer. Students will apply the knowledge and skills acquired in previous courses in authentic ways to complete an individualized senior project. The project will involve intense problem-solving and research in a student selected career-focused area. Experiences may include but are not limited to research projects, extensive portfolios and work-based learning opportunities. Projects and portfolios will be presented for review and critique.

Prerequisites and other notes: This is the capstone course in all Homeland Security and Emergency Preparedness completer programs. All courses in the option's course sequence are prerequisites.