

**CERTIFICATE OF ACHIEVEMENT**

This Certificate of Achievement is an 18-month program that provides students with the opportunity to acquire the knowledge, skills and abilities to obtain employment in the Environmental Safety and Health field. Courses cover such areas as Transportation of Hazardous Materials, Environmental Laws and Regulations and the 40-Hour HAZWOPER OSHA requirement. Classroom and Laboratory course work is accomplished.

**STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:**

- Demonstrate an understanding of the fundamentals of the management of hazardous materials and its impact on the human health and the environment.
- Demonstrate an understanding of the various laws, regulations and guidelines that are applicable to the ESH arena, and how they drive decision making in the management of hazardous materials and hazardous waste.
- Demonstrate an understanding of the concept of Industrial Hygiene as it applies to various industrial settings.

**GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
<b>COMMUNICATIONS:</b> ENG 107	3	_____

**SPECIAL PROGRAM REQUIREMENTS (27 Credits):**

	CR	SEMESTER
<b>ESH 130</b> Introduction to Hazardous Materials Management	3	_____
<b>ESH 201</b> 40 Hour Hazwoper Certification	3	_____
<b>ESH 202</b> Environmental Laws and Regulations	3	_____
<b>ESH 203</b> Sampling, Analysis, Treatment and Disposal	3	_____
<b>ESH 204</b> Environmental Site Assessments	3	_____
<b>ESH 205</b> Transportation of Hazardous Materials	3	_____
<b>ESH 210B</b> Waste Minimization and Recycling	3	_____
<b>ESH 215</b> Environmental Computer Applications		
OR		
<b>GIS 109B</b> Introduction to GIS	3	_____
<b>Plus 3 credits from the following:</b>		
<b>BT 161</b> Elementary Surveying	3	_____
<b>EMS 108B</b> Emergency Medical Technician Training	8	_____

*Continued in next column.*

**SPECIAL PROGRAM REQUIREMENTS (27 Credits):**

*Continued from previous column.*

	CR	SEMESTER
<b>ENV 101</b> Introduction to Environmental Science	3	_____
<b>ENV 220</b> Introduction to Ecological Principles	3	_____
<b>ESH 220B</b> Introduction to Wastewater Treatment	3	_____
<b>ESH 225B</b> Ethics and Legal Issues in Environmental Restoration	3	_____
<b>ESH 230B</b> Radiation Health Physics	3	_____
<b>ESH 235B</b> Asbestos Inspection and Abatement	3	_____
<b>ESH 240B</b> Wastewater Treatment I	3	_____
<b>ESH 241B</b> Wastewater Treatment II	3	_____
<b>ESH 242B</b> Wastewater Treatment III	3	_____
<b>ESH 243B</b> Water Treatment Plant Operations I	3	_____
<b>ESH 244B</b> Water Distribution I	3	_____
<b>ESH 245B</b> Water Treatment Plant Operations II	3	_____
<b>ESH 246B</b> Water/Wastewater Mathematics I	3	_____
<b>ESH 247B</b> Water/Wastewater Mathematics II	3	_____
<b>ESH 248B</b> Water Quality Analysis and Laboratory	4	_____
<b>ESH 249B</b> Industrial Pretreatment Programs and Inspection	3	_____
<b>ESH 250B</b> Pump Operation and Maintenance	3	_____
<b>ESH 251B</b> Current Issues	3	_____
<b>MT 110B</b> Material Science I (Ferrous and Non-Ferrous)	4	_____

Computation included in ESH 203

Human Relations included in ESH 130

**30**  
Total Credits

ESH C01

Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.