

DEPARTMENT OF APPLIED SCIENCE AND TECHNOLOGY

Contacts: Prof. James McIntosh, Chair

Website: <http://www.marshall.edu/cecs> (<http://www.marshall.edu/cecs/>)

Overview

Programs

- Occupational Safety and Health, B.S. (<http://catalog.marshall.edu/undergraduate/programs-az/engineering-computer-sciences/applied-science-technology/occupational-safety-health-bs/>)
- Occupational Safety and Health, Minor (<http://catalog.marshall.edu/undergraduate/programs-az/engineering-computer-sciences/applied-science-technology/occupational-safety-health-minor/>)
- Safety Technology, Minor (<http://catalog.marshall.edu/undergraduate/programs-az/engineering-computer-sciences/applied-science-technology/safety-technology-minor/>)

Courses

 - General Education Course

SFT 235 Intro to Occup Safety (CT) 3 Credit hours

Introduction to occupational safety and health on an international level. Comparisons of various accidents by type and country will be explored along with prevention techniques.

Attributes: Critical Thinking, International, No Textbook Required

Grade Mode: Normal Grading Mode

SFT 280 Special Topics 1-4 Credit hours

Grade Mode: Normal Grading Mode

SFT 281 Special Topics 1-4 Credit hours

Grade Mode: Normal Grading Mode

SFT 282 Special Topics 1-4 Credit hours

Grade Mode: Normal Grading Mode

SFT 283 Special Topics 1-4 Credit hours

Grade Mode: Normal Grading Mode

SFT 340 Indust Fire Prevent 3 Credit hours

Pre-req: SFT 235 (may be taken concurrently) with a minimum grade of C and (PHY 201 (may be taken concurrently) or PHY 211 (may be taken concurrently)) and PHY 202 (may be taken concurrently).

Concurrent PR: SFT 235 and (PHY 201 or PHY 211) and PHY 202

Grade Mode: Normal Grading Mode

SFT 350 Safety Technology Co-Op 0 Credit hours

A supervised experience in which the student works for a company to gain practical experience in a students major.

Pre-req: ENGR 217 with a minimum grade of D.

Grade Mode: Credit/No Credit Grade Only

SFT 372 Safety & Industrial Tech 3 Credit hours

Pre-req: SFT 235 (may be taken concurrently) and (MTH 121 (may be taken concurrently) or MTH 123 (may be taken concurrently) or MTH 127 (may be taken concurrently) or MTH 130 (may be taken concurrently) or MTH 122 (may be taken concurrently) or MTH 140 (may be taken concurrently) or MTH 229 (may be taken concurrently) or MTH 229H (may be taken concurrently)).

Concurrent PR: SFT 235 and (MTH 121 or MTH 123 or MTH 127 or MTH 130 or MTH 122 or MTH 140 or MTH 229 or MTH 229H)

Grade Mode: Normal Grading Mode

SFT 373 Prin Ergonomics & Hum Factors 3 Credit hours

Introductory principles within human-machine relationships; examining the biological, physiological, and psychological factors which contribute to accident causation.

Pre-req: (PHY 203 (may be taken concurrently) or PHY 212 (may be taken concurrently)) and PHY 204 (may be taken concurrently).

Concurrent PR: (PHY 203 or PHY 212) and PHY 204

Co-req: SFT 373L

Attributes: No Textbook Required

Grade Mode: Normal Grading Mode

SFT 373L Prin of Ergonomics Lab 1 Credit hour

A laboratory course designed to include the principles and applications of human factors/ergonomics that were introduced in SFT 373.

Pre-req: (PHY 203 (may be taken concurrently) or PHY 212 (may be taken concurrently)) and PHY 204 (may be taken concurrently).

Concurrent PR: (PHY 203 or PHY 212) and PHY 204

Co-req: SFT 373

Attributes: No Textbook Required

Grade Mode: Normal Grading Mode

SFT 375 Construction Safety I 3 Credit hours

Pre-req: SFT 235 (may be taken concurrently).

Concurrent PR: SFT 235

Grade Mode: Normal Grading Mode

SFT 378 Safety Eval & Measurement 3 Credit hours

Pre-req: SFT 235 or SED 235.

Grade Mode: Normal Grading Mode

SFT 385 Traffic Safety & Driver Educa 3 Credit hours

An introductory course in the teaching of safety and driver education, including techniques of classroom and behind-the-wheel instruction. 2 lec-2 lab.

Grade Mode: Normal Grading Mode

SFT 400 Traffic Law Enforcement 3 Credit hours

A course designed to study and evaluate the varied and complex system of laws governing the control of all forms of traffic and the influences and responsibilities of traffic law enforcement in presentday society.


Grade Mode: Normal Grading Mode

SFT 453 International Safety & Health 3 Credit hours

The course covers the impact of globalization on worldwide safety and health programs, and a wide variety of safety and health programs for various countries and multinational organizations.

Attributes: International

Grade Mode: Normal Grading Mode

SFT 454 Industrial Hygiene	3 Credit hours	SFT 489 Process Safety Mgmt	3 Credit hours
Environmental protection as related to industrial settings. Air/water quality, noise and chemical pollution and hazardous material control.		A study of the latest industrial safety information which will assist the student in designing a program to reduce or eliminate all incidents which downgrade the system.	
Pre-req: CHM 212 with a minimum grade of C and CHM 218 with a minimum grade of C and (PHY 203 with a minimum grade of C or PHY 212 with a minimum grade of C) and PHY 204 with a minimum grade of C and SFT 489 (may be taken concurrently) with a minimum grade of C and SFT 454L (may be taken concurrently).		Pre-req: SFT 372 with a minimum grade of C and (PHY 203 with a minimum grade of C or PHY 212 with a minimum grade of C) and PHY 204 with a minimum grade of C and CHM 211 (may be taken concurrently) and CHM 217 (may be taken concurrently).	
Concurrent PR: SFT 489 and SFT 454L		Concurrent PR: CHM 211 and CHM 217	
Co-req: SFT 454L		Grade Mode: Normal Grading Mode	
Grade Mode: Normal Grading Mode		SFT 490  Safety Internship	3-12 Credit hours
SFT 454L Industrial Hygiene Lab	2 Credit hours	Pre-req: (CHM 212 with a minimum grade of C and CHM 218 with a minimum grade of C) and (PHY 203 with a minimum grade of C and PHY 204 with a minimum grade of C).	
Quantitative monitoring techniques for measuring air and water quality, the measurement of noise and chemical pollutions and the evaluation of other physical hazards.		Attributes: Capstone Course, No Textbook Required	
Pre-req: SFT 489 (may be taken concurrently) with a minimum grade of C and CHM 212 with a minimum grade of C and CHM 218 with a minimum grade of C and (PHY 203 with a minimum grade of C or PHY 212 with a minimum grade of C) and PHY 204 with a minimum grade of C and SFT 454 (may be taken concurrently).		Grade Mode: Credit/No Credit Grade Only	
Concurrent PR: SFT 489 and SFT 454		SFT 491 Workshop	1-4 Credit hours
Co-req: SFT 454		Grade Mode: Normal Grading Mode	
Grade Mode: Normal Grading Mode		SFT 493 Workshop	1-4 Credit hours
SFT 458 Hospital Safety	3 Credit hours	Grade Mode: Normal Grading Mode	
The course covers the various aspects of safety and health in professional health care services.		SFT 494 Workshop	1-4 Credit hours
Grade Mode: Normal Grading Mode		Grade Mode: Normal Grading Mode	
SFT 460 Safety Training Methods	3 Credit hours	SFT 497 Occup Safety & Health Prog	3 Credit hours
A course designed to help students develop, present and evaluate training materials as mandated by OSHA or other governmental agencies. Hands on practice & live training will be required.		Safety functions in industry. Principles of organization and application of safety programs. Prevention, correction and control methods are outlined and evaluated.	
Pre-req: SFT 372 or SFT 375.		Pre-req: SFT 235 with a minimum grade of C.	
Grade Mode: Normal Grading Mode		Grade Mode: Normal Grading Mode	
SFT 461 Workers Compensation	3 Credit hours	SFT 498 Envir Safety & Health Legis	3 Credit hours
Introductory principles of workers' compensation and how it relates to the safety professional.		A survey of the legislation that has affected the safety movement with special emphasis on the 1970 Occupational Safety and Health Act.	
Grade Mode: Normal Grading Mode		Pre-req: SFT 372 (may be taken concurrently) with a minimum grade of C and CHM 212 (may be taken concurrently) and CHM 218 (may be taken concurrently).	
SFT 465 Incident Investigation Tech	3 Credit hours	Concurrent PR: SFT 372 and CHM 212 and CHM 218	
An introductory course in traffic accident investigation designed to give insight into the recognition and collection of evidence, collecting and recording data and reconstruct- ing the accident based on the facts.		Grade Mode: Normal Grading Mode	
Pre-req: SFT 372 and SFT 375 and SFT 373.		SFT 499 Dev & Mgt of Occup Safety Prog	3 Credit hours
Grade Mode: Normal Grading Mode		A study of safety program development, functions, organization and management.	
SFT 480 Special Topics	1-4 Credit hours	Pre-req: SFT 372 and CHM 212 and CHM 218 and (PHY 203 or PHY 212) and PHY 204.	
Grade Mode: Normal Grading Mode		Grade Mode: Normal Grading Mode	
SFT 481 Special Topics	1-4 Credit hours		
Grade Mode: Normal Grading Mode			
SFT 482 Special Topics	1-4 Credit hours		
Grade Mode: Normal Grading Mode			
SFT 483 Special Topics	1-4 Credit hours		
Grade Mode: Normal Grading Mode			
SFT 485 Independent Study	1-4 Credit hours		
Grade Mode: Normal Grading Mode			
SFT 486 Independent Study	1-4 Credit hours		
Grade Mode: Normal Grading Mode			
SFT 487 Independent Study	1-4 Credit hours		
Grade Mode: Normal Grading Mode			