

# OCCUPATIONAL SAFETY AND HEALTH, B.S.


James D. McIntosh, CIH, CSP, Chair  
mcintoshj@marshall.edu


The safety profession is an occupational field concerned with the preservation of both human and property resources through the application of various principles drawn from disciplines such as engineering, education, psychology, physiology, hygiene, health, physics and management. "Occupational Safety and Health" is a term for everything that goes into the prevention of accidents, illnesses, fires, explosions and other events which damage people, property and the environment.

The Bachelor of Science degree in Occupational Safety and Health offers students the option of preparing for entry-level positions in industry, governmental agencies and related service industries. The need for safety professionals has expanded due to Federal and State legislation governing safety and health in the workplace and an increase in public awareness of safety and health factors.

The program is accredited by the Applied Science Accreditation Commission/Accreditation Board for Engineering and Technology (ASAC/ABET) and by the Board of Certified Safety Professionals (BCSP) for the preparation of safety professionals. The BCSP accreditation allows our graduating seniors to be awarded the designation of GSP (Graduate Safety Practitioner). This certification provides a significant advantage to our students entering the job market. Students can apply online for the GSP at <https://www.bcspp.org/>. The GSP designation will take the place of the ASP designation as the student graduates and continues work toward becoming a Certified Safety Professional (CSP).


To qualify for admission to the B.S. in Occupational Safety and Health degree program a minimum Math ACT of 17 and minimum composite ACT of 17. (MTH SAT 440; composite SAT 820) is required. Each student in the program will be expected to maintain a 2.0 GPA overall and in areas of specialization. An internship (capstone experience) is required to be completed under the Core Curriculum and the program requirements.







































 - General Education Course




 - Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.

## Major

The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend disciplines. The Core applies to all majors. Information on specific classes in the Core can be found at <https://www.marshall.edu/gened/>.

Code	Title	Credit Hours
<b>Core Curriculum</b>		
<i>Core 1: Critical Thinking</i>		
FYS 100	First Yr Sem Critical Thinking	3
SFT 235 	Intro to Occup Safety (CT)	3

PSY 201 	Introductory Psychology (CT)	3
<i>Core 2</i>		
ENG 101  	Beginning Composition	3
ENG 201  	Advanced Composition	3
CMM 103  	Fund Speech-Communication	3
MTH 127 	College Algebra-Expanded	3-5
or MTH 130 	College Algebra	
BSC 104 	Introduction to Biology	4
or BSC 120 	Principles of Biology	
<i>Core II Humanities (WI section)</i>		
PSY 201 	Introductory Psychology (CT)	3
<i>Core II Fine Arts (Milestone course)</i>		
<i>Additional University Requirements</i>		
ENG 354	Scientific & Tech Writing	3
Writing Intensive (rec. Core II Hum)		
SFT 235 	Intro to Occup Safety (CT) (Multicultural or International)	3
SFT 490 	Safety Internship (Senior Project)	3
<b>Major-Specific</b>		
ENG 354 	Scientific & Tech Writing (WI)	3
Select one of the following:		
MTH 122  	Plane Trigonometry	
MTH 132  	Precalculus with Sci Applica	
MTH 229 	Calculus/Analytic Geom I (CT)	
CHM 211 	Principles of Chemistry I	3
CHM 217 	Principles of Chem Lab I	2
CHM 212  	Principles Chemistry II	3
CHM 218  	Principles of Chem Lab II	2
PHY 201  	College Physics I	3
PHY 202 	General Physics I Laboratory	1
PHY 203 	College Physics II	3
PHY 204 	General Physics 2 Laboratory	1
BSC 104 	Introduction to Biology	4
or BSC 120 	Principles of Biology	
MGT 320	Principles of Management	3
or ACC 215 	Accounting Principles (CT)	
<i>Stats Elective</i>		
Select one of the following:		
PSY 223 	Elem Behavioral Stat	
MGT 218	Business Quantitative Methods	
STA 225 	Introductory Statistics (CT)	
PSY 201 	Introductory Psychology (CT)	3
HS 201	Intro Appl Anat & Physiol	3
SFT 235 	Intro to Occup Safety (CT) (I)	3
SFT 340	Indust Fire Prevent	3
SFT 372	Safety & Industrial Tech	3
SFT 373	Prin Ergonomics & Hum Factors	3
SFT 373L	Prin of Ergonomics Lab	1
SFT 375	Construction Safety I	3
SFT 378	Safety Eval & Measurement	3

SFT 454	Industrial Hygiene	3
SFT 454L	Industrial Hygiene Lab	2
SFT 460	Safety Training Methods	3
SFT 465	Incident Investigation Tech	3
SFT 489	Process Safety Mgmt	3
SFT 498	Envir Safety & Health Legis	3
SFT 499	Dev & Mgt of Occup Safety Prog	3
SFT 490 	Safety Internship	3
<i>SFT Elective</i>		
Select three of the following:		9
SFT 453 	International Safety & Health	
SFT 458	Hospital Safety	
SFT 480	Special Topics	
SFT 481	Special Topics	
SFT 482	Special Topics	
SFT 483	Special Topics	
SFT 485	Independent Study	
SFT 486	Independent Study	
SFT 487	Independent Study	
SFT 491	Workshop	
SFT 493	Workshop	
SFT 494	Workshop	
SFT 497	Occup Safety & Health Prog	
BSC 250 	Microbiol & Human Disease	
Free Elective		3
Free Elective		2


## Major Information

- The mathematics a student must take will depend upon several factors such as the student's ACT score and mathematics proficiency. It is very important to talk to your advisor in selecting courses.
- A minimum of 120 hours is required for graduation.
- Because the B.S. degree is an accredited program by ASAC/ABET, students must be able to demonstrate "proficiency" in the areas of mathematics and statistics; chemistry, physics, and sciences; communication studies; psychology and physiology; and major field of study, i.e. safety. To demonstrate proficiency in the areas, a grade no less than a C is required. Courses in the areas of proficiency listed above cannot be completed under the CR/NC course option.
- Course offerings and course attributes are subject to change semesters. Please consult each semesters schedule of courses for availability and attributes.
- Students are required to know and track their degree requirements for graduation or for entrance to a professional school.

## Areas of Emphasis








- Pre#Pharmacy, Option (<http://catalog.marshall.edu/undergraduate/programs-az/engineering-computer-sciences/applied-science-technology/occupational-safety-health-bs/prepharmacy-option/>)








 - General Education Course





 - Milestone course: a key success marker for your major. See your advisor to discuss the importance of this course in your plan of study.



## Four Year Plan

The Bachelor of Science degree in Occupational Safety and Health offers students the opportunity of preparing for entry-level positions in industry, governmental agencies, and related service industries. The need for Safety Professionals has expanded due to Federal and State legislation governing safety and health in the workplace and an increase in public awareness of safety and health factors. The safety profession is an occupational field concerned with the preservation of both human and material resources through the application of various principles drawn from such disciplines as engineering, education, psychology, physiology, enforcement, hygiene, health, physics and management. "Safety Science" is a term for everything that goes into the prevention of accidents, illnesses, fires, explosions and other events which damage people, property and the environment.

Course	Title	Credit Hours
<b>First Year</b>		
<b>First Semester</b>		
SFT 235  	Intro to Occup Safety (CT)	3
ENG 101  	Beginning Composition	3
MTH 127 	College Algebra-Expanded	3-5
or	or College Algebra	
MTH 130 		
CMM 103 	Fund Speech-Communication	3
FYS 100	First Yr Sem Critical Thinking	3
UNI 100	Freshman First Class	1
Credit Hours		16-18

<b>Second Semester</b>		
BSC 104  	Introduction to Biology	4
or BSC 120 	or Principles of Biology	
Core II Fine Arts (Milestone course)		3
ENG 201 	Advanced Composition	3
SFT 372	Safety & Industrial Tech	3
Select one of the following:		3-5
MTH 122 	Plane Trigonometry	
MTH 132 	Precalculus with Sci Applica	
MTH 229 	Calculus/Analytic Geom I (CT)	
Credit Hours		16-18

<b>Second Year</b>		
<b>First Semester</b>		
PSY 201 	Introductory Psychology (CT)	3
PHY 201  	College Physics I	3
PHY 202 	General Physics I Laboratory	1
SFT 340	Indust Fire Prevent	3
SFT 375	Construction Safety I	3
Core II Humanities (WI)		3
Credit Hours		16

<b>Second Semester</b>		
PHY 203 	College Physics II	3
PHY 204 	General Physics 2 Laboratory	1

SFT 373	Prin Ergonomics & Hum Factors	3
SFT 373L	Prin of Ergonomics Lab	1
ENG 354	Scientific & Tech Writing	3
Select one of the following Statistics courses:		3
STA 225 🌱	Introductory Statistics (CT)	
PSY 223 🌱	Elem Behavioral Stat	
MGT 218	Business Quantitative Methods	
Credit Hours		14

**Third Year****First Semester**

CHM 211 🌱🎓	Principles of Chemistry I	3
CHM 217 🌱	Principles of Chem Lab I	2
HS 201	Intro Appl Anat & Physiol	3
SFT 460	Safety Training Methods	3
SFT 489	Process Safety Mgmt	3
Writing Intensive		3
Credit Hours		17

**Second Semester**

CHM 212 🌱	Principles Chemistry II	3
CHM 218 🌱	Principles of Chem Lab II	2
SFT 498 🎓	Envir Safety & Health Legis	3
SFT Elective		3
SFT 465	Incident Investigation Tech	3
Credit Hours		14

**Fourth Year****First Semester**

SFT 454	Industrial Hygiene	3
SFT 454L 🎓	Industrial Hygiene Lab	2
SFT Elective		3
MGT 320 or ACC 215 🌱	Principles of Management or Accounting Principles (CT)	3
SFT 378	Safety Eval & Measurement	3
Credit Hours		14

**Second Semester**

SFT 499	Dev & Mgt of Occup Safety Prog	3
SFT 490 🌱	Safety Internship	3
SFT Elective		3
Free Elective		3
Free Elective		1
Credit Hours		13

---

Total Credit Hours	120-124
--------------------	---------