FIRE PROTECTION AND SAFETY ENGINEERING TECHNOLOGY, BSET

Requirements for Students Matriculating in or before Academic Year 2024-2025. Learn more about University Academic Regulation 3.1 (http://catalog.okstate.edu/university-academic-regulations/#matriculation).

Minimum Overall Grade Point Average: 2.00
Total Hours: 125

Code	Title	Hours
General Education Requirements		
All General Education coursework requirements are satisfied upon completion of this degree plan.		
English Composition		
See Academic Regulation 3.5 (http://catalog.okstate.edu/university-academic-regulations/#english-composition)		
Select one of the following:		3
ENGL 1113	Composition I	
ENGL 1123	International Freshman Composition I	
ENGL 1313	Critical Analysis and Writing I	
ENGL 3323	Technical Writing	3
American History & Government		
Select one of the following:		3
HIST 1103	Survey of American History	
HIST 1483	American History to 1865 (H)	
HIST 1493	American History Since 1865 (DH)	
POLS 1113	American Government	3
Analytical & Quantitative Thought (A)		
MATH 2144	Calculus I (A)	4
MATH 2153	Calculus II (A)	3
Select one of the following:		3
STAT 2013	Elementary Statistics (A)	
STAT 4013	Statistical Methods I (A)	
Humanities (H)		
Courses designated (H)		6
Natural Sciences (N)		
Must include one Laboratory Science (L) course		
PHYS 2014	University Physics I (LN)	4
Select one of the following:		4
CHEM 1414	General Chemistry for Engineers (LN)	
CHEM 1314 & CHEM 1515	Chemistry I (LN) and Chemistry II (LN)	
CHEM 1215 & CHEM 1225	Chemical Principles I (LN) and Chemical Principles II (LN)	
Social & Behavioral Sciences (S)		
Course designated (S)		3
Additional General Education		
Courses designated (A) or (N)		2
Hours Subtotal		**41**
Diversity (D) & International Dimension (I)		
May be completed in any part of the degree plan		
Select at least one Diversity (D) course		
Select at least one International Dimension (I) course		
College/Departmental Requirements		
UNIV 1111	First Year Seminar (or other approved first year seminar course)	1
Engineering		
CET 2253	Printreading & BIM [1]	3
or ENGR 1322	Engineering Design with CAD	
Engineering Science		
ENSC 2113	Statics	3
or GENT 2323	Statics	
Select one of the following:		3
MET 3453	Heat Transfer [2]	
MET 3433	Basic Thermodynamics	
ENSC 2213	Thermodynamics	
ENSC 3431	Thermodynamics and Heat Transfer Lab	1
Specialty		
FPST 1213	Fire Safety Hazards Recognition	3
FPST 1373	Fire Suppression and Detection Systems	3
FPST 2023	Industrial and Occupational Safety	3
FPST 2243	Design and Analysis of Sprinkler Systems	3
FPST 2343	Elements of Industrial Hygiene	3
FPST 2483	Fluid Mechanics for Fire Protection	3
Hours Subtotal		**29**
Major Requirements		
Select one of the following:		3
ENSC 2143	Strength of Materials	
GENT 3323	Strength of Materials	
ENSC 3313	Materials Science	
Select one of the following:		3
STAT 3013	Intermediate Statistical Analysis	
STAT 4023	Statistical Methods II	
STAT 4043	Applied Regression Analysis	
MATH 2163	Calculus III	
MATH 2233	Differential Equations	
MATH 3013	Linear Algebra (A)	
IEM 3503	Engineering Economic Analysis	3
or IEM 3513	Economic Decision Analysis	
FPST 3013	Safety Management (S)	3
FPST 3143	Life Safety Analysis	3
FPST 3213	Human Factors in Accident Prevention	3
FPST 3373	Fire Dynamics	3
FPST 3383	Building Electrical Systems	3
or PHYS 1214	College Physics II (LN)	
or PHYS 2114	University Physics II (LN)	
FPST 4143	Industrial Ventilation and Smoke Control	3
FPST 4333	System and Process Safety Analysis	3
FPST 4403	Hazardous Materials Management	3
FPST 4683	Risk Control Engineering	3
Select one of the Following		4

FPST 4982 & FPST 4992	Fire Protection and Safety Projects I and Fire Protection & Safety Projects II	
FPST 4994	Fire Protection and Safety Interdisciplinary Projects	
Select 6-7 hours of specialty electives of the following: [1]		6
CET 4443	Construction Safety and Loss Control	
FEMP 3103	Introduction to Emergency Management (S)	
FEMP 3733	Emergency Management: Preparedness and Response	
FEMP 3763	Emergency Management: Recovery and Mitigation	
FPST and FSEP courses not used elsewhere.		
FPST 2153	Fire Protection Management	
FPST 3113	Advanced Special Hazard Suppression and Detection	
FPST 3611	Explosion Impact on Infrastructure	
FPST 3621	Wildland Urban Interface Fire Impact on Infrastructure	
FPST 3631	Fire Impact on Tall Building Infrastructure	
FPST 4153	Issues in Local Government and Fire Services	
FPST 4213	Advanced Building Design and Analysis	
FPST 4233	Advance Exposure Assessment	
FPST 4383	Fire and Evacuation Modeling	
FRNS 5143	Methods in Fire and Explosion Investigation NFPA 921/1033	
ENGR 2400	Engineering Lab Topics	
ENGR 2421	Engineering Data Acquisition Controls Lab	
ENSC courses not used elsewhere (except ENSC 2213 if MET 3433 is used for Engineering Science Requirements)		
MET 3433	Basic Thermodynamics [2]	
or ENSC 2213	Thermodynamics	
or MET 3453	Heat Transfer	
MET 3433 can NOT be used if ENSC 2213 is used for Engineering Science Requirements		
MGMT 3133	Developing Leadership Skills	
Hours Subtotal		**46**
Electives		
Select 9 hours of upper-division controlled electives of the following:		9
FPST courses not used elsewhere		
CET 4443	Construction Safety and Loss Control	
FPST 3113	Advanced Special Hazard Suppression and Detection	
FPST 3611	Explosion Impact on Infrastructure	
FPST 3621	Wildland Urban Interface Fire Impact on Infrastructure	
FPST 3631	Fire Impact on Tall Building Infrastructure	
FPST 4153	Issues in Local Government and Fire Services	
FPST 4213	Advanced Building Design and Analysis	
FPST 4233	Advance Exposure Assessment	
FPST 4383	Fire and Evacuation Modeling	
FRNS 5143	Methods in Fire and Explosion Investigation NFPA 921/1033	
Hours Subtotal		**9**
Total Hours		**125**

1

Students who take ENGR 1322 instead of CET 2253 will need to take an extra hour of related specialty

2

MET 3453 replaces MET 4433 and is equivalent.

Graduation Requirements

1. A minimum technical GPA of 2.00 is required. The technical GPA is calculated from all courses counting in the curriculum with a prefix belonging to the degree program, or substitutions for the courses.
2. A grade of 'C' or better is required in each course that is a prerequisite to a required course that has an engineering or engineering technology prefix. A Grade of 'C' of better is also required in FPST 4683, FPST 4992 and FPST 4994.

Below are the courses that require a "C" using the 2023-2024 catalog but the prerequisites are subject to change.

Code	Title	Hours
CET 2253	Printreading & BIM	3
or ENGR 1322	Engineering Design with CAD	
CHEM 1414	General Chemistry for Engineers (LN)	4
ENGL 1113	Composition I	3
ENGL 3323	Technical Writing	3
ENSC 2113	Statics	3
or GENT 2323	Statics	
FPST 1213	Fire Safety Hazards Recognition	3
FPST 1373	Fire Suppression and Detection Systems	3
FPST 2023	Industrial and Occupational Safety	3
FPST 2243	Design and Analysis of Sprinkler Systems	3
FPST 2343	Elements of Industrial Hygiene	3
FPST 2483	Fluid Mechanics for Fire Protection	3
FPST 3013	Safety Management (S)	3
FPST 3373	Fire Dynamics	3
FPST 4683	Risk Control Engineering	3
FPST 4982	Fire Protection and Safety Projects I	2
FPST 4992	Fire Protection & Safety Projects II	2
FPST 4994	Fire Protection and Safety Interdisciplinary Projects	4
STAT 2013	Elementary Statistics (A)	3
or STAT 4013	Statistical Methods I (A)	
MATH 2144	Calculus I (A)	4
MATH 2153	Calculus II (A)	3
MET 3453	Heat Transfer [2]	3
or ENSC 2213	Thermodynamics	
or MET 3433	Basic Thermodynamics	
PHYS 2014	University Physics I (LN)	4

Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2030.