

FIRE PROTECTION AND SAFETY ENGINEERING TECHNOLOGY, BSET

Requirements for Students Matriculating in or before Academic Year 2019-2020. 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.		
<i>English Composition</i>		
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
<i>American History & Government</i>		
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
<i>Analytical & Quantitative Thought (A)</i>		
MATH 2123	Calculus for Technology Programs I (A)	3
or MATH 2144	Calculus I (A)	
MATH 2133	Calculus for Technology Programs II (A)	3
or MATH 2153	Calculus II (A)	
Select one of the following:		3
MATH 3263	Linear Algebra and Differential Equations	
MATH 3013	Linear Algebra (A)	
MATH 2233	Differential Equations	
STAT 3013	Intermediate Statistical Analysis	
STAT 4033	Engineering Statistics	
<i>Humanities (H)</i>		
Courses designated (H)		6
<i>Natural Sciences (N)</i>		
Must include one Laboratory Science (L) course		
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)	
PHYS 1114	College Physics I (LN)	4

or PHYS 2014 University Physics I (LN)		
<i>Social & Behavioral Sciences (S)</i>		
Course designated (S)		6
<i>Additional General Education</i>		
Courses designated (A) or (N)		3
Hours Subtotal		44
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		
<i>Engineering</i>		
Select one of the following: ²		2
ENGR 1322	Engineering Design with CAD	
ENGR 1332	Engineering Design with CAD for MAE	
ENGR 1342	Engineering Design with CAD for ECEN	
ENGR 1352	Engineering Design with CAD for CHE	
MET 1123	Technical Drawing and Basic CAD	
CMT 2203	Construction Drawings (for non-majors)	
<i>Engineering Science</i>		
ENSC 2113	Statics	3
or GENT 2323	Statics	
Select one of the following:		3
ENSC 2213	Thermodynamics	
MET 3433	Basic Thermodynamics	
MET 4433	Heat Transfer	
Select one of the following:		3
ENSC 2613	Introduction to Electrical Science	
PHYS 1214	College Physics II (LN)	
PHYS 2114	University Physics II (LN)	
<i>Specialty</i>		
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
OR FPST 2344		
FPST 2483	Fluid Mechanics for Fire Protection	3
Hours Subtotal		29
Major Requirements		
Select one of the following: ³		3
GENT 3323	Strength of Materials	
ENSC 2143	Strength of Materials	
ENSC 3313	Materials Science	
CHEM 3013	Survey of Organic Chemistry	
CHEM 3015	Survey of Organic Chemistry	
Select one of the following:		3
STAT 2013	Elementary Statistics (A)	
STAT 4013	Statistical Methods I (A)	
STAT 4033	Engineering Statistics	
MGMT 3013	Fundamentals of Management (S)	3
or IEM 4413	Industrial Organization Management	

IEM 3503 or IEM 3513	Engineering Economic Analysis Economic Decision Analysis	3
FPST 3013	Safety Management	3
FPST 3143	Life Safety Analysis	3
FPST 3213	Human Factors in Accident Prevention	3
FPST 3373	Fire Dynamics	3
FPST 4143	Industrial Ventilation and Smoke Control	3
FPST 4333	System and Process Safety Analysis	3
FPST 4403	Hazardous Materials Incident Management	3
FPST 4683	Industrial Loss Prevention	3
FPST 4982 & FPST 4992 or FPST 4993	Fire Protection and Safety Projects I and Fire Protection & Safety Projects II Advanced Fire and Safety Problems	4
Select 6 hours of specialty electives of the following:		6
CMT 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.		
ENSC courses not used elsewhere (except ENSC 2213 if MET 3433 is used for Engineering Science Requirements)		
FRNS 5143	Methods in Fire and Explosion Investigation NFPA 921/1033	
MET 3433	Basic Thermodynamics (Cannot be used if ENSC 2213 or MET 3433 is used for Engineering Science Requirements)	
MET 4433	Heat Transfer (Cannot be used if MET 4433 is used for Engineering Science Requirements)	
MGMT 3133	Developing Leadership Skills	
Hours Subtotal		46
Electives		
Select 6 hours of upper-division controlled electives of the following:		6
CMT 4443	Construction Safety and Loss Control	
FPST 3113	Advanced Extinguishing Systems Design and Analysis	
FPST 3383	Building Electrical Systems	
FPST 4383	Fire and Evacuation Modeling	
FPST 4233	Advance Exposure Assessment	
FRNS 5143	Methods in Fire and Explosion Investigation NFPA 921/1033	
Hours Subtotal		6
Total Hours		125

¹ The combined credits for FPST 2343 or FPST 2344 and that of FPST 4982 and FPST 4992 or FPST 4993 needs to equal 7 credits. If FPST 2344, FPST 4982 and FPST 4992 are taken together, one hour can be applied towards the specialty or controlled electives.

² AutoCAD courses such as ENGR 1322 are the preferred course for FPST students instead of courses focusing on SolidWorks like ENGR 1332.

³ CHEM 3013 and CHEM 3015 require CHEM 1215 or CHEM 1515 as a prerequisite. GENT 3323 or ENSC2143 is the preferred option.

Graduation Requirements

1. 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.
2. A minimum overall GPA of 2.5 is required in all courses that are used in this degree plan with engineering or engineering technology prefixes.

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 2025.