

ENGINEERING TECHNOLOGY: FIRE SAFETY AND EXPLOSION PROTECTION, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (<http://catalog.okstate.edu/graduate-college/#70>).

Thesis Option

Total Hours: 30

Code	Title	Hours
Engineering Technology Core Courses		
FEMP 5013 or FSEP 5013	Research Design & Methodology	3
IEM 5603 or FSEP 5023	Project Management	3
FSEP 5133	Principles of Industrial and Process Safety	3
Fire Safety and Explosion Protection Core Courses		
FSEP 5033	Risk Analysis	3
FSEP 5113	Fire and Explosion Hazard Recognition	3
FSEP 5143	Structural Design for Fire and Life Safety	3
Hours Subtotal		18
Electives		
Select 6 hours, minimum of 3 hours from FSEP courses:		6
FSEP 5060	Emerging Topics in Engineering Technology	
FSEP 5123	Advanced Special Hazard Suppression and Detection	
FSEP 5153	Advanced Exposure Assessment	
FSEP 5163	Building Electrical Systems	
FSEP 5213	Advanced Building Design and Analysis	
FSEP 5383	Fire and Evacuation Modeling	
FSEP 5990	Directed Studies	
ETM 5153	Foundations of Engineering Management	
ETM 5221	Engineering Teaming	
ETM 5291	Failure Mode and Effects Analysis in Design	
ETM 5341	Leadership Strategies for Technical Professionals	
ETM 5371	Ethics for Practicing Engineers	
ETM 5411	Engineering Economic Analysis	
IEM 5143	Reliability and Maintainability	
IEM 5990	Special Topics in Industrial Engineering and Management	
ENGR 5133	Advanced Environmental Law for Technical Professionals	
FEMP 5113	Introduction to Fire Administration	
FEMP 5123	Introduction to Emergency Management	
FRNS 5123	Fire Dynamics in Forensic Investigations	
FRNS 5143	Methods in Fire and Explosion Investigation NFPA 921/1033	
FRNS 5183	Computer Fire Modeling	

Other FRNS Approved by Advisor

Hours Subtotal		6
Master's Thesis		
FSEP 5000	Master's Thesis	6
Each M.S. candidate must prepare a written thesis and defend it before a thesis committee of at least three faculty members (minimum two from the FPST program). The written document must satisfy the requirements of the Graduate College for format and structure. The thesis defense consists of a twenty-minute oral presentation, followed by questions from the committee.		
Hours Subtotal		6
Total Hours		30

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Engineering Technology Core Courses		
FEMP 5013 or FSEP 5013	Research Design & Methodology	3
IEM 5603 or FSEP 5023	Project Management	3
FSEP 5133	Principles of Industrial and Process Safety	3
Fire Safety and Explosion Protection Core Courses		
FSEP 5033	Risk Analysis	3
FSEP 5113	Fire and Explosion Hazard Recognition	3
FSEP 5143	Structural Design for Fire and Life Safety	3
Hours Subtotal		18
Electives		
Select 12 hours, minimum of 3 hours from FSEP courses:		12
FSEP 5060	Emerging Topics in Engineering Technology	
FSEP 5123	Advanced Special Hazard Suppression and Detection	
FSEP 5153	Advanced Exposure Assessment	
FSEP 5163	Building Electrical Systems	
FSEP 5213	Advanced Building Design and Analysis	
FSEP 5383	Fire and Evacuation Modeling	
FSEP 5990	Directed Studies	
ETM 5153	Foundations of Engineering Management	
ETM 5221	Engineering Teaming	
ETM 5291	Failure Mode and Effects Analysis in Design	
ETM 5341	Leadership Strategies for Technical Professionals	
ETM 5371	Ethics for Practicing Engineers	
ETM 5411	Engineering Economic Analysis	
IEM 5143	Reliability and Maintainability	
IEM 5990	Special Topics in Industrial Engineering and Management	
ENGR 5133	Advanced Environmental Law for Technical Professionals	
FEMP 5113	Introduction to Fire Administration	
FEMP 5123	Introduction to Emergency Management	
FRNS 5123	Fire Dynamics in Forensic Investigations	

FRNS 5143	Methods in Fire and Explosion Investigation NFPA 921/1033	
FRNS 5183	Computer Fire Modeling	
Other FRNS approved by advisor		
Hours Subtotal		12
Creative Component/Report		
FSEP 5990	Directed Studies	2
The FSEP 5990 course is used for a creative component. A report (a "mini-thesis") must be submitted, prepared in the style of an M.S. thesis, but not submitted for Graduate College approval.		
Hours Subtotal		2
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (<http://catalog.okstate.edu/graduate-college/>). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.