## **FPE Four-Year Plan with CORE**

Freshman Year		Fall	Spring
CORE	CORE Program Requirements	3	6
CHEM 135	General Chemistry for Engineers	3	
MATH 140, 141	Calculus I, II	4	4
PHYS 161	General Physics: Mechanics and Particle Dynamics		3
ENES 100	Introduction to Engineering Design	3	
ENES 102	Mechanics I		3
ENFP 101, optional (was 108)	Hot Topics in Fire	1	
•	Total	14	16
Sophomore Year			
CORE	CORE Program Requirements	3	3
MATH 206 <sup>1</sup>	Introduction to MATLAB	1	
MATH 240/MATH 241	Linear Algebra or Calculus III		4
MATH 246	Differential Equations	3	
PHYS 260, 261	General Physics: Vibration, Waves, Heat, Elect	4	
ENES 220	Mechanics II		3
ENES 221	Dynamics	3	
ENES 232	Thermodynamics		3
ENFP 250	Introduction to Life Safety Analysis	3	
ENFP 300	Fire Protection Fluid Mechanics		3
	Total	17	16
Junior Year			
CORE	CORE Program Requirements	3	3
Approved Elective	Approved Electives (STAT, ENFP, ENXX)	3	3
Elective	General Elective	3	
ENFP 310	Water Based Fire Protection Systems Design	3	
ENFP 312	Heat and Mass Transfer	3	
ENFP 320	Fire Assessment Methods and Laboratory		4
ENFP 350	Professional Development Seminar		1
ENFP 440 <sup>2</sup> /627 (was 489M/627)	Smoke Management and Fire Alarm Systems		3
,	Total	15	14
Senior Year			
CORE	CORE Program Requirements	3	
Approved Elective	Approved Electives (STAT, ENFP, ENXX)		6
ENFP 405/621	Structural Fire Protection	3	
ENFP 410 <sup>2</sup> /629L (was 489L/629L)	Advanced Fire Suppression		3
ENFP 411	Risk-Informed Performance Based Design		3
ENFP 413 <sup>1</sup> /613 (was 489G/613)	Advanced Life Safety Analysis	3	
ENFP 415/651	Fire Dynamics	3	
ENFP 425	Enclosure Fire Modeling	3	
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ENFP 426/616 (was 416)	Computational Methods in FPE		3

<sup>&</sup>lt;sup>1</sup> Students who take PHYS270/271 can use this instead of ENFP413 (life safety) and MATH206 (MATLAB).
<sup>2</sup> Students who took ENFP255 (when it was offered) can use this and one technical elective instead of ENFP410 (Suppression) and 440 (Smoke).