

# Fire Protection Engineering Four Year Academic Plan

Name: \_\_\_\_\_

UID: \_\_\_\_\_

Year 1	Fall		
Gateway requirements include: ENGL 101, CHEM 135, MATH 141, PHYS 161 and an approved Distributive Studies course. (Directly admitted freshman must successfully complete these courses and ENES 100 by 45 UM credits.)	Course	Credit	Grade
	ENFP 108 ( <i>suggested</i> )	1	
	ENES102 (SP)	3	
	MATH 140 (AR)	4	
	CHEM 135	3	
	ENGL 101 (AW)	3	
	<b>Total</b>	<b>14</b>	

Spring		
Course	Credit	Grade
ENES100 (SP)	3	
MATH 141	4	
PHYS 161 (NL)	3	
Hist & Social Sciences (HS)*	3	
Humanities (HU)*	3	
<b>Total</b>	<b>16</b>	

Year 2	Fall		
	Course	Credit	Grade
	MATH 206	1	
	MATH 246	3	
	ENFP 250	3	
	ENES 221	3	
	PHYS 260 and PHYS 261 (NL)	3 & 1	
	Scholarship and Practice (SP)*	3	
<b>Total</b>	<b>17</b>		

Spring		
Course	Credit	Grade
MATH 240 or 241	4	
ENES 232	3	
ENES 220	3	
ENFP 300	3	
Oral Communication (OC)	3	
<b>Total</b>	<b>16</b>	

Year 3	Fall		
Second benchmark requirements must be completed one year after students are reviewed for the gateway requirements and include: All 100 and 200 level MATH, PHYS, ENES courses, ENFP 250 and 300.	Course	Credit	Grade
	ENFP 310	3	
	ENFP 312	3	
	Approved Elective	3	
	Approved Elective	3	
	Humanities (HU)*	3	
	<b>Total</b>	<b>15</b>	

Spring		
Course	Credit	Grade
ENFP 320	4	
ENFP 350	1	
ENFP 440	3	
Approved Elective	3	
Hist & Social Sciences (HS)*	3	
<b>Total</b>	<b>14</b>	

Year 4	Fall		
Third benchmark requirements must be completed one year after students are reviewed for the second benchmark and include: ENFP 310, 312 and 320.	Course	Credit	Grade
	ENFP 405	3	
	ENFP 413	3	
	ENFP 415	3	
	ENFP 425	3	
	ENGL 393 (PW)	3	
<b>Total</b>	<b>15</b>		

Spring		
Course	Credit	Grade
ENFP 410	3	
ENFP 411	3	
ENFP 426	3	
Approved Elective	3	
Approved Elective	3	
<b>Total</b>	<b>15</b>	

\*All students must complete two Distributive Studies courses that are approved for I-series courses.

The Understanding Plural Societies (UP) and Cultural Competence (CC) courses may also fulfill Distributive Studies categories.

# FIRE PROTECTION ENGINEERING

NAME: \_\_\_\_\_

UID: \_\_\_\_\_

<b>General Education Requirements Fundamental Studies</b>			
Requirements	Course	Credits	Grade
Academic Writing (AW)	ENGL 101	3	
Professional Writing (PW)	ENGL 393	3	
Oral Communication (OC)		3	
Math (MA)	-----	0	
Analytic Reasoning (AR)	MATH 140	0	

<b>Distributive Studies</b>			
Requirements	Course	Credits	Grade
Natural Science Lab (NL)	PHYS 260&261	0	
Natural Sciences (NS)	PHYS 161	0	
History/Social Sciences (HS)		3	
History/Social Sciences (HS)		3	
Humanities (HU)		3	
Humanities (HU)		3	
Scholarship in Practice (SP)	ENES100	0	
Scholarship in Practice (SP) non major		3	

<b>I-Series Normally double counted with Distributive Studies</b>			
Requirements	Course	Credits	Grade
I-Series (IS)			
I-Series (IS)			

<b>Diversity (overlap permitted with Distributive Studies and/or I-series)</b>			
Requirements	Course	Credits	Grade
Understanding Plural Societies (UP)			
Understanding Plural Societies (UP) or Cultural Competency (CC)			

<b>Basic Sciences</b>			
Requirements- The cumulative average of these courses must be a 2.0	Credits	Grade	
CHEM 135 - Chem for Eng	3		
PHYS 161 - General Physics I	3		
PHYS 260 and PHYS 261 - Gen Physics II & Lab	3 & 1		
MATH 140 - Calculus I	4		
MATH 141 - Calculus II	4		
MATH 206 - Introduction to MATLAB	1		
MATH 240 - Linear Algebra or MATH 241 - Calculus III	4		
MATH 246 - Differential Equations	3		

<b>Engineering Sciences</b>			
Requirements- The cumulative average of these courses must be a 2.0	Credits	Grade	
ENES 100 - Intro to Eng Design	3		
ENES 102 - Mechanics I	3		
ENES 220 - Mechanics II	3		
ENES 221- Dynamics	3		

<b>Major Requirements</b>		
Requirements-The cumulative average of these courses must be a 2.0	Credits	Grade
ENFP 250 - Intro to Life Safety Analysis	3	
ENFP 300 - FP Fluid Mechanics	3	
ENFP 310 - Water Based FP Sys. Design	3	
ENFP 312 - Heat & Mass Transfer	3	
ENFP 320 - Fire Assessment Methods	4	
ENFP 350 - Professional Dev Seminar	1	
ENFP 405 - Structural Fire Protection	3	
ENFP 410 - Advanced Fire Suppression	3	
ENFP 411 - Risk Informed Perfm Base Des	3	
ENFP 415 - Fire Dynamics	3	
ENFP 425 - Enclosure Fire Modeling	3	
ENFP 426 - Computational Methods in FPE	3	
ENFP 440 - Smoke Mgmt & Fire Alarm Sys	3	
<b>Technical Requirements</b>		
ENES 232 - Thermodynamics	3	
Approved Elective*	3	
Approved Elective*	3	
Approved Elective*	3	
Approved Elective*	3	
Approved Elective*	3	
ENGL 393 - Technical Writing	3	

\*At least 3 credits of ENFP 4XX and 3 credits of 300-400 level coursework in statistics, math or applied math are required. Additional electives should be selected in consultation with ENFP Dept. Advisor.

<b>Gateway requirements</b>		
Requirements	Credits	Grade
ENGL 101	3	
CHEM 135, 271 or 113	3	
MATH 141	4	
PHYS 161	3	
An approved Distributive Studies course	3	
ENES 100 (required only for Direct Admits)	3	

<b>Benchmark 2 requirements</b>		
MATH 140, 141, 246 and 240 or 241	15	
PHYS 161, 260, 261, 270 and 271	11	
ENES 100, 102, 220 and 221	12	
ENFP 250 and ENFP 300	6	

<b>Benchmark 3 requirements</b>		
ENFP 310, 312 and 320	10	

<b>Requirements for Graduation:</b>	
<input type="checkbox"/>	At least 30 credits must be earned at UMD
<input type="checkbox"/>	15 of the final 30 credits must be earned at the 300-400 level
<input type="checkbox"/>	12 upper level major credits must be earned at UMD

Students must earn a minimum of 120 credits to complete a degree.