

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

# FIRE PROTECTION ENGINEERING

UID: \_\_\_\_\_ \_\_ A.A. \_\_ A.S. \_\_ Post-Bac

## GENERAL EDUCATION REQUIREMENTS

### Fundamental Studies

|                           |          |  |   |
|---------------------------|----------|--|---|
| Academic Writing (AW)     | ENGL 101 |  | 3 |
| Professional Writing (PW) | ENGL 393 |  | 3 |
| Oral Communication (OC)   |          |  | 3 |

### GenEd Distributive Studies

|  |  |  |   |
|--|--|--|---|
| History/Social Sciences (HS*)              |  |  | 3 |
| History/Social Sciences (HS*)              |  |  | 3 |
| Humanities (HU*)                           |  |  | 3 |
| Humanities (HU*)                           |  |  | 3 |
| Scholarship in Practice (SP*) out of major |  |  | 3 |

### GenEd I-Series Courses

|                |  |  |     |
|----------------|--|--|-----|
| I-Series (IS*) |  |  | 0/3 |
| I-Series (IS*) |  |  | 0/3 |

### GenEd Diversity

|   |  |  |     |
|---|--|--|-----|
| Understanding Plural Societies (UP*)                              |  |  | 0/3 |
| Understanding Plural Societies (UP*) OR Cultural Competency (CC*) |  |  | 0/3 |

## MAJOR REQUIREMENTS

### Basic Sciences

|  |  |  |       |
|--|--|--|-------|
| CHEM 135-Chem Engr or 131 & 134 -Fund & Prin         |  |  | 3/3&1 |
| PHYS 161 - General Physics I (NS)                    |  |  | 3     |
| PHYS 260 and PHYS 261 - Gen Physics II & Lab (NL)    |  |  | 3 & 1 |
| MATH 140 - Calculus I (MA/AR)                        |  |  | 4     |
| MATH 141 - Calculus II                               |  |  | 4     |
| MATH 240 - Linear Algebra or MATH 241 - Calculus III |  |  | 4     |
| MATH 246 - Differential Equations                    |  |  | 3     |

### Engineering Sciences

|                                     |  |  |   |
|-------------------------------------|--|--|---|
| ENES 100 - Intro to Eng Design (SP) |  |  | 3 |
| ENES 102 - Mechanics I              |  |  | 3 |
| ENES 220 - Mechanics II             |  |  | 3 |
| ENES 221- Dynamics                  |  |  | 3 |
| ENES 232 - Thermodynamics           |  |  | 3 |

\*May satisfy more than one requirement. See [www.gened.umd.edu](http://www.gened.umd.edu)  
 \*\*Technical electives must include the following: at least 3 credits of: MATH or STAT 400+; at least 3 credits of: ENFP 400+; and at least 6 credits of: Engineering coursework 300+, CHEM 400+, or PHYS 400+." [www.fpe.umd.edu](http://www.fpe.umd.edu)

## MAJOR REQUIREMENTS

|  |  |  |   |
|--|--|--|---|
| ENFP 201 - Numerical Methods with MatLab |  |  | 3 |
| 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 420 - Fire Assessment Methods & Lab |  |  | 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 413 - Advanced Life Safety Analysis |  |  | 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 |

### Technical Requirements

|                      |  |  |   |
|----------------------|--|--|---|
| Technical Elective** |  |  | 3 |
| Technical Elective** |  |  | 3 |
| Technical Elective** |  |  | 3 |
| Technical Elective** |  |  | 3 |

### Requirements for Graduation:

- Final 30 credits must be earned at UMD
  - 15 of the final 30 credits must be earned at the 300-400 level
  - 12 of the final 30 credits must be upper level major coursework
  - A minimum 2.00 cumulative UM GPA and satisfactory completion of all degree requirements are required for graduation
  - Students matriculating after Fall 2012 must have a 2.0 minimum GPA for all degree requirements, minor requirements, and undergraduate certificate requirements
- (Major courses are defined as: departmental courses, basic sciences, engineering sciences, specified degree tracks, technical requirements/ technical electives and ENGL 393)*
- A minimum of 120 credits is required to earn the degree

### For Degree Clearance Only

|                   |                    |
|-------------------|--------------------|
| Degree: B.S. ENFP | Advisor: _____     |
| Date: _____       | Credits/GPA: _____ |

# 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 101 (suggested) | 1         |       |
|  | ENES100 (SP)         | 3         |       |
|  | MATH 140 (AR)        | 4         |       |
|  | CHEM 135             | 3         |       |
|  | ENGL 101 (AW)        | 3         |       |
|  | <b>Total</b>         | <b>14</b> |       |

| Spring                       |           |       |
|------------------------------|-----------|-------|
| Course                       | Credit    | Grade |
| ENES102                      | 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 |
|        | ENFP 250                       | 3         |       |
|        | ENES 221                       | 3         |       |
|        | MATH 240 or 241                | 4         |       |
|        | PHYS 260 and PHYS 261 (NL)     | 3 & 1     |       |
|        | Scholarship and Practice (SP)* | 3         |       |
|        | <b>Total</b>                   | <b>17</b> |       |

| Spring                  |           |       |
|-------------------------|-----------|-------|
| Course                  | Credit    | Grade |
| ENFP 201                | 3         |       |
| ENES 220                | 3         |       |
| ENES 232                | 3         |       |
| MATH 246                | 3         |       |
| Oral Communication (OC) | 3         |       |
| <b>Total</b>            | <b>15</b> |       |

| Year 3 | Fall                         |           |       |
|--------|------------------------------|-----------|-------|
|        | Course                       | Credit    | Grade |
|        | ENFP 300                     | 3         |       |
|        | ENFP 440                     | 3         |       |
|        | Technical Elective**         | 3         |       |
|        | ENGL 393                     | 3         |       |
|        | Hist & Social Sciences (HS)* | 3         |       |
|        | <b>Total</b>                 | <b>15</b> |       |

| Spring               |           |       |
|----------------------|-----------|-------|
| Course               | Credit    | Grade |
| ENFP 310             | 3         |       |
| ENFP 312             | 3         |       |
| ENFP 350             | 1         |       |
| ENFP 413             | 3         |       |
| Technical Elective** | 3         |       |
| Humanities (HU)*     | 3         |       |
| <b>Total</b>         | <b>16</b> |       |

| Year 4 | Fall                 |           |       |
|--------|----------------------|-----------|-------|
|        | Course               | Credit    | Grade |
|        | ENFP 405             | 3         |       |
|        | ENFP 410             | 3         |       |
|        | ENFP 415             | 3         |       |
|        | ENFP 425             | 3         |       |
|        | Technical Elective** | 3         |       |
|        | <b>Total</b>         | <b>15</b> |       |

| Spring               |           |       |
|----------------------|-----------|-------|
| Course               | Credit    | Grade |
| ENFP 411             | 3         |       |
| ENFP 420             | 4         |       |
| ENFP 426             | 3         |       |
| Technical Elective** | 3         |       |
| <b>Total</b>         | <b>13</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.

\*\*Tech electives must include the following: at least 3 crdts of: MATH or STAT 400+; at least 3 crdts of: ENFP 400+; and at least 6 crdts of: ENGR coursework 300+, CHEM 400+, or PHYS 400+." [www.fpe.umd.edu](http://www.fpe.umd.edu)