

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

# MECHANICAL ENGINEERING

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

| GENERAL EDUCATION REQUIREMENTS                                    |              |  |       |
|-------------------------------------------------------------------|--------------|--|-------|
| <b>Fundamental Studies</b>                                        |              |  |       |
| Academic Writing (AW)                                             | ENGL 101     |  | 3     |
| Professional Writing (PW)                                         | ENGL 39X     |  | 3     |
| Oral Communication (OC)                                           |              |  | 3     |
| Mathmatics (MA)                                                   | MATH 140     |  | 4     |
| Analytic Reasoning (AR)                                           | MATH 140     |  | 0     |
| <b>Distributive Studies</b>                                       |              |  |       |
| History/Social Sciences (HS*)                                     |              |  | 3     |
| History/Social Sciences (HS*)                                     |              |  | 3     |
| Humanities (HU*)                                                  | ENES/ENEE200 |  | 3     |
| Humanities (HU*)                                                  |              |  | 3     |
| Natural Sciences No Lab (NS)                                      | PHYS 161     |  | 3     |
| Natural Sciences w/Lab (NL)                                       | PHYS 260/261 |  | 4     |
| Scholarship in Practice (SP*) in major                            | ENES 100     |  | 3     |
| Scholarship in Practice (SP*) out of major                        |              |  | 3     |
| <b>Big Question Courses</b>                                       |              |  |       |
| Big Question (SCIS*)                                              | ENES/ENEE200 |  | 0     |
| Big Question (SCIS*)                                              |              |  | 0/3   |
| <b>Diversity</b>                                                  |              |  |       |
| Understanding Plural Societies (UP*)                              |              |  | 0/3   |
| Understanding Plural Societies (UP*) OR Cultural Competency (CC*) |              |  | 0/3   |
| MAJOR REQUIREMENTS                                                |              |  |       |
| <b>Basic Sciences</b>                                             |              |  |       |
| CHEM 135-Chem Engr OR 131 & 134 -Fund & Prin                      |              |  | 3/3&1 |
| PHYS 161 - General Physics I (NS)                                 |              |  | 0     |
| PHYS 260 and PHYS 261 - Gen Physics II & Lab                      |              |  | 0     |
| PHYS 270 and PHYS 271 - Gen Physics III & Lab                     |              |  | 3 & 1 |
| MATH 140 - Calculus I (MA/AR)                                     |              |  | 0     |
| MATH 141 - Calculus II                                            |              |  | 4     |
| MATH 241 - Calculus III                                           |              |  | 4     |
| MATH 246 - Differential Equations                                 |              |  | 3     |
| <b>Engineering Sciences</b>                                       |              |  |       |
| ENES 100 - Intro to Eng Design (SP)                               |              |  | 0     |
| ENES 102 - Mechanics I                                            |              |  | 3     |
| ENES 220 - Mechanics II                                           |              |  | 3     |
| ENES 221 - Dynamics                                               |              |  | 3     |
| ENES 232 - Thermodynamics                                         |              |  | 3     |

| MAJOR REQUIREMENTS                                      |  |  |   |
|---------------------------------------------------------|--|--|---|
| ENES 200 or ENEE 200- Tech & Consequences (HU/I-Series) |  |  | 0 |
| ENME 202 - Computing Fundamentals for Engineers         |  |  | 3 |
| ENME 272 - Intro to CAD                                 |  |  | 2 |
| ENME 331 - Fluid Mechanics                              |  |  | 3 |
| ENME 332 - Transfer Processes                           |  |  | 3 |
| ENME 350 - Electronics & Instrumentation I              |  |  | 3 |
| ENME 351 - Electronics & Instrumentation II             |  |  | 3 |
| ENME 361 - Vibrations, Controls, & Opt I                |  |  | 3 |
| ENME 371 - Product Eng & Manufacturing                  |  |  | 3 |
| ENME 382 - Intro to Materials Eng                       |  |  | 3 |
| ENME 392 - Stat Methods for Prod & Proc Dev             |  |  | 3 |
| ENME 400 - Machine Design                               |  |  | 3 |
| ENME 462 - Vibrations, Controls, & Opt II               |  |  | 3 |
| ENME 472 - Integrated Product P & Design                |  |  | 3 |
| <b>Technical Requirements</b>                           |  |  |   |
| ENME 4XX - Tech Elective**                              |  |  | 3 |
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| ENME 4XX - Tech Elective**                              |  |  | 3 |
| ENME 4XX or TECH 4XX**                                  |  |  | 3 |
| ENME 4XX or TECH 4XX**                                  |  |  | 3 |

| Requirements for Graduation:                                                                                                                                                                          |                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/>                                                                                                                                                                              | Final 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 of the final 30 credits must be upper level major coursework                                                                                                |
| <input type="checkbox"/>                                                                                                                                                                              | A minimum 2.00 cumulative UM GPA and satisfactory completion of all degree requirements are required for graduation                                            |
| <input type="checkbox"/>                                                                                                                                                                              | Students matriculating after Fall 2012 must have a 2.0 minimum GPA for all degree requirements, minor requirements, and undergraduate certificate requirements |
| <i>(Major courses are defined as: departmental courses, basic sciences, engineering sciences, specified degree tracks, technical requirements/ technical electives and Professional Writing (PW))</i> |                                                                                                                                                                |
| <input type="checkbox"/>                                                                                                                                                                              | A minimum of 120 credits is required to earn the degree                                                                                                        |

\* May satisfy more than one requirement. See [www.gened.umd.edu](http://www.gened.umd.edu)

\*\*See Mechanical Advisor for information about appropriate technical electives and approval. <http://www.enme.umd.edu>

