

## College of Letters and Sciences B.S. Degree Requirements For Engineering with a Mathematics Minor

### 1) Communications & Calculations Skills (12 units or waivers)

- a) \_\_\_ ENGLISH 101
- b) \_\_\_ ENGLISH 102  
or \_\_\_ ENGLISH 105 Freshmen Honors  
(replaces both 101 and 102)
- c) \_\_\_ SPEECH 110
- d) \_\_\_ MATH 140 or 141

### 2) B.S. Degree Requirements (32 units)

- a) Quantitative and Technical Reasoning (7-11 units)
  - (1) \_\_\_ A 4-5 unit laboratory science designated *GL*
  - (2) \_\_\_ 3 – 6 units of science, math or computer science courses designated *GL* or *GM* from at least 1 subject area other than the laboratory science course used in Area 2.a.1 (Astronomy, Biology, Chemistry, Geology, Computer Science, Physical Geography, Math Physics)

#### b) Cultural Heritage (6 units)

- 1) \_\_\_ GENED 110
- 2) \_\_\_ GENED 390

#### c) Communities (6 units)

- 1) \_\_\_ GENED 130
- 2) \_\_\_ GENED 120 or 140

#### d) Personal Health and Well-being (1-2 units)

- 1) \_\_\_ PEGNRL 192
- 2) \_\_\_ 0-1 unit in HPRC courses designated *GP*

#### e) \_\_\_ Electives (7-12 units)

- 1) \_\_\_ Additional electives designated *GA*, *GE*, *GH*, *GI*, or *GS*; no more than 1 course from any one discipline may be counted in electives

### 3) Diversity (3 units)

- a) \_\_\_ Any diversity course listed in 2010-12 Catalog pg 38.

### 1) Physics (38 units)

- a) (1) \_\_\_ PHYSCS 180
- (2) \_\_\_ PHYSCS 181
- (3) \_\_\_ PHYSCS 221
- (4) \_\_\_ PHYSCS 305
- (5) \_\_\_ PHYSCS 310
- (6) \_\_\_ PHYSCS 324
- (7) \_\_\_ PHYSCS 330
- (8) \_\_\_ PHYSCS 331
- (9) \_\_\_ PHYSCS 344
- (10) \_\_\_ PHYSCS 360
- (11) \_\_\_ PHYSCS 489

#### b) Select 2 units of \_\_\_ PHYSCS 190

- c) Select remaining units from Physics courses numbered 300 or 400 with no more than 3 units from 490-499 courses.

#### d) \_\_\_ Departmental Exit Interview

### 2) Major – Unique Requirement (22 units)

- a) (1) \_\_\_ CHEM 102
- (2) \_\_\_ CHEM 104
- (3) \_\_\_ MATH 255\*
- (4) \_\_\_ MATH 355\*
- (5) \_\_\_ MATH 361\*

#### b) Choose one

\_\_\_ COMPSCI 347, COMPSCI 172 or  
COMPSCI 174

### 3) Writing

\_\_\_ ENGLISH 370 OR ENGLISH 372 RLS

### 4) Mathematics Minor (22 units)

- 1) \_\_\_ MATH 253
- 2) \_\_\_ MATH 254
- 3) \_\_\_ MATH 255\*
- 4) \_\_\_ MATH 361 or MATH 280
- 5) \_\_\_ Select remaining units from Math courses numbered 300 or higher except MATH 375.

\*These courses are also listed under the physics major requirements