ASU Requirement for all incoming Freshmen

### I. English Proficiency (6 hrs)

- **ASU 101 The ASU Experience** (1 credit)
- **ENG 101 / 107 First-Year Comp (3)** and **ENG 102 / 108 First-Year Comp (3)**
- **ENG 105 Adv First-Year Comp (3)** and an Applicable Elective (3) – see Department

#### Sub Total (I) ________

### II. General Requirements (15 hrs) (See Catalog for approved courses)

#### A. Humanities & Social Sciences (15 hrs min)

- Humanities, Fine Arts, and Design (6 hrs min)(HU)
- Social/Behavioral Sciences (6 hrs min)(SB)

#### Awareness Areas
- Cultural
- Global
- Historical

#### B. Literacy/Critical Inquiry (6 hrs)

- **L**: MAE 491 Thermofluids Lab
- **L**: MAE 400 Engineering Profession

#### C. Natural Sciences/Basic Sciences (8 hrs)

- **SQ**: PHY 121/122 Physics I & Lab I
- **SQ**: PHY 131/132 Physics II & Lab II

#### D. Mathematical Studies (6 hrs) – mark after taken

- **CS**: MAE 100 Intro to ME & AE
- **MA**: MAT 275 Modern Diff EQs

#### Sub Total (II) ________

### III. Required Lower Division Courses (52 hrs)

#### A. Natural Sciences/Basic Sciences (18 hrs)

- **BME 111 Engr Persp on Bio Sys** OR
- **BCH 361 Princ of Biochemistry**
- **+CHM 114, 115, 116** or 116** Chemistry (SQ)**
- **+CHM 231 Intro to Organic Chem** or **+CHM 240 Intro. Physical Chem**
- **+ PHY 121 Physics I (SQ)**
- **+ PHY 122 Physics Lab I (SQ)**
- **+ PHY 131 Physics II (SQ)**
- **+ PHY 132 Physics Lab II (SQ)**

#### Sub Total (III) ________

### IV. Required Upper Division Courses (47 hrs)

#### B. Mathematical Studies (12 hrs)

- **+MAT 265 Calc for Engrs I**
- **+MAT 266 Calc for Engrs II**
- **+MAT 267 Calc for Engrs III**
- **+MAT 275 Mod Diff EQ (MA)**

#### C. Lower Division Engr (22 hrs)

- **#MAE 100 Intro to ME & AE (CS)**
- **#MAE 212 Engineering Mechanics**
- **MAE 213 Mechanics of Solids**
- **MAE 214 CAE I**
- **MAE 240 Thermofluids I**
- **MSE 250 Struc & Prop of Materials**
- **EEE 202 Circuits I**

#### Sub Total (IV) ________

### Total Program Hours

**BSE**

- **Regular Curriculum – 120 Hours**

**Graduation Requirements:**

- **Semester Hour Summary**
- **Total Program Hours**

**4/17/07**