

**Check List**  
**Graduation Requirements**  
**B.S. in CEN/ELE (DOUBLE MAJOR) - Class of 2010**

**STUDENT** \_\_\_\_\_

**ADVISOR** \_\_\_\_\_

1. Total hours (at least 135)\*\* \_\_\_\_\_
2. Passing grade in all required courses \_\_\_\_\_

3. Overall GPA 2.0 \_\_\_\_\_
4. Department GPA 2.0 \_\_\_\_\_
5. COS courses 2.0 \_\_\_\_\_

**Required Course Grades:**

CHY 121 _____	MAT 126 _____	ECE 101 _____	ECE 342 _____
CHY 123 _____	MAT 127 _____	ECE 177 _____	ECE 343 _____
	MAT 228 _____	ECE 271 _____	ECE 351 _____
PHY 121 _____	MAT 258 _____	ECE 210 _____	ECE 401 _____
PHY 122 _____	MAT 481 _____	ECE 211 _____	ECE 402 _____
		ECE 214 _____	ECE 403 _____
COS 221 _____	CHB 350 _____	ECE 275 _____	ECE 414 _____
COS 431 _____		ECE 300 _____	ECE 473 _____
		ECE 471 OR	ECE 477 _____
ENG 101 _____	ENG 317 _____	ECE 314 _____	ECE 486 _____

**\*HV&SC + Ethics Gen Ed Requirements (18 hrs in the first 5 of the 6 areas)**

Each of the 6 areas below must be represented. A course may represent multiple areas.

Course	CR HRS	Taken	West	Soc	Cult	Pop	Art	Ethics
CMJ 103				X				

West - Western cultural tradition; Soc - Social context and institutions; Cult - Cultural diversity and international perspectives; Pop - Population and the environment; Art - Artistic and creative expression.

**Engineering Science Elective ( 3 hrs)**

**\*Basic Science (4 hrs)**

\*You may elect to take ERS 102 or BIO 222/223 to concurrently satisfy the Basic Science requirement and the Population & Environment segment of the HV & SC requirement. This option frees up 4 credit hours at least 3 of which **must** be used to take an additional Tech Elective. The remaining hour is a free elective, often satisfied by completing five 3-hour HV & SC courses in addition to ERS 102 or BIO 222/223 for a total of 19 HV & SC credit hours.

**\*\*Technical Electives (at least 6 Cr Hrs)**

\*\*ECE Tech Elective \_\_\_\_\_  
 \*\*Computer Focus \_\_\_\_\_

ECE Tech Elective \_\_\_\_\_  
 \*Tech Elective \_\_\_\_\_

\*\*Tech Elective selections must include two ECE courses and a Computer Focus course. The latter, if appropriate, may concurrently count as one of the two ECE courses; hence, the **minimum** of 6 Tech Elective credit hours. Neither ECE 394 nor ECE 198 may be used to satisfy the technical elective requirements for the double major. In addition to acceptable COS technical electives, the following ECE courses may be used to satisfy the "Computer Focus" requirement:

- |         |         |         |         |
|---------|---------|---------|---------|
| ECE 331 | ECE 417 | ECE 435 | ECE 471 |
| ECE 477 | ECE 478 | ECE 486 | ECE 487 |

In addition, ECE 198 is accepted *if taken prior to summer 2004*

## **Additional Information about Elective Courses**

**General Education Electives** – In addition to CMJ 103, the curriculum requires five courses used to complete General Education Requirements in Ethics and Human Values/Social Context (HV &SC). Note that CMJ 103 satisfies the Social Contexts and Institutions requirement. A course meeting the Ethics requirement must also meet one of the HV & SC areas in order to be counted in the 18 hours of HV & SC courses. The structure of the curriculum guarantees that all other General Education Requirements will be met.

### **Suggested Engineering Science Electives**

CHB 200	Fundamentals of Process Engineering
CIE 231	Fundamentals of Environmental Engineering
MEE 150	Applied Mechanics: Statics
MEE 230	Thermodynamics I
MEE 252	Statics and Strength of Materials

### **Suggested Basic Science Electives**

AST 110 and either AST 215 or AST 216 (NOTE: AST 109 is NOT acceptable)
BIO 222/223
CHY 122/124
ERS 101 or ERS 102

### **Program Specifics**

No grade of less than C- is acceptable in a course that is to be used as a prerequisite for any ECE course. No student is to be allowed to remain enrolled in an ECE course for which any of the required prerequisites have not been satisfied by obtaining a grade of at least C-.

Any required course in the curriculum cannot be taken more than twice. If any required course in the program is taken twice without achieving a passing grade then dismissal from the program will be recommended. This includes courses where a grade of AU, L, W, or WF is received. If the course is a prerequisite for a required course in the program, then a passing grade shall be considered C- or better.

To obtain a BS degree with a double major in Computer Engineering and Electrical Engineering, a student must: (1) meet all University academic requirements; (2) meet all Computer Engineering and Electrical Engineering curriculum requirements; and (3) have a composite GPA of 2.0 or better in all ECE courses as well as a composite GPA of 2.0 or better in all COS courses.

Any exceptions to the program specifics listed above require approval of the ECE faculty.