

**West Texas A&M University**  
**STARR Center**  
**Degree Checklist**  
**2006-2007**

NAME: \_\_\_\_\_ WT ID: \_\_\_\_\_ DATE: \_\_\_\_\_

**Mathematics - Engineering Mathematics**  
**Department of Mathematics, Physical Sciences and**  
**Engineering - CC 312B 651-2540**

| CORE CURRICULUM COURSES (42 HOURS)   |  | HRS |
|--|--|-----|
| ENGL 1301 (ENG 101) (ENGLISH)  |  | 3   |
| ENGL 1302* (ENG 102) (ENGLISH)   |  | 3   |
| SCOM 1315 (101), 1318 (103), or 1321 (201) (SPEECH COMMUNICATIONS)   |  | 3   |
| MATH 1314* (110) or 1324* (115)  |  | 3   |
| CHEM 1411*, 1411L (101) (CHEMISTRY)  |  | 4   |
| CHEM 1412*, 1412L (102) (CHEMISTRY)  |  | 4   |
| ENGL 2332* (ENG 201), 2333* (202), 2371* (203); HIST 2372 (210); PHIL 1301 (101); or SPAN 2312** (207) (ENGLISH, HISTORY, PHILOSOPHY, SPANISH) <b>Choose 1</b>   |  | 3   |
| HUMA 1315 (FA 101); ARTS 1303 (ART 151), ARTS 1304 (ART 152); MUSI 1306 (MUS 101) or 1208 and 1209; or THRE 1310 (105) (FINE ARTS, ART, MUSIC, THEATRE) <b>Choose 1</b>  |  | 3   |
| HIST 1301 (201) (HISTORY)  |  | 3   |
| HIST 1302 (202) (HISTORY)  |  | 3   |
| POSC 2305 (101) (POLITICAL SCIENCE)  |  | 3   |
| POSC 2306 (102) (POLITICAL SCIENCE)  |  | 3   |
| ANTH 2351 (201) ECON 2301 (ECO 201), GEOG 1302 (202), PSYC 2301 (PSY 201), SOCI 1301 (201) (ANTHROPOLOGY, ECONOMICS, GEOGRAPHY, PSYCHOLOGY, SOCIOLOGY) <b>Choose 1</b>   |  | 3   |
| PHED 1111 (SES 101) (PHYSICAL EDUCATION)<br>Upon written recommendation of the University physician or the coordinator for Student Disability Services, students may substitute a one hour elective course in lieu of physical education course. |  | 1   |
| ENGINEERING MATHEMATICS REQUIREMENTS (38-39 HOURS)   |  |     |
| MATH 1316* (111)<br>MATH 1348* (140) or 2412 Pre-Calculus <b>Choose 1</b>  |  | 3-4 |
| MATH 2413* (240) Calculus I  |  | 4   |
| MATH 2414* (241) Calculus II   |  | 4   |
| MATH 3311* (411) Linear Algebra  |  | 3   |
| MATH 3316* (316) Problem Solving and Programming   |  | 3   |
| MATH 3321* (321) Probability and Finite Mathematics  |  | 3   |
| MATH 3340* (340) Calculus III  |  | 3   |
| MATH 3342* (342) Differential Equations I  |  | 3   |
| MATH 4340* (440) Complex Variables I   |  | 3   |
| MATH 4341* (441) Advanced Calculus   |  | 3   |
| MATH 4361* (461) Engineering Statistics  |  | 3   |
| MATH 4362* (492) Introduction to Numerical Analysis  |  | 3   |
| REQUIREMENTS FROM OTHER DEPARTMENTS (26 HOURS)   |  |     |
| CIS 1315 (204) Programming Fundamentals  |  | 3   |
| CIS ADVANCED ELECTIVE  |  | 3   |
| CIS ADVANCED ELECTIVE  |  | 3   |

**Bachelor of Arts/Science Degree**  
**BA.MATH.ENGR or BS.MATH.ENGR (115)**

| ENGR 1304* (ET 125) (ENGINEERING) Engineering Graphics   | 3          |        |
|--|------------|--------|
| PHYS 1401*, 1401L (101) (PHYSICS) General Physics I<br>PHYS 2425*, 2425L (210) Engineering Physics I <b>Choose 1</b>   | 4          |        |
| PHYS 1402*, 1402L (102) General Physics II<br>PHYS 2426*, 2426L (211) Engineering Physics II <b>Choose 1</b>   | 4          |        |
| PHYSICS ADVANCED ELECTIVE  | 3          |        |
| PHYSICS ADVANCED ELECTIVE  | 3          |        |
| BACHELOR OF ARTS REQUIREMENTS (12 HOURS)   |            | OPTION |
| Six hours of foreign language.   | 6-8        |        |
| Six hours chosen from art, English, history, modern languages, music, philosophy and theatre.  | 6          |        |
| BACHELOR OF SCIENCE REQUIREMENTS (12 HOURS) (COVERED BY MAJOR)   |            | OPTION |
| Six hours chosen from biology, chemistry, geology, geosciences, mathematics, and physics.  | 0          |        |
| Six hours chosen from agriculture, anthropology, biology, chemistry, computer information systems, economics, geography, geology, geosciences, history, mass communications, mathematics, physics, political science, psychology, sociology, speech, and sports and exercise sciences. | 0          |        |
| ADVANCED ELECTIVES (2-17 HOURS BY ADVISEMENT)***   |            |        |
| ELECTIVES  |            |        |
| <b>TOTAL HOURS REQUIRED FOR DEGREE</b>   | <b>123</b> |        |

\* Indicates prerequisites—see catalog for more information.

\*\* Or an equivalent course (second year, second semester) in French or German.

\*\*\* At least 36 hours of advanced work (courses at the 3000- or 4000-level) are required to receive a bachelor's degree. At least 30 must be earned in residence at WTAMU.

Revised 5/06  
MATH.ENGR.BA.BS

**Note: This is NOT a degree plan. Upon completion of 60 hours, apply for a degree plan in the office of the dean of the College of Agriculture, Nursing, Science and Engineering, located in Old Main, Room 402, or call 651-2585.**