

PLAN OF STUDY FOR BACHELOR OF SCIENCE IN SYSTEMS ENGINEERING

For students entering Fall 2006 or later

Name: _____ SSN: _____

Address: _____ Advisor's Name: _____

_____ Email address: _____

| I. | GENERAL EDUCATION REQUIREMENTS (24 credits) | | | | | | Yr/Sem * (see note below) |
|-------------|--|--------------------------------------|-----|-----|-----|-----|---------------------------|
| | A. Written Communication | ENGL 101, 302 (3, 3) | 6 | ___ | ___ | | |
| | B. Oral Communication | COMM 100 | 3 | ___ | | | |
| | C. Literature | (see approved courses) | 3 | ___ | | | |
| | D. Fine Arts Elective | (see approved courses) | 3 | ___ | | | |
| | E. Western Civilization | HIST 100 | 3 | ___ | | | |
| | F. Social and Behavioral Science | ECON 103 | 3 | ___ | | | |
| | G. Global Understanding | (see approved courses) | 3 | ___ | | | |
| II. | MATHEMATICS AND STATISTICS (23 credits) | | | | | | |
| | A. Calculus | MATH 113, 114, 213 (4, 4, 3) | 11 | ___ | ___ | ___ | |
| | B. Differential Equations | MATH 214 | 3 | ___ | | | |
| | C. Matrix Algebra | MATH 203 | 3 | ___ | | | |
| | D. Probability for Engineers | STAT 346 | 3 | ___ | | | |
| | E. Engineering Statistics | STAT 354 | 3 | ___ | | | |
| III. | BASIC SCIENCES (12 credits) | | | | | | |
| | A. Physics | PHYS 160, 161, 260, 261 (3, 1, 3, 1) | 8 | ___ | ___ | ___ | ___ |
| | B. Natural Science elective | CHEM 251 or CHEM 211 | 4 | ___ | | | |
| IV. | ENGINEERING SCIENCE (2 credits) | | | | | | |
| | A. Engineering Fundamentals | ENGR 107 | 2 | ___ | | | |
| V. | COMPUTER PROGRAMMING (Counted as MAJOR) (7 credits) | | | | | | |
| | A. Computer Science I | CS 112 | 4 | ___ | | | |
| | B. Computer Science II | CS 211 | 3 | ___ | | | |
| VI. | SYSTEMS ENGINEERING (43 credits) | | | | | | |
| | A. Understanding Systems Engineering | SYST 101 | 3 | ___ | | | |
| | B. Systems Modeling | SYST 220, 221, 320 (3, 1, 3) | 7 | ___ | ___ | ___ | |
| | C. Systems Methodology & Design | SYST 210, 330 (3, 3) | 6 | ___ | ___ | | |
| | D. Discrete Systems Modeling & Simulation | SYST 335 | 3 | ___ | | | |
| | E. Systems Engineering Management | SYST 371 | 3 | ___ | | | |
| | F. Deterministic Operations Research | OR 441 | 3 | ___ | | | |
| | G. Stochastic Operations Research | OR 442 | 3 | ___ | | | |
| | H. Human Factors Engineering | SYST 470 | 3 | ___ | | | |
| | I. Decision and Risk Analysis | SYST 473 | 3 | ___ | | | |
| | J. Senior Seminar | SYST 489 | 3 | ___ | | | |
| | K. Senior Design Project | SYST 490, 495 (3, 3) | 6 | ___ | | | |
| VII. | ELECTIVE SPECIALIZATION (9 credits) | | | | | | |
| | Elective sequences chosen from approved specialization areas (OR, CTL, NET, SIS, ENG, ESD) | | | | | | |
| | Full Specialization Title: _____ | | | | | | |
| | Specialization Course 1 | _____ | () | ___ | | | |
| | Specialization Course 2 | _____ | () | ___ | | | |
| | Specialization Course 3 | _____ | () | ___ | | | |

Semester hours credits must total at least 120 hours, at least 45 of which must be at the 300/400 level. You must complete at least 34 hours at George Mason University in order to satisfy the residency requirement.

I acknowledge that this study plan takes into consideration all transfer and advanced placement credits as well as courses taken, or to be taken at George Mason University (including consortia courses), or as approved by George Mason University as "courses to be taken elsewhere."

_____ Advisor's Signature

Student's signature Date: _____

* Please indicate the year and semester as follows: Example: 06B–Spring 2006, 06D –Summer 2006, 06F–Fall 2006