# MASTERS OF SCIENCE, SYSTEMS ENGINEERING (MSSE) — DEGREE PLAN

## GRADUATE DIVISION – SMU SCHOOL OF ENGINEERING

Engineering Management, Information & Systems Department

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**Social Security #: ___________________ Name: ____________________________________________**

**Home Address: _______________________________________ Home Phone: ___________________**

**Business Address: _______________________________________ Business Phone: ___________________**

**E-mail Address _______________________________________ Fax Phone: ___________________**

**ARTICULATION**

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<tr>
<th>COURSE(S)</th>
<th>Course Title</th>
<th>Instructor</th>
<th>Hrs.</th>
<th>Semester Grade</th>
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**CORE COURSES (15 SCH)**

- EMIS 7300 Systems Analysis Methods
- EMIS 7301 Systems Engineering Process
- EMIS 7303 Integrated Risk Management
- EMIS 7305 Systems Reliability, Supportability and Availability Analysis
- EMIS 7307 Systems Integration and Test

**SYSTEMS ENGINEERING TRACK** (select and check one)

- System Engineering Technology Track
- Systems Engineering and Design Track
- Logistics & Supply Chain Management Track
- Systems Engineering Application Track

**ELECTIVE COURSES**

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**TOTAL HOURS 30**

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**APPROVED ______________________________________________________________________________**

Advisor / Date  EMIS Department Head / Date  Director of Graduate Division / Date

SEE BACK SIDE OF FORM FOR ACCEPTABLE COURSES.

07-26-2006
1. Thirty (30) term-credit hours of graduate courses with a minimum graduate G.P.A. of 3.00 on a 4.00 scale.

2. Satisfactory completion of the core curriculum encompassing five (5) courses:
   - EMIS 7300  Systems Analysis Methods
   - EMIS 7301  Systems Engineering Process
   - EMIS 7303  Integrated Risk Management
   - EMIS 7305  Systems Reliability, Supportability and Availability Analysis
   - EMIS 7307  Systems Integration and Test

3. Satisfactory completion of one (1) of the following tracks:

   - **Systems Engineering Technology Track**
     Satisfactory completion of following five (5) courses:
     - EMIS 7310  Systems Engineering Design
     - EMIS 7312  Software Systems Engineering
     - EMIS 7320  Systems Engineering Leadership
     - EMIS 7330  Systems Reliability Engineering
     - EMIS 7340  Logistics Systems Engineering

   - **System Engineering and Design Track**
     Satisfactory completion of any five (5) of the following courses:
     - CSE 7365  Introduction to Numerical Analysis
     - CSE 7376  Introduction to Telecommunications
     - EE 7360  Analog and Digital Control Systems
     - EE 7362  Systems Analysis
     - EE 7370  Communications & Information Systems
     - EE 7374  Digital Image Processing
     - ME 7331  Advanced Thermodynamics
     - ME 7357  Optimized Mechanical Design
     - ME 7358  Design of Electronic Packaging
     - ME 8361  Multivariate Control System Design

   - **Logistics & Supply Chain Management Track**
     Satisfactory completion of following three (3) courses:
     - EMIS 7330  Systems Reliability Engineering
     - EMIS 7340  Logistics Systems Engineering
     - EMIS 7362  Product & Operations Management
     
     plus any two (2) of the following courses:
     - EMIS 7364  Statistical Quality Control
     - EMIS 7369  Reliability Engineering
     - EMIS 8360  Operations Research Models
     - EMIS 8361  Economic Decision Analysis
     - EMIS 8378  Optimization Models for Decision Support

   - **Systems Engineering Application Track**
     Satisfactory completion of five (5) electives, with the approval of the student's academic adviser, in one or more of the following concentrations (concentration must be in a different field from the undergraduate major):
     - Computer Engineering
     - Electrical Engineering
     - Environmental Engineering
     - Mechanical Engineering
     - Operations Research
     - Systems Engineering
     - Computer Science
     - Engineering Management
     - Information Engineering & Management
     - Manufacturing Engineering
     - Software Engineering
     - Telecommunications