

**MASTERS OF SCIENCE, SYSTEMS ENGINEERING (MSSE) — DEGREE PLAN**  
**GRADUATE DIVISION – SMU LYLE SCHOOL OF ENGINEERING**  
**Engineering Management, Information & Systems Department**

SMU ID #: \_\_\_\_\_ Name: \_\_\_\_\_  
Home Address: \_\_\_\_\_ Home Phone: \_\_\_\_\_  
Business Address: \_\_\_\_\_ Business Phone: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_ Fax Phone: \_\_\_\_\_

**ARTICULATION**

COURSE(S)	Course Title	Instructor	Hrs.	Semester	Grade
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

**CORE COURSES (15 SCH)**

EMIS 7300	Systems Analysis Methods	_____	3	_____	_____
EMIS 7301	Systems Engineering Process	_____	3	_____	_____
EMIS 7303	Integrated Risk Management	_____	3	_____	_____
EMIS 7305	Systems Reliability, Supportability & Availability Analysis	_____	3	_____	_____
EMIS 7307	Systems Integration and Test	_____	3	_____	_____

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

System Engineering Technology Track	<input type="checkbox"/>
Systems Engineering and Design Track	<input type="checkbox"/>
Logistics & Supply Chain Management Track	<input type="checkbox"/>
Systems Engineering Application Track	<input type="checkbox"/>

**ELECTIVE COURSES**

_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

**TOTAL HOURS 30**

APPROVED \_\_\_\_\_  
Advisor / Date EMIS Department Head / Date

\_\_\_\_\_  
Director of Graduate Division / Date

# MASTER OF SCIENCE IN SYSTEMS ENGINEERING

---

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 Management
- 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 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