

**MASTER OF SCIENCE IN OPERATIONS RESEARCH (MSOR) DEGREE PLAN**

SMU Student ID # \_\_\_\_\_ Name \_\_\_\_\_  
 SMU email \_\_\_\_\_ Phone \_\_\_\_\_

<b>CORE COURSES (12 hours)</b>		Instructor	Hours	Semester	Grade
1. EMIS 7357	Analytics for Decision Support		3		
2. EMIS 73_			3		
3. EMIS 737_			3		
4. EMIS 8360	Operations Research Models		3		

**Notes:** Core Course #2 can be either EMIS 7362 or EMIS 7373  
 Core Course #3 can be either EMIS 7370 or EMIS 7377

**SPECIALTY (DEPTH) COURSES (9 hours, see next page for list)**

1.			3		
2.			3		
3.			3		

**CONCENTRATION ELECTIVES (9 hours, approved by advisor, see next page for examples)**

1.			3		
2.			3		
3.			3		

**TOTAL HOURS** 30

APPROVED: \_\_\_\_\_  
 Advisor Date OREM Department Chair Date  
 \_\_\_\_\_  
 Director of Grad Studies Date

NOTE: ANY REVISIONS MUST BE APPROVED BY ADVISOR, OREM DEPT. CHAIR AND DIRECTOR OF GRADUATE DIVISION.

Visit <http://www.smu.edu/Lyle/Departments/OREM/Courses> for the Lyle Graduate Catalog.

All Lyle graduate degrees must be completed within a 7 year window. Most courses are offered during alternating semesters to allow some flexibility. Sample tracks for completion are shown below:

- |                                     |                                                        |
|-------------------------------------|--------------------------------------------------------|
| Fall - 2 courses                    | Fall - 1 course/Spring - 1 course - year 1 - 2 courses |
| Spring - 2 courses                  | Fall - 1 course/Spring - 1 course - year 2 - 2 courses |
| Fall - 2 courses                    | Fall - 1 course/Spring - 1 course - year 3 - 2 courses |
| Spring - 2 courses                  | Fall - 1 course/Spring - 1 course - year 4 - 2 courses |
| Fall - 2 courses                    | Fall - 1 course/Spring - 1 course - year 5 - 2 courses |
| Graduation in Fall term (2.5 years) | Graduation in Spring term of year 5                    |

## Specialty (Depth) Course List

- EMIS 7331 Data Mining
- EMIS 7361 Computer Simulation Techniques
- EMIS 7373 Supply Chain Operation and Control
- EMIS 8331 Advanced Data Mining
- EMIS 8361 Engineering Economics and Decision Analysis
- EMIS 8370 Stochastic Models
- EMIS 8371 Linear Programming
- EMIS 8372 (STAT 6372) Queuing Theory
- EMIS 8373 Integer Programming
- EMIS 8374 Network Flows
- EMIS 8378 Optimization Models for Decision Support
- EMIS 8380 Mathematics of Optimization
- EMIS 8381 Nonlinear Programming
- EMIS 8383 Advanced Logistics

### Data Analytics

EMIS 7332 Data Mining

EMIS 8331 Advanced Data Mining

EMIS 7361 Computer Simulation Techniques

### Operations

EMIS 7365 Program and Project Management

EMIS 7366 Marketing Engineering

EMIS 7361 Computer Simulation Techniques

### Engineering Management

EMIS 7365 Program and Project Management

EMIS 8362 Engineering Accounting

EMIS 8364 Engineering Management

### Information Engineering

EMIS 7352 Information Systems Architecture

EMIS 7353 Information System Design Strategies

EMIS 7360 Management of Information Technologies

### Optimization

EMIS 8373 Integer Programming

EMIS 8374 Network Flows

EMIS 8378 Optimization Models for Decision Support

### Systems Engineering

EMIS 7301 Systems Engineering Process

EMIS 7303 Integrated Risk Management

EMIS 7305 Systems Reliability and Availability Analysis