



## Department of Systems Engineering

### Systems Engineering and Management MS Degree Course Plan

NAME \_\_\_\_\_

SID# \_\_\_\_\_

COURSE #	COURSE TITLE	PREREQUISITE	CROSSLIST (SUB) - COMMENTS	SEMESTER	GRADE
<b>ENGINEERING: MUST COMPLETE AT LEAST TWO OF THE FOLLOWING COURSES</b>					
SYSM 6301	Systems Engineering, Architecture and Design	(none)	MECH 6337		
SYSM 6302	Dynamics of Complex Networks and Systems	(none)	MECH 6317/EECS 6302/BMEN 6302		
SYSM 6303	Statistics and Data Analysis	(none)	OPRE 6301		
SYSM 6305	Optimization Theory and Practice	(none)			

<b>MANAGEMENT: MUST COMPLETE AT LEAST TWO OF THE FOLLOWING COURSES</b>					
SYSM 6311	Systems Project Management in Engineering and Operations	(none)	OPRE 6362		
SYSM 6318	Marketing Management	(none)	MKT 6301		
SYSM 6333	Systems Organizational Behavior	(none)	OB 6301		
SYSM 6337	Accounting for Managers	(none)	ACCT 6305		

**MUST COMPLETE A SUBSET OF THE FOLLOWING, DEPENDING ON NUMBER FROM ENGINEERING ABOVE, FOR A MINIMUM OF FOUR ENGINEERING COURSES**

SYSM 6304	Risk and Decision Analysis	SYSM 6303	OPRE 6335		
SYSM 6306	Engineering Systems: Modeling & Simulation	(none)	BMEN 6372/MECH 6314 (may sub SYSE 6322)		
SYSM 6307	Linear Systems	EE/MECH 4310	EECS 6331/MECH 6300		
SYSM 6308	Software Maintenance, Evolution & Re-engineering	SE 5354	CS 6356/SE 6356		
SYSM 6309	Advanced Requirements Engineering	SE 5354	CS 6361/SE 6361		
SYSM 6310	Software Testing, Validation, and Verification	SE 5354	CS 6367/SE 6367		
SYSM 6325	Requirements Design, Dev & Integ for Complex System	SYSM 6301 (co-req)			
SYSM 6326	Systems Life Cycle Cost Analysis	SYSM 6301			
SYSM 6327	Systems Reliability	SYSM 6303/OPRE 6301			

**MUST COMPLETE A SUBSET OF THE FOLLOWING, DEPENDING ON NUMBER FROM MANAGEMENT ABOVE, FOR A MINIMUM OF FOUR MANAGEMENT COURSES**

SYSM 6312	Systems Financial Management	SYSM 6303 & 6337 (Co-req)	FIN 6301		
SYSM 6313	Systems Negotiating & Dispute Resolution	(none)	HMGD 6324/OB 6332/MECO 6352		
SYSM 6315	The Entrepreneurial Experience	Consent of Instructor	ENTP 6398		
SYSM 6316	Managing Innovation within the Corporation	(none)	ENTP 6388		
SYSM 6319	Business Economics	OPRE 6303	MECO 6303		
SYSM 6320	Strategic Leadership	(none)	BPS 6332		
SYSM 6332	Technology and New Product Development	(none)	ENTP 6375/MIS 6375/OPRE 6394		
SYSM 6334	Systems Operations Management	OPRE 6301 (co-req)	OPRE 6302		
SYSM 6335	Organizing for Business Analytics: A Systems Approach	(none)	BUAN 6335		
SYSM 6336	Earned Value Management System (to be offered in future)	Consent of Instructor			

**REMAINING GRADUATE COURSES IN CONCENTRATION AREA (MUST BE APPROVED)**


**STUDENT SIGNATURE** \_\_\_\_\_ **DATE** \_\_\_\_\_

**ADVISOR SIGNATURE** \_\_\_\_\_ **DATE** \_\_\_\_\_