



Plan A Thesis	Plan B Project	<b>Master of Science Requirements (30 credits)</b>		Semesters Offered
Choose 15 cr.	Choose 15 cr.	3	<b>SYSE 501 Foundations of Systems Engineering</b>	F/S
		3	<b>SYSE 530 Overview of Systems Engineering Processes</b>	F/S
		3	SYSE/ECE 532 Dynamics of Complex Engineering Systems	F
		3	SYSE 534 Human Systems Integration	S
		3	SYSE 567 Systems Engineering Architecture	F
		3	SYSE 569 Cybersecurity Awareness for Systems Engineers	S°/Su°
		3	SYSE 571 Analytics in Systems Engineering	F
		3	SYSE 573 Cost Optimization for Systems Engineers	S
		3	SYSE 602 Systems Requirements Engineering	F
		3	SYSE 603 Introduction to Systems Test and Evaluation	S
		3	SYSE 667 Advanced Model-Based Systems Engineering	S
		3	<b>ENGR 502† Engineering Project Management and Program Management</b>	F/S°/Su°
		3	ENGR 510 Engineering Optimization: Methods and Applications	F
		3	ENGR 520 Engineering Decision Support/Expert Systems	S°
		3	ENGR 525 Intellectual Property and Invention Systems	S°/Su°
		3	<b>ENGR 531 Engineering Risk Analysis</b>	S/F°/Su°
		3	ENGR/ECE 565 Electrical Power Engineering	S
		3	ENGR 570 Coupled Electromechanical Systems	F
		3	ECE 566 Grid Integration of Wind Energy Systems	F°
		3	MECH 513 Simulation Modeling and Experimentation	S
		SYSE _____	(Experimental or new courses may be offered; complete list available at <a href="https://www.engr.colostate.edu/se/courses/">https://www.engr.colostate.edu/se/courses/</a> )	
6 cr.	12 cr.	Technical Electives	Choose from SE Elective List*	
<i>None</i>	3 cr.	SYSE 695	Independent Study	F/S/Su
9 cr.	<i>None</i>	SYSE 699	Thesis	

**Bold are suggested core courses**

\* Maximum of 6 credits at 400-level may apply to degree

† CIS 600A or CIS 670 may be substituted for ENGR 502

‘Semesters Offered’ Key (when courses are *expected* to be offered; there is no guarantee for any specific semester):

F = Fall, S = Spring, Su = Summer, ° = even years only, ° = odd years only