Plan A Thesis	Plan B Project		Master of Science Requirements (30 credits)	Semesters Offered
Choose 15 cr.	Choose 15 cr.	3 **SYSE 501**	**Foundations of Systems Engineering**	F/S
		3 SYSE 512	Systems Sensing and Imaging Analysis	S^e
		3 **SYSE 530**	**Overview of Systems Engineering Processes**	F/S
		3 SYSE/ECE 532	Dynamics of Complex Engineering Systems	F
		3 SYSE 534	Human Systems Integration	S
		3 SYSE 541	Engineering Data Design and Visualization	F
		3 SYSE 549	Secure Vehicle and Industrial Networking	S
		3 SYSE 567	Systems Engineering Architecture	F
		3 SYSE 569	Cybersecurity Awareness for Systems Engineers	S^o/Su^e
		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 **ENGR 502†**	**Engineering Project and Program Management**	F/S^o/Su^e
		3 ENGR 510	Engineering Optimization: Methods and Applications	F
		3 ENGR 520	Engineering Decision Support/Expert Systems	S^o
		3 ENGR 525	Intellectual Property and Invention Systems	S^e/Su^o
		3 **ENGR 531**	**Engineering Risk Analysis**	S/F^e/Su^o
		3 ENGR 533	Spaceflight and Biological Systems	S^o
		3 ENGR 540	Design & Analysis of Engineering Experiments	S
		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^e
		3 MECH 513	Simulation Modeling and Experimentation	S
		SYSE _____	(Experimental or new courses may be offered; complete list available at https://www.engr.colostate.edu/se/courses/)	
6 cr.	12 cr.	Technical Electives	Choose from SE Elective List*	
None	3 cr.	SYSE 695	Independent Study	F/S/Su
9 cr.	*None*	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, ^{e} = even years only, ^{o} = odd years only