

SYSTEMS ENGINEERING COURSE SCHEDULE - FACE-TO-FACE/VIRTUAL LIVE AND VIRTUAL LIVE ONLINE

			APL Center			Southern MD Higher Education Center			Virtual Live Online (No Onsite Classes)		
			Summer	Fall	Spring	Summer	Fall	Spring	Summer	Fall	Spring
CORE COURSES FOR MASTER'S DEGREES			Prerequisites								
645.662	Introduction to Systems Engineering	None			X		X - VL				
645.667	Management of Systems Projects	None	X	X	X			X - VL	X		
645.764	Software Systems Engineering	662, 667		X - VL	X - VL						
645.767	System Conceptual Design	662, 667		X - VL							
645.768	System Design & Integration	662, 667, 764, 767			X - VL			X - VL			X
645.769	System Test & Evaluation	662, 667, 764, 767, 768						X - VL		X	
645.800	Systems Engineering Project	662, 667, 764, 767, 768, 769	X	X	X	X	X	X			
	OR										
645.801/802	Systems Engineering Thesis	662, 667, 764, 767, 768, 769	X	X	X	X	X	X			
ELECTIVES (COURSES BY TRACK)			Prerequisites								
Systems											
645.669	Systems Engineering of Deployed Systems	667									
645.742	Management of Complex Systems	662, 667, 764, 767, 768, 769									
645.753	Enterprise Systems Engineering	662, 667, 764, 767, 768, 769									
645.761	Systems Architecting	662, 667, 764, 767, 768, 769									
645.766	Advanced Systems Engineering	662, 667									X - Even Yrs
645.771	System of Systems Engineering	662, 667, 764, 767, 768, 769									X - Odd Yrs
645.780	Agile Systems Engineering	662, 667, 764, 767									
Cybersecurity											
635.611	Principles of Network Engineering										
635.673	Critical Infrastructure										
635.676	Cybersecurity in Information Systems										
635.682	Website Development										
635.683	E-Business: Models, Architecture, Technologies, and Infrastructure				X						
695.601	Foundations of Information Assurance			X	X						
695.621	Public Key Infrastructure and Managing E-Security		X								
695.744	Reverse Engineering and Vulnerability Analysis				X						
Human Systems											
635.661	Principles of Human-Computer Interaction	662									
645.650	Foundations of Human Systems Engineering	662									
645.651	Integrating Humans and Technology	662									
645.754	Social and Organizational Factors in Human SE	662									
645.755	Methods in Human-System Performance Measurement and Analysis	662									
Modeling and Simulation											
625.603	Statistical Methods and Data Analysis	Multivariate calculus	X - VL	X - VL	X						
645.631	Introduction to Model Based Systems Engineering	662									
645.632	Applied Analytics for Model Based Systems Engineering	631									
645.756	Metrics, Modeling, and Simulation for SE	662, 667, 767			X						
645.757	Foundations of Modeling and Simulation in SE	662									
645.758	Advanced Systems Modeling and Simulation	757									
Project Management											
595.662	Technical Organization Management	667									
595.665	Strategic Communications in Technical Management	667									
595.676	Finance, Contracts, and Compliance for Technical Professionals	667									
595.727	Advanced Concepts in Agile Technical Management	667									
Software Systems											
605.604	Object-Oriented Programming with C++	Knowledge of Java or C++	X		X						
605.607	Agile Software Development Methods	662, 667									
605.608	Software Project Management	3-5 years technical work experience									
605.704	Object-Oriented Analysis and Design	Experience in OOP such as Java or C++									
605.705	Software Safety	662, 667		X							
605.708	Tools and Techniques of Software Project Management	3-5 years technical work experience			X						

SE students may not take Technical Management Courses 595.660 or 595.664