

NIA Graduate Program: Spring 2023  
FULL COURSE LIST

HAMPTON UNIVERSITY				
<b>Atmospheric Science (MS and PhD)</b>				
APS 646	Atmospheric Chemistry	TBD	TR 9:30am-10:45am	
APS 649	Atmospheric Radiative Transfer	TBD	TR 11:00am-12:15pm	
<b>GEORGIA TECH</b>				
<b>Aerospace Engineering (MS and PhD)</b>				
TBD				
<b>NORTH CAROLINA STATE UNIVERSITY</b>				
<b>Mechanical and Aerospace Engineering (MS and PhD)</b>				
MAE 501	Advanced Engineering Thermodynamics	Gould	Asynchronous streaming media	
MAE 515	Advanced Automotive Vehicle Dynamics	Tu		
MAE 526	Fundamentals of Product Design	Ferguson		
MAE 535	Design of Electromechanical Systems	Buckner		
MAE 537	Mechanics of Composite Structures	Lee		
MAE 538	Smart Structures and Materials	Bryant		
MAE 543	Fracture Mechanics	Ryu		
MAE 555	Applications of Acoustic and Elastic Wave Propagation	Muller		
MAE 577	Multiscale Two-Phase Flow Simulations	Bolotnov		
MAE 586	Project Work in Mechanical Engineering	Huang		
MAE 589	Special Topics in ME for General Electric Students II	Peters		
MAE 589	Applied Aerodynamics	Gopalathnam		
MAE 589	Special Topics in ME for ABB Students I	Peters		
MAE 589	Special Topics in ME for ABB Students II	Peters		
MAE 708	Advanced Convective Heat Transfer	Kuznetsov		
MAE 734	Finite Element Analysis II	Zkry		
MAE 787	Structural Health Monitoring	Yuan		
MAE 789	Advanced Dynamics II	Mazzoleni		
<b>Electrical and Computer Engineering (courses only)</b>				
ECE 506	Architecture of Parallel Computers	Gehring	Asynchronous streaming media	
ECE 515	Digital Communications	Duel-Hallen		
ECE 516	System Controlled Engineering	Rindos		
ECE 517	Object-Oriented Design and Development	Gehring		
ECE 524	Radio System Design	Ricketts		
ECE 535	Design of Electromechanical Systems	Buckner		
ECE 544	Design of Electronic Packaging and Interconnects	Evans		
ECE 546	VLSI System Design	Davis		
ECE 551	Smart Electric Power Distribution Systems	TBA		
ECE 552	Renewable Electric Energy Systems	Baran		
ECE 561	Embedded System Design	Dean		
ECE 563	Microprocessor Architecture	Becchi		
ECE 566	Computer Optimization and Scheduling	Tuck		
ECE 570	Computer Networks	Liu		
ECE 573	Internet Protocols	Shahzad		
ECE 574	Computer and Network Security	Reaves		
ECE 575	Introduction to Wireless Networking	Wang		
ECE 581	Electric Power System Protection	White		
ECE 583	Electric Power Engineering Practicum I	Gajda		
ECE 589	Solid State Solar and Thermal Energy Harvesting	Vashae		
ECE 591	Special Topics for General Electric Students	Franzon		
ECE 591	Special Topics for ABB Students	Franzon		
ECE 600	ECE Graduate Orientation	Franzon		
ECE 712	Integrated Circuit Design for Wireless Communications	Floyd		
ECE 726	Advanced Feedback Control	Rindos		
ECE 745	Application Specific Integrated Circuit Verification	Oden		
ECE 751	Detection and Estimation Theory	Bottomly		
ECE 773	Advanced Topics in Internet Protocols	Harfoush		
ECE 786	Advanced Computer Architecture: Data Parallel Processors	Zhou		
ECE 792	Advanced Cloud Architecture	Papapanagiotou		
<b>Industrial &amp; Systems Engineering (courses only)</b>				
ISE 510	Applied Engineering Technology	King	Asynchronous streaming media	
ISE 537	Statistical Model for System Analytics in Industrial Engineering	Fang		
ISE 540	Human Factors in Systems Design	Chen		
ISE 541	Occupational Safety Engineering	Xu		
ISE 562	Simulation Modeling	Wan		
ISE 748	Quality Modeling	Fathi		
<b>Materials Sciences and Engineering (courses only)</b>				
MSE 500	Modern Concepts in Materials Science	Kwansa		Asynchronous streaming media
MSE 555	Polymer Technology and Engineering	Thou		
MSE 556	Composite Materials	Kashichainula		
MSE 585	Introduction to Nanomaterials	Tracy		
MSE 580	Materials Forensics and Degradation	Koch		
MSE 589	Solid State Solar and Thermal Energy Harvesting	Vashae		
MSE 591	Introduction to Materials Informatics -- 8 weeks only	Yingling		
MSE 702	Defects in Solids	Narayan		
MSE 705	Mechanical Behavior of Engineering Materials	Kashichainula		
MSE 706	Phase Transformations and Kinetics	Wisinger		
MSE 791	Biomaterials	Yingling		
MSE 791	Density Functional Theory in MSE	Irving		
<b>NORTH CAROLINA A&amp;T UNIVERSITY</b>				
<b>Computer Engineering</b>				
TBD				
<b>Electrical Engineering</b>				
TBD				
<b>OLD DOMINION UNIVERSITY</b>				
<b>Mechanical and Aerospace Engineering (MS and PhD)</b>				
TBD				
<b>UNIVERSITY OF MARYLAND</b>				
<b>Aerospace Engineering (MS and PhD)</b>				
TBD				

