



Spacecraft Engineering Concentration Areas

Spacecraft Guidance, Navigation, and Control Options

MAE 4150 - GPS: Theory and Design	MAE 4730 - Intermediate Dynamics and Vibrations	MAE 6760 - Model-Based Estimation
ECE 5840 - Advanced GPS Receiver Design	MAE 4780 - Feedback Control Systems	MAE 6780 - Multivariable Control Theory
MAE 6969 - Seminar in GPS and GNSS	MAE 6700 - Advanced Dynamics	ECE 5210 - Theory of Linear Systems

Space Robotics Options

CS 4752 - Robotic Manipulation	MAE 4780 - Feedback Control Systems	ECE 5470 - Computer Vision
MAE 4180 - Autonomous Mobile Robots	MAE 6700 - Advanced Dynamics	
MAE 4730 - Intermediate Dynamics and Vibrations	MAE 6780 - Multivariable Control Theory	

Space Science Options

AEP 6060 - Introduction to Plasma Physics	Sciences II	ASTRO 6577 - Planetary Surface Processes
ASTRO 4410 - Experimental Astronomy	ASTRO 6523 - Signal Modeling, Statistical Inference, and	ASTRO 6578 - Planet Formation and Evolution
ASTRO 4431 - Introduction to Astrophysics and Space Sciences	Data Mining in Astronomy	EAS 4260 - Structural Geology
ASTRO 4432 - Introduction to Astrophysics and Space	ASTRO 6570 - Physics of the Planets	EAS 4530 - Mineralogy
	ASTRO 6575 - Planetary Atmospheres	EAS 4580 - Volcanology

Space-Based Earth Observation Options

CEE 4110 - Applied Remote Sensing and GIS for Resource Inventory and Analysis	EAS 4400 - Seminar on Climate Change Science, Impacts, and Mitigation	EAS 5840 - Inverse Methods in the Natural Sciences
CEE 6100 - Remote Sensing Fundamentals	EAS 4800 - Our Changing Atmosphere: Global Change and Atmospheric Chemistry	EAS 7500 - Satellite Remote Sensing Training for Biological Oceanographers
CEE 6150 - Digital Image Processing for Remote Sensing	EAS 4870 - Introduction to Radar Remote Sensing	ECE 4870 - Introduction to Radar Remote Sensing
EAS 4350 - Statistical Methods in Meteorology and Climatology	EAS 5011 - Evolution of the Earth System	

Space Travel, Exploration, Commercialization, and Settlement Options

MAE 6950 - Space Biomedical Engineering & Human Performance	BME 4440 - Science Policy Bootcamp: Concept to Conclusion	ARCH 5611 - Environmental Systems I: Site and Sustainability
MAE 5910 - Model Based Systems Engineering	BME 5390 - Biomedical Materials and Devices for Human Body Repair	ARCH 5616 - Environmental Systems II: Building Dynamics
MAE 5920 - Systems Architecture, Behavior, Optimization	MAE 6680 - Cancer for Engineers and Physicists	CEE 4510 - Microbiology for Environmental Engineering
MAE 5930 - Systems Engineering and Six Sigma for the Design and Operation of Reliable Systems	ARCH 4621 - Sustainable Architecture: The Science and Politics of Green Building	CEE 4540 - Sustainable Municipal Drinking Water Treatment
MAE 6640 - Mechanics of Bone	ARCH 5612 - Structural Concepts	CEE 6910 - Principles of Project Leadership
AEP 5520 - Physics of Life	ARCH 5613 - Structural Systems	EAS 4790 - Paleobiology
BME 4110 - Science and Technology Approaches to Problems in Human Health		ENGRG 4610 - Entrepreneurship for Engineers
		ORIE 5150 - Economic Analysis of Engineering Systems