MSE ROBO TECHNOLOGY ELECTIVE (EMRT)

Code	Title	Course Units
BE 5210	Brain-Computer Interfaces	1
BE 5700	Biomechatronics	1
CIS 5020	Analysis of Algorithms	1
CIS 5110	Theory of Computation	1
CIS 5150	Fundamentals of Linear Algebra and Optimization	1
CIS 5190	Applied Machine Learning	1
CIS 5200	Machine Learning	1
CIS 5210	Artificial Intelligence	1
CIS 5260	Machine Translation	1
CIS 5300	Natural Language Processing	1
CIS 5400	Principles of Embedded Computation	1
CIS 5410	Embedded Software for Life-Critical Applications	1
CIS 5450	Big Data Analytics	1
CIS 5600	Interactive Computer Graphics	1
CIS 5620	Computer Animation	1
CIS 5630	Physically Based Animation	1
CIS 5640	Game Design and Development	1
CIS 5650	GPU Programming and Architecture	1
CIS 5800	Machine Perception	1
CIS 5810	Computer Vision & Computational Photography	1
CIS 6100	Advanced Geometric Methods in Computer Science	1
CIS 6200	Advanced Topics in Machine Learning	1
CIS 6250	Theory of Machine Learning	1
CIS 6800	Advanced Topics in Machine Perception	1
ENM 5100	Foundations of Engineering Mathematics - I	1
ENM 5110	Foundations of Engineering Mathematics - II	1
ENM 5200	Principles and Techniques of Applied Math I	1
ENM 5210	Principles and Techniques of Applied Math II	1
ESE 5000	Linear Systems Theory	1
ESE 5050	Feedback Control Design and Analysis	1
ESE 5060	Introduction to Optimization Theory	1
ESE 5120	Dynamical Systems for Engineering and Biological Applications	1
ESE 5140	Graph Neural Networks	1
ESE 5190	Smart Devices	1
ESE 5300	Elements of Probability Theory	1
ESE 5310	Digital Signal Processing	1
ESE 5460	Principles of Deep Learning	1
ESE 5470	Introduction to Legged Locomotion	1
ESE 6050	Modern Convex Optimization	1
ESE 6150	F1/10 Autonomous Racing Cars	1
ESE 6170	Non-Linear Control Theory	1
ESE 6180	Learning for Dynamics and Control	1
ESE 6190	Model Predictive Control	1
ESE 6250	Nanorobotics	1
ESE 6500	Learning in Robotics	1
IPD 5010	Integrated Computer-Aided Design, Manufacturing and Analysis	1
IPD 5160	Advanced Mechatronic Reactive Spaces.	1
IPD 5190	Smart Devices	1
MEAM 5080	Materials and Manufacturing for Mechanical Design	1
MEAM 5100	Design of Mechatronic Systems	1
MEAM 5130	Feedback Control Design and Analysis	1
MEAM 5160	Advanced Mechatronic Reactive Spaces.	1
MEAM 5170	Control and Optimization with Applications in Robotics	1
MEAM 5200	Introduction to Robotics	1
MEAM 5350	Advanced Dynamics	1
MEAM 5430	Performance, Stability and Control of UAVs	1
MEAM 5450	Aerodynamics	1
MEAM 6130	Non-Linear Control Theory	1
MEAM 6200	Advanced Robotics	1
MEAM 6240	Distributed Robotics	1
NGG 5210	Brain-Computer Interfaces	1
PSYC 5790	Experimental Methods of Perception	1
ROBO 5970	Master's Thesis Research	1
ROBO 5980	Capstone Project	1-2
ROBO 5990	Masters Independent Study	1