

MATHEMATICS AND ENGINEERING, SYSTEMS AND ROBOTICS (M11): TECHNICAL ELECTIVES

List I

(choose **at least one** course)

Code	Title	Units
MTHE 406	Introduction To Coding Theory	3.00
MTHE 434	Optimization Theory with Applications to Machine Learning	3.50
MTHE 439	Lagrangian Mechanics, Dynamics Control	5.00
MTHE 477	Data Compression & Source Coding	3.00
MTHE 478	Topics In Communication Theory	3.00
MTHE 484	Data Networks	3.00
MTHE 454	Statistical Spectrum Estimation	3.00
MTHE 455	Stochastic Processes & Applications	3.50
MTHE 433	Continuum Mechanics with Applications	3.00
MTHE 437	Topics In Applied Mathematics	3.50

List II

Code	Title	Units
ELEC 353	Electronics II	4.25
ELEC 421	Digital Signal Processing: Filters and System Design	4.00
ELEC 431	Power Electronics	3.25
ELEC 448	Introduction To Robotics	3.50
	or MECH 456 Introduction To Robotics	
ELEC 454	Analog Electronics	3.25
ELEC 457	Integrated Circuits and System Applications	3.25
ELEC 461	Digital Communications	3.50
ELEC 464	Wireless Communications	3.00
ELEC 483	Microwave and RF Circuits and Systems	4.25
ELEC 486	Fiber Optic Communication	3.75
MECH 452	Mechatronics Engineering	5.00
MINE 472	Mining Systems, Automation, and Robotics	3.50