Mechatronic Systems Engineering
September 2018 (students who entered first year in September 2016)

Year 2:
Term A

AM 2270A	Applied Mathematics for Engineering II
CS 1037A	Computer Science Fundamentals II
ECE 2205A	Electric Circuits I
MSE 2200Q	Engineering Shop Safety Training
MSE 2212A	Mechanics of Materials
MSE 2214A	Thermodynamics
MSE 2201A	Introduction to Electrical Instrumentation

Term B

AM 2276B	Applied Mathematics for Elec & Mech Eng III
Writing 2130g	Building Better (Communication) Bridges: Rheotoric & Professional Communication for Engineers
MSE 2213B	Engineering Dynamics
MSE 2202B	Introduction to Mechatronic Design
MSE 2233B	Circuits and Systems
SS 2143B	Applied Statistics and Data Analysis for Engineers

Year 3:
Term A

AM 3415A	Applied Math for Electrical Engineering
ECE 2277A	Digital Logic Systems
ECE 3330A	Control Systems
MSE 3301A	Materials Selection and Manufacturing Processes
MSE 3310A	Electric Motors and Drives
MSE 3381A	Kinematics and Dynamics of Machines

Term B

ECE 3331B	Signal Processing
ECE 3375B	Microprocessors and Microcomputers
MSE 3302B	Sensors and Actuators
MSE 3360B	Finite Element Methods for Mechatronic Systems Engineering
MSE 3380B	Machine Component Design for Mechatronic Systems
0.5 non-technical elective taken from the approved list	

Year 4:
Term A

MSE 4401A	Robotic Manipulators
MSE 4499	Mechatronic Design Project
0.5 non-technical elective taken from the approved list	
Two 0.5 technical electives	

Term B

ECE 4460B	Real Time and Embedded Systems
ECE 4469B	Applied Control Systems
ES 4498G	Engineering Ethics, Sustainable Development and the Law
MSE 4499	Mechatronic Design Project
0.5 non-technical elective taken from the approved list	
One 0.5 technical elective	

NOTES:

Non-technical electives:
Please choose 1.0 credits (one 1.0 credit or two 0.5 credit) courses from the 1000 level and one 0.5 credit from the 2000 (or higher) level.

Technical Elective List:

Some technical electives may not be offered in a given academic year. Consult the department for accurate listing.

ECE 3380A/B	Advanced Digital Systems
ECE 4429A/B	Advanced Digital Signal Processing
ECE 4438A/B	Advanced Image Processing and Analysis
ECE 4445A/B	Introduction to Digital Image Processing
ECE 4455A/B	Biomedical Systems Anaylsis
ECE 4468A/B	Systems Optimization
MME 4424A/B	Mechanical Properties of Materials
MME 4425A/B	Mechanical Vibrations
MME 4459A/B	Advanced CAE: Manufacturing Technologies
MME 4469A/B	Biomechanics of the Musculoskeletal System
MME 4470A/B	Medical and Assistive Devices
MME 4473A/B	Computer Integrated Manufacturing
MME 4480A/B	Advanced CAE: Reverse Engineering
MME 4482A/B	Fundamentals of MEMS
MME 4492A/B	Production Management for Engineers