BE(Hons) Mechatronics Engineering - 2023

1st Year Engineering

S1	ENGR101 Foundations of Engineering	EMTH118 Engineering Mathematics 1A	PHYS101 Engineering Physics A	ELECTIVE
S2	ENGR102 Engineering Mechanics	EMTH119 Engineering Mathematics 1B	COSC131 Introduction to Programming for Engineers	ELECTIVE

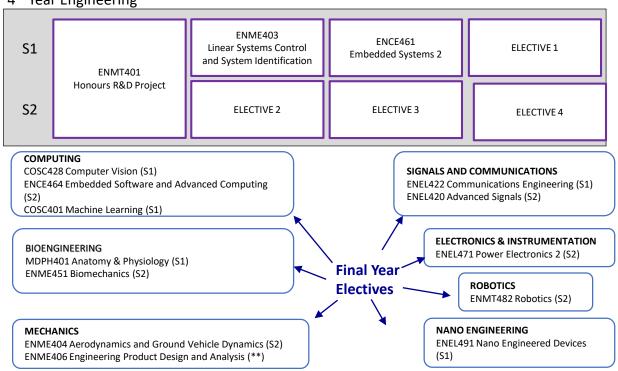ENGR100 Academic Writing Assessment

2nd Year Engineering

S1	ENMT211 Principles of Mechatronics	ENME202 Stress, Strain and Deformation in Machine Elements	ENEL270 Principles of Electronics and Devices	EMTH210 Engineering Mathematics 2
S2	ENMT221 Mechatronics Design 1	ENME203 Dynamics and Vibrations	ENCE260 Computer Systems	EMTH211 Engineering Linear Algebra and Statistics

ENME199 Workshop Training Course for Mechanical and Mechatronics Engineering
ENEL198 Electrical Workshop Training

3rd Year Engineering

S1	ENMT301 Mechatronics System Design	ENME303 Controls and Vibrations	ENCE361 Embedded Systems 1	ELECTIVE
S2		ENME302 Computational and Applied Mechanical Analysis	ENEL301 Fundamentals of Engineering Economics and Management	ENEL372 Power and Analogue Electronics

4th Year Engineering

S1	ENMT401 Honours R&D Project	ENME403 Linear Systems Control and System Identification	ENCE461 Embedded Systems 2	ELECTIVE 1
S2		ELECTIVE 2	ELECTIVE 3	ELECTIVE 4

COMPUTING
COSC428 Computer Vision (S1)
ENCE464 Embedded Software and Advanced Computing (S2)
COSC401 Machine Learning (S1)

BIOENGINEERING
MDPH401 Anatomy & Physiology (S1)
ENME451 Biomechanics (S2)

MECHANICS
ENME404 Aerodynamics and Ground Vehicle Dynamics (S2)
ENME406 Engineering Product Design and Analysis (**)

** Not being offered in 2022

SIGNALS AND COMMUNICATIONS
ENEL422 Communications Engineering (S1)
ENEL420 Advanced Signals (S2)

ELECTRONICS & INSTRUMENTATION
ENEL471 Power Electronics 2 (S2)

ROBOTICS
ENMT482 Robotics (S2)

NANO ENGINEERING
ENEL491 Nano Engineered Devices (S1)

Final Year Electives