

Qualification Code	Module Combination Title	Module Owner Department	Module Faculty Department Description	Credit	Semester	Exam %	Continuous Assessment (CA)	Note
ECSAO	CA177 CSC1014 Programming Fundamentals	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	50	50	
ECSAO	CA208 CSC1018 Logic	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	50	50	
ECSAO	CA216 CSC1021 Operating Systems	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	70	30	
ECSAO	CA267 CSC1029 Software Testing	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	0	100	
ECSAO	CA269 CSC1031 Computer Programming 4 (Object Oriented Prog)	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	50	50	
ECSAO	CA271A CSC1157 Introduction to Machine Learning	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	0	100	
ECSAO	CA274 CSC1033 Programming for Data Analysis	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	0	100	
ECSAO	CA279 CSC1036 Professional Practice for Computing	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	0	100	
ECSAO	CA360 CSC1091 Communication Skills	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	0	100	
ECSAO	CA4006 CSC1101 Concurrent and Distributed Programming	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	70	30	
ECSAO	CA4007 CSC1102 Computer Graphics and Image Processing	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	70	30	
ECSAO	CA4012 CSC1105 Machine Translation	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	70	30	
ECSAO	CA4109 CSC1117 Machine Learning	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	0	100	
ECSAO	CA648 CSC1136 Formal Programming	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	
ECSAO	CA650 CSC1137 Software Process Quality	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	
ECSAO	CA659 CSC1139 Mathematical Methods/Computational Science	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	100	0	
ECSAO	CA670 CSC1141 Concurrent Programming	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	
ECSAO	CA683 CSC1144 Data Analytics and Data Mining	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	50	50	
ECSAO	CA684 CSC1145 Machine Learning	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	
ECSAO	CA691 CSC1151 Data Governance	COMPUTING	FACULTY OF ENGINEERING AND COMPUTING	10	Semester 2	50	50	
ECSAO	EE201 EEN1016 Digital and Analogue Electronics II	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	75	25	
ECSAO	EE219 EEN1021 C/C++ Programming for Engineers	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	75	25	
ECSAO	EE206 EEN1019 Operating Systems	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	75	25	
ECSAO	EE202 EEN1017 Embedded Systems	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	75	25	
ECSAO	EE220 EEG1018 Engineering Mathematics IV	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	70	30	
ECSAO	EE303 EEN1025 Mobile Robotics	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	0	100	
ECSAO	EE321 EEN1030 Data Communications & Networks II	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	75	25	
ECSAO	EE322 EEN1031 Analogue Circuits & Design	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	75	25	
ECSAO	EE401 EEN1034 DSP-Digital Filters & DFT	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	80	20	
ECSAO	EE417 EEN1037 Web Application Development	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	0	100	
ECSAO	EE445 EEN1040 Bioelectronics	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	70	30	
ECSAO	EE454 EEN1045 Optical Communications System Design	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	80	20	
ECSAO	EE457 EEN1046 Undergraduate Project Exchange/Study Abroad	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	15	Semester 2	0	100	
ECSAO	EE459 EEN1048 Mechatronic System Simulation & Control	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	70	30	
ECSAO	EE497 EEN1057 3D Interface Technologies	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	
ECSAO	EM112 EEG1003 Engineering Mechanics-Statics	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	0	100	
ECSAO	EM114 EEG1005 Numerical Problem Solving for Engineers	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	0	100	
ECSAO	EM122 EEG1008 Engineering Mathematics II	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	75	25	
ECSAO	EM202 EEG1010 Engineering Mathematics IV	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	70	30	
ECSAO	MM203 MEC1000 Engineering Mechanics - Dynamics	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	80	20	
ECSAO	MM212 MEC1004 Mechanics of Materials II	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	80	20	
ECSAO	MM227 MEC1006 Thermofluid Mechanics	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	80	20	
ECSAO	MM228 MEC1007 Biomechanics of Human Movement	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	70	30	
ECSAO	MM232 MEC1008 Pneumatics & Hydraulics	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	75	25	
ECSAO	MM235 MEC1009 Manufacturing Processes 2	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	80	20	
ECSAO	MM353 MEC1026 Fundamentals of Control	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	80	20	
ECSAO	MM400 MEC1030 4th Year Project	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	15	Semester 2	0	100	
ECSAO	MM401 MEC1031 Mechanical Engineering System Simulation	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	60	40	
ECSAO	MM413 MEC1034 Biomaterials & Processing Technology	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	70	30	
ECSAO	MM451 MEC1042 Design For Manufacture and Assembly	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	80	20	
ECSAO	MM459 MEC1044 Robotics	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	80	20	
ECSAO	MM485 MEC1045 Operations Research Methods	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	70	30	
ECSAO	MM498 MEC1046 Rehabilitation Engineering	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	70	30	
ECSAO	MM499 MEC1047 Surgical Device Technology	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	5	Semester 2	70	30	
ECSAO	MM524 MEC1054 Advanced FEA	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	60	40	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	MM532 MEC1056 Computational Thermo-Fluid Dynamics	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	50	50	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	MM536 MEC1059 Advanced Sustainable Energy Systems	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	0	100	Please note that this module is intended exclusively for students in their 5th year at their home institution.

ECSAO	MM537 MEC1060 Whole Life Cycle Analysis	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	0	100	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	MM538 MEC1061 Turbomachinery	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	50	50	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	MM555 MEC1069 Manufacturing Process Analysis & Tool Design	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	80	20	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	MM559 MEC1070 Robotics	MECHANICAL ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	50	50	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	EE514 EEN1072 Data Analysis and Machine Learning II	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	EE518 EEN1076 Photonic Applications and Technologies	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	EE521 EEN1078 Future Network Architectures	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	EE5001 EEN1059 Security for IoT and Edge Networks	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	EE508 EEN1069 Semiconductor Device Manufacturing	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	EE513 EEN1071 Connected Embedded Systems	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	EE517 EEN1075 Network Analysis and Dimensioning	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	EE544 EEN1001 Computer Vision	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	Please note that this module is intended exclusively for students in their 5th year at their home institution.
ECSAO	EE562 EEN1004 Network Stack Implementation	ELECTRONIC ENGINEERING	FACULTY OF ENGINEERING AND COMPUTING	7.5	Semester 2	75	25	Please note that this module is intended exclusively for students in their 5th year at their home institution.