

Programme	Module	Faculty	Module Title	Credits	Semester
ECSAO	EEG1004	Engineering & Computing	"Introduction to Electronics"	5	Full Year
ECSAO	EEG1014	Engineering & Computing	"4th Year Project-Mechatronics"	15	Full Year
ECSAO	MEC1012	Engineering & Computing	"Project for Exchange / Study Abroad"	15	Full Year
ECSAO	MEC1013	Engineering & Computing	"Project for Exchange / Study Abroad"	30	Full Year
ECSAO	MEC1017	Engineering & Computing	"Product Design"	10	Full Year
ECSAO	MEC1030	Engineering & Computing	"4th Year Project"	15	Full Year
ECSAO	MEC1072	Engineering & Computing	"Project Planning & Research"	7.5	Full Year
ECSAO	CSC1005	Engineering & Computing	"Data Science & Databases"	5	Semester 1
ECSAO	CSC1019	Engineering & Computing	"Advanced Web Design"	5	Semester 1
ECSAO	CSC1020	Engineering & Computing	"Systems Analysis"	5	Semester 1
ECSAO	CSC1023	Engineering & Computing	"Enterprise Information Systems"	5	Semester 1
ECSAO	CSC1030	Engineering & Computing	"Computer Programming 3 (Data Structures & Algorithms)"	5	Semester 1
ECSAO	CSC1032	Engineering & Computing	"Data Warehousing & OLAP"	5	Semester 1
ECSAO	CSC1037	Engineering & Computing	"Introduction to DevOps"	5	Semester 1
ECSAO	CSC1041	Engineering & Computing	"Quantitative Analysis for Business Decisions"	5	Semester 1
ECSAO	CSC1042	Engineering & Computing	"Computer Networks 2"	5	Semester 1
ECSAO	CSC1046	Engineering & Computing	"OO Analysis & Design"	5	Semester 1
ECSAO	CSC1047	Engineering & Computing	"Advanced Algorithms & A.I. Search"	5	Semester 1
ECSAO	CSC1048	Engineering & Computing	"Computability & Complexity"	5	Semester 1
ECSAO	CSC1055	Engineering & Computing	"Comparative Programming Languages"	5	Semester 1
ECSAO	CSC1056	Engineering & Computing	"Business Information Management"	5	Semester 1
ECSAO	CSC1057	Engineering & Computing	"IT Architecture"	5	Semester 1
ECSAO	CSC1058	Engineering & Computing	"User Interface Design & Implementation"	5	Semester 1
ECSAO	CSC1096	Engineering & Computing	"Programming Fundamentals (Project)"	5	Semester 1
ECSAO	CSC1098	Engineering & Computing	"Compiler Construction"	7.5	Semester 1
ECSAO	CSC1100	Engineering & Computing	"Cryptography & Security Protocols"	7.5	Semester 1
ECSAO	CSC1103	Engineering & Computing	"Search Technologies"	7.5	Semester 1
ECSAO	CSC1104	Engineering & Computing	"Data Warehousing & Data Mining"	7.5	Semester 1
ECSAO	CSC1115	Engineering & Computing	"High-Technology Innovation & Entrepreneurship (C)"	7.5	Semester 1
ECSAO	CSC1116	Engineering & Computing	"Exploring Innovative & Disruptive Technologies"	7.5	Semester 1

ECSAO	CSC1131	Engineering & Computing	"Professional & Research Practice"	7.5	Semester 1
ECSAO	CSC1132	Engineering & Computing	"Cryptography & Number Theory"	7.5	Semester 1
ECSAO	CSC1142	Engineering & Computing	"Cloud Technologies"	7.5	Semester 1
ECSAO	CSC1143	Engineering & Computing	"Data Management & Visualisation"	7.5	Semester 1
ECSAO	EEG1006	Engineering & Computing	"Materials Engineering"	5	Semester 1
ECSAO	EEG1007	Engineering & Computing	"Engineering Mathematics I"	5	Semester 1
ECSAO	EEG1009	Engineering & Computing	"Engineering Mathematics III"	5	Semester 1
ECSAO	EEG1011	Engineering & Computing	"Engineering Mathematics IV"	5	Semester 1
ECSAO	EEN1003	Engineering & Computing	"Nanoelectronics Technology"	7.5	Semester 1
ECSAO	EEN1018	Engineering & Computing	"Circuits Analysis Techniques"	5	Semester 1
ECSAO	EEN1021	Engineering & Computing	"C/C++ Programming for Engineers"	5	Semester 1
ECSAO	EEN1022	Engineering & Computing	"Digital & Analogue Electronics I"	5	Semester 1
ECSAO	EEN1023	Engineering & Computing	"Data Communications & Networks I"	5	Semester 1
ECSAO	EEN1026	Engineering & Computing	"Signals"	5	Semester 1
ECSAO	EEN1027	Engineering & Computing	"Computation/Simulation"	5	Semester 1
ECSAO	EEN1029	Engineering & Computing	"Electromechanical Systems"	5	Semester 1
ECSAO	EEN1032	Engineering & Computing	"Electromagnetism II"	5	Semester 1
ECSAO	EEN1039	Engineering & Computing	"Image Processing & Analysis"	5	Semester 1
ECSAO	EEN1043	Engineering & Computing	"Wireless/Mobile Communications"	7.5	Semester 1
ECSAO	EEN1044	Engineering & Computing	"Image Processing & Analysis (Plus)"	7.5	Semester 1
ECSAO	EEN1046	Engineering & Computing	"Undergraduate Project for Exchange / Study Abroad"	15	Semester 1
ECSAO	EEN1047	Engineering & Computing	"Control Systems Analysis"	5	Semester 1
ECSAO	EEN1049	Engineering & Computing	"Solid-State Electronics & Semiconductor Devices"	7.5	Semester 1
ECSAO	EEN1056	Engineering & Computing	"Computer Architecture & HDL"	5	Semester 1
ECSAO	EEN1067	Engineering & Computing	"Photonic Devices"	7.5	Semester 1
ECSAO	EEN1073	Engineering & Computing	"Real-Time Digital Signal Processing (DSP)"	7.5	Semester 1
ECSAO	EEN1079	Engineering & Computing	"Energy System Decarbonisation"	7.5	Semester 1
ECSAO	EEN1083	Engineering & Computing	"Data Analysis and Machine Learning I"	7.5	Semester 1
ECSAO	EEN1092	Engineering & Computing	Mathematics for Machine Learning	5	Semester 1
ECSAO	EEN1097	Engineering & Computing	"Edge Programming with C/C++ & Rust"	7.5	Semester 1
ECSAO	MEC1001	Engineering & Computing	"Thermodynamics:Energy"	5	Semester 1

ECSAO	MEC1003	Engineering & Computing	"Mechanics of Materials I"	5	Semester 1
ECSAO	MEC1005	Engineering & Computing	"Design & Solid Modelling"	5	Semester 1
ECSAO	MEC1010	Engineering & Computing	"Manufacturing Processes 1"	5	Semester 1
ECSAO	MEC1011	Engineering & Computing	"Engineering Computation"	5	Semester 1
ECSAO	MEC1014	Engineering & Computing	"Mechanics of Machines"	5	Semester 1
ECSAO	MEC1015	Engineering & Computing	"Measurement & Signal Processing"	5	Semester 1
ECSAO	MEC1020	Engineering & Computing	"Process & System Modelling"	5	Semester 1
ECSAO	MEC1021	Engineering & Computing	"Life Cycle Assessment & Decarbonisation"	5	Semester 1
ECSAO	MEC1022	Engineering & Computing	"Thermodynamics: Exergy"	5	Semester 1
ECSAO	MEC1024	Engineering & Computing	"Group Project"	5	Semester 1
ECSAO	MEC1027	Engineering & Computing	"Lean & 6 Sigma Manufacturing"	5	Semester 1
ECSAO	MEC1029	Engineering & Computing	"Data Analytics for Engineers"	5	Semester 1
ECSAO	MEC1032	Engineering & Computing	"Adv Eng Materials & Manufacturing Processes"	5	Semester 1
ECSAO	MEC1037	Engineering & Computing	"Building Physics & Systems"	7.5	Semester 1
ECSAO	MEC1039	Engineering & Computing	"Finite Element Analysis"	7.5	Semester 1
ECSAO	MEC1040	Engineering & Computing	"Heat & Mass Transfer"	7.5	Semester 1
ECSAO	MEC1043	Engineering & Computing	"Manufacturing Automation"	5	Semester 1
ECSAO	MEC1057	Engineering & Computing	"Research Practice & Methodology"	7.5	Semester 1
ECSAO	MEC1058	Engineering & Computing	"Energy Auditing & Energy Management"	7.5	Semester 1
ECSAO	MEC1071	Engineering & Computing	"Manufacturing Systems Simulation"	7.5	Semester 1
ECSAO	CSC1005	Engineering & Computing	"Data Science & Databases"	5	Semester 2
ECSAO	CSC1014	Engineering & Computing	"Programming Fundamentals"	5	Semester 2
ECSAO	CSC1018	Engineering & Computing	"Logic"	5	Semester 2
ECSAO	CSC1021	Engineering & Computing	"Operating Systems"	5	Semester 2
ECSAO	CSC1029	Engineering & Computing	"Software Testing"	5	Semester 2
ECSAO	CSC1031	Engineering & Computing	"Computer Programming 4 (Object Oriented Programming)"	5	Semester 2
ECSAO	CSC1036	Engineering & Computing	"Professional Practice for Computing"	5	Semester 2
ECSAO	CSC1101	Engineering & Computing	"Concurrent & Distributed Programming"	7.5	Semester 2
ECSAO	CSC1102	Engineering & Computing	"Computer Graphics & Image Processing"	7.5	Semester 2
ECSAO	CSC1105	Engineering & Computing	"Machine Translation"	7.5	Semester 2
ECSAO	CSC1114	Engineering & Computing	"Enterprise Architecture (C)"	7.5	Semester 2

ECSAO	CSC1117	Engineering & Computing	"Machine Learning"	7.5	Semester 2
ECSAO	CSC1136	Engineering & Computing	"Formal Programming"	7.5	Semester 2
ECSAO	CSC1137	Engineering & Computing	"Software Process Quality"	7.5	Semester 2
ECSAO	CSC1139	Engineering & Computing	"Mathematical Methods/Computational Science"	7.5	Semester 2
ECSAO	CSC1141	Engineering & Computing	"Concurrent Programming"	7.5	Semester 2
ECSAO	CSC1144	Engineering & Computing	"Data Analytics & Data Mining"	7.5	Semester 2
ECSAO	CSC1151	Engineering & Computing	"Data Governance"	10	Semester 2
ECSAO	CSC1187	Engineering & Computing	"Advanced Machine Learning"	7.5	Semester 2
ECSAO	EEG1003	Engineering & Computing	"Engineering Mechanics-Statics"	5	Semester 2
ECSAO	EEG1005	Engineering & Computing	"Numerical Problem Solving for Engineers"	5	Semester 2
ECSAO	EEG1008	Engineering & Computing	"Engineering Mathematics II"	5	Semester 2
ECSAO	EEG1010	Engineering & Computing	"Engineering Mathematics IV"	5	Semester 2
ECSAO	EEN1001	Engineering & Computing	"Computer Vision"	7.5	Semester 2
ECSAO	EEN1004	Engineering & Computing	"Network Stack Implementation"	7.5	Semester 2
ECSAO	EEN1016	Engineering & Computing	"Digital & Analogue Electronics II"	5	Semester 2
ECSAO	EEN1017	Engineering & Computing	"Embedded Systems"	5	Semester 2
ECSAO	EEN1019	Engineering & Computing	"Operating Systems"	5	Semester 2
ECSAO	EEN1020	Engineering & Computing	"Introduction to Systems, Signals & Control"	5	Semester 2
ECSAO	EEN1024	Engineering & Computing	"Study Abroad Project/Internship"	5	Semester 2
ECSAO	EEN1025	Engineering & Computing	"Mobile Robotics"	5	Semester 2
ECSAO	EEN1030	Engineering & Computing	"Data Communications & Networks II"	5	Semester 2
ECSAO	EEN1031	Engineering & Computing	"Analogue Circuits & Design"	5	Semester 2
ECSAO	EEN1034	Engineering & Computing	"DSP - Digital Filters & DFT"	5	Semester 2
ECSAO	EEN1037	Engineering & Computing	"Web Application Development"	7.5	Semester 2
ECSAO	EEN1040	Engineering & Computing	"Bioelectronics"	7.5	Semester 2
ECSAO	EEN1045	Engineering & Computing	"Optical Communications System Design"	7.5	Semester 2
ECSAO	EEN1046	Engineering & Computing	"Undergraduate Project for Exchange / Study Abroad"	15	Semester 2
ECSAO	EEN1048	Engineering & Computing	"Mechatronic System Simulation & Control"	7.5	Semester 2
ECSAO	EEN1057	Engineering & Computing	"3D Interface Technologies"	7.5	Semester 2
ECSAO	EEN1059	Engineering & Computing	"Security for IoT & Edge Networks"	7.5	Semester 2
ECSAO	EEN1068	Engineering & Computing	"Entrepreneurship for Engineers"	7.5	Semester 2

ECSAO	EEN1069	Engineering & Computing	"Device Manufacturing"	7.5	Semester 2
ECSAO	EEN1071	Engineering & Computing	"Connected Embedded Systems"	7.5	Semester 2
ECSAO	EEN1072	Engineering & Computing	"Data Analysis & Machine Learning II"	7.5	Semester 2
ECSAO	EEN1076	Engineering & Computing	"Photonic Applications & Technologies"	7.5	Semester 2
ECSAO	EEN1078	Engineering & Computing	"Future Network Architectures"	7.5	Semester 2
ECSAO	EEN1090	Engineering & Computing	"Semiconductor Device Manufacturing"	7.5	Semester 2
ECSAO	MEC1000	Engineering & Computing	"Engineering Mechanics: Dynamics"	5	Semester 2
ECSAO	MEC1004	Engineering & Computing	"Mechanics of Materials II"	5	Semester 2
ECSAO	MEC1006	Engineering & Computing	"Fluid Mechanics"	5	Semester 2
ECSAO	MEC1007	Engineering & Computing	"Biomechanics of Human Movement"	5	Semester 2
ECSAO	MEC1008	Engineering & Computing	"Pneumatics & Hydraulics"	5	Semester 2
ECSAO	MEC1009	Engineering & Computing	"Manufacturing Processes 2"	5	Semester 2
ECSAO	MEC1012	Engineering & Computing	"Project for Exchange / Study Abroad"	15	Semester 2
ECSAO	MEC1026	Engineering & Computing	"Fundamentals of Control"	5	Semester 2
ECSAO	MEC1031	Engineering & Computing	"Mechanical Engineering System Simulation"	7.5	Semester 2
ECSAO	MEC1034	Engineering & Computing	"Biomaterials & Processing Technology"	5	Semester 2
ECSAO	MEC1035	Engineering & Computing	"Smart Energy Systems"	7.5	Semester 2
ECSAO	MEC1036	Engineering & Computing	"Emerging Sustainable Technologies"	7.5	Semester 2
ECSAO	MEC1041	Engineering & Computing	"Water & Waste Management"	7.5	Semester 2
ECSAO	MEC1042	Engineering & Computing	"Design For Manufacture & Assembly"	7.5	Semester 2
ECSAO	MEC1044	Engineering & Computing	"Robotics"	5	Semester 2
ECSAO	MEC1045	Engineering & Computing	"Operations Research Methods"	7.5	Semester 2
ECSAO	MEC1046	Engineering & Computing	"Rehabilitation Engineering"	5	Semester 2
ECSAO	MEC1047	Engineering & Computing	"Surgical Device Technology"	5	Semester 2
ECSAO	MEC1054	Engineering & Computing	"Advanced FEA"	7.5	Semester 2
ECSAO	MEC1056	Engineering & Computing	"Computational Thermo-Fluid Dynamics"	7.5	Semester 2
ECSAO	MEC1059	Engineering & Computing	"Advanced Sustainable Energy Systems"	7.5	Semester 2
ECSAO	MEC1060	Engineering & Computing	"Whole Life Cycle Analysis"	7.5	Semester 2
ECSAO	MEC1061	Engineering & Computing	"Turbomachinery"	7.5	Semester 2
ECSAO	MEC1069	Engineering & Computing	"Manufacturing Process Analysis & Tool Design"	7.5	Semester 2
ECSAO	MEC1070	Engineering & Computing	"Robotics"	7.5	Semester 2