

Courses Mapped with SDGs

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Maths	19MA3027	Fuzzy Set Theory and its Applications															
Maths	19MA3029	Computational Tools			70												
Mech	19ME2020	Drone Technology			100			25	75								
Robotics	19RO2001	Theory and Programming of CNC Machines			40			60									
Robotics	19RO2002	Autonomous Vehicles					30	30									
Robotics	19RO2005	Industrial Robotics and Material Handling Systems					20	20									
Robotics	19RO2007	Cognitive Robotics			40												
Robotics	19RO2009	Medical Robotics		20			20	20									
Robotics	19RO2010	Machine Learning for			60		10	10			10						
Robotics	19RO2012	Artificial Intelligence in			30			30									
Robotics	19RO2014	Robotics and Automation in Food Industry	20		30												
Robotics	19RO2015	Neural Networks and Fuzzy Systems			60			20									
Robotics	19RO2016	Microcontrollers for Robotics			50			20									
Aerospace	20AE2020	Aerospace Structures-II			70		30	25	75								
Aerospace	20AE2021	Aerospace Structures and Composite Laboratory						25	75								
Aerospace	20AE2022	Propulsion-II			70		30										
Aerospace	20AE2023	Computational Fluid Dynamics			100												
Aerospace	20AE2024	Computational Fluid Dynamics Laboratory															
Aerospace	20AE2025	Aircraft Stability and Control			70		30										
Aerospace	20AE2026	Flight Stability and Aero Modelling Laboratory															
Aerospace	20AE2027	Finite Element Analysis			100												
Aerospace	20AE2028	Finite Element Analysis															
Aerospace	20AE2029	Aircraft Design Project															
Aerospace	20AE2030	Technical Aptitude			100												
Aerospace	20AE2033	Design and Analysis of Composite Structures															
Aerospace	20AE2035	Structural Vibration															
Aerospace	20AE2037	Cryogenic Propulsion			70		30										
Aerospace	20AE2038	Rocket and Missiles															
Aerospace	20AE2048	Unmanned Aircraft Systems			100												
Aerospace	20AE2052	Wind Tunnel Techniques			70		30										
Aerospace	20AE2062	Heat and Mass Transfer			70		30										
Aerospace	20AE3001	High Speed Jet Flows															
Agriculture	20AG1010	Human Values and Ethics			80	44.4			33.3								22.2
Agriculture	20AG1012	Physical Education			60												
Commerce	20BC2019	Disaster Management	10		50		10		25	25		50					
Commerce	20BC2022	Financial Management			100				25	25							
Biomedical	20BM2001	Medical Physics		20													
Biomedical	20BM2005	Entrepreneurship for Biomedical Engineers		20													
Biomedical	20BM2994	Industry Certification Course															
Biotech	20BT1002	Basics of Python Programming															
Biotech	20BT2001	Chemistry of Biomolecules		20													
Biotech	20BT2003	Cell Biology		20													
Biotech	20BT2004	Workshop Practices in Biotechnology		46.7				13.3	25								
Biotech	20BT2005	Basics of Industrial		46.7				13.3	25								
Biotech	20BT2007	Bio-Analytical Techniques		20													
Biotech	20BT2008	Bio-Analytical Techniques		20													

Biotech	20BT2009	Biochemistry		20												
Biotech	20BT2010	Biochemistry Lab		20												
Biotech	20BT2011	Microbiology		20												
Biotech	20BT2012	Microbiology Lab		20												
Biotech	20BT2015	Bioprocess Principles		20												
Biotech	20BT2017	Molecular Biology		20												
Biotech	20BT2018	Genetic Engineering						25	75							
Biotech	20BT2019	Molecular Biology and Genetic Engineering Lab		46.7				13.3	25							
Biotech	20BT2023	Downstream Processing														
Biotech	20BT2024	Downstream Processing Lab														
Biotech	20BT2025	Immunology														
Biotech	20BT2026	Cell Biology and Immunology		20												
Biotech	20BT2030	Concepts of Bioinformatics		20												
Biotech	20BT2043	Stem Cell Technology						25	75							
Biotech	20BT2044	Biopharmaceutical Technology		46.7				13.3	25							
Biotech	20BT2052	Plant and Animal Tissue Culture Lab														
Biotech	20BT2054	Environmental Biotechnology		28			12	8	24		8	12		8		
Biotech	20BT2057	Bioethics, IPR and Biosafety		43.8		25				18.8						12.5
Biotech	20BT2058	Tissue Engineering						25	75							
Biotech	20BT2059	IoT in Biotechnology		46.7				13.3	25							
Biotech	20BT2060	Developmental Biology Principles of Plant		20												
Biotech	20BT2068	Biotechnology and Applications		46.7				13.3	25							
Biotech	20BT2069	Advances in Animal Biotechnology		46.7				13.3	25							
Biotech	20BT3001	Advances in Biopolymer and Applications		20												
Biotech	20BT3002	Genetic Engineering and Recombinant Products						25	75							
Biotech	20BT3004	Biochemical Analysis Lab		20												
Biotech	20BT3005	Animal and Plant Tissue Culture Lab														
Biotech	20BT3012	Bioethics and Biosafety		43.8		25				18.8						12.5
Biotech	20BT3014	Immunotechnology						25	75							
Biotech	20BT3018	Sustainable Bioprocess Development		41.2			17.6				11.8	17.6		11.8		
Biotech	20BT3021	Drug Design and Discovery														
Biotech	20BT3027	Nanobiotechnology		46.7				13.3	25							
Biotech	20BT3029	Cancer Management							25	25						
Biotech	20BT3031	Advanced Environmental Biotechnology		28			12	8	24		8	12		8		
Biotech	20BT3032	Entrepreneurship and Business Plan							25	25						
Biotech	20BT3033	Industrial Waste Management					21.4		14.3	14.3	14.3	21.4		14.3		
Biotech	20BT3052	Plant Secondary Metabolites and Pharmaceuticals		20												
Biotech	20BT3055	Animal Biotechnology and Immunology		46.7				13.3	25							
Biotech	20BT3058	Molecular Medicine and Diagnostics														
Biotech	20BT3060	Lab- V Bioprocess and Downstream processing Lab		20												
Biotech	20BT3061	Lab-VI Immunological Techniques Lab														
Biotech	20BT3062	Industrial Biotechnology		46.7				13.3	25							
Biotech	20BT3067	Tissue Engineering and Stem Cell Technology						25	75							

Biotech	20BT3068	Metabolic Engineering for Industrial Production						25	75							
Biotech	20BT3069	Human Anatomy, Physiology and Health Education		25	60											
Biotech	20BT3070	Vaccine Technology						25	75							
Digital Sciences	20CA2017	Fundamentals of Business Analytics							25	25						
Digital Sciences	20CA2018	Big Data Analytics														
Digital Sciences	20CA2019	Big Data Analytics Lab														
Digital Sciences	20CA2020	Data Mining and Data Warehousing														
Digital Sciences	20CA2021	Data Analysis and Visualization														
Digital Sciences	20CA2022	Data Visualization Lab														
Digital Sciences	20CA2023	Machine Learning			60											
Digital Sciences	20CA2024	Machine Learning Lab			60											
Digital Sciences	20CA2027	Professional Ethics			50	44.4		20		33.3						22.2
Digital Sciences	20CA2029	Artificial Intelligence for Data Science			50											
Digital Sciences	20CA2045	Security of Web Applications			70			10								
Digital Sciences	20CA2046	Data Mining in Cyber Security			60			20								
Digital Sciences	20CA2047	Email and Mobile Forensics			60			20								
Digital Sciences	20CA2048	Python for Network and Security			50			30								
Digital Sciences	20CA2049	Python for Network and Security Lab														
Digital Sciences	20CA2050	Cloud Security			50			10								
Digital Sciences	20CA2051	Cloud Security Lab														
Digital Sciences	20CA2052	Information Security Ethics			50	44.4		20		33.3						22.2
Digital Sciences	20CA3003	Network Security			60			10								
Digital Sciences	20CA3026	Machine Learning and Data Analytics			60											
Civil	20CE1001	Building Science and						25	75			20				
Civil	20CE1003	Green Design and Life Cycle Assessment					13	30			17	20		20		
Civil	20CE1007	Design Studio - 3D Modelling														
Civil	20CE2001	Surveying and Geomatics Engineering						25	75							
Civil	20CE2002	Mechanics of Solids														
Civil	20CE2003	Fluid Mechanics and														
Civil	20CE2004	Soil Mechanics and Foundation Engineering						25	75							
Civil	20CE2005	Water Supply and Sanitary Engineering						25	75							

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CSE	20CS2034	Neural Networks and Deep Learning			60												
CSE	20CS2037	Optimization Methodologies			100												
CSE	20CS2039	Principles of Industry 4.0			100												
CSE	20CS2043	Real Time Data Streaming															
CSE	20CS2044	Reinforcement Learning			60												
CSE	20CS2046	Robotic Process Automation			100												
CSE	20CS2047	Robotics			100												
CSE	20CS2050	Software Engineering			100			25	75								
CSE	20CS2052	System Administration			100												
CSE	20CS2054	Theory of Computation			100												
CSE	20CS2056	Web Technology			80			25	75								
CSE	20CS2057	Fundamentals of Web Design			100												
CSE	20CS2058	Basics of Data Analytics - R Programming and Tableau															
CSE	20CS3006	Applications of Cyber Physical Systems			100												
ECE	20EC1001	Python Programming			100												
ECE	20EC1002	R programming															
ECE	20EC1004	C Programming Laboratory															
ECE	20EC1005	Electronics For Intelligent Machines Laboratory															
ECE	20EC2001	Electronic Measurement															
ECE	20EC2002	Electronic Devices			80												
ECE	20EC2003	Signals and Systems			100												
ECE	20EC2004	Computer Architecture			100												
ECE	20EC2005	IoT for Communication			46.7			13.3	25								
ECE	20EC2006	IoT for Communication Engineering Laboratory			46.7			13.3	25								
ECE	20EC2007	ARM Processor Laboratory															
ECE	20EC2008	5G Communications			60			20									
ECE	20EC2016	Building Automation Systems Laboratory															
ECE	20EC2017	Media Laboratory			100												
ECE	20EC3002	Low Power VLSI Design			60		20										
ECE	20EC3007	Bio Mems		20													
EEE	20EE1001	Basic Electrical and Computer Engineering						25	75								
EEE	20EE1002	Basic Electrical and Computer Engineering Laboratory						25	75								
English	20EN2001	Communication Skills in English			60			20									
Food	20FP2017	Material Science for Food															
Food	20FP2018	Heat and Mass Transfer			80		20										
Food	20FP2019	Unit Operations in Food Processing - II															
Food	20FP2020	Milling Technology of Cereals, Pulses and Oil seeds	100					25	75								
Food	20FP2021	Food Standards and	20		50												
Food	20FP2022	Food Enzymology Lab															
Food	20FP2023	Food Product Technology Lab						25	75								
Food	20FP2024	Food Analysis Lab - II															
Food	20FP2025	Engineering Properties of Biological Materials		46.7				13.3	25								
Food	20FP2026	Engineering Properties of Biological Materials Lab		46.7				13.3	25								
Food	20FP2027	Food Packaging Technology						25	75								

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Forensic	20FS2020	Fundamentals of Forensic Psychology															
Forensic	20FS2023	Forensic Medicine	20														
Forensic	20FS2024	Forensic Anthropology and Odontology	10		40												
Forensic	20FS2026	Forensic Biology and Serology		20													
Forensic	20FS3013	Microscopy in Forensic															
Maths	20MA1005	Mathematical Foundations of Computing			80												
Maths	20MA1007	Elementary Mathematics			100												
Maths	20MA1013	Calculus and Differential Equations for Robotic			80			25	75								
Maths	20MA1014	Linear Algebra, Transforms and Numerical Methods for Robot Control			80												
Maths	20MA1017	Basics of Calculus and Linear Algebra			80												
Maths	20MA1019	Mathematics for Data Science and Machine Learning in Civil Engineering			46.7			13.3	25								
Maths	20MA1020	Mathematical Modelling for Civil Engineering Problems			80			25	75								
Maths	20MA2006	Probability and Stochastic Processes			80												
Maths	20MA2008	Probability, Statistics and Random Process for Robotic			80			25	75								
Maths	20MA2026	Numerical Mathematics and Computing			80												
Maths	20MA3001	Probability and Biostatistics		20	80												
Mech	20ME1001	Materials Engineering			100			25	75								
Mech	20ME1007	3D Printing Technology			100			25	75								
Mech	20ME1008	Dynamics and Vibration			100												
Mech	20ME2002	CNC Programming			100												
Mech	20ME2004	Design of Medical Devices and Implants		20													
Mech	20ME2005	Computational Fluid Dynamics Laboratory			100												
Mech	20ME2007	Automation of Product Life Cycle Management			100				25	25							
Mech	20ME2009	Intelligent Robotic System															
Mech	20ME2010	Kinematics and Dynamics of Machinery			100												
Mech	20ME2011	Finite Element Methods in Engineering			100			25	75								
Mech	20ME2012	Internet of Things for Mechanical Systems			100			25	75								
Mech	20ME2013	Sensor Technology for						25	75								
Mech	20ME2017	Automotive Materials and Electronics			100												
Mech	20ME3001	Additive Manufacturing Technologies			100												
Mech	20ME3008	Non-Destructive Testing and Inspection			100												
Mech	20ME3009	New-Age Materials			100												
Management	20MS2002	Modeling for Business Plan							25	25							

Management	20MS2003	Concept of Entrepreneurship			100											
Management	20MS2004	Entrepreneurship and Product Development			100			30								
Management	20MS2005	Soft Skills														
Management	20MS2006	Professional Ethics				44.4				33.3						22.2
Management	20MS2007	Business Plan			100				25	25						
Management	20MS2008	Artificial Intelligence for Business							25	25						
Management	20MS3003	Marketing for Business							25	25						
Management	20MS3004	Organizational Behaviour and Management							25	25						
Management	20MS3010	Corporate Strategy														
Management	20MS3012	Human Resource Management							25	25						
Nano	20NT3003	Analytical Methods and Spectroscopy														
Nano	20NT3004	Nanomaterials in Biology and Medicine		20												
Nano	20NT3019	Cancer Nanomedicine														
Physics	20OP2025	Clinical Examination of Visual System														
Physics	20OP2026	Clinical Psychology														
Physics	20OP2027	Low Vision Aids			30			5								
Physics	20OP2028	Dispensing Optics	10		30		5									
Physics	20OP2029	Binocular Vision	10		30		5	5								
Physics	20OP2030	Low Vision Aids Lab														
Physics	20OP2031	Dispensing Optics lab														
Physics	20OP2032	Glaucoma														
Physics	20OP2033	Pediatric Optometry and Geriatric Optometry	10		30					10						
Physics	20OP2034	Contact Lens			20			5								
Physics	20OP2035	Occupational Optometry	10		30		5	5		10						
Physics	20OP2036	Systematic Diseases		20	10											
Physics	20OP2037	Clinics and Special Clinical														
Physics	20OP2038	Clinics and Special Clinical														
Physics	20OP2998	Clinical Internship - I														
Physics	20OP2999	Clinical Internship - II														
Physics	20PH1015	Physics for Robotics														
Physics	20PH1018	Applied Physics for Food Process operations	30		20			10								
Physics	20PH1019	Applied Physics Lab for Food Process operations lab														
Physics	20PH3014	Fabrication and Testing of Thin Film Devices					20									
Robotics	20RO1004	Introduction to Robotics and Automation						10								
Robotics	20RO2001	Digital Electronics and Microprocessors			10			10								
Robotics	20RO2002	Mechanics of Solids			50			20								
Robotics	20RO2003	Sensors and Protocols for Instrumentation			20			30								

Robotics	20RO2004	AI and ML Laboratory for															
Robotics	20RO3003	Computer Aided Modelling and Design			30				30								
Robotics	20RO3004	Drives and Control Systems for Automation							30								
Robotics	20RO3005	Embedded Systems for			50				30								
Robotics	20RO3006	Advanced Automation															
Robotics	20RO3008	Embedded and IoT Lab															
Robotics	20RO3009	Advanced AI and ML lab															
Robotics	20RO3013	Advanced Embedded															
Robotics	20RO3014	Industrial Internet of Things and its Applications			60												
Robotics	20RO3018	Artificial Intelligence in Robotics and Automation			30				30								
Robotics	20RO3019	Advanced Machine learning			60												
Robotics	20RO3021	Deep Learning for Computer			60				30								
Robotics	20RO3023	Virtual Reality and Augmented Reality															
Aerospace	21AE3001	Advanced Aerodynamics			70			30									
Aerospace	21AE3002	Advanced Structural Analysis			70			30									
Aerospace	21AE3003	Advanced Aerodynamics Laboratory															
Aerospace	21AE3004	Structural Analysis Laboratory															
Aerospace	21AE3005	Elements of Data Analytics			100												
Aerospace	21AE3006	Advanced Propulsion			70			30	25	75							
Aerospace	21AE3007	Modeling and Simulation of Aerospace Vehicles			70			30	25	75							
Aerospace	21AE3008	Advanced Propulsion															
Aerospace	21AE3009	Advanced Avionics			70			30									
Aerospace	21AE3010	Advanced Aircraft Materials			100												
Aerospace	21AE3011	Simulation and Model based Systems Engineering			100				25	75							
Aerospace	21AE3012	Aviation 4.0			70			30									
Aerospace	21AE3013	Data Analytics and Artificial Intelligence and			100												
Aerospace	21AE3014	Machine Learning in Aerospace Applications			46.7				13.3	25							
Aerospace	21AE3015	Digital Manufacturing															
Aerospace	21AE3016	Artificial Intelligence and Machine Learning Laboratory			60												
Aerospace	21AE3017	Avionics Laboratory															
Aerospace	21AE3023	Data Analytics and Visualization Laboratory															
Agriculture	21AG1001	Fundamentals of Agronomy	20		20												
Agriculture	21AG1002	Agricultural Heritage	10		20												
Agriculture	21AG1003	Introduction to Forestry	10		20												
Agriculture	21AG1051	Fundamentals of Agricultural Economics	10		20					25	25						
Agriculture	21AG1101	Communication Skills and Personality Development			60							50					
Agriculture	21AG1151	Fundamentals of Entomology	10		20												
Agriculture	21AG1201	Fundamentals of Genetics	10		20												
Agriculture	21AG1301	Fundamentals of Soil Science	10		20												
Agriculture	21AG1302	Introductory Agro-meteorology & Climate						13				17	20		20		
Agriculture	21AG1303	Agricultural Microbiology	20	20	20												
Agriculture	21AG1351	Fundamentals of Plant	20		20												

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CSE	21CS3003	Artificial Intelligence and Machine Learning			60												
CSE	21CS3009	Information Security Management System			80				20	25	25						
ECE	21EC1006	Introduction to Computer Engineering			100				25	75							
ECE	21EC2001	Object Oriented Programming in C++			100												
ECE	21EC2002	Object Oriented Programming in C++ Laboratory															
ECE	21EC2003	Electronic Devices and			60				20								
ECE	21EC2004	Electronic Devices and Circuits Laboratory															
ECE	21EC2005	Operating Systems			100												
ECE	21EC2006	Mathematics for Signal			100												
ECE	21EC2007	Data Structures and			100												
ECE	21EC2008	Data Structures Laboratory															
ECE	21EC2009	Fundamentals of JAVA Programming			100												
ECE	21EC2010	Linear Integrated Circuits			60				20								
ECE	21EC2011	Analog Electronics			60				20								
ECE	21EC2014	Microprocessors and Microcontrollers															
ECE	21EC2015	Web Technology			80				25	75							
ECE	21EC2016	Internet of Things															
ECE	21EC2017	Internet of Things Laboratory															
ECE	21EC2018	Machine Learning			60												
ECE	21EC2019	System Software and Compiler Design															
ECE	21EC2020	Data Communication			60												
ECE	21EC2023	Cyber Security															
ECE	21EC2024	Cloud and Distributed															
ECE	21EC2025	Neural Networks and Deep Learning			60												
ECE	21EC2026	Machine Learning Laboratory			60												
ECE	21EC2027	Linux Programming			100												
ECE	21EC2029	High Performance Computing															
ECE	21EC2031	Semantic Modeling and its Applications															
ECE	21EC2032	Computer Vision			80				10								
ECE	21EC2033	Embedded System Design															
ECE	21EC2034	Cyber Physical Systems															
English	21EN3006	American Literature															
English	21EN3009	Literary Theory and Criticism			50												
English	21EN3010	Gender Studies in Literature				44.4				33.3						22.2	
English	21EN3012	Christian Literature			50	30											
English	21EN3013	Post-colonial Literature															
English	21EN3016	Research Methodology			50												
English	21EN3019	Creative Writing															
Agriculture	21HO1251	Fundamentals of Horticulture	20		20												
Agriculture	21HO1270	Production Technology for Fruit and Plantation Crops							25	75							
Agriculture	21HO2271	Production Technology for Vegetables and Spices	20		20				25	75			10				
Agriculture	21HO2272	Production Technology for Ornamental Crops, MAP and Landscaping	20		20				25	75			10				

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ECE	22EC1004	Fundamentals of Electrical and Electronics Engineering			50			30	25	75						
ECE	22EC2002	Social Media Analytics														
ECE	22EC2004	Data Visualization Techniques														
ECE	22EC2005	Pattern Recognition			80											
ECE	22EC2006	Deep Learning			60											
ECE	22EC2007	Natural Language Processing			100											
ECE	22EC2008	Introduction to Human Computer Interaction														
ECE	22EC2010	Electromagnetics and Radiation Laboratory														
ECE	22EC2013	Digital System Design														
ECE	22EC2014	Digital System Design														
ECE	22EC2015	Communication Theory and Systems			60											
ECE	22EC2016	Digital Communication			60											
ECE	22EC2018	Signal Processing and its Applications														
ECE	22EC2019	Signal Processing Laboratory														
ECE	22EC2020	FPGA Based System Design														
ECE	22EC2022	Building the Web of Things														
ECE	22EC2023	IoT Security and Trust			60			10								
ECE	22EC2024	Cognitive IoT														
ECE	22EC2025	Energy Harvesting for IoT						13				17	20		20	
ECE	22EC2026	IoT Data Analytics			50			20								
ECE	22EC2027	Brain Computer Interface														
ECE	22EC2028	Computational Intelligence Laboratory														
ECE	22EC2029	Data Analytics Laboratory														
ECE	22EC2030	Computational Intelligence Laboratory														
ECE	22EC2031	Cognitive IoT Laboratory														
ECE	22EC2032	Analog Circuits Laboratory														
ECE	22EC3004	Graph Theory and			70											
ECE	22EC3005	Testing and Testability			70											
ECE	22EC3006	CAD for VLSI Circuits														
ECE	22EC3007	Reconfigurable Computing														
ECE	22EC3008	Machine Learning for Communication Systems			60											
ECE	22EC3009	5G and Beyond			60											
ECE	22EC3010	Machine Learning for			60											
Food	22FP2047	Smart Sensors for Food Industries Laboratory														
Food	22FP2048	IoT and Deep Learning for Food Quality			60											
Food	22FP2049	Data Analytics for Food Supply Chain														
Food	22FP2050	Intelligent Food Industries														
Forensic	22FS2001	Laboratory Management and								25	25					
Forensic	22FS2002	Instrumental Methods in		20												
Food	22FT3001	Food Chemistry		20												
Food	22FT3002	Food and Industrial		20												
Food	22FT3003	Principles of Food														
Food	22FT3004	Technology of Cereals, Pulses and Oilseeds						25	75							
Food	22FT3005	Technology of Fruits and Vegetable Processing						25	75							

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Robotics	22RO2008	Vision and Image Processing Laboratory														
Robotics	22RO2011	Robotic Process Automation			30			20								
Robotics	22RO3001	Advanced Robotics														
Robotics	22RO3005	Real-Time Operating System														
Aerospace	23AE1001	Engineering and Aviation				23.5		11.8	35.3	17.6						11.8
Aerospace	23AE2001	Introduction to Aerospace Engineering						25	75							
Aerospace	23AE2002	Engineering Mechanics						25	75							
Aerospace	23AE2003	CAD for Aerospace Engineers						25	75							
Aerospace	23AE2004	Basics of Fluid Mechanics														
Aerospace	23AE2005	Fluid Mechanics Laboratory														
Aerospace	23AE2006	Strength of Materials														
Aerospace	23AE2007	Strength of Materials														
Aerospace	23AE2008	Engineering Thermodynamics						25	75							
Aerospace	23AE2009	Thermodynamics Laboratory														
Aerospace	23AE2010	Introduction to Aerospace						25	75							
Aerospace	23AE2011	Aerospace Structures-I						25	75							
Aerospace	23AE2012	Propulsion-I														
Aerospace	23AE2013	Aircraft Instrumentation and Avionics														
Aerospace	23AE2014	Aerodynamics														
Aerospace	23AE2015	Aerodynamics Laboratory														
Aerospace	23AE2016	Airplane Performance														
Aerospace	23AE2017	CAD/CAM Laboratory														
Aerospace	23AE2018	Aircraft Instrumentation and Avionics Laboratory														
Aerospace	23AE2046	Boundary Layer Theory														
Aerospace	23AE2060	Basics of Aerospace						25	75							
Aerospace	23AE2066	Engineering Computations using Spreadsheets						25	75							
Aerospace	23AE2067	Engineering Computations using MATLAB						25	75							
Aerospace	23AE2068	UAV Laboratory														
Agriculture	23AG2110	Soil, Plant, and Water testing	20		60											
Agriculture	23AG2111	Organic Production	20		46.7			13.3	25			10				
Agriculture	23AG2112	Commercial Floriculture and Landscaping			60			20								
Agriculture	23AG2113	Commercial Nursery Management and Protected Cultivation	20		63.6			50	18.2	18.2						
Agriculture	23AG2114	Production Technology of Biofertilizer	20	31.8	31.8			9.1	27.3			10				
Agriculture	23AG2115	Mushroom Cultivation	20		46.7			13.3	25							
Agriculture	23AG2116	Commercial Beekeeping	20		60											
Agriculture	23AG2117	Agribusiness Management	20		63.6				18.2	18.2						
Agriculture	23AG2119	Broiler Production Technology	20		46.7			13.3	25							

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Chemistry	23CH3028	Waste to Energy					13				17	20		20		
Chemistry	23CH3030	Forensic Chemistry		20												
Chemistry	23CH3031	Forensic Toxicology														
Chemistry	23CH3032	Instrumental Methods of														
Chemistry	23CH3034	Forensic Chemistry Lab		20												
Chemistry	23CH3037	Chromatography														
CSE	23CS1001	Digital System Design														
CSE	23CS1002	Digital System Design Lab														
CSE	23CS1003	Microprocessor and														
CSE	23CS1004	Microprocessor and Microcontroller Lab														
CSE	23CS1005	Programming for Problem														
CSE	23CS1006	Programming for Problem Solving Laboratory														
CSE	23CS1007	Python Programming														
CSE	23CS1008	Python Programming Lab														
CSE	23CS1009	Artificial Intelligence in IOT														
CSE	23CS1010	Artificial Intelligence in IOT														
CSE	23CS1012	Computer Organization and Architecture														
CSE	23CS1013	Ethics in Information				23.5		11.8	35.3	17.6						11.8
CSE	23CS1015	C Programming and														
CSE	23CS1016	C Programming and Applications Lab														
CSE	23CS1017	Coding for Problem Solving - Python														
CSE	23CS1018	Coding for Problem Solving - Python Lab														
CSE	23CS2001	Artificial Intelligence: Principles and Techniques														
CSE	23CS2004	Computer Networks														
CSE	23CS2005	Computer Networks Lab														
CSE	23CS2007	Cryptography and Network														
CSE	23CS2008	Data Visualization														
CSE	23CS2009	Data Visualization Lab														
CSE	23CS2011	Data Structures and														
CSE	23CS2012	Data Structures and														
CSE	23CS2013	Database Management							25	25						
CSE	23CS2014	Database Management							25	25						
CSE	23CS2017	Design and Analysis of														
CSE	23CS2019	Distributed Computing														
CSE	23CS2022	Internet of Things														
CSE	23CS2023	Internet of Things Lab														
CSE	23CS2024	Data Science Ecosystem														
CSE	23CS2028	Machine Learning Techniques			60											
CSE	23CS2029	Machine Learning Techniques			60											
CSE	23CS2032	Object Oriented Programming														
CSE	23CS2033	Object Oriented Programming														
CSE	23CS2035	Operating Systems														
CSE	23CS2045	System Software and Compiler Design														
CSE	23CS2047	Unix and Linux Lab														
CSE	23CS2050	Embedded Systems														
CSE	23CS2056	Data Science Laboratory for Healthcare		20												
CSE	23CS2057	Fundamentals of Programming														
CSE	23CS2058	Fundamentals of Programming														

CSE	23CS2501	Logical and Critical Thinking														
CSE	23CS2502	Digital Marketing								25	25					
CSE	23CS2503	Git and GitHub for Beginners														
CSE	23CS2911	CS Certification I														
CSE	23CS2912	CS Certification II														
CSE	23CS3001	Blockchain Technologies and Applications				100										
DSCS	23DC1001	Digital System Design														
DSCS	23DC1002	Digital System Design														
DSCS	23DC1003	Digital Principles and Computer Organization														
DSCS	23DC1004	Digital Principles and Computer Organization Laboratory														
DSCS	23DC1005	Programming for Problem Solving														
DSCS	23DC1006	Programming for Problem Solving Laboratory														
DSCS	23DC1007	Introduction to Artificial Intelligence														
DSCS	23DC1008	Python Programming														
DSCS	23DC1009	Python Programming														
DSCS	23DC1010	Ethics in Information Technology				23.5			11.8	35.3	17.6					11.8
DSCS	23DC1011	Microprocessor and Microcontroller														
DSCS	23DC1012	Microprocessor and Microcontroller Laboratory														
DSCS	23DC1013	Computer Organization and Architecture														
DSCS	23DC2001	Object Oriented Programming														
DSCS	23DC2002	Object Oriented Programming Laboratory														
DSCS	23DC2003	Data Structures and Algorithms														
DSCS	23DC2004	Data Structures and Algorithms Laboratory														
DSCS	23DC2005	Cyber Physical System														
DSCS	23DC2006	IoT and its Applications														
DSCS	23DC2007	IoT and its Applications Lab														
DSCS	23DC2008	Computer Networks														
DSCS	23DC2009	Computer Networks Laboratory														
DSCS	23DC2010	Database Management Systems								25	25					
DSCS	23DC2011	Database Management Systems Laboratory								25	25					
DSCS	23DC2012	Design and Analysis of Algorithms														
DSCS	23DC2013	Communication for Cyber Physical Systems				60										
DSCS	23DC2015	Machine Learning Techniques				60										
DSCS	23DC2016	Machine Learning Techniques Laboratory				60										
DSCS	23DC2017	Data Engineering							25	75						
DSCS	23DC2018	Quantum Machine Learning				60										
DSCS	23DC2019	Federated Learning				60										
DSCS	23DC2020	Data Science Eco System														
DSCS	23DC2021	Data Science Ecosystem Lab														
DSCS	23DC2023	Zero Trust Architecture														
DSCS	23DC2028	Data Exploration and Analytics														
DSCS	23DC2031	Generative AI														
DSCS	23DC2032	Full Stack Development														
DSCS	23DC2033	Full Stack Development Laboratory														
DSCS	23DC2040	Deep Learning				60										
DSCS	23DC2041	Deep Learning Laboratory				60										
DSCS	23DC2043	Cloud computing for Data Science														
DSCS	23DC2049	Natural Language Processing														

DSCS	23DC2054	Cryptography and Network															
DSCS	23DC2055	Cryptography and Network Security Laboratory															
DSCS	23DC2501	Exploratory Data Analysis using Tableau															
DSCS	23DC2503	Cloud Foundations															
ECE	23EC1001	Computational Thinking															
ECE	23EC1002	Programming for Problem Solving with C															
ECE	23EC1004	C++ and Data Structures															
ECE	23EC1005	C++ and Data Structures															
ECE	23EC2012	Network Theory															
ECE	23EC2015	Basics of Electronics for Aerospace Engineers						25	75								
ECE	23EC2020	Printed Circuit Board Design and Arduino Programming															
ECE	23EC2021	Printed Circuit Board Design and Arduino Programming Laboratory															
ECE	23EC2022	Sensors, Data Acquisition and Control Laboratory															
ECE	23EC2025	Electromagnetic Fields and Waveguides															
ECE	23EC3003	Hardware Security															
EEE	23EE1001	Electrical Engineering						25	75								
EEE	23EE1002	Fundamentals of Electrical and Computer Engineering						25	75								
EEE	23EE1003	Fundamentals of Electrical and Computer Engineering Laboratory						25	75								
EEE	23EE1004	Industrial Practice I - PCB															
EEE	23EE1005	Design Thinking and															
EEE	23EE1006	Industrial Practice II - Circuit Simulation															
EEE	23EE1008	Electric Circuits and Electronic Devices															
EEE	23EE1009	Electric Circuits and Electronic Devices Lab															
EEE	23EE2001	Electrical Circuit Analysis						25	75								
EEE	23EE2002	Analog Electronic Circuits															
EEE	23EE2003	Digital Electronics															
EEE	23EE2004	Computational Electromagnetic Fields															
EEE	23EE2005	Analog Electronic Circuits Laboratory															
EEE	23EE2006	Industrial Practice III															
EEE	23EE2008	Electrical Machines						25	75								
EEE	23EE2009	Power Electronics															
EEE	23EE2010	Linear Integrated Circuits															
EEE	23EE2011	Electric Power Transmission and Distribution															
EEE	23EE2012	Electrical Machines						25	75								
EEE	23EE2013	Power Electronics Laboratory															
EEE	23EE2014	Industrial Practice IV - Lab															
EEE	23EE2025	Foundation of Machine				60											
EEE	23EE2031	Object Oriented Programming															
EEE	23EE2032	Object Oriented Programming Laboratory															
EEE	23EE2072	DIY Skills in Engineering						25	75								

	EEE	23EE2073	Digital Forensics															
	EEE	23EE2079	Python Programming															
	EEE	23EE2080	Python Programming															
	English	23EN2001	English for Communication			60												
	English	23EN2002	Professional English															
	English	23EN2003	General English															
	English	23EN2004	Creative English															
	English	23EN2005	Technical English Writing															
	English	23EN2007	Communication Skills Lab			60												
	English	23EN2008	Professional Communication Practice			60												
	English	23EN3022	English for Research Paper															
	Food	23FP1001	Basics of Food Science and Technology						25	75								
	Food	23FP1002	Bakery, Beverages and Confectionery Technology						25	75								
	Food	23FP1003	Food Product Technology Lab-I						25	75								
	Food	23FP2001	Basics of Microbiology		20													
	Food	23FP2002	Food Chemistry		20													
	Food	23FP2003	Food Process Calculations															
	Food	23FP2004	Fruit and Vegetable Processing Technology						25	75								
	Food	23FP2005	Introduction to Fluid															
	Food	23FP2006	Food Analysis Lab-I															
	Food	23FP2007	Dairy Process Engineering						25	75								
	Food	23FP2008	Unit Operations in Food Processing-I															
	Food	23FP2009	Food Biochemistry Lab		20													
	Food	23FP2010	Unit Operations in Food Processing Lab															
	Food	23FP2011	Food Standards and															
	Food	23FP2019	Bakery and Beverages and Confectionery Technology for Beginners						25	75								
	Food	23FP2036	Mechanical Systems for Food Processing						25	75								
	Food	23FP2040	Product Packaging and Label Design															
	Food	23FP2049	Processing of Food															
	Forensic	23FS2001	Fundamentals of Forensic Medicine Constitution,															
	Forensic	23FS2002	Fundamental Laws and Regulations				44.4			33.3							22.2	
	Forensic	23FS2003	Forensic Physics															
	Forensic	23FS2004	Crime and Society				44.4			33.3							22.2	
	Forensic	23FS2005	Crime Scene Investigation															
	Forensic	23FS2006	Finger Print Analysis															
	Forensic	23FS2007	Basic Biology for Forensic		20													
	Forensic	23FS2008	Questioned Documents															
	Forensic	23FS2009	Forensic Ballistics															
	Forensic	23FS2013	Crime Scene Investigation Lab-I															
	Forensic	23FS2014	Crime Scene Investigation Lab-II															
	Forensic	23FS2015	Forensic Physics Lab															
	Forensic	23FS2016	Forensic Dermatoglyphics Laboratory															
	Forensic	23FS2017	Moot Court for Forensic															
	Forensic	23FS2018	Questioned Documents															
	Forensic	23FS2019	Forensic Ballistics Laboratory															

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Management	23MS3025	Product Development and Entrepreneurship															
Management	23MS3026	Translating Business Model into Startup							25	25							
Management	23MS3027	Social Entrepreneurship															
Management	23MS3028	Social Media Analytics															
Physics	23PH1001	Applied Physics for Aerospace Engineering						25	75								
Physics	23PH2001	Nanomaterials and Energy					13					17	20		20		
Physics	23PH3013	Physics of Nanomaterials															
Physics	23PH3014	Thin Film Technology						25	75								
Physics	23PH3022	Material Characterization															
Physics	23PH3036	Biomaterials		20													
Robotics	23RO1001	Programming in C															
Robotics	23RO1002	C Programming Laboratory															
Robotics	23RO1003	Fundamentals of Python Programming for Robotics															
Robotics	23RO1004	Python Programming Laboratory for Robotics															
Robotics	23RO1005	Electronic System Design and Fabrication Laboratory															
Robotics	23RO1006	Rapid Prototyping Laboratory															
Robotics	23RO2003	Industrial IoT Laboratory															
Robotics	23RO2004	Electron Devices and Circuits															
Robotics	23RO2005	Electrical Machines						25	75								
Robotics	23RO2006	Automatic Control Systems															
Robotics	23RO2007	Electron Devices and Circuits Laboratory															
Robotics	23RO2008	Electrical Machines and Control Systems Laboratory						25	75								
Robotics	23RO2019	Drone Technology						25	75								
Robotics	23RO2022	System Simulation Laboratory															
Robotics	23RO2023	Data Acquisition and Interfacing Laboratory															
Robotics	23RO3001	Robotics: System and Analysis															
Aerospace	24AE3001	Autonomous Navigation and Flight Control in UAV															
Agriculture	24AG3001	Modern Concepts in Crop Production															
Agriculture	24AG3002	Principles and Practices of Soil Fertility and Nutrient Management							25	25							
Agriculture	24AG3003	Principles and Practices of Weed Management							25	25							
Agriculture	24AG3004	Principles and Practices of Water Management							25	25							
Agriculture	24AG3006	Cropping Systems and Sustainable Agriculture					13					17	20		20		
Agriculture	24AG3008	Agronomy of Major Cereals and Pulses															
Agriculture	24AG3009	Agronomy of Oilseed, Fiber and Sugar Crops															
Agriculture	24AG3018	Recent Trends in Weed Management							25	25							
Agriculture	24AG3022	Research and Publication				44.4				33.3							22.2

Agriculture	24AG3024	Physiological and Molecular Aspects of Source-Sink Capacity for Enhancing Yield														
Agriculture	24AG3025	Principles of Genetics														
Agriculture	24AG3026	Principles of Cytogenetics														
Agriculture	24AG3027	Principles of Plant Breeding														
Agriculture	24AG3028	Fundamentals of Quantitative Genetics														
Agriculture	24AG3029	Molecular Breeding and Bioinformatics		20												
Agriculture	24AG3030	Hybrid Breeding														
Agriculture	24AG3031	Breeding for Quality and Special Traits														
Agriculture	24AG3032	Mutagenesis and Mutation														
Agriculture	24AG3033	Breeding for Stress Resistance and Climate Change					13				17	20		20		
Agriculture	24AG3039	L Advances in Biometrical		20												
Agriculture	24AG3048	Crop Evolution														
Agriculture	24AG3214	Plant Biochemistry		20												
Agriculture	24AG3217	Experimental Designs														
Agriculture	24AG3218	Remote Sensing and GIS Techniques for Soil and Crop Studies														
Agriculture	24AG3219	Data Analysis using Statistical Packages														
Agriculture	24AG3227	Analytical Technique and Instrumental Methods in Soil and Plant Analysis														
Agriculture	24AG3228	Physiological and Molecular Responses of Plants to Abiotic Stresses		20												
Agriculture	24AG4025	Concepts and Application of Omics in Biological Science		20												
Agriculture	24AG4039	Advances in Biometrical		20												
Agriculture	24AG4040	Genomics in Plant Breeding														
Agriculture	24AG4042	IPR and Regulatory														
Agriculture	24AG4048	Advances in Plant Breeding Systems														
Agriculture	24AG4052	Techniques in Plant														
Agriculture	24AG4053	Climate Change and Sustainable Development					13				17	20		20		
Agriculture	24AG4054	Advanced Techniques in Biochemistry		20												
Agriculture	24AG4055	Applied Regression Analysis														
Agriculture	24AG4082	Statistical Methods for Applied Sciences														
Agriculture	24AG4090	Information Technology in Agriculture					25	75								
AIML	24AI2503	Machine Learning with			60											
AIML	24AI2504	JAVA Full Stack Development														
Commerce	24BC3005	Artificial Intelligence in						25	25							
Commerce	24BC3007	Customer Relationship						25	25							
Commerce	24BC3008	Digital Marketing for						25	25							
Commerce	24BC3009	E-Business						25	25							
Commerce	24BC3010	Banking Technology and Management						16.7	66.7	16.7						

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Water	24WI3002	Hydrological Processes															
Water	24WI3003	Wastewater Management					21.4		14.3	14.3	14.3	21.4		14.3			
Water	24WI3004	Irrigation Water Management							25	25							
Water	24WI3005	Computational Methods and Applications															
Water	24WI3006	Water Resources Systems															
Water	24WI3007	Water Supply Distribution and Maintenance															
Water	24WI3008	Water Supply Distribution Network and Quality Analysis															
Water	24WI3009	Fundamentals of Environmental Isotope Techniques					13				17	20		20			
Water	24WI3018	Forest, Urban and Agricultural Watershed Management							25	25							
Water	24WI3021	Water Harvesting and Soil Conservation Structures															
Water	24WI3030	Basics of Agrivoltaics						25	75								
Water	24WI3031	Water Chemistry		20													
Water	24WI3032	Application of Electrochemistry in Water and Wastewater Treatment		41.2			17.6				11.8	17.6		11.8			