

1.2.1 Percentage of new courses introduced of the total number of courses across all programmes offered during the last five years (20)

Name of the Course	Course Code	Activities/Content with direct bearing on Employability/ Entrepreneurship/ Skill development	Year of introduction (during the last five years)	Link to the relevant document
Construction Materials, Machines & Techniques	510121	Concrete mix design, special concrete, prefabrication	2021	https://web.mitsgwalior.in/images/Department/2021/510121.pdf
Building Services & Maintenance	900120	Provision of NBC, Plumbing services	2021	https://web.mitsgwalior.in/images/Department/2021/900120.pdf
Sustainable Materials & Green Building	900121	Green buildings, provisions of LEED,	2021	https://web.mitsgwalior.in/images/Department/2021/900121.pdf
Wastewater Treatment & recycling	110754	waste water treatment techniques,	2021	https://web.mitsgwalior.in/images/Department/2021/110754.pdf
Introduction to Multimodal Urban Infrastructure Planning & Management	110755	Planning of urban transportation	2021	https://web.mitsgwalior.in/images/Department/2021/110755.pdf
Urban Governance & Development	110756	Construction & Economic Risks,	2021	https://web.mitsgwalior.in/images/Department/2021/110756.pdf
Trace & Ultra Trace Analysis of Metals using Civil Drawing Lab	800308	Metropolitan Planning, Dealing	2021	https://web.mitsgwalior.in/images/Department/2021/800308.pdf
Trace & Ultra Trace Analysis of Metals using Civil Drawing Lab	800309	Application of AAS techniques	2021	https://web.mitsgwalior.in/images/Department/2021/800309.pdf
Civil Drawing Lab	110415	drawing of building elements on AutoCAD	2021	https://web.mitsgwalior.in/images/Department/2021/110415.pdf
Concrete Technology	110654	Fibre reinforced concrete, self	2021	https://web.mitsgwalior.in/images/Department/2021/110654.pdf
Air Pollution & Control	110655	air pollution control techniques, air	2021	https://web.mitsgwalior.in/images/Department/2021/110655.pdf
Environmental Impact Assessment	110855	Planning & developing of EIA reports	2021	https://web.mitsgwalior.in/images/Department/2021/110855.pdf
Rock Engineering	110856	Rock slope stability analysis, tunneling	2021	https://web.mitsgwalior.in/images/Department/2021/110856.pdf
Strategies for Sustainable Design	110857	Sustainable design of buildings, uses of	2021	https://web.mitsgwalior.in/images/Department/2021/110857.pdf
Scientific Computing Using Matlab	110858	numerical solution to ODE, curve fitting	2021	https://web.mitsgwalior.in/images/Department/2021/110858.pdf
Air Pollution & Control	900629	air pollution control techniques, air	2021	https://web.mitsgwalior.in/images/Department/2021/900629.pdf
Rural Water Resources Management	900630	Solving case studies in rural water	2021	https://web.mitsgwalior.in/images/Department/2021/900630.pdf
Strategies for Sustainable Design	510218	Sustainable design of buildings, uses of	2021	https://web.mitsgwalior.in/images/Department/2021/510218.pdf
Strategies for Sustainable Design	530216	Sustainable design of buildings, uses of	2021	https://web.mitsgwalior.in/images/Department/2021/530216.pdf
Analog Integrated Circuit	140412/200	Simulation and circuit design using Op-amp and 555 timer IC	2021	https://web.mitsgwalior.in/images/Department/2021/140412/200.pdf
Satellite and Radar Communication Systems	140711/200	modern surveillance radar and satellite communication systems	2021	https://web.mitsgwalior.in/images/Department/2021/140711/200.pdf
VLSI Design	140713/200	Analysis of wave propagation in dielectric waveguide	2021	https://web.mitsgwalior.in/images/Department/2021/140713/200.pdf
Digital Image Processing	140717/200	Different techniques for the enhancement of digital images	2021	https://web.mitsgwalior.in/images/Department/2021/140717/200.pdf
Introduction to Wireless Cellular Communication	140752/200	wireless channel and the related impairments (multipath fading), small scale	2021	https://web.mitsgwalior.in/images/Department/2021/140752/200.pdf

Satellite System	900206	Satellite system engineering, orbital mechanics, orbital offsets	2021	https://web.mit.edu
Consumer Electronics	900207	Main features of consumer electronics products/devices like audio system	2021	https://web.mit.edu
MEMS and Mechatronics	900218	MEMS technology with present and future challenges	2021	https://web.mit.edu
Multimedia Communication	900219	Knowledge of social media, Facebook, Twitter, Instagram, YouTube	2021	https://web.mit.edu
Data Mining & Predictive Modelling	160714	This course deals with fundamentals of	2021	https://web.mit.edu
Design and Thinking Lab	230305	Understanding various sensors and	2021	https://web.mit.edu
Python Programming Lab	240305	Design and development of efficient	2021	https://web.mit.edu
Introduction to Artificial Intelligence and Data	270101	The course introduces the variety of	2021	https://web.mit.edu
Introduction to Artificial Intelligence and	280101	The course introduces the variety of	2021	https://web.mit.edu
Blockchain and its Applications	160854	Course will cover the basic design	2021	https://web.mit.edu
Robotics & vision control	900119	Robotic vision, the combination of	2021	https://web.mit.edu
Computer Architecture and Microprocessor	230401	Fundamental knowledge of a computer	2021	https://web.mit.edu
IoT Architecture and Protocols	230404	Sensors, actuators, compute servers, and	2021	https://web.mit.edu
Machine Learning and Optimization	240404	This course deals with the overview of	2021	https://web.mit.edu
Computer Programming	160122	This course deals with programming	2021	https://web.mit.edu
Analytics using R programming	900227	Statistical techniques for scientific	2021	https://web.mit.edu
Data Science in IoT	230502	Mathematical foundations required for	2021	https://web.mit.edu
Soft Computing Techniques	230505	Implementation of advanced algorithm	2021	https://web.mit.edu
Data Science using python	240502	Mathematical foundations required for	2021	https://web.mit.edu
Introduction to Artificial Intelligence and	280121	The course introduces the variety of	2021	https://web.mit.edu
Physico chemical processes for waste water	170854	Aerobic/anaerobic sludge treatment	2021	https://web.mit.edu
Chemical Process utilities	170855	Drum collers, drum dryers and cooling	2021	https://web.mit.edu
Electrochemical Technology in pollution	900624	Dialysis, electrostatic precipitator	2021	https://web.mit.edu
Environmental quality monitoring and analysis	900623	Parameterization with Environmental Quality Monitoring & Analysis	2021	https://web.mit.edu
Heterogeneous reaction system	170615	Seven steps of catalysis	2021	https://web.mit.edu
Physical and electrochemical characterization in	170654	Characterization of nano particles and	2021	https://web.mit.edu
Principle and practice of process equipment	170755	Ergonomics in plant design	2021	https://web.mit.edu
Disaster Management	1000006	Emergency response and disaster	2021	https://web.mit.edu
Ethical Hacking	150854	Linear Disclosure, Cyber Ethics, Different issues of hardware security,	2021	https://web.mit.edu
Hardware Security	150855	Blockchain technology and its	2021	https://web.mit.edu
Blockchain and its Application	150856	Blockchain technology and its	2021	https://web.mit.edu
Online Privacy	150857	Various privacy breaches, forms of	2021	https://web.mit.edu
Ethical Hacking(OC-4)	900627	Cyber Ethics, Information Gathering, e	2021	https://web.mit.edu
Online Privacy(OC-4)	900628	Various privacy breaches, forms of	2021	https://web.mit.edu

Internship / Project	150801	Intership or project	2021	https://web.mitsgw
Professional Development	150802	Leadership, Networking,	2021	https://web.mitsgw
Programming Lab Python Programming	150415	Setting up programming environment,	2021	https://web.mitsgw
Computer Hardware and Troubleshooting Lab	150315	Examine the computer system layout,	2021	https://web.mitsgw
Environments (SWAYAM)	210551	Understand the different materials used	2021	https://web.mitsgw
Architecture(SWAYAM)	210514	regional awareness and how it affect the	2021	https://web.mitsgw
Design(SWAYAM)	210515	composition of space design so that they	2021	https://web.mitsgw
(SWAYAM)	210615	principles and concepts from across	2021	https://web.mitsgw
(SWAYAM)	210616	EIA.Environmental Impact Assessment	2021	https://web.mitsgw
Applications (SWAYAM)	210754	fundamental aspects of structural	2021	https://web.mitsgw
Historic Buildings (SWAYAM)	210814	conservation; energy refurbishment of	2021	https://web.mitsgw
(SWAYAM)	210815	how to plan, finance and manage urban	2021	https://web.mitsgw
VII) (SWAYAM)	2101011	Student obtain knowledge of	2021	https://web.mitsgw
BIM(COURSERA)	2101013	Student obtain knowledge of	2021	https://web.mitsgw
GIS(COURSERA)	210102	Basics of Remote Sensing, Geographical	2021	https://web.mitsgw
Google UX	210104	Week 1 : Introduction to User Interface	2021	https://web.mitsgw
Fundamentals of Theoretical and	190854	Aerodynamics aspects in vehicle and	2021	https://web.mitsgw
Experimental stress Analysis	190855	Measurement of stress on different	2021	https://web.mitsgw
Applied Ergonomics	190856	Different aspects of ergonomics in	2021	https://web.mitsgw
Introduction to soft Matter	190857	applications and properties in	2021	https://web.mitsgw
Sound and structural vibration	120854	To measure sound and classify	2021	https://web.mitsgw
Carbon Material and Manufacturing	120855	Application of carbon material and	2021	https://web.mitsgw
Introduction to Abrasive Machining and	120856	Different advanced machining	2021	https://web.mitsgw
Automation in Manufacturing	800310	Application of computers in various	2021	https://web.mitsgw
Electrical and Electronic Measurement	130312	for electrical/electronic parameters ,	2021	https://web.mitsgw
IoT in Microgrid	900216	Provide an overview of microgrid and its	2021	https://web.mitsgw
Electric Vehicle	900217	for the design, development, and test of	2021	https://web.mitsgw
Programming with Python	130414	Python will doubtlessly be at the	2021	https://web.mitsgw
Renewable Energy Lab	130415	A new Renewable Energy Lab is set up	2021	https://web.mitsgw
Power System Dynamics, Control and	130855	Gain high-quality knowledge on	2021	https://web.mitsgw
Environmental Engineering	110509	water treatment plant design, design of	2020	https://web.mitsgw
Matrix Methods of Structural Analysis	110751	Advanced methods of structural analysis	2020	https://web.mitsgw
Advanced Concrete Technology	110752	Study on high performance concrete	2020	https://web.mitsgw
Remote Sensing & GIS	110753	Digital image processing, image	2020	https://web.mitsgw

Integrated Waste Management for Smart City	900201	energy recovery from municipal solid	2020	https://web.mitsgw
Project Planning & Control	900202	network techniques in project planning	2020	https://web.mitsgw
Urban Planning & Transportation Systems	900213	planning of urban transportation	2020	https://web.mitsgw
Software Application for Solving Civil	110701	Study on Prima Vera, STADD Pro &	2020	https://web.mitsgw
Creative Problem Solving	110703	Providing engineering solutions of	2020	https://web.mitsgw
Computational Techniques	510111	Game Theory, Theory of Probability, Z	2020	https://web.mitsgw
Construction Materials & Machines	510112	Concrete mix design, special concrete,	2020	https://web.mitsgw
Maintenance Management	510114	Provision of NBC, Plumbing services	2020	https://web.mitsgw
Infrastructure Development	510115	strategic issues in infrastructure	2020	https://web.mitsgw
Formwork for Concrete Structures	510116	formwork for special structures,	2020	https://web.mitsgw
Organizational Behaviour & Management	800108	group dynamics, comparative	2020	https://web.mitsgw
Safety & Quality Management	800109	quality standards, ISO, Quality	2020	https://web.mitsgw
Construction Lab	510119	tests in concrete, CBR test of soil	2020	https://web.mitsgw
Solid & Hazardous Waste Management	530112	energy recovery from municipal solid	2020	https://web.mitsgw
Industrial Waste Management	530114	Treatment of various industrial wastes,	2020	https://web.mitsgw
Environmental Auditing & Management	530115	environmental management system	2020	https://web.mitsgw
Environmental Hydraulics	530116	Pollution transport in surface water	2020	https://web.mitsgw
Sustainable Waste Management System	800110	low cost sanitation methods, green	2020	https://web.mitsgw
Environmental Engineering Lab	530118	water and waste water quality analysis	2020	https://web.mitsgw
Basic Civil Engineering Lab	100026	determination of setting time of cement,	2020	https://web.mitsgw
Railway, Airport & Tunnel Engineering	110614	geometrical design, curves, railway stations,	2020	https://web.mitsgw
Numerical Methods in Engineering	900117	Engineering Solutions of specific field	2020	https://web.mitsgw
Maintenance Management	900118	Maintenance Services in Buildings,	2020	https://web.mitsgw
Safety in Construction	110851	OSHA regulations, BIM, Safety	2020	https://web.mitsgw
Introduction to Accounting & Finance for Civil	110852	Financing planning, capital budgeting	2020	https://web.mitsgw
Water Supply Engineering	110853	water treatment plant design, design of	2020	https://web.mitsgw
Natural Hazards (Deptt Elective Course)	110854	Tsunami assessment & mitigation,	2020	https://web.mitsgw
Natural Hazards (Open Category Course)	900614	Tsunami assessment & mitigation,	2020	https://web.mitsgw
Plastic Waste Management	900615	Road construction using plastic waste,	2020	https://web.mitsgw
Remote Sensing: Principles & Applications	900617	Remote sensing, LIDAR, Imaging radar	2020	https://web.mitsgw
Internship / Project	110801	work on field based projects	2020	https://web.mitsgw
Professional Development	110802	overall evaluation of capabilities of	2020	https://web.mitsgw
Project Economics & Financing	510211	capital budgeting, project risk, financial	2020	https://web.mitsgw
Construction Project Management	510213	network techniques in project planning	2020	https://web.mitsgw

Safety in Construction	510217	OSHA regulations, BIM, Safety	2020	https://web.mitsgw
Sustainable Materials & Green Building	800208	Green buidlings, provisions of LEED,	2020	https://web.mitsgw
Computational Laboratory for Construction	510219	MATLAB, Prima Vera, BIM	2020	https://web.mitsgw
Plastic Waste Management	530214	Road construction using plastic waste,	2020	https://web.mitsgw
Global Climatic Changes & Disaster	800209	Climate modelling, disaster mitigation	2020	https://web.mitsgw
Advanced Environmental Engineering Lab	530217	air quality analysis, AAS analysis	2020	https://web.mitsgw
Electronics Devices	140211	Problem Solving and Electronic Circuit Analysis,Immense knowledge about Electronic Devices	2020	https://web.mitsgw alior.in/images/Departments/electronics_engineering/BOS%20minutes%20Nov%202020%201.pdf
Engineering Materials	200212	Developing ,Modifying ,Testing and Evaluating Material	2020	https://web.mitsgw alior.in/images/Departments/electronics_engineering/BOS%20minutes%20Nov%202020%201.pdf
EEES (Energy Ecology Environment & Society)	100015	1.Generation,Optimisation and Utilization of Energy2.Environment Sustainability and Conservation3.Learning Ethical and moral values	2020	https://web.mitsgw alior.in/images/Departments/electronics_engineering/BOS%20minutes%20Nov%202020%201.pdf
Practical Machine Learning with Tensorflow	160751	Model Building on real dataset using	2020	https://web.mitsgw
Scalable Data Science	160752	Implementation of data science concepts	2020	https://web.mitsgw
IoT Lab	160701	Understanding various sensors and	2020	https://web.mitsgw
Introduction to Computer Programming	230102	This course deals with programming	2020	https://web.mitsgw
IT workshop	160111	This course deals with fundamentals of	2020	https://web.mitsgw
Soft Computing	900208	Implementation of advanced algorithm	2020	https://web.mitsgw

R Programming	900220	Statistical techniques for scientific	2020	https://web.mitsgw
Artificial Intelligence	900221	The course introduces the variety of	2020	https://web.mitsgw
Introduction to Internet of Things (IoT)	230101	This course will cover different	2020	https://web.mitsgw
Introduction to Artificial Intelligence	240101	The course introduces the variety of	2020	https://web.mitsgw
High-speed Networks	630113	This course would be focused on the	2020	https://web.mitsgw
Mobile Computing & M-Commerce	630114	This course covers interesting topics	2020	https://web.mitsgw
Adhoc & Sensor Based Networks	630115	Students will learn about a variety of	2020	https://web.mitsgw
Information Security & Systems	630116	This course would cover the	2020	https://web.mitsgw
Soft Computing	800105	Implementation of advanced algorithm	2020	https://web.mitsgw
Blockchain Technology	800106	Course will cover the basic design	2020	https://web.mitsgw
Lab-I (IoT Lab)	630118	Understanding various sensors and	2020	https://web.mitsgw
Artificial Intelligence: Knowledge	160654	The course introduces the variety of	2020	https://web.mitsgw
Social Networks	160851	Analysis of Modern Social Network	2020	https://web.mitsgw
Privacy and Security in Online Social Media	160852/90	Privacy and Security Analysis of	2020	https://web.mitsgw
Introduction to internet of things	900619	This course will cover different	2020	https://web.mitsgw
Data Science for Engineers	900620	Mathematical foundations required for	2020	https://web.mitsgw
Social Networks	900621	Analysis of Modern Social Network	2020	https://web.mitsgw
Data Mining & Warehousing	900116	The course will cover the fundamentals	2020	https://web.mitsgw
Digital Logic Design	230201	This course is associated with digital	2020	https://web.mitsgw
Advanced Topics in Data Mining &	630212	The course will cover the fundamentals	2020	https://web.mitsgw
Data Science for Engineers	630214	Mathematical foundations required for	2020	https://web.mitsgw
Privacy and Security in Online Social Media	630215	Privacy and Security Analysis of	2020	https://web.mitsgw
Cloud Computing and Distributed System	630216	Clouds, Virtualization and Virtual	2020	https://web.mitsgw
Introduction to Internet of Things	800206	This course will cover different	2020	https://web.mitsgw
Equilibrium Stage Operation	170711	Technical Skills of Chemical Separation	2020	http://103.25.130.7
Industrial Pollution prevention and Control	170713	Summarization with industrial pollution	2020	http://103.25.130.7
Petrochemical Technology	170714	Comprehensive knowledge of	2020	http://103.25.130.7
Petroleum Processing Technology	900211	Application of petroleum technology in	2020	http://103.25.130.7
Industrial safety and hazards	900223	Fall tree analysis, EPA	2020	http://103.25.130.7
Optimization in chemical engineering	170851	Application of optimization techniques	2020	http://103.25.130.7
Plant Design and economics	170751	Application of economic analysis for the	2020	http://103.25.130.7
Chemical Process Safety	170752	Summarization of various process hazards	2020	http://103.25.130.7
Numerical Methods for Engineer's	170753	Application of various numerical methods	2020	http://103.25.130.7
Waste to Energy conversion	170852	Formulation of waste materials for	2020	http://103.25.130.7

Biomass conversion and biorefinery	170853	Exploration of various types of biomass	2020	http://103.25.130.7
Social Networks(DE)	150851	Tranaming kear-wgldr Network Datasets,	2020	https://web.mitsgw
Real Time Operating system(DE)	150852	Characteristics of Real-time systems,	2020	https://web.mitsgw
Reinforcement Learning(DE)	150853	Markov Decision Learning algorithms.	2020	https://web.mitsgw
Intellectual Property right	100008	Webinar Intellectual Property Rights.	2020	https://web.mitsgw
Summer interenship Project-III	150702	The primary purpose of doing an	2020	https://web.mitsgw
Creative Problem Solving	150703	Problem solving, Algorithm design, Data	2020	https://web.mitsgw
Data Mining & Warehousing(DE)	150712	Data Mining, Data warehouse and	2020	https://web.mitsgw
Practical Machine Learning with	150751	SQL, Flow, Machine Learning, Data	2020	https://web.mitsgw
Scalable Data Science (DE*)	150752	Probability, Linear algebra,	2020	https://web.mitsgw
Network Security (oc)	900209	Security Principles and Attacks, Basic	2020	https://web.mitsgw
Data Mining & Warehousing (oc)	900210	Data Mining, Data warehouse and	2020	https://web.mitsgw
Computer Network(oc)	900222	Networking protocols, OSI Reference	2020	https://web.mitsgw
IT Workshop	150111	Evolution of internet, Cyber security and	2020	https://web.mitsgw
Introduction to Computer Science and Design	290101	Computers and its components, von-	2020	https://web.mitsgw
Introduction to Computer Programming	290102	Basic input/output, variables, Problem	2020	https://web.mitsgw
Algorithms Design Techniques and Analysis	620211	Algorithms Analysis, Asymptotic	2020	https://web.mitsgw
Advanced Topics in Data Mining &	620212	Workshop on machine Learning(101)	2020	https://web.mitsgw
Image Processing and Retrieval Techniques	620123	Two Days workshop on	2020	https://web.mitsgw
Internet of Things	620214	Industrial Implementation	2020	https://web.mitsgw
Deep Learning	620215	Introduction to Neural networks,	2020	https://web.mitsgw
Cloud Computing	620216	Cloud architecture standards and	2020	https://web.mitsgw
Social Networking	620217	Tranaming kear-wgldr Network Datasets,	2020	https://web.mitsgw
Lab-II	620221	Lab Based Implementation	2020	https://web.mitsgw
Self Learning/ Presentation	620222	Self Learning based evaluation	2020	https://web.mitsgw
Distributed Computing	620112	Evolution of Distributed Computing	2020	https://web.mitsgw
High Speed Networks	620113	Frame relay networks, Asynchronous	2020	https://web.mitsgw
Adhoc and Sensor Based Networks	620115	MAC & ROL ATM ROAD	2020	https://web.mitsgw
Computer Architecture and Parallel Processing	620117	NETWORKS TRANSPORT & QOS	2020	https://web.mitsgw
Soft Computing	620118	PERFORMANCE MEASURES,	2020	https://web.mitsgw
Blockchain Technology	620119	Fuzzy logic and its applications,	2020	https://web.mitsgw
Machine Learning using Python	620120	Blockchain technology and its	2020	https://web.mitsgw
Mathematical Foundations	680111	Applications of Machine Learning,	2020	https://web.mitsgw
Management Functions and Oral & written	680115	Apply the concepts of mathematics to	2020	https://web.mitsgw
Communication	680115	Implement professional work habits	2020	https://web.mitsgw

Lab – I (Object Oriented Programming Lab)	680116	Develops object oriented application	2020	https://web.mitsgw
Lab – II (DBMS Lab)	680117	Construct database application system	2020	https://web.mitsgw
Computer Graphics & Multimedia	680215	Demonstrate their ability to use modern	2020	https://web.mitsgw
Corporate Planning	680219	Select and apply current technologies to	2020	https://web.mitsgw
Java Programming Lab	680225	Employ a hierarchy of Java classes to	2020	https://web.mitsgw
Business Programming Laboratory	680227	Demonstrate Rich Web Application and	2020	https://web.mitsgw
Artificial Intelligence and Applications	680311	Explore the latest trends in soft	2020	https://web.mitsgw
Management Support Systems	680312	Apply various information systems like	2020	https://web.mitsgw
Lab-V (Python Programming Lab)	680323	Implement Python programs using basic	2020	https://web.mitsgw
Media (Elective IV)(SWAYAM)	210508	different aspects of visual	2020	https://web.mitsgw
Structural System in Architecture (Elective V)	210751	fundamental aspects of structural	2020	https://web.mitsgw
planning (SWAYAM)	210752	smart cities in a more comprehensive	2020	https://web.mitsgw
Management (UGDM) (SWAYAM)	210753	the city and regional level organizations	2020	https://web.mitsgw
Applications (SWAYAM)	210754	fundamental aspects of structural	2020	https://web.mitsgw
Mini Project	130111	management and presentation spheres.	2020	https://web.mitsgw
Renewable Energy Systems	130712	Renewable energy generation	2020	https://web.mitsgw
IoT in Microgrid	130713	efficient electric grid by enabling the	2020	https://web.mitsgw
Intelligent Sensors and Instrumentation	130714	instrumentation	2020	https://web.mitsgw
Control Systems Lab	130701	in multi disciplinary teams through	2020	https://web.mitsgw
Summer Internship Project -III	130702	Learn and sharpen in-demand technical	2020	https://web.mitsgw
Creative Problem Solving lab	130703	Acquaint with the conceptual as well as	2020	https://web.mitsgw
Introduction to Smart Grid	130751	Power System generations and intrgations	2020	https://web.mitsgw
Advances in UHV Transmission & Distribution	130752	Emphasizes learning and understanding	2020	https://web.mitsgw
Electrical Distribution System Analysis	130753	electrical engineering	2020	https://web.mitsgw
Element Analysis	130754	Understand and apply FEM effectively	2020	https://web.mitsgw
Applications of Electrical Equipment & Motors	900205	Build the concepts of various types of	2020	https://web.mitsgw
IoT in Microgrid	900216	Provide an overview of microgrid and its	2020	https://web.mitsgw
Electric Vehicle	900217	for the design, development, and test of	2020	https://web.mitsgw
Reliability and Vibration Lab	120701	To check performance of different	2020	https://web.mitsgw
Summer Internship Project-III	120702/1	Hands on sessions for skill development	2020	https://web.mitsgw
Creative problem solving	120703/1	Optimization of machine,	2020	https://web.mitsgw
Basic of Finite Element Analysis	120712	The concepts of Mathematical	2020	https://web.mitsgw
Foundation of Computational Fluid	120751	In-depth understanding of concepts	2020	https://web.mitsgw
Introduction to Composites	120752	Develop the concepts of various	2020	https://web.mitsgw

Advanced Machining Processes	120753	Aims at bringing the students up-to-	2020	https://web.mitsgw
Industrial Safety Engineering	120754	Skill to reduce the occurrence of	2020	https://web.mitsgw
Automotive Maintenance Lab	190701	Vehicle Service Procedure	2020	https://web.mitsgw
Farm Machinery	190751	Design of horticultural machines and	2020	https://web.mitsgw
Mechanism and Robot Kinematics	190752	Robot mechanism and its	2020	https://web.mitsgw
Introduction to Mechanical Vibration	190753	Robot mechanism and its	2020	https://web.mitsgw
Industrial Safety Engineering	190754	Skill to reduce the occurrence of	2020	https://web.mitsgw
Industrial Automation	900203	Different machine control systems	2020	https://web.mitsgw
Solar Energy	900204	Application of solar systems for	2020	https://web.mitsgw
Engineering Materials for Industrial	900214	Different materials and their behavior	2020	https://web.mitsgw
Maintenance Engineering	900215	The Maintenance strategies and overall	2020	https://web.mitsgw
Professional Development	120802/1	To motivate students to participate in	2020	https://web.mitsgw
Quality Design and Control	120851	Statistical methods used in industries	2020	https://web.mitsgw
Robotics: Basics and Selected Advanced	120852	Key elements and constituents of a	2020	https://web.mitsgw
Steam and Gas Power Systems	120853	Develop understanding of the steam	2020	https://web.mitsgw
Waste to Energy Conversion	900605	Analyze and design the basic mobile	2020	https://web.mitsgw
Product Design and Manufacturing	900609	Skills to translate the ideas into the	2020	https://web.mitsgw
Automatic Control	900610	Understand the fundamental and	2020	https://web.mitsgw
Mechatronics	900611	Skill sets needed in the	2020	https://web.mitsgw
Elements of Solar Energy Conversion	900612	Introduce the basic concepts	2020	https://web.mitsgw
Traditional and Non-Traditional	900613	Formulation of design problems as	2020	https://web.mitsgw
Internship/Project	120801/1	Working on field based projects	2020	https://web.mitsgw
Wheeled Mobile Robots	190851	Computational and motion control	2020	https://web.mitsgw
Steam and Gas Power Systems	190852	Analysis of vapour power cycle,	2020	https://web.mitsgw
Viscous Fluid Flow	120654	In-depth understanding of concepts	2020	https://web.mitsgw
Quality Design and Control	560214	Statistical methods used in industries	2020	https://web.mitsgw
Traditional and Non-Traditional	560215	Use of latest optimization technique for	2020	https://web.mitsgw
Product Design and Manufacturing	560216	Skills to translate the ideas into the	2020	https://web.mitsgw
Material characterization	560217	Microstructural characterization of	2020	https://web.mitsgw
Generative Design for Additive	560218	3D Printing, Additive	2020	https://web.mitsgw
Introduction to Operations Management	800210	Efficient business operations,	2020	https://web.mitsgw
Product Design & Development	800111	Skills to translate the ideas into the	2020	https://web.mitsgw
Tools in Scientific Computing	800211	Hands-on training various tools	2020	https://web.mitsgw
Nature and properties of materials	120656/9	Materials and its behavior for different	2020	https://web.mitsgw

Solar PV System: Design and Economics	130614	understanding in solar PV system	2020	https://web.mitsgw
Biomedical Instrumentation	900115	of bioelectrical signals, working with	2020	https://web.mitsgw
Introduction to Internet of Things	130851	Learn about Basics of IoT, Components	2020	https://web.mitsgw
Waste to Energy Conversion	0605	Deals with the production of energy	2020	https://web.mitsgw
and Biomass Energy Systems	0607	Generation using Renewable Energy	2020	https://web.mitsgw
Fuzzy Logic and Neural Networks	900302	Provide the various fundamental	2020	https://web.mitsgw
Non Conventional Energy Resources	900608	alternate energy resources, its chalanges	2020	https://web.mitsgw
Internship/Project	130801	Get opportunity to enhance the skills,	2020	https://web.mitsgw
Professional Development	130802	Taking steps to learn relevant skills,	2020	https://web.mitsgw
Estimating, Costing & Contracting	110501	rate analysis, preparation of detailed	2019	https://web.mitsgw
Minor Project - I	110506	students work on various field based	2019	https://web.mitsgw
Summer Internship Project - II	110507	students work on improving their soft	2019	https://web.mitsgw
Water Resources Engineering	110406	Flood estimation, hydrograph analysis,	2019	https://web.mitsgw
Solid Waste Management	110612	collection of solid waste, treatment and	2019	https://web.mitsgw
Maintenance & Repair of Concrete Structures	110651	Repair of Concrete Structures	2019	https://web.mitsgw
Geotechnical Engineering - II (Foundation	110652	Shallow foundations, deep foundations,	2019	https://web.mitsgw
Energy Efficiency, Accoustics & Day lighting	110653	design of energy effeicient buildings	2019	https://web.mitsgw
Disaster Management	100007	disaster impacts, disaster risk reduction	2019	https://web.mitsgw
Minor Project - II	110607	students work on various field based	2019	https://web.mitsgw
Neural Network and Fuzzy Systems	110607	machine learning approach that find the	2019	https://web.mitsgw
Advanced Power Electronics & Control	EE062011	power electronics in terms of switches,	2019	https://web.mitsgw
integrated Circuits, MOSFETs, Op-Amps and	EE062011	Understanding rectification, parameters,	2019	https://web.mitsgw
their Applications	EE062011	high power converters used in the	2019	https://web.mitsgw
High Power Multilevel Converter	EE062011	Design the fuzzy logic and artificial	2019	https://web.mitsgw
Intelligent Control	900104	Neural Network or hardware and software	2019	https://web.mitsgw
Embedded Systems	900105	Classify the Optical sources and	2019	https://web.mitsgw
Optical Communication	140611/20	Antenna theory with Dielectrics or ground	2019	https://web.mitsgw
Antenna and Wave Propagation	140612/20	modern signal telecommunication	2019	https://web.mitsgw
Telecom Switching and Networks	140613/20	optical speed up systems like DCFN, DDN	2019	https://web.mitsgw
Spread Spectrum Communications and	140617/20	Design low power digital integrated	2019	https://web.mitsgw
Jumping	140652/20	Deep learning or neural net fuzzy	2019	https://web.mitsgw
Digital IC Design	140653/20	networks, machine learning algorithms	2019	https://web.mitsgw
Fuzzy Sets, Logic and Systems & Application	0653	Analysis on Real Data Set	2019	https://web.mitsgw
Data Analytics with Python	160651	The course introduces the variety of	2019	https://web.mitsgw
Introduction to Machine Learning	160652	Design and development of efficient	2019	https://web.mitsgw
Programming Lab	160405/16			

Fuels & Combustion	900109	Combustion calculation, solid briquetting	2019	https://web.mitsgw
Nano Technology	900110	Combing effect nano particles and its	2019	https://web.mitsgw
Network and Web Security (DE)	150611	Security Principles, Cryptography, Hash	2019	https://web.mitsgw
Image Processing (DE)	150612	Image processing systems, image	2019	https://web.mitsgw
Data Analytics with Python (DE*)	150651	Online national workshop on Data	2019	https://web.mitsgw
Introduction to Machine Learning (DE*)	150652	(in)ter Learning; ML model, model	2019	https://web.mitsgw
Python Programming	900107	Python introduction, tuples and lists,	2019	https://web.mitsgw
Minor Project-I	150505	In this course the students apply the	2019	https://web.mitsgw
Summer interenship Project-II(Evaluation)	150506	The primary purpose of doing an	2019	https://web.mitsgw
Architeecture)	210506	minimize the negative environmental	2019	https://web.mitsgw
Power Plant Engineering	120651	Study of plant requirement of	2019	https://web.mitsgw
Fundamental of Welding Science and	120652	Welding behavior of materials	2019	https://web.mitsgw
Gear and Gear unit Design: Theory and	120653	Different aspects of gear design	2019	https://web.mitsgw
Properties of Materials (Nature and	120655	Materials and its behavior for different	2019	https://web.mitsgw
Fundamental of combustion for propulsion	190651	Combustion behavior and its	2019	https://web.mitsgw
Robotics and Control: Theory and Practice	190652	Robot anatomy	2019	https://web.mitsgw
Fundamental of Automotive System	190653	Basics of automotive system and	2019	https://web.mitsgw
Robotics	900101	Robot anatomy and its application	2019	https://web.mitsgw
Product Design	900102	Product requirement and its different	2019	https://web.mitsgw
Summer Internship Project -II	130506	Learn and sharpen in-demand technical	2019	https://web.mitsgw
Industrial Automation	130612	Understand automation technologies and	2019	https://web.mitsgw
Transducers & Sensors	130613	Understand the constructions and	2019	https://web.mitsgw
Non Conventional Energy Resources	130651	Understand the need of harnessing	2019	https://web.mitsgw
DC Power Transmission Systems	130652	Gives an introduction to the DC power	2019	https://web.mitsgw
Fuzzy Logic and Neural Networks	130653	Provide the various fundamental	2019	https://web.mitsgw
Energy Conservation & Management	900103	Various terminology, rules &	2019	https://web.mitsgw
Building Planning & Design	110302	Green Buildings, NBC provisions,	2018	https://web.mitsgw
Software Lab	110306	drawing of building elements on	2018	https://web.mitsgw
Summer Internship Project - I	110308	Students work on in house projects	2018	https://web.mitsgw
Railway, Bridge & Tunnel Engineering	BCEL704	geometrical design, curves, railway stations,	2018	https://web.mitsgw
Geotechnical Engineering	110402	permeability of soil, stress distribution in	2018	https://web.mitsgw
Survey Practice Lab	110407	Traversing by total station, Profiling of	2018	https://web.mitsgw
Electronic System Design	BELL604/ BELL604	multidisciplinary design issues of	2018	https://web.mitsgw
Data Structure	BELL604/ BELL604	Organization and management of data	2018	https://web.mitsgw

Integrated Circuit	BEEEL610	Design of Complex IC design	2018	https://web.mitsgw
Microcontroller and Embedded System	BEEEL611	Controlling unit of processor	2018	https://web.mitsgw
Neural Network and Fuzzy Systems	BEEEL612	Machine learning approach that find the	2018	https://web.mitsgw
Image Processing and Pattern Recognition	BEEEL808	Diagnosis of diseases and analysis of	2018	https://web.mitsgw
Nanotechnology	BEEEL809	Development tools and steps for	2018	https://web.mitsgw
Biomedical Instrumentation	BEEEL900	Measurement of biological signals like	2018	https://web.mitsgw
Cyber Security	100004	This course would emphasize on	2018	https://web.mitsgw
Multiphase flow	BCHL704	Simultaneous flow of multiphase	2018	https://web.mitsgw
Process Piping Design	BCHL705	Bents, joints and fitting in piping	2018	https://web.mitsgw
Environmental Engineering(DE-6)	BCHL804	Solid, Liquid waste disposal	2018	https://web.mitsgw
Environmental Engineering Lab	BCHP806	Proximate ultimate analysis	2018	https://web.mitsgw
Chemical Synthesis Lab	170306	Synthesis of different chemicals	2018	https://web.mitsgw
Process Control Lab	170407	Flow controllers, level control	2018	https://web.mitsgw
Image Processing	BCSL 801	Image processing systems, image	2018	https://web.mitsgw
Data Warehouse and Data Mining	BCSL 802	Data Mining, Data Warehouse and	2018	https://web.mitsgw
Neural Networks & Fuzzy Systems	BCSL 803	Fuzzy Sets, Fuzzy Reasoning, Fuzzy	2018	https://web.mitsgw
Internet of Things and Application	BCSL 804	Planning of Internet of things, Organized	2018	https://web.mitsgw
Major Project-II	BCSD 805	Project based Learning, Evaluation	2018	https://web.mitsgw
Artificial Intelligence and Expert Systems	BCSL 701	KNOWLEDGE AND REASONING,	2018	https://web.mitsgw
Distributed Systems	BCSL 702	UNCERTA IN KNOWLEDGE AND	2018	https://web.mitsgw
Digital Forensics	BCSL 703	Distributed Shared Memory, Distributed	2018	https://web.mitsgw
Adhoc Networks	BCSL 704	(Noted by syllabus)	2018	https://web.mitsgw
E-Commerce	BCSL 705	MANET, MANET (MAC, Routing),	2018	https://web.mitsgw
Grid Computing	BCSL 709	E-commerce and its Technological	2018	https://web.mitsgw
Natural Language Processing	BCSL 710	Grid Architecture, Open Grid Service	2018	https://web.mitsgw
Software Testing and Quality Assurance	BCSL 711	NLP tasks in (syntax, semantics, and	2018	https://web.mitsgw
Agile Methodology	BCSL 712	Software Structure and Software	2018	https://web.mitsgw
Programming Lab	150405	Fundamentals of Agile, Agile Scrum	2018	https://web.mitsgw
Object Oriented Programming and Methodology	150304	Three week Work Shop under linux	2018	https://web.mitsgw
Hardware lab	150305	Object Oriented Concepts, programming	2018	https://web.mitsgw
Self Learning Presentation(SWATAM/ NPTEL MOOC)	150306	Hardware components, Obstructions,	2018	https://web.mitsgw
Image Processing and Retrieval Techniques	620301	Bus, Memory Devices	2018	https://web.mitsgw
Network Security	620302	Self Learning through MOOC courses	2018	https://web.mitsgw
Elective-II (Vastu)	AR606	Denosing with different noise models,	2018	https://web.mitsgw
		Attacks, Services and mechanisms,	2018	https://web.mitsgw
		Security Attacks, Security Services	2018	https://web.mitsgw
		the city and regional level organizations	2018	https://web.mitsgw

Elective-IV(Product Design)	AR804	problems by prioritizing the consumer's	2018	https://web.mitsgw
Gas Dynamics	BMEL-	Behaviour of gas under dynamic	2018	https://web.mitsgw
Material Handling systems and Equipment	BMEL-	Industrial material handling	2018	https://web.mitsgw
Off Road Vehicles	BAUL-	Vehicle designing and its	2018	https://web.mitsgw
Advance Welding Technology	BMEL-	Latest welding techniques for	2018	https://web.mitsgw
Optimization Techniques	BMEL-	To optimize machine/process with	2018	https://web.mitsgw
Maintenance Engineering	BMEL-	To schedule different maintenance	2018	https://web.mitsgw
Project Management	BMEL-	To manage activities with different	2018	https://web.mitsgw
Tyre Technology	BAUL-	different types of tyre,	2018	https://web.mitsgw
Quality Assurance	BAUL-	To perform different quality test	2018	https://web.mitsgw
Power System Economics	A	Imbibe different practical issues involve	2018	https://web.mitsgw
Electrical Industrial Safety & Maintenance	BEEP806	Learn the techniques for ensuring that	2018	https://web.mitsgw
Basic Civil Engineering & Mechanics	100205	Building Materials, applications of	2017	https://web.mitsgw
Construction Planning & Management	BCEL501	time cost optimization using network	2017	https://web.mitsgw
Traffic Engineering	BCEL502	traffic studies, traffic planning	2017	https://web.mitsgw
Civil lab	BCEP507	mix design, SPT test	2017	https://web.mitsgw
Solid Waste, Air & Noise Pollution	BCEL602	solid waste management, air quality	2017	https://web.mitsgw
Environmental Impact Assessment & Ethics	BCEL603	Planning & developing of EIA reports	2017	https://web.mitsgw
Optimization techniques	DETE507	Optimization approach for mathematical	2017	http://103.25.130.7
Renewable energy resources	DETE509	working approach of various renewable	2017	http://103.25.130.7
Mechatronics	DETE510	energy resources	2017	http://103.25.130.7
ATM Networks	DETE511	Design of High Performance system	2017	http://103.25.130.7
Selected Topics in Communication	DETE512	Design of Network for data transmission	2017	http://103.25.130.7
CMOS Technology	DETE709	various communication approach for	2017	http://103.25.130.7
Data Mining and Warehousing	DETE710	data transfer	2017	http://103.25.130.7
Electromagnetic Fields	DETE711	IC Design using CMOS	2017	http://103.25.130.7
Basic Computer Engineering	DETE712	Database management	2017	http://103.25.130.7
Software Engineering	DETE713	Data transfer using EM wave	2017	http://103.25.130.7
Network Security	100203	This course deals with programming	2017	https://web.mitsgw
Fluidization engineering	900108	This course would be focused on the	2017	https://web.mitsgw
Nano technology	900209	This course would cover the	2017	https://web.mitsgw
Chemical Technology Lab	BCHL501	Inceptient fluidization	2017	https://web.mitsgw
Polymer Technology	BCHL502	Utilization of nano particle by using	2017	https://web.mitsgw
Parallel Processing(E-II)	BCHP507	Recent Technology	2017	https://web.mitsgw
	BCHL603	Synthesis of different chemicals	2017	https://web.mitsgw
	BCHL601	Application of Polymer by using	2017	https://web.mitsgw
	BCSL601	Multi programming and Time Sharing, Principles of Distributed System	2017	https://web.mitsgw

Information Theory & Coding (E-II)	BCSL609	Entropy, its characterization and related	2017	https://web.mitsgw
Cloud Computing (E-II)	BCSL610	Two Days Workshop on Big Data and	2017	https://web.mitsgw
Mobile Computing	BCSL602	Personal Communication Services (PCS),	2017	https://web.mitsgw
Software Project Management	BCSL603	PROJECT PLANNING, PROJECT	2017	https://web.mitsgw
Network & web Security	BCSL605	Security Principles, Cryptography, Hash	2017	https://web.mitsgw
Minor Project	BCSP606	In this course the students apply their	2017	https://web.mitsgw
Self Study	BCSS607	Self Study based Course	2017	https://web.mitsgw
Seminar/ Group Discussion	BCSS608	Evaluation based on seminar	2017	https://web.mitsgw
Principle of management & Economics	BCSL501	Introduction to Management, Evolution	2017	https://web.mitsgw
Internet Technology & web Designing(E-I)	BCSL509	Internet technology and Protocol,	2017	https://web.mitsgw
Management Information System(E-I)	BCSL510	Management information systems, Mail	2017	https://web.mitsgw
Lab(Java Programming)	BCSP506	Java programming Basics, Object-	2017	https://web.mitsgw
Self Study	BCSS507	Self Study based Course	2017	https://web.mitsgw
Seminar/ Group Discussion	BCSS508	Evaluation based on seminar	2017	https://web.mitsgw
Advance Database Management System	620201	Overview of storage and indexing, Hash	2017	https://web.mitsgw
Soft Computing	620202	Richard workshop on Soft Computing	2017	https://web.mitsgw
Advance Algorithms and Design	620203	Algorithmic Analysis, Asymptotic	2017	https://web.mitsgw
Advance Topics in Data Mining &	620204	Data Mining, Applications, Data Mining	2017	https://web.mitsgw
Adhoc & Sensor Based Networks	620205	MAC & ROUTING IN AD HOC	2017	https://web.mitsgw
Theoretical Foundation of Computer	620101	NETWORKS, TRANSPORT & QOS,	2017	https://web.mitsgw
Distributed System	620102	Distributed Computing Model,	2017	https://web.mitsgw
Advanced Computer Architecture	620103	Processor Design Concepts, Distribution	2017	https://web.mitsgw
Advanced Computer Networks	620104	Delayed Communication Architecture,	2017	https://web.mitsgw
Mobile Computing & M-Commerce	620105	Overview of wireless telephony, Cellular	2017	https://web.mitsgw
SAD and Software Engineering	680101	Discover what the business is trying to	2017	https://web.mitsgw
Mathematical Foundation of Computer Science	680102	Apply the concepts of mathematics to	2017	https://web.mitsgw
Programming and Problem Solving in C	680103	Use the techniques, skills and modern	2017	https://web.mitsgw
Computer Organization and Assembly	680104	Write Assembly language programs.	2017	https://web.mitsgw
Language Programming	680105	Implement professional work habits	2017	https://web.mitsgw
Communication Skills	680105	Write the code to access registers and	2017	https://web.mitsgw
Assembly Language Programming Lab	680107	Develop multimedia virtual reality	2017	https://web.mitsgw
Multimedia Systems	680201	Applying the concepts of the studied	2017	https://web.mitsgw
Computer Oriented Numerical & Statistical	680204	Develop a broad understanding for	2017	https://web.mitsgw
Accounting & Management Control	680205	Execute appropriate sorting/staffing	2017	https://web.mitsgw
Data Structure Programming Lab	680206	techniques for solving problems	2017	https://web.mitsgw

Programming Lab in Computer Graphics	680207	Design and implement models of	2017	https://web.mitsgw
Computer Oriented Optimization	680301	Evaluate and implement suitable	2017	https://web.mitsgw
Object Oriented Methodology & C++	680303	Design the solution for selected	2017	https://web.mitsgw
Database Management System	680304	Analyze an information storage problem	2017	https://web.mitsgw
Managerial Economics	680305	Develop an understanding of	2017	https://web.mitsgw
Minor Project-I(VB+MySql)	680306	Construct database application system	2017	https://web.mitsgw
C++ Programming Lab	680307	Design the classes and constructs for	2017	https://web.mitsgw
Theory of Computation	680401	Demonstrate key notions, such as	2017	https://web.mitsgw
Artificial Intelligence and Machine Learning	680402	Develop intelligent algorithms for	2017	https://web.mitsgw
Unix and Shell Programming (Elective-I)	680403	Identify Unix utilities to create and	2017	https://web.mitsgw
Java Programming and Technologies	680404	Implement java programs comprising	2017	https://web.mitsgw
Computer Networks and Communication	680405	Justify the use of cryptography, security	2017	https://web.mitsgw
Minor Project-II (Java and MySQL)	680406	Identify classes, objects, members or a	2017	https://web.mitsgw
Programming Lab in C++ and Shell	680407	Design a text file with the vi text editor	2017	https://web.mitsgw
Analysis and Design of Algorithms	680501	Demonstrate a number of standard	2017	https://web.mitsgw
Network and Cyber Security	680502	Evaluate appropriate resources to stay	2017	https://web.mitsgw
Web Technologies and Cloud Computing	680503	Explore some important cloud	2017	https://web.mitsgw
Elective-I (.NET Technologies and C#)	680504	Develop web-based distributed	2017	https://web.mitsgw
Elective-II (Data Warehousing and Mining)	680505	Select appropriate DM, ASD, NIFT, SOL	2017	https://web.mitsgw
Minor Project-III (web Based Application)	680506	Recognize the professional ethics and	2017	https://web.mitsgw
Programming Lab in PHP and web	680507	Demonstrate web application using PHP	2017	https://web.mitsgw
Technologies	680507	Recognize the professional ethics and	2017	https://web.mitsgw
System Development Project	680601	Recognize the professional ethics and	2017	https://web.mitsgw
Elective-I (Graphic Design)	AR506	changing trends and lifestyles	2017	https://web.mitsgw
Elective-III (Conservation)	AR705	conservation, its techniques and develop	2017	https://web.mitsgw
Inclusive Urban Planning (Elective -I)	670301	and Needs, Access to Shelter, Services	2017	https://web.mitsgw
Management (Elective - II)	670302	area of planning & understanding of	2017	https://web.mitsgw
Production & Operation & Management	MEL705(	Industrial operations, strategy, time	2017	https://web.mitsgw
Non Conventional Energy Sources	MEL705(	Use of alternative energy,	2017	https://web.mitsgw
Material & Handling	MEL705(	Industrial material handling	2017	https://web.mitsgw
Computer Integrated Manufacturing	MEL	To make machine smart which	2017	https://web.mitsgw
Machine Tool Technology	MEL705(	Design of different machine tools for	2017	https://web.mitsgw
Emerging Technologies & Management	MEL804(	Latest management technologies to	2017	https://web.mitsgw
Statistical Quality Control / Statistical	MEL804	To inspect product using SQC	2017	https://web.mitsgw
Maintenance Management	MEL804	Maintenance of different machining,	2017	https://web.mitsgw

