



COMPLIANCE/ACTION TAKEN REPORT ON DECISIONS OF IQAC ON MAECH03rd2020

In Compliance to the decisions taken by IQAC in the meeting on 03rd March 2020, following actions have been taken:

1. Actions for promoting a culture of meritocracy in the institute

In compliance to Item no 2 regarding the meritocracy initiative, the IQAC in its next meeting on 30th June 2020, vide Item No 22 recommended, the name of **Mr. Atul Chauhan**, Assistant Registrar for the award in terms of certificate & Financial Support of an Amount of Rs. 51,000/- for his significant contribution towards IT support during COVID-19 Pandemic crisis to the institution to embark upon online teaching learning process to maintain continuity of the studies of the students and take every effort for students for easy access to the quality learning resource & internal assessment through Institute MOODLE.

The IQAC decided to launch incentives and motivations to faculty/staff of Institution for research, innovations and development activities or for any other significant contributions towards better governance or any "one of its kind" activity or achievement. It was proposed to annually award in terms of certificate & Financial Support of an Amount of Rs. 51,000/- to the "Best Employees of the Institute".

2. The draft Internship policy of the Institute

In compliance to prior deliberations regarding implementation of the Flexible Curriculum the provision of **3 mandatory internships** out of which **two internships of 60 and 90 Hours are being conducted in-house** by the institute faculty during the summer vacations.

The third internship for 150 Hours (about a month) is to be undertaken at a relevant industry after the VI semester. Also there is a provision of registering for an internship for the full duration of the 8th semester at an industry which is approved by the institute, department and the T&P cell

In this regard a committee has been constituted to draft a clear policy for

- (i) The III summer internship at a relevant industry after VI semester
- (ii) Provision of a full 8th semester internship

The policy was reviewed by the IQAC and necessary suggestions and directions were given to the Training & Placement Cell. The Internship Coordinators were appointed vide order no 345 dated 10.02.2020.





3. Mechanism developed to compute the Administrative Efficiency Index (AEI) of the departments

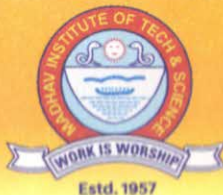
In compliance to Item no 8 regarding about computation of AEI, the Item no 12 the IQAC in its meeting on 29th August 30th June 2020, vide Item No 22

As previously discussed and approved in the meeting of the IQAC the **Administrative Efficiency Index (AEI)** for the Jan-June 2020 session has been computed.

- The house reviewed the status of Administrative Efficiency Index (AEI) of various academic departments, following are the details:
- A total of **30 parameters** were used for the computation of **AEI out of 10**. The department wise scores are listed here.

Rank	Name of the Department	AEI (out of 10)
1.	CSE & IT	9.14
2.	Applied Sciences	8.05
3.	Electrical Engineering	7.88
4.	Electronics/Electronics & Telecommunication	7.81
5.	Chemical Engineering	7.67
6.	Humanities	7.20
7.	Civil Engineering	6.96
8.	Mechanical & Automobile Engineering	6.96
9.	Biotechnology	6.71
10.	Architecture	6.44





MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

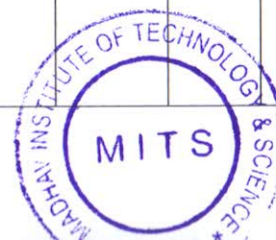
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)

Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

ADMINISTRATIVE EFFICIENCY INDEX (AEI) (Session : January to June 2020) No of parameters: 31

S. No.	Routine Information/Data (Soft Copy of report or intimation to be send Dean Academics E-Mail according to dead line)	Dead Line Date(s)	Civil Engg.	Mech./ Auto.	Elect. Engg.	Elex./ ET	CSE & IT	Chem. Engg.	BT	Humanities	Applied Sci.	Arch.	Remark (if any)
Session : January to June 2020													
1	Uploading Newsletter on the department web page (Quarterly) (1. July to Sep., 2. Oct. to Dec., 3. Jan. to March & 4. April to June)	30-01-2020	10	10	10	10	10	10	0	0	10	10	
2	Updated quarterly APR (Annexure-X : APR Format) (30th January, 30th April, 30th July, 30th October) HOD/ Faculty In-charge	30-01-2020	10	10	0	5	10	5	0	0	0	1	
3	Question Paper Analysis based on COs, difficulty level, etc. (30th July & 30th January)	30/01/2020	10	10	10	10	10	10	10	10	10	0	
4	Report of Workshop to Discuss, Analyze and Review the Exiting End Semester Examination Question Papers (Signed Hard Copy)	03/02/2020	10	5	5	10	10	5	5	10	10	0	
5	Report of Orientation Programme for II to IV Year (1. An Introduction to OBE by OBE Coordinators 2. Importance of Self-learning through SWAYAM 3. Career Opportunities/how to prepare for GATE 4. Importance of Feedback on (CO, PO, Faculty Feedback, Curriculum) in accreditation and quality improvement 5. Importance of attending special classes for remedial purposes 6. Institute MOODLE and the activities on MOODLE 7. Efforts made by institute for students' overall development like student chapters, clubs etc. 8. Importance of taking part in technical activities outside institute/submission of such documents to class coordinator 9. Introduction to schemes/Courses/ Evaluation Process (II Year students should be briefed about the Flexible Curriculum & various electives etc. by a suitable faculty member 10. Assigning projects to Final Year students based on Industrial/societal needs 11. Importance of internships 12. Any other information which the department feels is required to be clarified to the students to avoid complications and issues later (Regarding attendance, mid-term tests, tips for faring well in examinations etc.)	20/02/2020	10	1	3	3	10	0	0	NA	NA	0	



Handwritten signature/initials



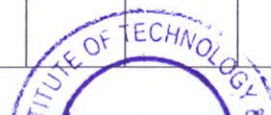
MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)

Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

6	Report of One day In-house Workshop "Innovative and Interactive Teaching Learning Practices" , on or before 16th February, 2020 (Signed Hard Copy)	20/02/2020	1	0	0	10	10	10	10	10	10	0	
7	Report of Parent-Teacher Association (PTA) is to be constituted at department level for each department. (at least one meeting per semester), HoD	24/02/2020	1	5	3	0	10	0	0	NA	0	10	
8	Report of Departmental Alumni Association (DAA) is to be constituted at the department Level, HoD	24/02/2020	1	0	0	5	10	0	0	NA	0	10	
9	Report of Parent Satisfaction Survey (Format in Annexure-VIII) (PTM after the First Mid-Sem Exam) Class coordinator through MOODLE during parent teacher meeting >25% Parents 10 Marks, >20% Parents 8 Marks, >15% Parents 6 Marks, >10% Parents 5 Marks, >5% Parents 4 Marks, <5% Parents 3 Marks	24/02/2020	0	0	10	3	10	0	0	NA	0	0	
10	Responses of Faculty Feedback (FF) through GOOGLE FORM during First Mid Sem Exam >60% Responses 10, >55% Responses 9, >50% Responses 8, >40% Responses 6, Else category Responses 2	-	3	10	10	10	10	10	3	3	5	3	
11	Report and List of Value Added Course Modules (30 hours duration) , At the beginning of each session, (Odd & Even both) Value Added Course Team constituted by the HoD (Report Submission : Odd Sem. - 01 to 05 Aug. and Even Sem. - 01 to 05 Feb.)	25/02/2020	0	0	1	0	10	0	0	NA	NA	0	
12	Time Table of Remedial Classes (Yes/No) If Time Table for Remedial Classes to be Displayed on Departmental Web Page in prescribed Format. Identifying absentees, poor performers, etc. of First Mid-Semester Exam and displaying their Names on Notice Board Within 10 days of completion of Mid-Semester Exams, Class Coordinators (Monitored by HoD)	28/02/2020	0	0	3	10	0	0	0	0	0	0	





MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)

Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

13	Action Taken Report on Student Faculty Feedback , (within 10 days of receiving the mail), HOD	07-03-2020	0	0	10	0	10	0	0	0	0	0	
14	Report of Six Monthly Review of Ph.D. Students by Research Advisory Committee on 7th March, 2020 (Signed Hard Copy)	Within a week	1	1	10	10	10	NA	NA	NA	10	10	
15	Action Taken Report on Academic Audit HOD/Faculty In-charge 15 days after Audit (Signed Hard Copy)	09/03/2020 & 16/03/2020	5	10	10	10	10	0	0	0	0	0	
16	Report of Student Feedback on Course Content/Curriculum (Format in Annexure-IV) (About 2-4 weeks before BoS meetings in April) Class coordinator through MOODLE	2 days before BoS Meeting	10	5	5	5	5	10	5	5	5	5	
17	Report of Teacher Feedback on Course Content/Curriculum (Format in Annexure-V) (About 2-4 weeks before BoS meetings in April) HOD/Faculty in-charge through MOODLE	2 days before BoS Meeting	10	5	5	5	5	10	5	5	5	5	
18	Responses of Faculty Feedback (FF) through GOOGLE FORM during Second Mid Sem Exam >60% Responses 10, >55% Responses 9, >50% Responses 8, >40% Responses 6, Else category Responses 2	-	5	10	10	10	5	10	10	5	10	5	
19	Uploading Newsletter on the department web page (Quarterly) (1. July to Sep., 2. Oct. to Dec., 3. Jan. to March & 4. April to June)	30-04-2020	10	10	10	10	10	10	0	0	10	10	
20	Report of Extension activities under NSS , Minimum 02 Activities during the Semester, NSS Unit MITS with Programme Officer (Nov./May)	15/05/2020	1	10	5	10	5	5	3	NA	3	3	
21	Weekly Report of Online Classes conducted during the Lockdown. (18th March to 14th June)	-	10	5	10	10	5	3	5	10	5	5	
22	No. of Online Classes Conducted during the Lockdown.	-	10	5	10	5	10	5	5	10	10	10	
23	Conduction of Online Internal Via-Voce during the Lockdown.	-	10	10	10	10	10	10	10	NA	10	10	



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)


Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

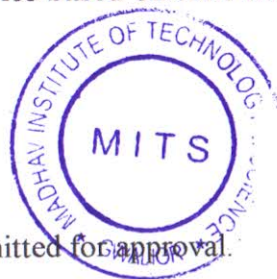
Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

24	Conduction of Online Quiz during the Lockdown.	-	5	5	10	10	10	5	5	5	5	3	
25	Conduction of Online Assignment during the Lockdown.	-	10	10	10	5	10	5	5	5	10	5	
26	Summer Internship Modules developed and conducted during the Lockdown.	-	10	10	10	5	10	10	0	10	10	10	
27	Feedback received on Summer Internship Programs during the Lockdown.	-	10	5	10	10	10	10	0	10	10	10	
28	Conduction of Finishing School Program during the Lockdown.	-	10	5	10	5	10	10	10	NA	NA	0	
29	Feedback of Finishing School Program during the Lockdown.	-	10	10	5	5	10	10	10	NA	NA	0	
30	Conduction of Online Remedial/Additional Classes during the Lockdown.	-	3	5	10	10	10	3	3	5	5	1	
31	Updated quarterly APR (Annexure-X : APR Format) (30th January, 30th June) HOD/ Faculty In-charge	30-06-2020	5	5	0	10	10	5	10	5	10	0	


Note :- Excellent, if received same day = 10; Very Good, if within 2-4 days = 5; Good, if within 5-7 days = 3; Average, if within 8-15 days = 1; Timely report not received after 15 days = 0

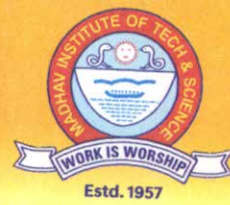
Compiled at Dean Academics Office based on time lines set at the beginning of Semester.


15/7/2020
Dr. Manjaree Pandit
(Dean Academic)



Submitted for approval.


15.7.2020
Dr. R.K. Pandit
(Director)



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)

Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

- Total number of students registered for SIP-I were 953. The feedback was given by 526 students.
- In SIP-II the soft skills module was developed and conducted in on-line mode.
- Total number of students registered for SIP-II was 980. The feedback was given by 622 students.

Module Number	Faculty coordinator	Module faculty coordinator	Module Name	Brief Description
1.	Electrical Engineering department: Prof.Rakesh Narvey & Prof.Himant Singh	Prof. Nipun Gupta (9713433109) & Prof. Tarun Shrivastava	Designing and modeling of Electrical Components	Hands on training to design different loading arrangements, types of wiring, constructional view of measuring components, types of winding in AC and DC machines, prototype modeling of free energy , DC generators, domestic switch board and their wiring connections, series board , Inverter wiring, cable sizing etc.
2.		Prof. G K Naveen Kumar & Prof. Shailendra Pratap Singh	Designing and modeling of Electronics Components	Verify network concepts of Kirchhoff's Current & Voltage Law, design prototype model of Half wave and full wave rectifier circuits, Design of dual polarity DC power supply and theorems using bread board, Design logic gates and verify concepts in breadboard and Verification of addition, subtraction, multiplication, half adder and full adder using bread board and programming of addition, subtraction and division problem in hexadecimal numbers.
3.		Prof.Punjan Dohare & Prof. Rahul Sagwal	Introduction to MATLAB programming for Engineering applications	Introduction to MATLAB working with special matrices and toolboxes. Variables, arrays, conditional statements, loops, functions and plots will be discussed.
4.		Prof.Aprajita Kumari & Prof. Shweta Kumari	Electricity usage for Domestic and Industrial application	Construction features of tube light, bulb, ceiling fan, cooler etc their operation and load calculation, Basics of generation, transmission , distribution, different voltage levels, types of AC and DC distribution, Power generation capacity in INDIA and abroad & its geographical distribution, Domestic and Industrial load calculation and read electricity bill and tariff calculation
5.		Dr. Vikram and	Hands on Training on Signal/ Image Processing Toolbox in MATLAB	Signal processing operations <ul style="list-style-type: none"> • Basic signals and sequences representation such as



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)

Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

		Prof. Bhavnarathore		<p>unit sample, unit step, real and complex valued exponential, sinusoidal, random and periodic sequences.</p> <ul style="list-style-type: none"> • Sampling and correlation of two sequences. • Difference equation and filters. • Transforms and their usefulness in electrical and electronics networks. <p>Image Processing operations</p> <ul style="list-style-type: none"> • Point operations and image representation. • Basic Image processing operations such as sharpness, contrast, negative, masking filtering and threshold. • Images, their histograms and histogram normalization. • Extraction of meaningful information from the images, such as finding shapes, counting objects, identifying colours, measuring object size etc.
6.		Prof. SaurabhK.Rajput and Prof. Manoj Kumar	Introduction to Solar Photovoltaic and application of power Electronics switches in Solar Inverter	<p>Hands on training of Solar Photovoltaic</p> <ul style="list-style-type: none"> • Sun Earth angles, Types of radiation • Concept of Solar cell , Solar Module, Solar Array • Maximum power point tracking • Battery Sizing and load calculation <p>Application of power electronics in solar technology</p> <ul style="list-style-type: none"> • Power electronic switches and their operational characteristics. • Concept of Solar charge controller • Concept of solar Inverter
7.		Prof. Shivam Gupta & Prof. SauravKakani	Use of Modern Surveying Techniques in Survey Works	<p>This module will enhance the Student's skill by exploring their domain knowledge of Modern surveying in Civil Engineering. This training course shall cover both theoretical as well as practical aspects which help students to see the practical side of Civil engineering. In this module students will be exposed to various methods. The student will learn the basic principle of Surveying by using Total Station and GPS etc. They will be able to draw maps and ground features</p>
8.	Civil Engineering department:	Prof. NupurVerma& Prof. Nishi Gangwar	In-house Testing of Engineering Materials	<p>In this module following Material testing shall be done:</p> <ul style="list-style-type: none"> • Aggregate Testing



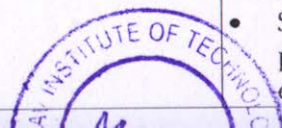
MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)

Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

	Prof. Deepak Rastogi			<ul style="list-style-type: none"> • Concrete Field Testing • Concrete Strength Testing • Cement Testing • Soil Testing
9.		Prof. Pratibha Singh and Prof. Shivendra Singh Kushwaha	Understanding of Building and Structural Elements through Model Making	This module is designed to keep in mind the need of undergraduate students of engineering who have enthusiasm to learn the fundamental concept of Building and Structural Elements. This training course shall cover both theoretical as well as practical aspects which will help students to see the practical side of Civil Engineering. The main theme of module will be oriented around hands on exposure to basic concepts Pile and Raft Foundation, Different types of Bridges and their model making.
10.		Prof. Almas Siddiqui & Prof. Chetan Sharma	Developing Concepts of Smart Village through Model	This module aims to provide knowledge to students about the concepts of Smart Village and thereby making working models of the smart village considering various Engineering, Economical and Sustainability Aspects.
11.		Dr. Sanjay Tiwari & Dr. Pankaj Kumar	Learning of Computational methods in Civil engineering using MATLAB	<p>This module aims to provide hands on engineering applications of MATLAB for engineering UG students of 1 year. Following topics shall be included in the module:</p> <p>Session 1 shows how MATLAB is used in engineering and introduces a standard problem-solving methodology.</p> <p>Session 2 introduces the MATLAB environment and the skills required to perform basic computations. This Module also introduces M-files, and the concept of organizing code into cells. Doing so early in the text makes it easier for students to save their work and develop a consistent programming strategy.</p> <p>Session 3 details the wide variety of problems that can be solved with built-in MATLAB functions. Background material on many of the functions is provided to help the student understand how they might be used.</p> <ul style="list-style-type: none"> • Session 4 demonstrates the power of formulating problems by using matrices in MATLAB and expanding on the techniques employed to define





MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)

Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

				those matrices	
12.		Prof. Mohit Aggarwal & Prof. Shashank Sharma	Plumbing Work	In this introductory plumbing class, students learn about the scientific underpinnings of plumbing. The module covers drainage, sewer and vent pipe systems and gives an overview of plumbing codes. Beginner-level plumbing classes like this one have no prerequisites	
13.	Mechanical Engineering Department: Dr. Amit Ahirwar & Prof. Vaibhav Shivhare	Prof. Kapil Tyagi & Prof. Kostubh Khot Mr. Bharat Sakwar (for hands on training in workshop)	Conventional machine	The students will have to go through the various Conventional Machines and understand its different components and then perform various operations on the same	
14.		Dr. Dharmendra Jain Prof. K.K. Yadav	Dismantling & assembling of two strokes & four Stroke Engine.	Hands on experience of dismantling and assembling of two stroke and four stroke engine. Practical session with theory classes will be arranged for the awareness of advance automotive technologies being used.	
15.		Prof. Shubham Shrivastav & Prof. Sumit Singh	Repair and maintenance of a vehicle.	Hands on experience of repair and maintenance of vehicle, along with the practical session some theory classes will also be arranged for the awareness of basics of automotive technologies being used.	
16.		Prof. Utkarsh & Shrivastava Prof. Dhruv Maggu	Introduction to Auto CAD for Engineering Applications	The students will be introduced to the principles and practices of Computer-aided Drafting.	
17.		Prof. Ajay Rajput & Dr. Naresh Raghuwanshi	Mechanical Testing and Measurement	Performance of different mechanical tests on materials such as Tensile Test, Impact Testing, Hardness Testing, and Fatigue Test etc. The students will have to go through the various engineering measuring Instruments and understand its applications	
18.		Electronics Engineering Department: Prof. Deepak Batham & Prof. Arun Chauhan	Dr. Vikas Mahor and Prof. Rakesh Naik	Training on PCB Designing & Circuit Wizard	To provide hands-on experience in PCB circuit design using software and to familiarize with PCB fabrication process. To provide hands on experience in assembly and testing of electronics circuit.
19.			Dr. Ashish Gupta, and Prof. Deepak Batham	Training on MATLAB	Hands on training on MATLAB include writing of code in MATLAB as well as designing of circuit.
20.		Prof. Aruna Chauhan, and Prof. Santosh Sharma	Training on Digital Circuit Design	To provide hands on experience in digital circuit design using bread board. To provide hands on experience in assembly and testing of digital circuits.	



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)

Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

21.		Prof. ChaitanyaDhopte, and Prof. ArpitaSinghal	Training on Electrical Circuit Design using LT-Spice	To provide hands on experience in electrical circuit design using bread board. To provide experience in assembly and testing of electrical circuit.
22.		Prof. Praveen Kumar Singh	Training on Electronics Measuring Instruments	To provide state-of-art training on electronics measuring instruments And, to understands working and applications of measuring instruments.
23.		Prof. Saurabh Singh Raghuvanshi	Python for Engineers	This module is targeted to provide basic understanding of Python language. Moreover, Scientific and numerical applications will also be explore.
24.	CSE & IT Department : Prof.VikasSejwar&Prof.AbhilashSonkar	Mr. LavUpadhyay	Front End Web Developer	<ul style="list-style-type: none"> • Design dynamic website using HTML5, CSS and Advanced JavaScript • Apply the principles and tools that are used to develop Web applications • Implement jQuery, AngularJS and Bootstrap in web pages
25.		Mr. DheerajGurjar	Computer Hardware & Networking	<ul style="list-style-type: none"> • Demonstration of operating system installation and hardware configuration. • Demonstration of networking devices and IP addressing for communication and connection of internet. • Simulation and study of network using different networking tools.
26.		Ms. PoojaAgrawal	Internet of Things (IoT)	<ul style="list-style-type: none"> • Acquire fundamental knowledge of networking, sensors and actuators. • Develop an understanding of IoT-based applications such as agriculture, innovative shopping system, infrastructure management, remote health monitoring and emergency notification systems, and transportation systems • Demonstration of acquired knowledge using hardware and software tools like Arduino, Raspberry Pi.
27.		Ms. ShivangiGarg	Relational Database Using SQL	<ul style="list-style-type: none"> • Demonstrate an understanding of the elementary & advanced features of DBMS & RDBMS • Develop a clear understanding of the conceptual frameworks and definitions of specific terms that are integral to the Relational Database



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)

Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

				<p>Management System</p> <ul style="list-style-type: none"> Examine techniques pertaining to Database design practices using SQL Commands
28.		Mr. Sheo Kumar	Problem Solving Through Programming	<ul style="list-style-type: none"> Introduction to basic programming concepts Develop problem solving skills helpful for solving programming problems in projects and academics. Develop thinking capability in students towards real time problems and game development.
29.		Mr. Mir Shahnawaz Ahmad	Python Programming With Applications To Machine Learning	<ul style="list-style-type: none"> Basic Programming concepts using python. Object oriented programming concepts using python. Concepts of machine learning and its implementations in python and R.
30.	CSE & IT Department	Mr. Mahesh Parmar	Android Based Application Development.	<ul style="list-style-type: none"> Build and deploy Android application. Understand the operation of the application, application lifecycle, configuration files, intents, and activities. Understanding of the UI - components, layouts, event handling, and screen orientation.
31.		Mr. VikasSejwar	Microprocessor & Interfacing Techniques	<ul style="list-style-type: none"> To interpret, analyze, verify and troubleshoot microprocessor circuits and interfacing using appropriate techniques and test equipment.
32.		Mr. AbhilashSonkar	Google Services	<ul style="list-style-type: none"> Managing, Sharing, Analyzing, Distribution of data using various Google services.
33.		Chemical Engineering department: Prof.Suloचना Nagar	Prof. ArtiSahu & Prof. Sulochana Nagar	Utility of Heat Transfer in Process Industry
34.	Prof. Sachin R. Geed & Dr. KulbhushanSamal		Application of Environmental Biotechnology in Chemical Engineering	This module helps to know the application of environmental biotechnology in chemical engineering Now a day's environmental pollution is big issue keeping this fact in mind we plan to design this module. This also gives the brief information on types of the bio-filter, bioreactors and integrated systems used to clean up the environmental pollutants. The laboratory experiments on water and wastewater characteristics (COD, BOD, DO, etc.) give the





				knowledge about water pollution.
35.		Dr. Antaram N. Sarve	Introduction to Analytical Instruments	Analytical measurements are required in a wide range of fields beyond the chemical industry such as biochemistry and the pharmaceutical industry, environmental sciences, forensic sciences, and the food industry amongst others. The module will provide an introduction into the fundamentals of chemical analysis, including an understanding of some of the most important analytical techniques today.
36.	Biotech Department: Dr.Sunita Sharma	Dr. Sunita Sharma & Prof. Vishal Ranjan	Comparison of water quality collected from public place with the standard water quality parameters	This in-house training program aims at investigating the physical, chemical and biological water quality parameters from the water dispensors installed at public places. The results will be compared to established drinking water standards and frame guidelines to trace following compliance; (1) safeguard consumers from possible chemical and microbial contaminants which may occur in water suppliers, (2) set recommendations for proper maintenance and cleaning measures, and (3) increase awareness and confidence in the quality of water consumed.
37.		Prof. Rahul Anand	Basic tools of Molecular Modelling	This module aims to provide hands on training for simulating, predicting and analyzing molecular structures of biomolecules using classical mechanics and electrostatics <i>in-silico</i> . This training will fulfill the pre requisite required for advance courses like computer aided drug design and computational biology.
38.		Prof. Vinod Kumar Jatav	Basics of Bioinformatics	This module focuses to provide basic information on application of information technology in analysis of biological data. Storage and retrieval of biological data for carrying out various analytical studies, sequence similarity between DNA, protein sequence and its analysis, protein structure prediction, protein structure validation, visualization, will be covered in the course. This module will lay foundation to understand in depth mechanism involved in various life processes.
39.		Dr. Radhika, R. and Prof. ShikhaJha	Commercial Plant Cell and Tissue Culture Techniques: A biotechnological tool for the conservation of natural resources	Plant tissue culture is an applied biotechnological tool for mass propagation, virus elimination, secondary metabolite production and <i>in vitro</i> cloning of plants. The pioneer plant tissue culture method has been the



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)

Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

				demonstration for several decades in the production of totipotent plant species. The entire plant system from any type of explants, small tissue or plant cells can be developed in an appropriate culture medium under controlled environment. To attest the plant tissue culture technique, conservation of recalcitrant or dormant plant species are also highly possible by this method when compared to that of conventional methods of conservation. This universal and unique commercial plant tissue culture technology has been widely inculcated in the area of agriculture, horticulture, forestry and plant breeding for large-scale multiplication of plants. Moreover, this technology is referred to as an alternative technology for the utilization and conservation of natural plant resources or species without deteriorating the existing plant system available in the field for the benefits of human welfare.
40.	Applied Science department: Dr.Prachi Sharma	Dr. Anjula Gaur	Detection and identification of contaminants using uv spectroscopy.	This internship is about to educate students, the theoretical as well as the practical knowledge of UV-Visible spectrophotometer. It aims to provide the practical importance of this spectroscopic technique and make the students able to use it for detecting the contamination in various industrial influents. At the end of the training programme, students would be familiar with working on spectrophotometer in various aspects. Lectures, assignments and hands on experiment would be covered in this course.
41.		Dr. HansnathTiwari	Analysis of Mixtures by using the Chromatographic Technique.	This internship is about the chromatographic separation and its application. It aims to provide the practical realization of working with chromatography technique such as TLC and Paper chromatography. At the end of the training programme, students will be able to express the working of chromatographic technique with respect to the industrial approach. Lectures assignments and hands on experienced would be covered in this course.





MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)

Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

42.	Applied Science department:	Dr. Prachi Sharma	Laser Technology	<p>This internship is about the LASER system and its applications. It aims to provide students the practical realization of working with He-Ne LASER.</p> <p>At the end of the program/training, student will be able to express the working of a Hologram with respect to the engineering application, with the help of He-Ne LASER</p>
43.		Prof. Deobrat Singh	Nano structured transition metal oxides for photo catalytic applications	<p>The projects aims at synthesizing new nanostructured transition metal oxides by employing suitable synthetic methods. The oxides will be characterized by powder X-ray diffraction, UV-vis DRS, FT-IR, Raman, Field-emission scanning electron microscopy, transmission electron microscopy, surface area analysis etc.</p>
44.		Dr. Prachi Sharma	Dr. Ashish Verma & Prof. Jitendra Muthele	Statistical Methods



