



INSTITUTE OF TECHNOLOGY
& MANAGEMENT
Gwalior • MP • INDIA

“THINK BIG... THINK BEYOND”

INSTITUTE OF TECHNOLOGY AND MANAGEMENT, Gwalior

AICTE Approved Technical Campus /
Affiliated to RGPV, Bhopal (Estd. 1997)



A NEWSLETTER OF DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Vision of the Department

The Department envisions to nurture students to become technologically proficient, research competent and socially accountable for the welfare of the society.

Mission of the Department

- To provide high quality education through an effective teaching-learning process emphasizing active participation of students.
- To build scientifically strong engineers to cater to the needs of industry, higher studies, research and startups.
- To awaken young minds, ingrained with professional and behavioral ethics for the betterment of the society.

Program Educational Objectives

- Our graduates will employ capabilities of solving complex engineering problems to succeed in research and/or higher studies.
- Our graduates will exhibit team-work and leadership qualities to meet stakeholders' business objectives in their careers.
- Our graduates will demonstrate application of comprehensive technical knowledge for innovation and entrepreneurship.
- Our graduates will evolve in ethical and professional practices and enhance socio-economic contributions to society.

MESSAGE FROM HOD



Prof. Dr. Rishi Soni

I trust that everyone is taking care of yourself and your family!

It gives me great pleasure to communicate with you all through this newsletter. Due to the lockdown, the entire country has come to a standstill except for essential services. But the education sector has increasingly taken note of the interest of students and teachers to

continue their services in teaching. It is considered the responsibility of the education sector to engage the students and utilize the time not only for quality education but also for self-development. The faculty of ITM upgraded themselves to the new platform and experimented with new avenues to share lecture notes, videos, and assessments on theory and laboratory topics, guides on projects, clearing doubts, etc. During lockdown situation covid-19 the faculty conducted online classes using the virtual classroom platform BigBlueButton. Videos recorded for theory courses and laboratory experiments were made online on LMS. Internal assessments webinars and

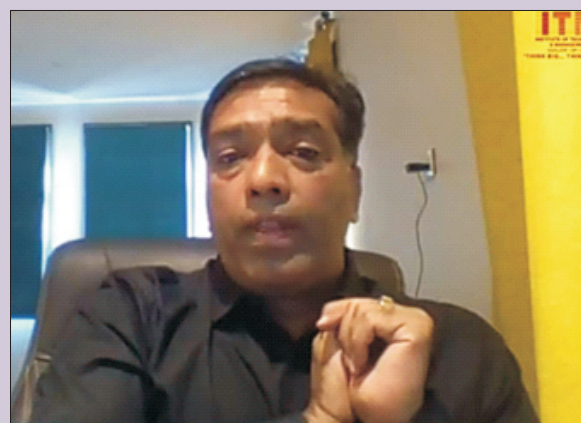
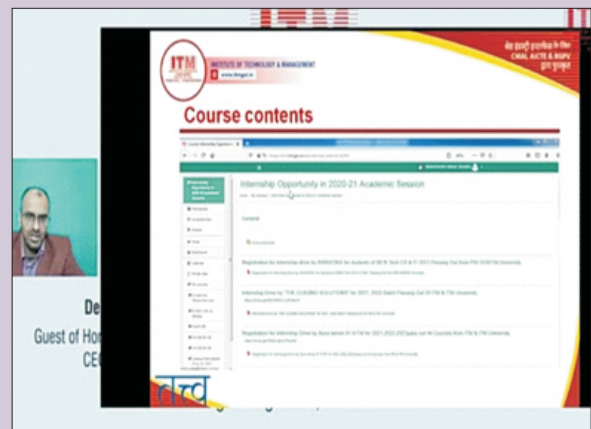
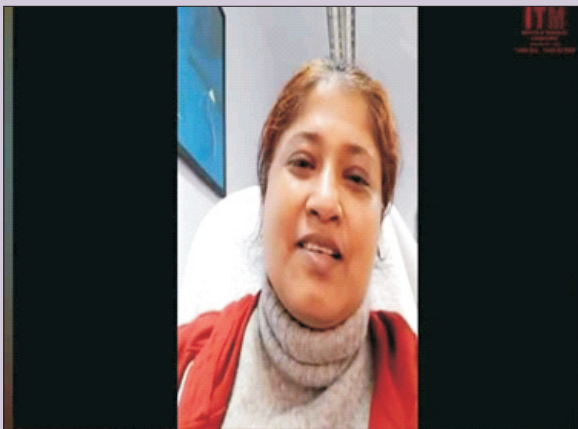
workshops were also conducted using online platforms. Faculty development programmes, workshops, seminars, invited talks for students and staff were organized for continuous learning and periodic updating of knowledge and skills.

All this was accomplished with the dedicated, systematic efforts of the faculties keeping safety in mind. This edition of the newsletter showcases the contribution of the faculties and best practices adopted by the Department of Computer Engineering, ITM during the difficult times of COVID-19.

With best wishes for a healthy and prosperous life.

Student Orientation Programme

The orientation program of B.Tech. students at ITM Gwalior was conducted on 01-02 Dec 2020. In the recent proceedings, students were inspired by HR Manager Mr. Vivek Roussia who came to motivate the students of the first year in ITM Gwalior's Orientation Program with new ideas and enthusiasm. This Orientation program was kept for students seeking admission in B.Tech. At the beginning of the program, Dr. Meenakshi Majumdar, Director of ITM Group of Institutions welcomed the students and gave them detailed information about the vision, mission, and values of the Institute. She said that you have to learn to balance the academic and extra-curricular activities. On this occasion, Dean Academic Dr. SS Chauhan told about the examination part and Dean Student Welfare Dr. Manoj Mishra explained about Extra-Curricular activities. Apart from this, HOD's of various departments also gave information about their department. Mr. Pankaj Gupta, CEO of Reflex Solution, also joined the program and said that it is difficult to say at this stage what companies are expecting to see in the freshers now, there are some skills which are very important in students. He emphasized effective communication and acquiring skills. Pro-Chancellor Dr. Daulat Singh Chauhan also motivated the students and gave very important tips to succeed in college life.



Workshop on Data Analysis & Visualization Using Pandas

The Department of Computer Science & Engineering, ITM Gwalior, organized a three days workshop on “Data Analysis & Visualization using Pandas, Plotly and Seaborn in Python”, 16-18 July 2020 in online mode through Zoom Application.

Dr. Jitendra Singh Kushwah explained the data visualization for an easier way of presenting the data to analyze trends and relationships amongst variables with the help of libraries of python.

He also focuses on the advantages of Data Visualization of easier representation of complex data, highlights good and bad performing areas, explores the relationship between data points,

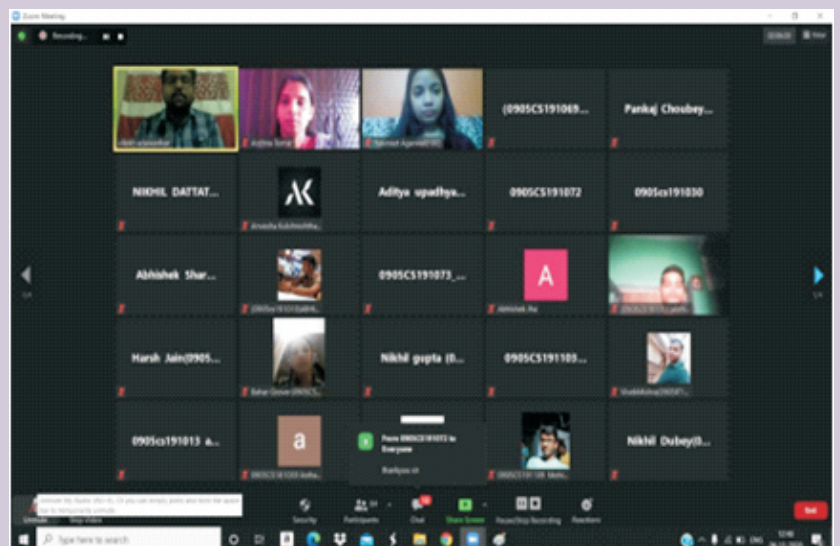
identifies data patterns even for larger data points, ensures appropriate usage of shapes, colors, and size while building visualization, Plots/graphs using a co-ordinate system are more pronounced, knowledge of suitable plot for the data types brings more clarity to the information, usage of labels, titles, legends, and pointers passes seamless information to the wider audience. He also conducted Hands-on work on Jupyter Notebook and Spyder for data analysis and visualization using pandas and seaborn library. Participants also create some projects and showed interest.



Workshop on Mean Stack Development

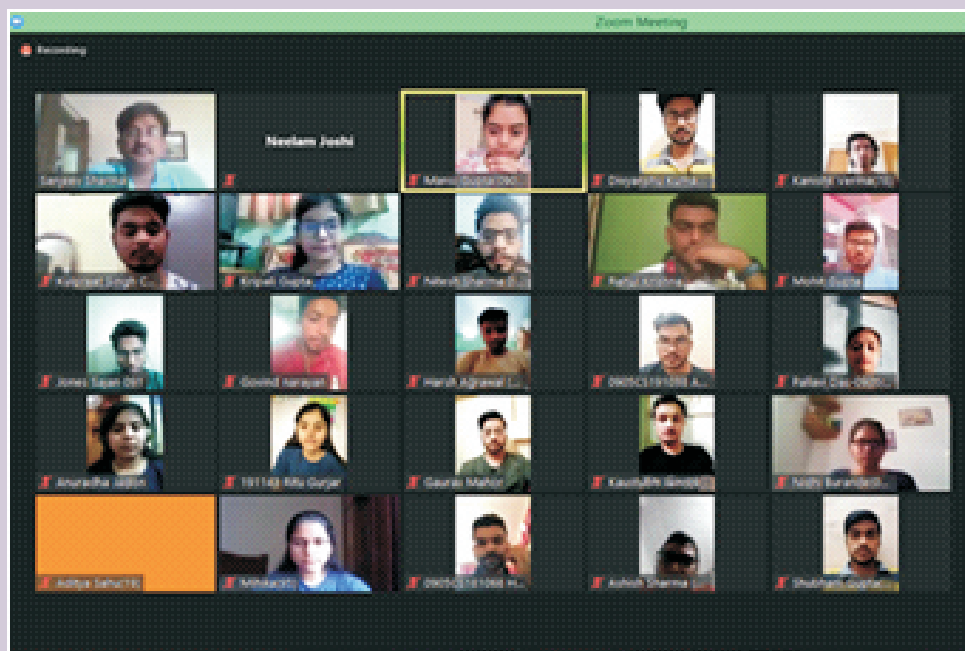
The Department of Computer Science & Engineering, ITM Gwalior organized One day Workshop on “Mean Stack Development” in Association with CSI Gwalior Region-III on 6th November 2020 in online mode using the Zoom platform

The coordinator of this workshop Ms. Archana Tomar introduced the expert Mr. Vivek Adawadkar and his expertise. Dr. Rishi Soni, Head of Department welcomed the expert and underlined the achievements of the department over the years. Mr. Vivek focused on Web development using the mean stack concept and the SQL instead of using a separate scripting language. Mean Stack is a prominent technology to get eminent and speedy results for mobile and web app development. There is no doubt Mean Stack comes with attractive features and makes it the most favored solution to build apps. He elaborated on the software and its classification. During the session, the student asked their queries related to Web and Mobile Application Development, Real-Time Applications, Single Page Applications, etc. More than 100 students participated in this workshop.



Webinar on “Data Analytics and Machine Learning”

The Department of Computer Science & Engineering, ITM Gwalior organized one day expert lecture on “Data Analytics & Machine Learning” in Association with CSI Gwalior Region-III on 31st October 2020 in online mode through Zoom Platform. Ms. Neelam Joshi introduces Dr. Sanjeev Sharma, Director-RGPV, Bhopal. Dr. Rishi Soni welcomed the expert and gave a brief introduction to the course to the participants. Expert focused on how Data Analytics encompasses many different skills. They said that these are two high-focus of data science. Data analytics has become important as many organizations both public and private have been collecting massive amounts of domain-specific information, which can contain useful information about problems such as national intelligence, cyber security, fraud detection, marketing, and medical informatics. Companies such as Google and Microsoft are analyzing large volumes of data for business analysis and decisions, impacting existing and future technology. They also discussed Machine learning today is not like machine learning of the past. It was born from pattern recognition and the theory that computers can learn without being programmed to perform specific tasks; researchers interested in artificial intelligence wanted to see if computers could learn from data. The iterative aspect of machine learning is important because as models are exposed to new data, they can independently adapt. They learn from previous computations to produce reliable, repeatable decisions and results. He also guided the participants to explore areas on Data Analytics and Machine Learning.



Data science lifecycle

- **Capture:** Data acquisition, data entry, signal reception, data extraction
- **Maintain:** Data warehousing, data cleansing, data staging, data preparation, data architecture
- **Process:** Data mining, clustering/classification, data modeling, data summarization
- **Communicate:** Data reporting, data visualization, business intelligence, decision making
- **Analyze:** Exploratory/confirmatory, predictive analysis, regression, mining, qualitative analysis
- All stages require different techniques, programs and, in some cases, skillsets.



Faculty Achievement's

Book/ Book Chapter

Title of the Book/Book Chapters	Author Name	Name of the publisher
Artificial Bee Colony Algorithm with Mutation (ABCM)using Modified Search Solution	Mr. Manuj Mishra	Lambert Publication, Germany
Computer Software Part-III	Ms. Neelam Joshi	Pioneer Publishers Delhi
Computer Software Part-II	Ms. Neelam Joshi	Pioneer Publishers Delhi

FDP/STTP Attended

S. No.	Name of Faculty	Nature of the program	Topic	Organized By	Days & Duration	Approved By
1	Ms. Archana Tomar	Short Term Training Programme	Recent Trends in Cloud Computing	DRIEMS Autonomous Engineering College	07-12 Dec, 2020	AICTE
2	Ms. Neelam Joshi	Faculty Development Programme	Artificial Intelligence	IIIT, Naya Raipur	21-25 Nov 2020	AICTE
3	Ms. Reena Chauhan	Short Term Training Programme	Internet of Things (IoT) & Data Analytics	MITS, Gwalior	23-24 Oct 2020	RGPV Bhopal under TEQIP-III
4	Ms. Aruna Bajpai	Short Term Training Programme	AI-Enabled Augmented Analytics for Business Intelligence	CMR, Bangalore	12-17 Oct 2020	AICTE
5	Mr. Deshdeepak Shrivastava	Faculty Development Programme	Data Analysis & Visualization Using Pandas, Seaborn & Plotly In Python	CSI, Gwalior	16-18 July 2020	CSI, Gwalior
6	Ms. Archana Tomar	Faculty Development Programme	Data Analysis & Visualization Using Pandas, Seaborn & Plotly In Python	CSI, Gwalior	16-18 July 2020	CSI, Gwalior

Placements



Tejasvi Thorat
Wipro



Shrey Gupta
Wipro



Shivani Soni
Wipro



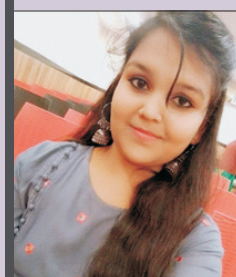
Shikha Gupta
TCS



Sahil Gupta
Ingenuity



Kafilur Rahman
Cognizant



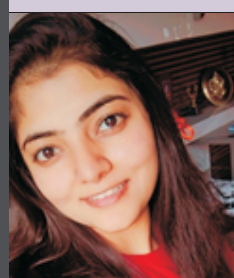
Jaya Karothia
Wipro



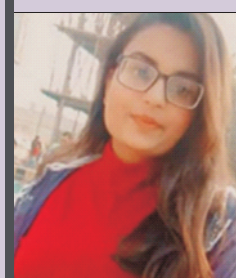
Ishita Bakhan
TCS



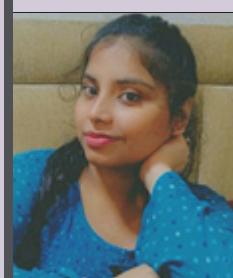
Harshit Vishwakarma
Infosys



Yogita Dhingra
Infosys



Prerna Bansal
TCS



Neha Gupta
Celebal Technologies



Student Achievements



Editorial Board

Editorial Team:

Ms. Aruna Bajpai
Assistant Professor
Deptt. of CSE

Mr. Manuj Mishra
Assistant Professor
Deptt. of CSE

Student Representatives:

Ms. Tanya Gupta
CSE, 3rd semester

Ms. Yashika Gupta
CSE, 3rd semester