# MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
## (A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)
### Department of CSE & IT

## PATRON

**Dr. R.K. Pandit**
Director
MITS Gwalior

## WORKSHOP TEAM

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**Mr. Lav Upadhyay** (Assist. Prof., CSE&IT)
For Tech. Support: Mr. Shubham Sharma (Research Scholar)

## REGISTRATION

Faculty members, Research scholars and UG/PG students in relevant discipline of degree level technical Institution/ Universities approved by AICTE are eligible to attend the workshop. The number of participants is limited. The interested candidate needs to apply online at https://forms.gle/zQEnENLXkRfrwjax7 (on or before **17th June, 2020**). Shortlisting of participants will be on **First Come First Serve** basis. The shortlisted candidates will be informed via E-mail.



## ONLINE NATIONAL WORKSHOP
## ON
# DATA SCIENCE: TECHNIQUES & TOOLS
## UNDER TEQIP-III
## JUNE 20 - 21, 2020
### ORGANIZED BY
## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING AND INFORMATION TECHNOLOGY

**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE**
(A GOVT. AIDED UGC AUTONOMOUS & NAAC ACCREDITED INSTITUTE, ESTABLISHED IN 1957) GWALIOR, M.P. 474005

🌐 www.mitsgwalior.in

## PREAMBLE

The field of engineering and technology is facing unparallel changes and consolidations. As educators, we must be continuously aware of these developments so that we cannot only define a fixed path but also we have to take full advancement in engineering and technology. Keeping view of the current thrust, relevance and importance of the development in engineering and technology, the faculty members of technical institute have to keep a place with its exchanging trends for social and industrial benefits. Researchers and Scientists have applied modelling and computational techniques as a tool to represent the various problems in real word situations. It is because of the wide applicability of Data Sciences in different domains of Engineering and Technology, this Workshop is being organized with the following objectives.

- Motivate and equip the participants with the basics as well as the recent trends in Data Sciences, and its applications for solving wide variety of problems in various fields of engineering and technology.
- To expose the faculty members and students with the newer dimensions of the area with their practical approaches to tackle the real life problems in engineering and technology and other related disciplines.
- To take up various challenges of the present day to day societal problems for their acceptable logical solutions.

This Workshop will be helpful for faculty members and researchers to utilise methods, tools, and computational techniques for real life problems solving.

## REGISTRATION FEE

There will be no registration fee for the participants from AICTE recognized Institutions

## WORKSHOP CONTENTS

The following topics will be covered in this Workshop:

- Introduction to Data Science.
- Mathematical concepts behind Data Science techniques.
- Introduction to various techniques/approaches used in Machine learning, Deep learning and other sub fields of Data Sciences.
- Applications of Data Science Techniques, including the fight against COVID - 19.
- Visualization, Data Pre-Processing, Classification and Regression Analysis.
- Various tools used for the implementation of techniques used in data science.

## RESOURCE PERSONS

- **Dr. Deepak Garg,**
Director leadingindia.ai;
Professor and Head-Computer Science and Engineering Department, Bennett University, Noida; Director, NVIDIA-Bennett Research Centre for Artificial Intelligence.
- **Dr. Dinesh K. Vishwakarma,**
Associate Professor, Department of IT, DTU, Delhi.
- **Dr. Mukesh Saraswat,**
Associate Professor, Jaypee Institute of Information Technology, Noida.
- **Dr. Vivek Kapoor,**
Assistant Professor, Department of IT, IET, Devi Ahilya University, Indore.
- **Dr. Virendra Kumar Shrivastava,**
Prof. & Dean Engineering, SGT University, Gurugram.
- **Dr. Ramjeevan Singh Thakur,**
Professor, Department of Computer Applications, MANIT, Bhopal.

## ABOUT MITS

Madhav Institute of Technology and Science (MITS), Gwalior was established by His Highness Late Sir Jiwaji Rao Scindia, Maharaja of Erstwhile State of Gwalior, with an aim to create world class quality engineers and technocrats capable of providing leadership in all spheres of life and society. Founded as Madhav Engineering College in 1957 with three UG programmes, this temple of learning is now about 60 years old. Since its inception, the institute has constantly strive for excellence and quality in technical education. Today, the institute offers nine UG programmes along with research programmes leading to Masters and Ph.D. degree in various specializations of engineering and technology. All the departments of the institute have well equipped laboratories and experienced faculties. The institute is a minor QIP centre of AICTE for Ph.D. programme in five disciplines. The institute is also funded by World Bank under TEQIP phase III to strengthen the quality of technical education.

## 📍 LOCATION

Gwalior city has major road and rail connectivity. The Institute is located on Agra-Bombay Road (NH-3) and is approximately 320 KM from Delhi. The institute is located in the heart of city and is at a distance of about 2 km from Gwalior Bus Stand/Gwalior Railway Station.

## ABOUT THE DEPARTMENT

The department of CSE & IT has an excellent & rich history and an outstanding record of contributions to the profession and community. The department is well recognized for excellence in facilities and teaching. The Department offers UG, PG and Ph.D. Programmes in Computer Science & Engineering and Information Technology. The Department has a comprehensive curriculum on topics related to all aspects of Computer Hardware and Software with an emphasis on practical learning. The course structure is up-to-date and includes courses on emerging topics to equip our students with the latest developments in Computer Science and Engineering. The Department has state-of-the-art infrastructure and computing equipment supported by high speed Ethernet and wireless networks. Our faculty members aim at delivering top class education blending their rich research experience with classroom teaching.