

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

| Title of the activity: National Workshop on "Soft Computing Techniques and its Applica |  |  |  |
|--|--|--|--|
| Dates:   | 18 – 19 <sup>th</sup> Jan, 2019  |  |  |
| Objectives of the  | Soft Computing refers to the science of reasoning, thinking and deduction that recognizes and uses the real world phenomena of grouping, memberships, and classification of various quantities under study. As such, it is an extension of natural heuristics and capable of dealing with complex systems because it does not require strict mathematical definitions and distinctions for the system components. It differs from hard computing in that, unlike hard computing, it is tolerant of imprecision, uncertainty and partial truth. In effect, the role model for soft computing is the human mind. The guiding principle of soft computing is: Exploit the tolerance for imprecision, uncertainty and partial truth to achieve tractability, robustness and low solution cost. The main techniques in soft computing are evolutionary computing, artificial neural networks, and fuzzy logic and Bayesian statistics. Each technique can be used separately, but a powerful advantage of soft computing is the complementary nature of the techniques. Used together they can produce solutions to problems that are too complex or inherently noisy to tackle with conventional mathematical methods. The applications of soft computing have proved two main advantages. First, it made solving nonlinear problems, in which mathematical models are not available, possible. Second, it introduced the human knowledge such as cognition, recognition, understanding, learning, and others into the fields of computing. This resulted in the possibility of constructing intelligent systems such as autonomous self-tuning systems, and automated designed systems. In view of all these applications and benefits of Soft Computing Techniques and its Applications, we propose to organize an national workshop on "Soft Computing Techniques and its Applications, will further enhance the applications", which will focus on highlighting various concepts and techniques used in Soft Computing. The workshop will benefit faculty, research scholars as well as students because these days this field |  |  |
| Objectives of the activity:  | <ul> <li>To Understand basics of Soft Computing ng</li> <li>To acquaint the participants with soft computing techniques and tools useful in solving real life engineering problems.</li> </ul>   |  |  |
| Outcomes of the activity:  | <ul> <li>The participants will be able to:</li> <li>Implement, evaluate and compare solutions by various soft computing approaches for finding the optimal solutions.</li> <li>Recognize the feasibility of applying a soft computing methodology for a particular problem</li> <li>Design the methodology to solve optimization problems using fuzzy logic, genetic algorithms and neural networks.</li> </ul>  |  |  |



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| Name and affiliation of experts: | 1. Dr. T. V. Vijay  |
|----------------------------------|---|
|                                  | School of Computer & Systems Sciences<br>Jawaharlal Nehru University, Delhi   |
|                                  | 2. Dr. Ramjeevan Singh Thakur Department of Computer Applications, MANIT, Bhopal, MP                                    |
|                                  | 3. Dr. Jagdish Chand Bansal<br>South Asian University New Delhi   |
|                                  | 4. Dr. A.K Singh Department of Computer Science & Engineering Motilal Nehru National Institute of Technology ,Allahabad |
|                                  | 5. Dr. K.R. Pardasani<br>MANIT, Bhopal, MP  |
| Number of Participants:          | Total = 105 (External Participants =21, Internal Participants =84)  |

Dr. Akhilesh Tiwari Prof. & Head

### Madhay Institute of Technology and Science, Gwalior

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### Workshop Brochure

### ABOUT INSTITUTE

### AIM & SCOPE OF THE WORKSHOP

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### FINANCIAL ASSISTANCE

There will be no registration for for the participants. No TAGNA will be provided to the participants however boarding and ladging will be pryanged on alvergeable basis.

### RESOURCE PERSON

Expert from National level Institutes (III central universities and reputed engine higher educational institutes will be in deliver tectures. The mode of conduct be interactive.

### ADDRESS OF COMMUNICATION

Rajeev Kumor Singh Assistant Professor Department of CSE & IT Cuntact No. 8269230075 Email: rajeevkunsariumitsgwali

Khushboo Agarwal Assistant Professor Department of CSE & IT Contact No. 9981 18101. [mail ka agarwais ain isgwai or r

### ABOUT DEPARTMENT

had department of SEL & II but an excel-bent & each harboy and are authorizing record of contributions to the profession and community. The department offer two IRs and those Bit programmes. Some 2012, this department is a minor GIP centre for research programmes. The first by a netwely engaged in research, and has imbilited mamorous propers in material and International paramolis and conference. The abunus of the department have se-cured their places in the higher activities of the storoly and technical world.

### REGISTRATION

This Workshop is open to research scholars fairfully members and industry pursuants. The number of participants is finished for the course to participation will be considered on the boars of first come first serve. Last lidite of receiving completed form in 15 in 2019. The randicators will be indensed of his/her selection in off-wance via e-mail to require online refer to the given link, goo g/forms/8f-stpoWsips IAVED.

# **ROUTE TO MITS, GWALIOR**

### REGISTRATION FORM

National Workshop

on Soft Computing Techniques and its Applications (Under IEQIP Phase III) (18-19 Jan. 2019)

- 1 Name
- 2 Gender M | | / F [ |
- 3 Designation:
- A Organization
- 5. Correspondence address
- 6 Mobile No
- 7 E-mail
- 8 Qualifications 9. Teaching/Research Exp. (Years)
- 10 Lodging Requirement (Chargeoble)
- Yes [ ] / No [ ] 11 Area of Research

(5 great in 6 5 and of Head of Department Institute will date)

Note: Photocopy of the form can be used as registration form. For online registeration refer to the given link: goo.gl/forms/BfwLpeWsgpxTAVcD3

### ORGANIZING COMMITTEE

### ADVISORY COMMITTEE

Dr. Manjareo Pandi Dr. Rajeov Kansal Dr. L. Srivastava

Or Archina Tiwan Dr. P. K. Singhal Dr. Alok Sharma Or K.S. Jadan Dr. Abhay Mishra Prof. S. Proshad Or Manish Sagar

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Coordination TEQIP III
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TEQIP III)
(Head Civil Engineering)

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(Head, Mechanical Engineering





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# MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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

National Workshop on "Soft Computing Techniques and Its Applications"

(18th -19th January 2019)

Organized By

Department of Computer Science & Engineering and Information Technology

Under

## Technical Education Quality Improvement Programme (TEQIP)-III

### WORKSHOP SCHEDULE

| Date & Day   | Time                | Event  |
|--|---------------------|--|
| 18-01-2019<br>(Friday)   | 9:30 am-10:00 am    | Registration   |
|  | 10:00 am-11:00 am   | Inaugural  |
|  | 11:00 am-11:30 am   | High Tea   |
|  | 11:30 am-1:00 pm    | Expert Talk-1  |
|  | 11133               | Dr. K. R. Pardasani  |
|  |                     | MANIT, Bhopal  |
|  | 1:00 pm-2:00 pm     | Lunch  |
|  | 2:00 pm-3:30 pm     | Expert Talk-2  |
|  | 2.00 pm 3.23 p      | Dr. K. R. Pardasani  |
|  |                     | MANIT, Bhopal  |
|  | 3:30 pm-3:45 pm     | Tea Break  |
|  | 3:45pm-5:15pm       | Expert Talk-3  |
|  | 3.45pm 55pm         | Dr. R. S. Thakur   |
|  |                     | MANIT, Bhopal  |
| the same and the same state of | 10:00 am -11:30 am  | Expert Talk-1  |
|  | 10.00 2111 7 1 10 2 | Dr. J. C. Bansal   |
|  |                     | South Asian University<br>New Delhi  |
|  |                     | Tea Break  |
| 19-01-2019<br>(Saturday)   | 11:30 am-11:45am    | Expert Talk-2  |
|  | 11:45 am-1:15 pm    | Or T. V. Vijay Kumar   |
|  |                     | Jawaharlal Nehru University  |
|  | 2 1500              | Lunch  |
|  | 1:15pm-2:15pm       | Expert Talk-3  |
|  | 2:15pm-3:45pm       | Dr. A.K Singh  |
|  |                     | NINNIT, Allahabad  |
|  | 5.00 .00            | Feedback & Valedictory   |
|  | 3:45 pm-5:00 pm     | and the same of th |



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### Some pics of the event:



