



# Dr B R Ambedkar National Institute of Technology Jalandhar Punjab India Department of Information Technology

## TEQIP-III Sponsored Online STC on Soft Computing: Theories and Applications (SoCTA-2020) 14-18 September 2020

**Timings:** Session1 11:00 AM – 1.00 PM  
Session2 02.00 PM – 4:00 PM



<https://forms.gle/ie3PSYZrukHLapJJ9>

(till September 12, 2020)

**No registration fee for attending STC**



### Eminent Experts

<b>Prof. Swagatam Das</b> ISI Kolakata	
<b>Prof. D.P. Vidyarthi</b> JNU, New Delhi	
<b>Prof. B.K.Panigrahi</b> IIT Delhi	
<b>Prof. Millie Pant</b> IIT Roorkee	
<b>Dr. N C Kaushal</b> NIT Hamirpur	
<b>Dr. Manoj Kumar Thakur</b> IIT Mandi	
<b>Dr. Jagdish Chand Bansal</b> South Asian University, New-Delhi	
<b>Prof. Aditya Trivedi</b> ABV-IIITM Gwalior	
<b>Prof. Tarun Kumar Sharma</b> Shobhit University	

### ORGANIZING COMMITTEE

#### CHIEF PATRON

**Professor Lalit K Awasthi**  
Director, NIT Jalandhar

#### PATRON

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Registrar, NIT Jalandhar

**Prof. A. L. Sangal**  
Head, CSE Dept. NIT Jalandhar

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**Mr. D. K. Gupta**  
**Dr. Rajneesh Rani**  
**Dr. K. P. Sharma**  
**Dr. Nonita Sharma**  
**Dr. Samayveer Singh**  
**Dr. Amritpal Singh**  
**Dr. Prashant Kumar**  
**Dr. Kunwar Pal**  
**Dr. Lalatendu Behera**  
**Dr. Jagdeep Kaur**

### OBJECTIVE OF THE COURSE

The aim of this short-term course is to provide an exposure in “Soft Computing: Theories and Applications” through interaction with experts in different domains of research in Evolutionary algorithms and Swarm Intelligence.

The technical program will include state-of-the-art lectures, discussion/presentation sessions, specifically focused on Insights and Research challenges in the area of soft computing. The proposed STC seeks to update the knowledge of tools and techniques in optimization. The participants. It includes the fundamental concepts of optimization theory and various optimization algorithms involved. These tools have a broad range of applications in almost every area of engineering, science, design and management.

It is also open to faculty members, persons from industry and doctoral/M.Tech/B.Tech students.

### TOPICS TO BE COVERED

The participants from various domains will be benefited immensely with the theories of SoCTA and will be a guide to learn and carry out research activities. The topics to be covered in this STC are as follows:

- ❖ Understand soft computing techniques and their role in real life problem solving.
- ❖ Understanding various nature inspired algorithms.
- ❖ Analyse and integrate various soft computing techniques in order to solve real-time problems effectively and efficiently.
- ❖ Foster abilities in designing and implementing soft computing-based solutions.
- ❖ Extending its enormous applications in areas such as medical diagnosis, computer vision, pattern recognition, machine intelligence, weather forecasting, network optimization, VLSI design, etc.