

**Two Days Workshop  
on  
Evolutionary Computing and its  
application to Engineering using MATLAB**

**3<sup>rd</sup> & 4<sup>th</sup> October 2018**

**REGISTRATION FORM**

Name :  
Designation :  
Organization :  
Mailing Address :  
Mobile :  
E-mail :  
Payment Details  
Amount Rs :.....

Head of the Department :

Signature

Date :

**Conveners:**

Dr. S. Kaja Mohideen  
*Dean (SECS)*

Dr. Y. Mohamed Shuaib  
*HOD/EEE*

**Co-ordinators:**

Mrs. S. Jennathu Beevi,  
*AP(SG)/EEE*

Mrs. Belwin J.Brearley,  
*AP(SG)/EEE*

**Registration Fees:**

Students/Research Scholars/Faculty from  
Institutions : Rs.600/participant

**Address for Correspondance:**

**Co-Ordinators**

Mrs. S. Jennathu Beevi, Assistant Professor (SG),  
Department of Electrical & Electronics  
Engineering,  
BSACIST

**Mobile:** +91 9962617483

**Email:** jennathu.beevi@crescent.education

Mrs. Belwin J.Brearley  
Assistant Professor (SG),  
Department of Electrical & Electronics  
Engineering, BSACIST

**Mobile:** +91 9445214129

**Email:** belwin@crescent.education



QS 4-STAR AWARDED  
INTERNATIONALLY  
TOP-RANKED UNIVERSITY



B.S. Abdur Rahman  
**Crescent**  
Institute of Science & Technology  
Deemed to be University u/s 3 of the UGC Act, 1956

**Two Days Workshop  
on  
Evolutionary Computing and its application  
to Engineering using MATLAB**

**3<sup>rd</sup> & 4<sup>th</sup> October 2018**

**Venue: Seminar Hall - I  
Convention Center, Crescent**



**Organized by**

**Department of  
Electrical and Electronics Engineering  
B. S. Abdur Rahman Crescent  
Institute of Science & Technology**

## ABOUT THE INSTITUTE

B.S. Abdur Rahman Crescent Institute of Science & Technology was established as a deemed to be University, under section 3 of the UGC Act, 1956 on 16<sup>th</sup> December 2008. The erstwhile Crescent Engineering College established in the year 1984, got upgraded as a Deemed to be University, was earlier affiliated to University of Madras and Anna University, Chennai.

It is one of the technical institutions of repute and served for the cause of quality technical education at under-graduate and post-graduate level, in addition to Ph.D. programmes in most of the disciplines of Engineering, Technology, Science and Humanities for well over 34 years.

This Institute after becoming Deemed to be University has been awarded “A Grade” by NAAC in the first cycle of accreditation in the year 2014. The programme-wise accreditation by NBA has been already initiated for all the engineering programmes, and 16 + 4 of the programmes have already been accredited under TIER-1, Washington Accord. It is one of the very few institutes to have been awarded an “Overall 4 STAR Rating” by QS and a “Top 100” NIRF Ranked institute.

## ABOUT THE DEPARTMENT

The Department of EEE was established, when Crescent Engineering College got established in the year 1984. The department is having excellent and dedicated team of faculty, supporting staff members and motivated students. At present, the department of EEE is offering B.Tech (Electrical and Electronics Engineering), M.Tech (Power System Engineering), M.Tech. (Power Electronics & Drives).

The department has produced 10 Ph.Ds and 27 research scholars are currently pursuing research in the department. Consultancy works worth of Rs. 61 Lakhs have been completed. Training programmes worth of Rs. 72 Lakhs have been successfully completed. There are more than 100 Journal / Conference publications in the last 5 years and the h-index of the department is 3.

## ABOUT THE WORKSHOP

Evolutionary computation is an artificial intelligence subfield and closely linked to computational intelligence, involving lots of combinatorial optimization problems and continuous optimization.



It is employed in problem-solving systems that use computational models with evolutionary processes as the key design elements. It is an abstraction from the evolutionary concept in biology since it deals with methods and concepts that are continually and selectively evolving and optimizing. Evolutionary computation is a general name for a group of problem-solving techniques whose principles are based on the theory of biological evolution, such as genetic inheritance and natural selection. These techniques are applied to a variety of problems, from practical industry applications such as analytics and prediction algorithms to leading-edge scientific research such as protein folding.

Evolutionary computation is usually implemented on computer systems that are used to solve problems, implementing techniques such as evolutionary algorithms, differential evolution, genetic algorithm, firefly algorithm, particle swarm optimization, flower pollination algorithm etc.

Techniques in this field are used on problems that have too many variables for traditional algorithms to consider and in times where the approach in solving a particular problem is not well understood.

The workshop aims to provide

- A brief introduction on Genetic Algorithm and its applications
- Grey wolf algorithm and its application to Engineering problems using MATLAB
- Multi objective Particle Swarm Optimization and its application to Engineering problems using MATLAB
- Firefly and Flower Pollination Algorithms and its application to Engineering problems using MATLAB

## WHO CAN PARTICIPATE

Under Graduate Students / Post Graduate Students / Research Scholars / Faculty members of Mechanical, Electrical, Instrumentation Engineering and Industry Personnel.