

### **Tentative Course Schedule**

#### **Day -1 Lab Session**

- 9.30am-10.00am :  
Introduction to MATLAB : Basic Programming Language Feature.
- 10.00am-10.45am :  
Vectors: Basic operations, Dot product, Vector Indexing in MATLAB and Plotting in MATLAB.
- 10.45am-11.00am:  
Coffee/Tea Break
- 11.00am-11.30am:  
Matrices : Definition, fundamental properties, basic operations, Linear Transformations.
- 11.30am-01.00pm:  
Polynomials, Curve Fitting & Interpolation, Solving linear equations, Eigen Values & Eigen Vectors, Ordinary Differential Equations & Symbolic Mathematics.
- 01.00pm-2.00pm:  
Lunch Break
- 2.00pm-3.00pm:  
Laplace Transform & its Applications, Fourier Transform & its Applications.
- 3.00pm-3.45pm:  
2-D & 3-D plotting in MATLAB.
- 3.45pm-4.00pm:  
Coffee/Tea Break
- 4.00pm-4.45pm  
Numerical Analysis & its applications.
- 4.45pm-5.30pm:  
Graphics & Creating GUI in MATLAB.

#### **Day -2 Lab Session**

- 9.30am-10.45am : MATLAB Applications in Processing Speech, Audio & Bio-Signals.
- 10.45am-11.00am : Coffee/Tea Break
- 11.00am-01.00pm : MATLAB Applications in Image Processing & Computer Vision.
- 01.00pm-2.00pm : Lunch Break
- 2.00pm-3.45pm : MATLAB Applications in Machine Learning, Data Mining & Soft Computing.
- 3.45pm-4.00pm : Coffee/Tea Break
- 4.00pm-5.30pm : Mathematical Modeling with MATLAB.

### **ORGANIZING COMMITTEE**

*Convener & Chair person :*

**Dr. L. Sasi Bala**  
Principal.

*Coordinators :*

**Smt. P. Nirmala Kumari**  
Lecturer in Mathematics

**Smt. A.V. Kavitha**  
Lecturer in Computer Science

#### *Organizing Committee Members*

- 1. Sri. Ch. Pulla Reddy**  
Vice Principal & IQAC Coordinator
- 2. Smt. K.M.S Sailaja Rani**  
Dept. of Computer Science
- 3. Smt. D. Kalyani**  
Dept. of Mathematics
- 4. Sri. G.V. Bhaskar**  
Dept. of Mathematics
- 5. Dr. Shaheda Akthar**  
Dept. of Computer Science
- 6. Dr. K. Saroja**  
Dept. of Mathematics

#### **For Details Contact**

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Guntur.

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Dept. of Computer Science  
Govt. College for Women(A),  
Guntur.

## **Applications of Mathematics in Computer Science**

### **An Interdisciplinary National Workshop**

**20th & 21st Feb 2015**

*Sponsored by :*

**UGC - SERO**

*Organised by :*

**Department of Mathematics &  
Computer Science  
Govt. COLLEGE FOR WOMEN (A)**

Accredited 'A' by NAAC  
Guntur  
Andhra Pradesh

### About College

Government College for Women, Guntur, established in 1942, has been the beacon of knowledge to generations of women students from the town as well as many neighboring villages in the district. Founded by philanthropists and visionaries working for emancipation of women and for social equality, the institution has withstood the tough competition from the corporate culture and rapid multiplication of degree colleges in the town and has emerged as a reliable, equality conscious, disciplined, value oriented and accessible destination for those who seek higher education in a secure environment.

The campus which is spread over 10 acres in the heart of the town, takes care of the educational needs as well as employment needs of students from plus two to PG as it includes a government junior college, a government vocational junior college along with Degree College which also offers 3 PG courses (Chemistry, Economics, Telugu), conducts job fairs on campus through its Jawahar Knowledge Centre to see that its students leave the campus as educated and empowered citizens.

Accredited with 'A' by NAAC in September 2011, UGC sponsored IQAC cell is there in our college. The college has endeavored to set higher benchmarks in all aspects, keeping the institutional vision and mission as indicators and the suggestions of the NAAC peer team as motivators. The constant guidance and support from the CCE-AP, encouragement and involvement of the public and trust of the stakeholders motivate this institution of realize its goals which are in line with the Nation's goals for women's education.

### Objective of this Workshop

The objective of this workshop is to explore the mathematical techniques for Computer Science Applications. The three areas of continuous mathematics such as Linear Algebra, Probability and Statistics are critical in many parts of computer science, including machine learning, scientific computing, computer vision, computational biology, computational finance, natural language processing, and computer graphics etc., This workshop will provide **hands-on experience** with specialized language for mathematical computation, such as **MATLAB**, and will discuss how the language can be used for computation and for graphical output.

### Key Facilitator and Master Trainer

**Mahesh Anand. S**  
Research Scientist, Founder &  
CEO, SCS-India, Chennai.

### Eligibility :

Faculty, Research Scholars Working in related areas

### Registration:

Faculty : Rs. 400/-  
Research Scholar : Rs. 300/-

The registration fee Covers Working lunch, snacks Tea/Coffee for two days along with the conference kit. Registration fee has to be paid through Demand Draft drawn in the favour of convener – National Workshop on "Applications of Mathematics in Computer Science" payable at Syndicate Bank (A.C. College Extension Counter, Branch No: 3279), Guntur.

Filled in registration forms along with scanned copy of D.D should be mailed on or before 10-2-2015 to amicsgcw@gmail.com

**Last date for Registration: 10-02-2015.**  
**Provision is available only for 40 participants**  
**on first come first serve basis.**

**Note:-** Participants are requested to bring their laptops.

**Accommodation:-** Arrangements will be made on payment for stay at local hotels of Guntur on request through a letter on or before 10.02.2015 for long distance participants. Travelling allowance and D.A @ Rs.350/- per day will be paid for long distance participants.

### Registration Form :

**An interdisciplinary National Workshop**  
**on**  
**Applications of Mathematics in**  
**Computer science**  
**On**  
**On 20th & 21st February, 2015**

Name :

Designation :

Department :

University/College :

Address :

Mobile :

Email :

### Payment details

Amount: Rs :

Draft No :

Date :

Issuing Bank :