## About The College

❖ The college was established in 1996 by Sree Vidyanikethan Educational Trust under the stewardship of Dr. M. Mohan Babu, renowned film artiste and former Member of Parliament (Rajya Sabha).

❖ Approved by AICTE, New Delhi and permanently affiliated to Jawaharlal Nehru Technological University Ananatapur, Anantapuramu.

❖ The college is conferred 'Autonomy' by University Grants Commission (UGC), New Delhi in 2010.

❖ Awarded 'Colleges with potential for Excellence(CPE)' by UGC, New Delhi under XII Plan period UGC-CPE scheme.

❖ The college is accredited with "A" grade by NAAC.

❖ Offers B.Tech Program in 08 disciplines, M.Tech Program in 07 specializations and MCA.

❖ Extensive Computing facilities with more than 2000 computers.

❖ Centrally Air-Conditioned Auditorium, e-class rooms and Seminar Halls.

❖ Selected for participation in TEQIP-II under Sub Component 1.1: Strengthening Institution to improve learning outcomes and employability of graduates with a grant of Rs. 4 Crores. An additional fund of Rs. 2 crores obtained as one of the best performing Institutions.

❖ MoUs with 20 Industries/Institutions including IIT-Hyd, IITM-QEEE, CII-Hyd & ISB-Hyd.

❖ Vibrant placements for both UG and PG.

**Route:** 15 km from the temple town of Tirupati on Tirupati-Madanapalle National Highway No. 205.

### Courses offered:

The college offers B.Tech programs in CSSE (120), CSE (240), IT (120), EEE (240), ECE (240), EIE (120), CE (120), ME (180). The college also offers MCA and M.Tech in CS, CNIS, SE, EPS, DECS, VLSI and CMS.

### Dept of Computer Science and Systems Engineering

The Department was established in the year 1999 with a modest intake of 40. The intake was increased to 60 in the year 2002 and 120 in the year 2012. The Department got accredited by NBA in 2014 under OBE for three years. The Department has well qualified and experience faculty. In every Academic Year about 80% of eligible students are placed in different organizations both in national and multi-national companies. To keep abreast of latest technologies, the Department organizes various Guest Lectures, Seminars and Workshops by inviting eminent people from Academia and Industry. Department has its distinguished Alumni in National, Multinational, Government and Public sector units.

## Objective of the FDP:

The objective of this FDP on **"Cryptography: Foundations and New Directions in Research"** is to provide the most important technical and theoretical aspects of modern Cryptography. Cryptography is a science that applies complex mathematics and logic to design strong encryption methods. The rapid increase of information transmitted electronically resulted to an increased reliance on cryptography. This leads to an increase in the need of security services such as confidentiality, integrity, authentication etc. These security services are solely depends on cryptographic algorithms. The aim is to provide fundamental theory, practical aspects and research direction are the major topics to be covered.

### Outcomes of the FDP:

❖ Gain knowledge on basic principles of applied cryptography, including classical cryptography, modern secret key and public key cryptography.

❖ Identify Research Problems in the area of Cryptography.

❖ Participants can acquire skills in Cryptanalytic attacks.

❖ Understanding security (attacks and defenses) in complex real life systems and the role of keys, cryptographic algorithms and protocols.

❖ Hands-on Experience-Attacks on existing Ciphers viz DES, SHA-1 etc..

❖ Learn basic techniques to protect data in computer and communication environments against several different varieties of fraud.

### Course Contents:

❖ Overview of Cryptology
❖ Mathematics for Cryptology
❖ Classical Cryptosystems
❖ Modern Block Ciphers, Stream Ciphers
❖ Public Key Cryptosystems
❖ Hash Functions and digital signatures
❖ Elliptic Curve Cryptography
❖ Pairing Based Cryptography
❖ Lattice Based Cryptography
❖ Quantum and Post Quantum Cryptography
❖ ID based cryptography,
❖ Implementation of some Crypto systems
❖ Anonymous Signature
❖ Algebraic Cryptanalysis
❖ Secret Sharing

## Resource Persons :

1. Dr. N Rajesh Pillai, Scientist-G, SAG,DRDO, New Delhi.
2. Dr. Sartaj UL Hasan, Scientist-C SAG, DRDO, New delhi
3. Dr.Sahadeo Padhye, Assistant Professor, MNIT Allahabad
4. Dr. PVS Anand, Assoc.Professor, C.R.Rao (AIMSCS), Hyderabad
5. Dr. Vishal Saraswat, Asst.Professor, C.R.Rao (AIMSCS), Hyderabad.
6. Dr.M.Naresh Babu,Assoc.Professor Dept.of CSSE,SVEC,Tirupathi.

### Eligibility:
Faculty of CSSE, CSE, IT, Mathematics and related branches from AICTE Approved Colleges

### Registration:
The filled in registration form is to be submitted (through mail id or hard copy-*kavithakrishnag19@gmail.com* ) to the department of CSSE on or before 08-02-2017.

### General Information:
❖ Selection will be on first come first served basis.
❖ Certificates will be issued to all the participants only if they attend all the sessions.
❖ No TA/DA will be provided for attending the programme. Participants will have make their own accommodation arrangements.
❖ No Registration Fee.
❖ Working Lunch and Snacks will be provided.

### Important Dates:
❖ **Registration closes by :** 08th February, 2017
❖ **Intimation of Selection :** 10th February, 2017 (Through E-mail)
❖ **Programme Dates** : 16th-18th February, 2017

### Contact:
**1. Ms.C.Sushama, Ms.T. Kavitha**
Assistant Professor
Department of Computer Science and Systems Engineering
Mobile No.: +91-8897165555

# Three Day FDP on "Cryptography: Foundations and New Directions in Research"

**16th -18th February, 2017**
**Under TEQIP-II**

## REGISTRATION FORM
**(Use Xerox copies if Necessary)**

1. Name : _____

2. Designation : _____

3. Qualification : _____

4. Department : _____

5. Name of the Affiliating Institute: _____
   _____

6. Phone No. : _____

7. Email : _____

8. Address for Communication _____

   _____

   _____

*Place:*                     ***Signature of Applicant***

### SPONSORSHIP

*Mr./Ms./Dr. _____ is an employee of our Institution and is hereby sponsored. He/she will be permitted to attend the programme, if selected.*

*Date:*              ***Signature of Head of Institution***
                                  ***With seal***

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### Chief Patron
**Dr. M. Mohan Babu**
Chairman, SVET.

### Patron
**Prof. T. Gopal Rao**
Special Officer, SVET.

### Advisors
**Dr. D.V.S. Bhagavanulu,** Director, SVEC.
**Dr. P.C. Krishnamachary,** Principal, SVEC.

### TEQIP-II Coordinator
**Dr. A. K. Damodaram**
Professor, Dept.of Mechanical Engineering.

### Program Advisor
**Dr.B.Narendra Kumar Rao**
Professor and Head,Dept.of CSSE

### Convener
**Dr. M. Naresh Babu**
Associate Professor, Dept.of CSSE.

### Coordinators
**Ms.C. Sushama,** Assistant Professor of CSSE.
**Ms.T. Kavitha,** Assistant Professor of CSSE.

### Organizing Committee
**Dr. G. Sasi Kumar,** Assoc. Professor
**Dr. P. Sivakumar,** Assoc. Professor
**Ms. K. Lalitha,** Asst. Professor(S.L)
**Mr. A. Chandra,** Asst. Professor
**Ms. P. Dhanalakshmi,** Asst. Professor
**Mr. S. Shiva Prakash,** Asst. Professor
**Mr. M. Ramu,** Asst. Professor
**Mr. P. Surya Chandra,** Asst. Professor
**Mr. B. Narendra,** Asst. Professor
**Mr. D R Kumara Raja,** Asst. Professor
**Mr. B.D. Kalyan Kumar,** Asst. Professor
**Mr. T. Bala Krishna,** Asst. Professor
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**Mr. B. Rakesh,** Asst. Professor
**Mr. V. Lalithendra Nadh,** Asst. Professor
**Ms. O. Rajitha,** Asst. Professor
**Mr. P. Lakshmi Sagar,** Asst. Professor
**Ms. K. Thejaswi,** Asst. Professor
**Mr. N. Bala Krishna,** Asst. Professor
**Mr. Ashraf Ali Shaik,** Asst. Professor
**Mr. M. Ismail,** Asst. Professor
**Ms. M Sri Lakshmi Preethi,** Asst. Professor

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**SREE VIDYANIKETHAN**
Engineering College
(Autonomous)



*Organized by*

**DEPARTMENT OF COMPUTER SCIENCE AND SYSTEMS ENGINEERING**
**SREE VIDYANIKETHAN ENGINEERING COLLEGE**
**(Autonomous)**
**Affiliated to JNTUA, Anantapuramu,**
**Accredited by NAAC 'A' grade**
**Sree Sainath Nagar, Tirupati**
**Chittoor Dist. – 517 102 A.P.**
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