



*SANDIP FOUNDATION'S
SANDIP INSTITUTE OF
ENGINEERING & MANAGEMENT
Nashik*

SIFEM

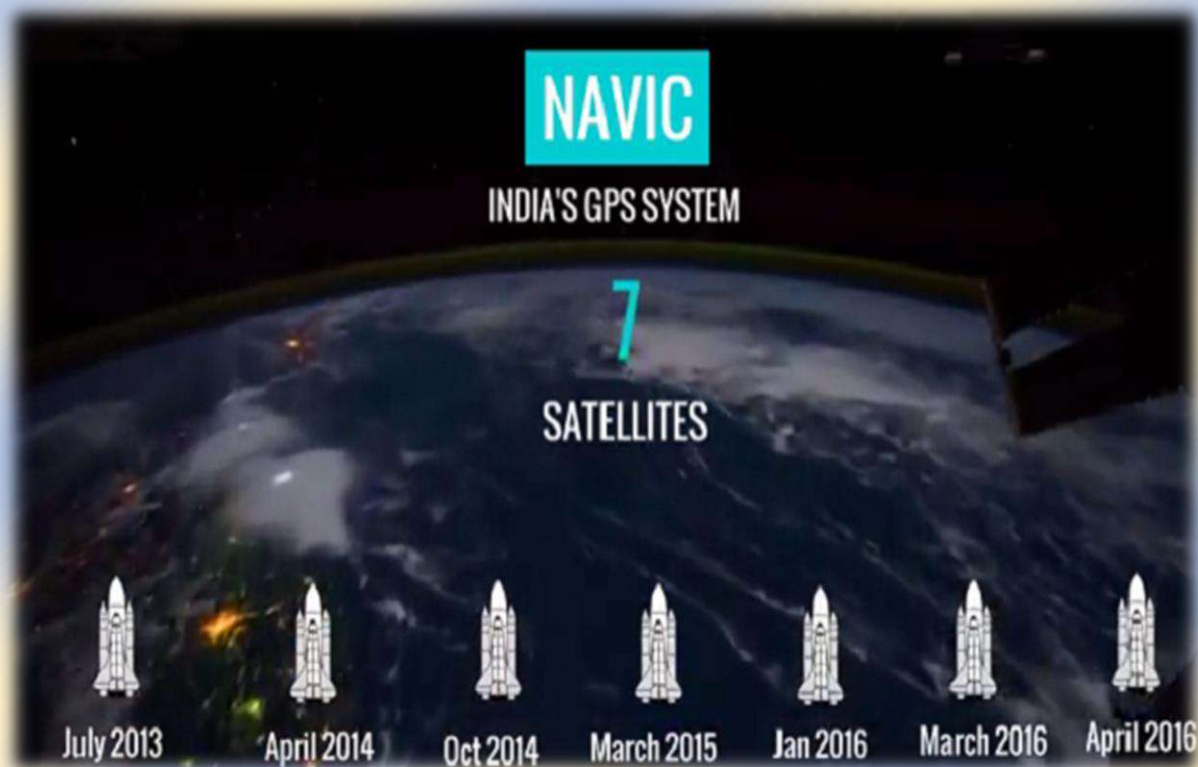
E-BULLETIN

OCTOBER 2017

Editor's Section:

ISRO-NavIC

The Indian Regional Navigation Satellite System (IRNSS) with an operational name of NAVIC ("sailor" or "navigator" in Sanskrit, Hindi and many other Indian languages, which also stands for NAVigation with Indian Constellation) is an autonomous regional satellite navigation system, that provides accurate real-time positioning and timing services. It covers India and a region extending 1,500 km (930 mi) around it, with plans for further extension. The system at-present consist of a constellation of 7 satellites, with two additional satellites on ground as stand-by. The constellation is already in orbit and system is expected to be operational from early 2018 after a system check. NAVIC will provide two levels of service, the 'standard positioning service' will be open for civilian use, and a 'restricted service' (an encrypted one) for authorized users (including military).



The system is intended to provide an absolute position accuracy of better than 10m throughout Indian landmass and better than 20 meters in the Indian Ocean as well as a region extending approximately 1,500 km (930 mi) around India. The Space Applications Centre in 2017 said NAVIC will provide standard positioning service to all users with a position accuracy up to 5 m. The GPS, for comparison, had a position accuracy of 20–30 m. Unlike GPS which is dependent only on L-band, NAVIC has dual frequency (S and L bands). When low frequency signal travels through atmosphere, its velocity changes due to atmospheric disturbances.

Rubidium Atomic Clocks

Almost a Primary Reference Source

Symmetricon



- Use:**
- Versatile frequency source for many commercial, telecommunication & aerospace applications
 - first atomic clock in space
 - meets lifetime mobile basestation holdover
 - perfect Osc. inside GNSS & SSU systems
- Pro's:**
- small, light, low cost, low power atomic clock
 - fast warm up (7 minutes)
 - excellent retracibility
 - unlimited lifetime (physics doesn't limit lifetime)
 - self controlled, alarm indication
 - 3-6 weeks network holdover
 - very good short term stability
- Con's:**
- doesn't meet PRS stability specification
 - Rubidium typical frequency aging of 1 to 5e-11/month
 - initial factory calibration / aging correction required

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In 2017, it was announced that all three rubidium atomic clocks on board IRNSS-1A had failed. The first failure occurred in July 2016, following which two other clocks also failed. This rendered the satellite somewhat redundant and required replacement. Although the satellite still performs other functions, the data is coarse, and thus cannot be used for accurate measurements. India's Department of Space in their 12th Five Year Plan (2012–17) stated increasing the number of satellites in the constellation from 7 to 11 for extending coverage. These additional 4 satellites will be made during 12th FYP and will be launched in the beginning of 13th FYP. Also, development of space qualified atomic clocks was initiated, along with study & development initiative for All Optical Atomic Clock

CELEBRATION “FRESHER'S PARTY”

by Civil Engineering Department

Department of Civil Engineering SIEM Nashik organized Freshers Party for new batch of second year students. This function is organized for the purpose of interaction of new students with senior students and department faculty. HOD Civil engineering Prof. K. L. Bidkar delivered welcome speech and given the department information to gathering. Felicitation of Guest was done by ACES President and Team Members of Civil Engineering Dept. Civil Dept. Faculty & Team ACES taken the efforts for smooth conduction of program.

In the initial phase of program Felicitation of Winner of Volley Ball competition taken at SF campus held by Civil Dept SIEM was done.

During this program some events were arranged for second year students like, Mr. & Miss Fresher, Dance, Games etc. Lunch and DJ music system was arranged for the students during the program.







ALUMNI MEET OF Department of Civil Engineering

Event Co-ordinator : Prof. Ketan Salunke/ Prof. Satish Barmade





Alumni Meet of Computer Department

Objective:

Objective was to call all the alumni and give them an opportunity to interact with all the juniors and guide them in various aspects. Also we to get various information about various openings available in the market. Alumni shared their professional experience with juniors. Furthermore, they suggested few things which can be implemented in the curriculum, to help the students for the placements. Outcome of this event is junior students got awareness about how they should prepare themselves to get ready to work in the industry.







Seminar on Blog Creation

Dr. M. R. Sanghavi
Professor, SNJB, COE, Chandwad

Event Coordinator : Prof. A.R. Gaidhani

Number of Students: 80

Event Objectives & Outcomes:

Understanding the concepts of blog creation, Different techniques for blog creations. To Understand and to develop our own blog. Students of Second and Third year got the concepts of create, design, modify our own blog. By creating blog how to Attract an Audience, Build Rapport and Engagement, Create Opportunities, Organize Your Thoughts and Learn, Tell Your Story, Meet New People etc.

Workshop Photos:





Educational Visit at Sandip University construction site, Mahiravani, Nasik

Subject:- *Building Technology and Materials*

Class: SE Civil Students

Topic Covered :

1. Different building materials, Formworks, centering and shuttering, building finishing.
2. Beyond Syllabus scope: Reinforcement details for Flat slabs, waist slab, bar bending, and post tension bars etc.

Objectives:

- To study stages of construction.
- To study different building components.
- To study materials used in building construction.

Outcome:

After completion of visit students came to know following details:

1. Details information building construction site .
2. Various components of the building .
3. Arrangement and placing details of formwork, shuttering and centering for slab, beam and staircase of building.
4. Understanding of brick bond in walls.
5. Understanding of various building materials such as bricks, cement, tiles, etc.
6. Understanding of reinforcement details and laying along with post tension bars (tendons) laying conceptually.





Guest Lecture on “Session on Resume writing”

by
Prof. Indrajit S. Sonawane, TPO, Sandip Foundation
Under
Department Placement activity

Outcome of the session :

- Prof. Indrajit guided the final year students about the preparation of resume .
- He discussed about the Do's and Dont's in the resume.
- He had given the innovative ideas to make resume more effective .
- He had also shown the various standard resume formats .





Guest Lecture on Motivational Interaction & Need Of Positive Attitude

by Mr. Ashish Patil, M. Sc. (Psychology) NLP Practitioner

Date of Program: 25th September, 2017

Co-ordinator: Dr. T. A. Rajput

Brief Discussion of Event:

Workshop of Motivational Interaction & Need Of Positive Attitude was organised on 25th Sep., 2017. The strength of motivation and positive thinking combined It is much easier to get on to doing anything when you clearly know the reasons why you want to do it and you can identify the benefit you'll get when you achieve your goal. The following steps combine motivation and positive thinking: Decide what you want. Many people cruise through this life not even knowing what they want, and just reacting to what comes along, either by accepting it or by rejecting it. They don't choose, as such. You know, you have the power to choose what you want. This is your motivation. This is so you don't give up, and you actually end up having what at the moment you can only imaging. Use motivation and positive thinking together. You could use visualization techniques and positive affirmations to make you create now the feeling you will have when you achieve your goal.





Orientation Lecture on Fire & Security Association of India (FSAI)

1. **Event Title:** Orientation lecture by Fire & Security Association of India
2. **Event Conduction Duration:** 3 Hrs.
3. **Resource Person:** Dr S M Shendorkar (Principal, Bharati Vidyapeeth college of Engineering, Lavale & Chairman, Student Activity, FSAI)

Event Description:

On 19th Sept.2017, Department of Civil Engineering SIEM Nashik organized orientation lecture of Fire & Security Association of India (FSAI) at Civil Engineering Dept. For this program Dr S M Shendorkar (Principal, Bharati Vidyapeeth college of Engineering, Lavale & Chairman, Student Activity, FSAI) was the resource person. This program is conducted by keeping the goal of department to established the student chapter of Fire & Security Association of India at SIEM Civil Engineering Dept. For this program 250 plus students and all the faculty of civil engineering dept. were present.

At the starting of program felicitation of dignitaries was done by HOD Prof. K. L. Bidkar. After that welcome speech was delivered by Prof. S. G. Pande. Then by taking the blessings from goddess Sarswati Dr. S M Shendorkar addressed the gathering and motivated them to join the FSAI. He also assured the gathering that very soon the Student Chapter of FSAI will be established in Civil Engineering Dept. of SIEM Nashik. Program was concluded after vote of thanks and National Anthem.

Welcome to Dignitaries:







CELEBRATION OF *FRESHER'S PARTY OF DIRECT SE STUDENTS*

Date: 23rd September 2017

Objective: The event was organized by Mechanical Engineering Student Association (MESA) to introduce newly admitted second year students to department and to strengthen the bond among the students. A competition was held for second year students named “Mr. and Miss Freshers” in which a platform was provided for students to showcase their talent in front of other students. Many students performed dance, Singing and mimicry and a program ended with very much positive vibe. **Also lunch was provided by department to all SE, TE and BE students.**

Outcomes:

Student got chance to show their talent in and the senior students ice braking was achieved between seniors and junior students with this program.

The Winners of previous “Engineers Day” competition were felicitated and prizes were distributed by Hon. Principal, Dr.M.P.Ray.





Industrial Visit

at Vaitarna Hydroelectric Power Station

Subject: Fluid Mechanics-II

Class: TE Civil Students

Objective:

1. To study types of turbines
2. To study the working of Francis turbine
3. To study different components of hydro power plants

Outcome: After completion of visit student came to know following details:

1. Details information of components of hydro power plants obtained.
2. Observed the components of Francis turbine.
3. Observed the working and construction of draft tube.
4. Observed the working of the turbine and get information that how electricity can be generated.





Workshop on Three Days State Level Hands-on Workshop on “Compiler Design & Data Mining”

by

Dr. A. B. Pawar, Computer Engineering, Sanjivani College of Engineering, Kopergaon.

Dr. K. C. Nalavade, Computer Engineering, SIEM, Nashik.

Prof. Sujit. A. Ahirrao, Computer Engineering, SIEM, Nashik

Prof. Amit G. Patil, Computer Engineering, SIEM, Nashik

Audience: Faculties from Academic Institutions, UG students & Research Scholar

Number of Participants: 86.

Course Content:

- Introduction to Compiler & Data Mining
- Phases of Compiler
- Hands on Lexical Analyzer using LEX Tool
- Hands on Parser using YACC Tool
- Hands on ICG using LEX and YACC
- Implementation of AST & Code Optimization
- Hands on KNN & Apriori Approach
- Introduction to Supervised & Unsupervised Learning
- Hands on K - Means Clustering using C++ & weka

Event Objectives

- Providing opportunity to faculty and UG students of Engineering Colleges or improving their technical skills and knowledge.
- Providing an opportunity for interaction and mutual exchanges of ideas between interested teachers and trainer working in particular areas of specialization.
- Providing an opportunity for teachers to familiarize themselves with modern engineering practices including the latest technological advances adopted by industry in view the national needs and relevant technologies.

Outcomes:

Participants get in depth knowledge of compiler construction and its working, data mining and its different algorithms. The workshop is divided into their sessions and lab sessions, in which participant's gets hands on various assignments. How to scan the program, check the syntax, generate the intermediate code, how to optimize it are the various assignments covered under compiler constructions. Various algorithms like Apriori, K-means, KNN covered under data mining





SESSION ON “Cyber Forensic”

by

Mr. Tanmoy Dikshit

Director at CPAG Graphology Experts LLP

Nasik, Maharashtra, India

Information Technology and Services

Course Content:

- Basics of Cyber security
- Ethical hacking
- Videos on cyber security
- Cases handled by cyber police.

Objectives:

- Assess the current security landscape, including the nature of the threat, the general status of common vulnerabilities, and the likely consequences of security failures;
- Appraise the interrelationships among elements that comprise a modern security system, including hardware, software, policies, and people;
- Assess the role of strategy and policy in determining the success of information security

Outcomes:

- Explain the concepts of confidentiality, availability and integrity in Information
- Assurance, including physical, software, devices, policies and people. Analyze these factors in an existing system and design implementations.
- Cite and comply with relevant industry and organizational codes of conduct & ethics.





COMPETITION ON Marketing Monopoly competition





Expert Lecture On “VLSI DESIGN”

Conducted by
Department of E&TC Engineering





ART & CRAFT EXHIBITION

By Civil Engineering Department







Seminar Internet of Things (IOT) by

**Mr. G. G. Gaikwad,
IOT Developer, Intelidemics, Nashik.**

Event Coordinator: Prof. A. C. Taskar

Number of Students: 104

Event Objectives & Outcomes: Objectives:

- a. Concept of IOT
- b. IOT devices
- c. Uses of IOT
- d. Applications
- e. Current Trends in IOT

Outcomes:

- a. Students gain the exact concepts of IOT through examples.
- b. Working of IOT based systems.





Educational Visit at National Pipe, Satpur, Nasik

Subject:- Structural Design & Drawing-I.

Class: TE Civil Students

Topic Covered : Trusses, beams, columns, footing

Objectives:

1. To study Structural steel details
2. To study details of various connections
3. To study Truss components & its details
4. To get the knowledge of Structural footing
5. To study components of various steel structures & its parts

Outcome:

After completion of visit students came to know following details:

1. Details information regarding steel structures & its parts
2. Connections details at sites .
3. Arrangement of structural members
4. How to execute structural drawing at site







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