

# SANDTP FOUNDATION (Nashik Campus)

MARC# 2016

E-BULLETIN



# SANDIP INSTITUTE OF

ENGINEERINGE

MANAGEMENT

# ....MESSAGE FROM THE CHAIRMAN....



SANDIP FOUNDATION was established in 2005 with a vision of creating an education system from which the leaders of tomorrow emerge. Since our inception we have been aware of our strengths, motives and goals which we have set out to achieve. When we embarked on this journey, all we had was a dream and the tools of foresight and strategy. We combined these forces to pave a path of growth towards excellence and merit. Today it is our endeavour to be the most competitive institution in the

country with emphasis on efficiency in everyday operations, reliability for students and thrust on discovery and development of new technologies. We are an organization that combines the latest developments in the field of education with our scientific and operational skills to create an environment which nurtures and encourages the aspirations of students. It is our aim that the combination of these factors along with the state of the art infrastructure and a dedicated teaching staff will provide an impetus to the Indian educational system as a whole. Our first campus is set up at Nashik, Maharashtra where the college building is spread across a 200 acre area. Keeping pace with the times, the campus is Wi-Fi enabled. To ensure the complete educational experience, laboratories with the latest tools and machinery are provided along with a comprehensive library with RFID technology, a computer centre with complete internet connectivity a wholesome cafeteria, all set up in a green environment to give our students the most healthy and pleasant experience as they embark and pursue their professional goals. What does an International quality Education system consist of? That is the question we asked ourselves when we set out to build this Foundation. India as a country has no problem with unemployment but there are institutions which churn out a large number of unemployable students. Should we consider ourselves an exception to this? The search for the answer has resulted in the faculty and staff to come up with innovative methods in teaching to construct new knowledge in the classroom. Our motto is to always give our students the best of what is happening in and around so that they are always at the cutting edge of academics the world over. The cultural aspect has always been a strong-point of our College as it has an acknowledged role in moulding the personality, teaching softskills, developing leadership and management abilities and strengthening the EQ. Extracurricular activities, participation in sports and other cultural activities has now become universal contributing to all-round formation which is much needed in the world today. Finally we look to create an Alumnus for inspiration and support so that our students have wonderful role models to emulate. Our faculty and students remain focused on a quality of education that is not just a college degree but a way of life.

> HON. DR. SANDIP KUMAR JHA CHAIRMAN SANDIP FOUNDATION

# ....MESSAGE FROM MENTOR & GM....



#### **GM Message**

Sandip foundation was established with the core objective of rendering selfless and dedicated, service to higher education in the disciples of Engineering, Sciences, Arts, management studies, Polytechnic and Pharmacy. It is our vision to provide education aided by the best infrastructure available in the most congenial atmosphere so that every student can aspire, achieve his dreams and succeed in life. The visionaries of Sandip Foundation have been involved in the field of higher education since the last fifteen years. During this period they have provided

the most valuable service to thousands of students across the country. In the quest to enhance the cause of higher education, professional courses across various fields are designed and set up with the institution housed out of Nashik.

> Hon. Mohini Patil GM, Sandip Foundation



#### **Mentor Message:**

Sandip Foundation is an educational institution, which strives to form men and women who will build more than just a human world. It strives for an intellectual endeavour that focuses on critical and creative thinking, with the aim of social transformation. The college makes a preferential option for the marginalized and it seeks or give an all-round formation, inculcating both human and spiritual values. Competence, compassion and commitment are the hallmarks of the human person we seek to encourage. The infrastructure is world class with workshops, state-of-the-art Laboratories, overhead projectors

in every classroom, and extensive library hostel facilities for outdoor students. The faculty and staff are dedicated in their task of making the Institution a world class learning centre and hence constantly look to improve the learning process.

> Hon. Prof. P. I. Patil Mentor, Sandip Foundation, Nashik



**Prof. N. L Bhirud** 

**Dean Admin** 

Prof. (Dr.) R. G. Tated Principal



Prof. A S Dube Dean Academics



Prof. V A Kolhe HoD (Mechanical)



Prof. Dr.D P Kadam HoD (Electrical)



Prof.D Patil HoD(E&TC)



Prof. K Bidkar HoD (Civil)



Prof. K Nalavade HoD(Computer)



Prof. R J Nayak HoD(First Year)

# STATT CORNER

# Importance of Mathematics in Electronics & Communication

#### By Prof. Neetu M. Sharma, Priyanka Ahire

Electronics and telecommunications technicians need more mathematics, including complex numbers, trigonometry, elementary geometry, elementary statistics, and differential and integral calculus. All areas want their students to be able to use technology, such as spreadsheets, to analyze mathematics. Better communication between mathematics and technology departments was considered vital.

The most important general goals for the mathematical education of students in technical electronics fields are

- Development of formula manipulation skills and understanding of the value of the formulas via the use of real problems
- Development of problem solving skills and critical reasoning.

#### ALGEBRAIC TOPICS AND SKILLS

- Solving equations for particular variables
- Línear equations and slopes
- Quadratic equations
- Important to test solutions for feasibility.
- Needed for complex numbers and conjugates
- Necessary for considering nonlinear effects
- Simultaneous equations (usually two equations)
- Cramer's rule, Gaussian elimination
- Matrix methods (for more than two variables)
- Manipulation of inequalities
- Number systems: binary, hexadecimal

#### FUNCTIONS

- Definitions of function, dependent variable, and independent variable
- Absolute value functions, step functions, polynomials, linear functions & slopes
- Exponential functions and logarithms (base 10)
- Composite functions
- Limits of functions, zeroes, asymptotic behavior, extrapolation
- Semiconductor example: where does Ohm's law break down?

# STATT CORNER

#### TRIGONOMETRY

- Basic trigonometric functions: sine, cosine, and tangent
- Computations with right triangles
- Relationships with the unit circle
- Graphical analysis of sines and cosines:
- Amplitude, phase, frequency, RMS peak, and relationship between RMS and peak.

#### VECTORS

- Resultants, addition and subtraction of vectors
- Vector products and cross-products (for higher level degrees)
- Phasors (vectors in the complex plane representing sinusoidal signals)

#### GRAPHS OF FUNCTIONS AND DATA

- Coordinate systems, both rectangular and polar
- Use of log and semi-log paper
- Curve-fitting techniques (linear regression, etc.)
- · Graphical analysis

#### STATISTICS

- Means, medíans, standard deviations
- Normal dístributions
- Sigma notation
- Know when a process is "drifting" (statistical controls)
- Variability in measurements
- Difference between population and sample (discrete vs. continuous data)
- Descriptive statistics (skew)
- · Quality control

#### DIFFERENTIAL AND INTEGRAL CALCULUS

- Derivatives and integrals and their meanings
- Delta Functions

#### SIGNAL ANALYSIS

- Fourier analysis. Deconstructing a periodic waveform into its constituent frequencies; see also: Fourier theorem, Fourier transform.
- Nyquist-Shannon sampling theorem.
- Information theory. Sets fundamental limits on how information can be transmitted or processed by any system.

# "DESIRE 2k16"







# INDUSTRIAL VISIT PERSISTENT SYSTEM LIMITED, PUNE

19TH FEBRUARY, 2016

#### T.E. COMPUTER ENGINEERING STUDENTS



## Brief:

In this visit, there were total 42 students and 4 staff members. The companies HR explored their ideas and views. They shared their experience with students. Student asked their queries regarding criteria, technologies to them. It was beneficial for student as they came to know about the working environment, latest technologies, and current requirement of industries and availability of different facilities.

# INAUGURATION OF

# STUDENT CHAPTER OF ASSOCIATION OF CONSULTING CIVIL ENGINEERS

5TH FEBRUARY, 2016



## INDUSTRIAL VISIT

# KADWA SAHAKARI SAKHAR KARHANA

7TH FEBRUARY, 2016

#### B.E. MECHANICAL ENGINEERING STUDENTS



### Brief:

At the site there are two water Tube Steam Boilers of 1.2MW capacity which use Bagasse as primary fuel for furnace. Er. Gaikwad guided the students about all the boiler details and various steam processes. They also explained various mountings and accessories fitted on the boiler. The steam is further used for heating Sugarcane Juice. Students enjoyed the visit and learnt a lot about Cogeneration System.

### EXPERT LECTURE

#### EXAMS & PROCESS FOR ABROAD EDUCATION

Mr. Manesh Damaniya, Global Carrier Hub, Nashik 15<sup>TH</sup> FEBRUARY, 2016

#### B.E. ENGINEERING STUDENTS (ALL BRANCH)



# Brief:

Mr. Manesh Damaniya. Global Carrier Hub. Nashik having 21 years' experience in Carrier development and counselling for masters education in foreign universities. In the expert lecture he covered present scenario of education sector, future after completion of graduation as an Engineer, and the scope of foreign education. With the help of effective presentation and Videos he covered many points such as how to prepare for GRE. GMAT, TOEFL, SAT, IELTS, PTE, CAEL, etc. and part time jobs available in the foreign countries doing parallel with the studies. Process for VISA and documentation required during admission etc. This expert lecture helped our students to understand prospects available for them for pursuing higher studies in reputed foreign universities.

# EXPERT TALK FOR GRE PREPARATION $\mathcal{G}$ ABROAD STUDIES

Mrs. Balkawade Mam 2<sup>nd</sup> FEBRUARY, 2016

#### TE & BE CIVIL STUDENTS



# EXPERT LECTURE PRODUCT DEVELOPMENT: PHASES OF DEVELOPMENT OF CAR

Mr. Jaywant Ghodake, Manage, Tata Motors, Pune 13<sup>TH</sup> FEBRUARY, 2016

#### T.E. & B.E. MECHANICAL ENGINEERING STUDENTS



## Brief:

Mr. Jaywant Ghodake, Manger, TATA Motors having 15 years' experience in product design & development and training. In the expert lecture he covered present scenario of Automobile Industries. He had given a brief presentation on product development of CAR. He had covered different phases in the designing the Car. How to do the Market survey for requirement of customers in a car. He also covered value addition in the cars. Redesigning a car, quality improvements through product development. Also he had guided the students regarding the areas to do their carrier in the field of Automobile industries and option available. Also he touched the Automobile styling, the software available for the Styling. With the help of effective Videos he covered many points of assembling designing and development of the Car. This expert lecture helped our students to understand the various parameters related to product design and development.

# AN ACTIVITY OF MOCK INTERVIEW

#### 12TH FEBRUARY, 2016

#### B.E. COMPUTER ENGINEERING STUDENTS



## Brief:

The student association conducted a Mock interview session for the students of final year computer engineering. The faculties of the department conducted interviews of the students and presented an analysis of their response. Also, a Group Discussion round was kept for the students.

# VALUE ADDITION PROGRAM ON TOTAL STATION LAWRENCE & MAYO EXPERT FOR T.E CIVIL STUDENTS



# VALUE ADDED PROGRAM CATIA V5 Training

Mr Dadasaheb Jadhav (Training Dept, IFS Academy-Pune) 5-14<sup>TH</sup> FEBRUARY, 2016

#### MECHANICAL ENGINEERING STUDENTS



## Brief:

CATIA Software Training Program had been organized by Mechanical Department of Engineering in CAD Lab under Value Added Program. CATIA is the most versatile software in Automotive as well as Aerospace companies as it is having great feature of surfacing. CATIA enables the creation of 3D parts. from 3D sketches, sheet-metal, composites, molded, forged or tooling parts up to the definition of mechanical assemblies. The software provides advanced technologies for mechanical surfacing. It provides tools to complete product definition, including functional tolerances as well as kinematics definition. CATIA provides a wide range of applications for tooling design, for both generic tooling and mold & die. Many automotive companies use CATIA to varying degrees CATIA offers a solution to shape design, styling, surfacing workflow and visualization to create, modify, and validate complex innovative shapes from industrial design to Class-A surfacing with the ICEM surfacing technologies. CATIA supports multiple stages of product design whether started from scratch or from 2D sketches. CATIA v5 is able to read and produce STEP format files for reverse engineering and surface reuse.

# VALUE ADDED PROGRAM Design of IC Engine Components

Mr. Dípankar Aich (CEO § Founder- Prakarsa-Pune-Pune) Mr Atul Pokale (Training Dept. - Prakarsa) 5-14<sup>TH</sup> FEBRUARY, 2016

#### MECHANICAL ENGINEERING STUDENTS



### Brief:

Design of IC Engine components' workshop had been organized by Mechanical Department of Engineering, under Value Added Program.

In this workshop, CED of 'Prakarsa' Mr Dipankar Aich with his collegue Mr Atul, were delivered various designs of components related to IC Engines in details like Cam designing, pistons and cylinder designing.

Mr. Dipankar had discussed current scenario in the Automotive Sectors with his huge experience of 15 years in industries Pune. He is working as consultant for TATA Motors, BOSCH and Emerson in pune.

His specialization is design development, Emission solution software. He briefly discussed the methodology of Design and Developments of IC engines. The components like Connecting Rod, Piston Speed, and Cylinder with Cylinder blocks and system of Inlet and Exhaust Valves with recent trends happened in FORD, TATA Motors and Emerson.

# VISION O STUDENT



# PLACEMENTNEWS

# CONGRATULATIONS

Placement Details of Mechanical Engineering Students (February 2016)





Mr.Sainath D. Bendre Trainee Engineer Kaizen Measuring Systems Pvt.Ltd. Mr.Aditya V.Kavdikar Trainee Engineer Kaizen Measuring Systems Pvt.Ltd.

#### Civil Department Placements (February)



Miss. <u>Bhagyashri Patil</u> (Shree Consultants <u>nashik</u>)



Miss. <u>Sunita</u> Kale (Shree Consultants <u>nashik</u>)



Miss. Pooja Patil (Shree Consultants nashik)



Miss. Nirali Pandit (Shree Consultants nashik)



# CIRCULATION

SANDIP FOUNDATION'S

www.sandipfoundation.org



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