## SARASWATI INSTITUTE OF TECHNOLOGY, Kharghar

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Newslette

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#### About our College

The burning desire of the Saraswati Institute of Technology is to produce the tomorrow's competitive techno survey greenhorns to meet the challenges ahead of today's society. It is our goal to explore individual's talent and sharpen the technical skills to compete with his own unknown incomparable abilities to shine the realities of the future. Saraswati Institute of Technology is approved by the All India Council for Technical Education (AICTE) and the Directorate of Technical Education (DTE); recognized by the Government of Maharashtra and affiliated to the Maharashtra State Board of Technical Education (MSBTE).

With our education system that matches global standards, we endeavor to give a rewarding and fulfilling experience to our students. The best education leads to all-round development of an individual. We also stress on the importance of extra-curricular activities and conduct various sports and cultural events through the year. Comprehensive development is achieved with strong emotional quotient and personal grooming. The excellence our students imbibe is reflects in their personal and professional lives. The most important feature of the Saraswati Education Society and Re Vera Institute of Technology, which is quite different from other such organizations, is that it is based on collective effort made by every individual, working with a spirit of team work. Long term planning, meaningful administration and a dedicated and experienced work force, a full-fledged library and well equipped laboratories are a few of our strong points which are worth mentioning.

Saraswati Education Society lays special emphasis on providing the best possible infrastructure for learning in all its campuses. All the existing and upcoming institutions of the Society are provided with spacious buildings to accommodate reception, office, classrooms, staff rooms, drawing halls, laboratories, workshop, library, computer center, auditorium, conference halls, examination hall, recreation center for staff and students, sports rooms, canteen, and placement cell. All the buildings have been elaborately furnished and fitted with the necessary fixtures. There is a 24-hour back up in case of power failure, so that the teaching and practical work are not hampered.

As part of editorial team, we welcome all suggestion, articles, and news regarding engineering academic field or accomplishment of your classmates. Please send your suggestions, queries at <u>darshanaghankute3@gmail.com</u> or <u>nayaksubrat806@gmail.com</u> or call on 9022734716 (Subrat Nayak).

### **OUR VISION AND MISSION**

#### VISION

"To excel in the field of technology by creating technocrats with value"

#### MISSION

To provide technical expertise to fulfil the needs of industry. To impact ethical values and professional responsibilities. To achieve excellence in academics.

#### **CIVIL VISION AND MISSION**

"To impart quality technical education beneficial to industry and the society in the field of Civil Engineering."

- + To arrange academic and technical expertise.
- + To improve the practical knowledge of the student as per current scenario of industry.
- $\downarrow$  To make the students socially and ethically responsible.

#### COMPUTER VISION AND MISSION

To contribute the society through excellence in scientific and knowledgeable based education of computer science with a deep passion.

- + To transform students in to technically components, socially responsible and ethical computer science professional.
- + To promote creative teaching learning process that will strive for academic excellence in field of computer engineering.
- 4 To enhance the technical expertise of student through workshop & Industry institute interaction.

#### MECHANICAL VISION AND MISSION

tribute "To incorporate technical and professional skills in Mechanical Engineers to fulfill industrial and social needs".

- 4 To educate, guide and mentor the students for academic excellence.
- 4 To develop technical skills and discipline among the students as per requirement of industry.
- 4 To impart ethics & social values by arranging social activities.

## **EVENTS**

### **INTERNATIONAL YOGA DAY**

On 21<sup>st</sup> June, 2018 we organized the International Yoga Day. A Chief Guest of the program was Mr. Nitin Sonawane from Yoga Niketan Vidya Mandir, Vashi. He expressed his views, opinion about the importance of Yoga in our day to day life. The media partners were akal and Maharashtra Times newspapers. Later the yoga session was performed with all the facilities of the SIOT. Our Principal Sir D. R. Suroshe also showed the participation while performing yoga.

Event concluded with light refreshment and cleanliness drive was organized and carried out by students and staff. The spirituality which was created while the yoga session was beyond the words

#### **TREE PLANTATION**

On 02<sup>nd</sup> August, 2018 Saraswati Institute of Technology Kharghar Successfully Completed the Event of tree Plantation at college Campus . The Event was began With the Welcoming of Guest Dr. Manjusha Deshmukh Principal SCOE Kharghar. Welcome speech given by the Principal D.R. Suroshe Sir. At that time Principal advice to student think positively.

The students council committee students Shared his past experience with the students how he got the success. He said that "In society all the human beings are equal no matter with the men or women". After the spiritual words of guest and Principal, We all moved towards the place where tree plantation took place. A very first tree planted by Principal Sir in college premises and then other staff members. Total tree planted by all teachers and student was more than 50 on the day.

All were happy and experienced proud after the tree plantation event was finished it really feels great to do positive for the nature.









#### **CIVIL DEPARTMENT**

#### ADVANCE SURVEY CAMP, KHANDALA

Second year students of civil department visited to Khandala for completing Advance survey project on Block contouring and Total Station from 21<sup>st</sup> February 2018 to 23<sup>rd</sup> Feb 18, They have completed there both project and gain some information about how to use the various Advance survey instruments used in civil engineering in given educational curriculum. Project gave appropriate information to students about various instruments and also underlined necessity of the thorough practical





Survey in charge gave us the proper direction which will help us in future in performing accurate surveys. We appreciate Prof. D. R. Suroshe (Principal) and Mr. Dattatray Bangar (HOD) for arranging the survey project and also our faculty for their support and encouragement.

#### VISIT TO READY MIX CONCRETE PLANT, VAHAL

**Executive Engineer: - Mr. Atul Surve.** Second year students of Civil department along with faculty - Mrs. Neha Giri, Ms. Ashwini Mune and Mr. Sarwan Gupta visited R. K. Patil RMC plant on 6<sup>nd</sup> July, 2018 to gain some information about the ready mix concrete as it is a course of Concrete Technology in our educational curriculum. Visit gave us appropriate information about various appliances, test



and also underlined necessity of the thorough practical knowledge. Plant in charge gave us the knowledge about the process which will help us in future. We are thankful to Mr. Atul Surve for giving us information. We appreciate Prof. D. R. Suroshe (Principal) and Mr. Dattatray Bangar (HOD) to arrange the plant visit and also our faculty for their support and encouragement.

#### VISIT TO BUILDING UNDER CONSTRUCTION, KHARGHAR



Second year students of civil department visited the Site under Construction on 26th July,2018 to gain some information about the Substructure and Superstructure as it is related to the subject of Building Construction in our educational curriculum. Visit gave us appropriate information about various Component parts of building and also the process of construction of each component. Site in charge gave us the proper information which will help us in future to understand the Construction process.

We are thankful to Mr. Santosh Mohite Sir for giving us information. We appreciate Prof. D. R. Suroshe (Principal) and Mr. Dattatray Bangar (HOD) to arrange the Site visit and also our faculty for their support and encouragement.



#### VISIT FOR ESTIMATING AND COSTING TO HOSPITAL BUILDING UNDER CONSTRUCTION, KHARGHAR



Third year students of civil department visited the Site under Construction on 8th Aug,2018 to gain information about actual measurement, billing of Substructure and Superstructure as it is related to the subject of Estimating & Costing in our educational curriculum. Visit gave us appropriate information about various Component parts of building and also the process of construction of each component. Site in charge gave us the proper information

which will help us in future to

understand the Construction process. We are thankful to Site Engineer for giving us information. We appreciate Prof. D. R. Suroshe (Principal) and Mr. Dattatray Bangar (HOD) to arrange the Site visit and also our faculty for their support and encouragement.



#### **CESA EVENTS**

## MARATECH 2018



Maratech was held on 30th January 2018.

Maratech was an event which is divided into 3 parts, which includes 32 teams each with 4 members from institute.

Events are as follows: 1. Treasure Hunt, 2. Technical Quiz, and 3. 500m Marathon and the winning team was awarded with 1st cash prize worth Rs.1500/- and the runner up with Rs.800/- and certificates. Winners were honored by the Principal D.R. Suroshe and the CESA coordinator Ms. Darshana Ghankute and HOD of Civil department Mr. Dattatray Bangar

# **CIRCLE CRICKET 2018**

#### Circle Cricket was held on 16<sup>th</sup> Feb 2018.

Circle Cricket was the event, which includes 16 teams each with 9 players. The entry fee was Rs.200/. This was an Institutional level event. This event was consisted of two qualifying rounds. The prizes were, winning team awarded with 1<sup>st</sup> cash prize of Rs.1200/. And the runnerup with Rs.700/- and certificates. Winners were honored by the principal D.R. Suroshe and the CESA coordinator Ms. Darshana Ghankute and HOD of Civil department Mr. Dattatray Bangar.



#### **CESA EVENTS**

## TY FAREWELL (BATCH 2017-18)



Farewell of batch 2017-18 was organized on 23<sup>rd</sup>, March 2018. CESA committee arranged farewell party for 3<sup>rd</sup> year students of batch 17-18. The program was started with lighting ceremony by Principal Sir and civil faculty. The farewell continued by the award ceremony for the 3<sup>rd</sup> year students dance performance and played video of their journey from1st year to last year. Principal Sir motivated them for their future life by giving a small speech. Dinner and DJ was arranged for faculties and students present over there.



### **COMPUTER DEPARTMENT**

### **GUEST LECTURE ON STRESS MANAGEMENT**

On 3<sup>rd</sup> August, 2018 computer department arranged a guest lecture on stress management which was conducted by Mr. Omkar Devdar. He has explained different point related to stress management e.g., Positive and Negative Stress, causes of stress (Internal and External), impact of the stress on human body and Mind, consequences, remedies, ways to life happily. Complete session was interactive in which students asked their doubts. They also provided their suggestions and feedback



### **CLOTH DONATION AND BOOK DONATION PROGRAM**



Cloth donation and book donation program was held by 3rd year student and staff on 31<sup>st</sup>, Jul 2018 at Girija welfare association. Student interacted with the disabled and mentally challenged children and help them by donating cloth and books. It was indeed very satisfying experience for the students as they could bring smiles on children's faces however for a brief period.

They realized that one must contribute and understand his/her social responsibility toward society.

#### SOCIAL ACTIVITY ON SAY NO TO PLASTIC

Computer Department, of SIOT, Kharghar, organized social activity on Say No To Plastic on 13<sup>th</sup> July, 2018 to sensitize the students towards the need to protect the environment from plastic and to promote love for environment among children. To achieve this objective, a plethora of activities on the theme 'Say No to Plastic' were organized for the



students of third year computer. A lot of fun filled yet learning activities cloth bag, paper bag making activity from waste materials and banner making competition to showcase the impact of using plastic in our lives .

### GUEST LECTURE ON NETWORK SYSTEM

On 22nd Feb 2018 Computer Department organized a Guest Lecture on network system for 2nd Students. The main motivation behind this Guest lecture was to inculcate knowledge among the students regarding networking system. The lecture was delivered by highly qualified and experienced resource person Ms. Esha Parab. She focused on networking system, its various types. She started the session with "what is network?" She explained how network plays important role in our life. It was great experience as the guest lecture was motivational informative interactive and students participated with full enthusiasm and spirit.

#### **MECHANICAL ENGINEERING DEPARTMENT**

#### EXPERT LECTURE ON "AC MOTOR'S"



Mechanical Engineering Department organized an expert lecture of Mr. Nilesh Patil on 14<sup>th</sup>Jul, 2018 from 1:00 pm to 2:00 pm for Second Year students for Basic Electrical and Electronics Engineering Subject on AC motor's topic. This lecture is conducted to get the subject expert guidance to the students. As per discussion with the students, they learned basics of AC motors. This guest lecture would certainly help them understand their subject in a new perspective.

We thankful to Mr. Nilesh Patil for spending his valuable time with us and sharing knowledge. More than 40 students and 3 faculties from Mechanical department benefited from this lecture.



#### EXPERT LECTURE ON "CONTROL SYSTEM"



Mechanical Engineering Department organized an expert lecture of Mr. Santosh Kamble on 17thJul, 2018 from 11:00 am to 12:30 pm for Third Year students for Measurement and Control Subject. This lecture is conducted to get the subject expert guidance to the students in the control system. During interaction with the students, he shared his thoughts and experience in the field of Automation & Control.

As per discussion with the students, the topic covered was appreciated by most of the students and requested to arrange such kind of lectures in the future too for other subjects.

We thankful to Mr. Santosh Kamble for spending his valuable time with us and sharing knowledge.

More than 110 students and 4 faculties from Third year Mechanical department benefited from this lecture.



#### **MECHANICAL ENGINEERING DEPARTMENT**

#### EXPERT LECTURE ON "AUTOMOBILE AND POWER ENGINEERING"



Mechanical Engineering Department organized the guest lecture of Mr. Niranjan for Automobile and Power Engineering on 19th Jul, 2018 which was held in Seminar Hall of Saraswati Institute of Technology, Kharghar, in that he has cleared theoretical part. The workshop was held on 20th and 21st July, 2018 at NTI, Thane, under the guidance of

Mr. Kishor Koli and Mr. Shailesh Jadhav. They shared the practical knowledge of both the subject for Third Year students. This lecture and Workshop was conducted to get the subject guidance to the student's. During interaction with the students, they shared their thoughts and experience in the field of Automation & Power Engineering. As per interaction with the students, the topics covered was appreciated by most of the students and requested to arrange such kind of lectures in the future too, for other subjects. More than 110 students and 4 faculties from Third year Mechanical department benefited from this lecture.



#### MOTIVATION LECTURE ON HOW TO STUDY EFFECTIVELY



Mechanical Engineering Department organized an expert lecture of Mr. Sanjay Gulabani on 8<sup>th</sup> Aug, 2018 from 1:00 pm to 3:00 pm for 2nd and 3rd Year Mechanical Engineering students And 2nd year Civil Engineering Students for Motivation & How to Study Effectively. This lecture was conducted to inspire the students, reduce their stress levels,

and to improve focus towards their studies. Students got the solutions for their personal problems. Also they got the information about how to improve the technical knowledge, & how to use that knowledge for getting more marks. This guest lecture would certainly help them understand their subject in a new perspective. More than 180 students and 13 faculties from Mechanical & Civil Engineering department benefited from this lecture.



#### **TECHNICAL ARTICLES**

#### Light Transmitting Concrete

Transparent concrete also called as translucent concrete or light transmitting concrete is achieved by replacing aggregates with transparent alternate materials. The bonding material in transparent concrete may be able to transmit light by using clear resins the concrete mix. Use of optical fibers and fine concrete also used as transparent concrete. Transparent concrete is manufactured by using combination of fiber optics and fine concrete. These fibers blend into the concrete like any other aggregates. These optical fibers can transmit light from natural and artificial sources into spaces enclosed by the translucent concrete panels. The main reason for using optical fiber in concrete is that it can transmit light even an incident angle greater than 600.





Optical fiber consists of three layers called as core, cladding and buffer coating or jacket. The light is transmitted through the core of the optical fiber. Optical fibers in the range of 4 to 5% by volume are used for transparent concrete. Thickness of the optical fibers can be varied between 2 µm and 2 mm to suit the particular requirements of light transmission. The main advantage of transparent concrete is that it can transmit light. There, it can be used to make green buildings. Since it can transmit light from natural as well as artificial sources, the building can have fewer lights to meet its demand for lighting. Thus saving huge energy cost. The main advantage of these products is that on large scale objects the texture is still visible - while the texture of finer translucent concrete becomes indistinct at distance.

When a solid wall is imbued with the ability to transmit light, it means that a home can use fewer lights in their house during daylight hours. It has very good architectural properties for giving good aesthetical view to the building. Where light is not able to come properly at that place transparent concrete can be used. Energy saving can be done by utilization of transparent concrete in building. Totally environment friendly because of its light transmitting characteristics, so energy consumption can be reduced.

-Mrs. Jyoti Sadhu (Lecturer in CIVIL DEPARTMENT)

#### **TECHNICAL ARTICLES**

#### **Blockchain Technology**

A blockchain, originally block chain, is a growing list of records, called blocks, which are linked using cryptography. Blockchain which are readable by the public are widely used by crypto currencies. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data (generally represented as a merkle tree root hash).

By design, a Blockchain is resistant to modification of the data. It is "an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way". For use as a distributed ledger, a blockchain is typically managed by a peerto-peer network collectively adhering to a protocol for inter-node communication and validating new blocks. Once recorded, the data in any given block cannot be altered retroactively without alteration of all subsequent blocks, which requires consensus of the network majority.

Blockchain technology contains all the necessary information about the balances and the addresses from the genesis block that is, the very first transactions executed to the most recently completed block.

In other words it is a single Linked List of a block, each block contains a number of transactions and provides a decentralized store that is visible around the globe by the whole network of users and acts as a mode of transfer of records of transaction offering a great transparency. The Blockchain Technology is immutable and the information remains in the same state.

- Process Integrity
- Traceability
- Security
- Faster processing
- It reduces data duplication.
- Achieve and Contribution Distribution nature of Blockchain, there is no chances of failure.
- ✤ Governance and Trust.

-Ms. Anita Dhami (Lecturer in COMPUTER DEPARTMENT)

## **Static Career Fair 2018**

Static Career Fair 2018, a career guidance program sponsored by Maharashtra State Board of Technical Education and organized by SES's Saraswati Institute of Technology, Kharghar for 10th, 12th and ITI pass out students. It was a one day event held at the Saraswati Institute of Technology, Kharghar, on 14th Jun, 2018. The program is inaugurated with the presence of



Dr. Vinod Kumar Mohitkar, Director, MSBTE, Mr. Bhavesh Karhade, Secretary, MSBTE and Mr. D.R. Suroshe, Principal, SIOT, Kharghar.

In the guidance speech, Dr. Mohitkar Sir explained why MSBTE is taking the initiative to organize Career Fair. As after 10th students do not get useful information about different available career courses so the students and parents are in confused state where to take admissions. In such cases, if the students get guidance about their career, then they can explore the right opportunity and avoid the stress in the future. For this reason to promote and increase awareness about diploma courses and Information about Admission Process amongst students and their parents MSBTE organizing career fair programs.



## Static Career Fair 2018

Mr. D.R. Suroshe Sir, Principal SIOT given the introductory speech about the career fair. Dr. Sunil Dehspande, chief career counsellor explained different options for choosing a career path after 10th, 12th and ITI pass out students. Mr. Nirmal Thakur sir guided students about the admission process, eligibility criteria for taking admission at diploma level, different Schemes of Government,



Scholarships offered by the Government. During the program MSBTE video clip also played to show different activities of the MSBTE.

We express our sincere thanks to Dr. Vinodkumar Mohitkar and Mr. Bhavesh Karhade of MSBTE, Mumbai, for their valuable guidance and gracious presence.



We thanks to Dr. Sunil Deshpande, Mr. Nirmal Thakur for thought provoking guidance to the students. We thanks to Mrs. Shipra Sahu, Manager Bank of India, Kharghar for guiding students about various loan facilities available for educational loans. We also thanks to Mr. Sachin Mhatre, Businessmen for guiding the students about different opportunities in Business. We are thankful to our college

Committee Members and all teaching and non-teaching staff of SIOT for their presence and support. We express gratitude to all the participated of Polytechnic Institutes. Very importantly, we thank all the participated students without whom this program would not be possible.

### **Toppers**

#### THIRD YEAR TOPPERS



Shrinivas Sanchit Deshmukh 87.50 % (CIVIL)



Shinde Pratiksha Arun 84.13 % (CIVIL)



Kasalkar Ajay Jayavant 83.38 % (CIVIL)



Jadhav Ashish Ashok 83.18% (Mechanical)



Shivraj Gaikwad 82.13% (Computer)



Dalvi Ballal Vitthal 81.47% (Mechanical)



81.29% (Mechanical)



Nisha Jadhav 66.25% (Computer)

and Contri





**Rohan Deshmukh** 77.78% (Computer)

Murudkar Paras Deepak



Shubham patil 81.78 (Computer)

Bahira Nikhil Kamalakar 78.09% (Mechanical)

SECOND YEAR TOPPERS

## Toppers

#### SECOND YEAR TOPPERS



Jangle Pranal Umakant 76.35% (Mechanical)



Sankalp Madhavi (74.33) (Computer)



Bhonkar Aditya Laxman 73.82% (Mechanical)





Powar Ganesh Shivaji 71.11 % (CIVIL) Shedge Omkar Ashok 69.11 % (CIVIL) Aughad Pranav Raju 68.78 % (CIVIL)

Nikola Tesla was a Serbian American inventor, Electrical Engineer, Mechanical Engineer, Physicist, and Futurist who is best known for his contributions to the design of the modern Alternating Current Electricity Supply System.



Our virtues and our failings are inseparable, like force and matter. When they separate, man is no more. ~Nikola Tesla

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