FIRST OF ITS KIND

Saveetha Engineering Industries
Saveetha, a destiny for valued education, takes the pride in stepping into the Indian History of Education and Industries together by invoking the thought of setting up an industry in an engineering campus. Saveetha University has been in the forefront for delivering the best education in engineering and medical fields over the past 30 years.

The inauguration took place on 3rd August 2018. Mr. M. Ponnuswami, Chairman, Confederation of Indian Industry (CII), Tamil Nadu, Mr. S. Rajasekaran, President, SIPCOT Irungattukottai Manufactures Association (SIMA) Managing Director, INFANT Engineering (P) Ltd, consented to be Chief Guests and Mr. K. Balasubramanian, Chairman, Precision Machines & Auto Components (P) Ltd, was Guest of Honor.

“When a medical college does not exist without a hospital why not engineering colleges provide industry experience with an industry in built?” was his influence for thought at his presidential address of our Honorable Chancellor Dr. N. M. Veeraiyan SIMATS and that was undeniable.
Saveetha Engineering Industries is a unique facility that will create opportunity for the students to have hands-on experience in live production. The students will be able to work in internship or part time and earn while they learn.

Mr. Ponnuswami extended his congratulations to the entire team of Saveetha on this monumental location. Mr. Ponnuswami said he was happy to know that Saveetha is using all the resources including manpower in the most efficient manner. He further said that this is the right time for the educational institutes to partner with the industry. Tamil Nadu is one of the leading states in terms of manufacturing, tourism, medical tourism among many other fields. Tamil Nadu is the leading state in the total number of companies registered and doing business in India. Mr. Ponnuswami also mentioned that a healthy competition has developed between the states and this has led to a drastic improvement in Tamil Nadu industries. However, unfortunately the nation itself is lacking in developing the skills in engineering graduates. Saveetha Engineering Industries will successfully be able to address this deficiency thus equipping the engineering graduates with necessary skills and make them employable as well as industry ready.
Mr. Rajasekaran, President, SIPCOT, Irrungattukottai Manufacturers Association (SIMA) and MD, Infant Engineering (P) Ltd. addressed the students and said “it is imperative for us to leave a mark wherever we go and it all begins at the institute”. He urged the students to work hard and learn through experience. Saveetha Engineering Industries, he said will help the engineering graduates to develop high level skill and will help them to leave a mark in a positive manner.

Mr. K. Balasubramaniam, Chairman of Precision Machine and Auto Components (P) Ltd., an organisation that will partner with Saveetha in production at SEI also addressed the faculty and students of Saveetha. Mr. Balasubramaniam said each of the machines that are set-up at SEI create a minimum of 16 jobs across all the branches of engineering such as Mechanical, Mechatronics, CSE, ECE, etc. Automation will be at the finger tips and will create more jobs in every sector each year. He said that robotics is the future of engineering. SEI will be employing SSE students part time and will be giving them an opportunity to earn while they learn.

He has called upon the students to work for any of his industries upon graduation. With experience from SEI they will be an asset to any firm they will work for. Precision industries also agreed to donate a heat exchanger worth Rs. 5 lakhs to Saveetha School of Engineering.

Mrs. Ramya Deepak, Director of SSE, said “SEI is a result of untiring thoughts to equip the engineering graduates with practical training. An initiative of CLAB (Lab in the class) where theory and practical go hand in hand is already in place. The next big leap is “Industry within the Institute”. She said more industrial partners are coming forward to support SSE and advanced technologies will be added as per the need. Training and Certification programs will be developed and courses on CNC will be extended to the students. Mrs. Ramya also conveyed her heartfelt thanks to the industry partners who have taken initiative and time to be a part of the inauguration.

Principal of SSE has expressed his gratitude for all present and ensured that Saveetha Engineering Industries and SSE will put best foot forward to create engineering graduates with skill, competency and value based education. It will prepare them as employable and best in the industry.
INDUCTION CEREMONY OF FIRST YEAR B.E/B.TECH PROGRAMME (2018-19 BATCH)
“THE GRAND OPENING FOR A GREAT SUCCESSFUL CAREER”

The induction ceremony for first year students took place on 20th August 2018, in Nall Arangam, with Chief Guest Dr. Sharmila Anand Founder and Managing Director SEHPL - HealthCare Skills Training Academy and Guest of Honor Mr. Neeraj Sharma, Senior Director, HR, Fourkites. The function was presided by Mrs. Ramya Deepak, Director of Saveetha School of Engineering and Dr. D. Dhanasekaran, Principal of SSE.

As a Director, Mrs. Ramya Deepak thanked all the students for choosing Saveetha as the destiny for their career, which was absolutely a right choice, at her presidential address. She insisted students with three main mantra for life, which says “Decide, Commit and Succeed”. Mrs. Ramya Deepak also emphasized on having a clear vision and mission which will lead to a successful career. Last but not least she said “The energy of the mind is the essence of life”.

On a different notion Guest of Honor Mr. Neeraj Sharma enlightened students with expectations and requirements of business person and employers of current trend and techniques to build up to the requirements with a slide show.
Chief Guest Dr. Sharmila gave a stunning and an impressive speech about four personalities surrounding us who will help us reach the ladder of success at the right time. The four personalities described by her are

1. Parents
2. Teachers
3. Friends and
4. One’s own Self

Students were fortunate to have the guests speak about the topic to get inspired upon.

The function had the traditional welcome address by Principal Dr. D. Dhanasekaran and vote of thanks by Dr. Roji HOD of Science and Humanities.

The three main mantra for a successful career
1. Decide
2. Commit
3. Succeed

--Mrs. Ramya Deepak
Education Fair at SSE

International Office of SSE conducted an “Education Fair” for the final year students

Education Higher Studies Expert from “Education Matters” were called to provide an insight about studying abroad

More than 20 Global Universities participated in the fair

Students are also benefited through “One Semester Abroad Program”, where they receive International Study Experience during their engineering study at SSE
Dr. T. Ruso, Mrs. T. Devi, and Mrs. N. Deepa from Computer Science Department have conducted the competition for “SQL Hackathon 2018” on 04th August, 2018 at CISCO Laboratory, SSE. Totally 80 students across Tamil Nadu have registered for the competition. Out of 80 students we shortlisted 63 students based on the CGPA.

There were two levels of screening. In the first level, students were asked basic questions like create, delete, select and update queries against records and tables. Out of 63 students 45 have cleared the first round. In the second level screening, students were asked to develop a Graphical User Interface(GUI) for Executing all types of queries using DHTML, PHP and MySQL. Among the 45 students only 2 students have successfully cleared the second round. Both the students belong to our college.

First Price - Nanda Sai Kumar - III CSE
Output Link http://cse.sse.saveetha.com/ProgrammingClub/query.php
Second Price - P. Vignesh - II CSE
Output Link http://cse.sse.saveetha.com/ProgrammingClub/Vignesh/
Guest Lecture was conducted on one of the emerging technology “BLOCK CHAIN TECHNOLOGY” Saveetha School of Engineering on 20/08/2018. Resource person was Dr. Sumathy Eswaran(Dean CSE/IT, Dr.MGR Educational And research Institute, University) who is certified in Blockchain Essentials from IBM. The session was attended by 82 students. The session gave the students insight into one of the most significant development in information technology over the past few years that has the potential to change the way that the world approaches big data, with enhanced security and data quality.

Solution for Real time implementation - Car Leasing Business Network using "BLOCK CHAIN TECHNOLOGY"
MECHANICAL DEPARTMENT

Two Day Industrial Visit to "Southern Alloy foundry" Madhavaram, Chennai.
About the IV

On 29th and 30th August 2018, Department of Mechanical Engineering, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences organized Two Day Industrial Visit to the Southern Alloy foundry.

The purpose of the industrial visit was to make the aspiring engineers & faculties familiar with the conceptual as well as practical knowledge of the casting, pattern making and moulding Technological being used in the manufacturing Industries. Around 100 students & faculties visited.

Student's perception about the visit

Being a very useful visit, the casting process and secondary process (cutting, machining and grinding) were clearly explained and showed. The quality was checked using destructive testing methods such as tensile test, hardness test & impact test and non-destructive testing methods such as radiographic test, ultrasonic test and magnetic particle test methods. The initial and final product characterized by spectrometer. They use Magnus software for simulation of casting process.

The industrial visit helps in enhancing engineering skills and useful to improve practical and technical knowledge.

Dr. S. Suresh Kumar and Mr. R. Sathish arranged the Industrial Visit under the guidance of Dr. D. Devika, Professor Head of Department, Mechanical Engineering, and the Management of SSE, Saveetha Institute of Medical and Technical Sciences.
Department of Mechanical Engineering conducted seminar on mechanism of hot corrosion by Dr. Arivazhagan, Director, School of Mechanical Engineering, VIT University, Vellore Campus.

Hot corrosion is the accelerated oxidation of a material at elevated temperature induced by a thin film of fused salt deposit. Fused Na2SO4, which is the dominant salt involved in hot corrosion, is an ionic conductor, so that the corrosion mechanism is certainly electrochemical in nature. Further, the acid/base nature of this oxianion salt offers the possibility for the dissolution (fluxing) of the normally protective oxide scale.

On the whole students were given detailed description of the topic to deal with.
WORKSHOP ON LEAN SIX SIGMA MANUFACTURING

MECHANICAL DEPARTMENT

One-day workshop on Lean six sigma manufacturing was organised by Department of Mechanical Engineering on 2nd August 2018.

Totally 75 students benefited out of the workshop

The objective of this workshop was
• Comprehend the concept of Lean and its principles
• Learn and understand Lean tools and methods
• Classify roles and responsibility of various team members
• Understanding significance of implementing Lean principles in an organization
• Case studies to understand theoretical and practical knowledge of Lean principles
• Impediments while applying lean principles in a process and solutions for the same

The resource person for the workshop was Dr. G. Sivakumar, a Certified Six Sigma Black Belt Professional with 16 years of teaching and research experience. He has teaching and administrative experience in the capacity of Professor, HOD and Principal in Engineering College and Deemed Universities. His research areas and consulting expertise include Internal Combustion Engines, Six Sigma, Lean deployment, SPC and DoE.
Artistic Talent

The theme for the art "What will be the future after 10 years? If you have the power to change what will it be?"

M. Sandeep - II Year CSE, &
Y. Aravind Reddy - II Year CSE
The Artist’s View about the picture

"HUMANS LIFE TURN OVER A NEW LEAF- DUE TO RAISE UP WATER LEVEL"
(To Begin Life Again, Fresh And Re-forming On Earth)

Over the past several decades, the Polar Ice Caps has begun to show signs of significant ecological upheaval. The rate of warming in the Polar ice caps is nearly twice the global average, and those changes are triggering a cascade of destabilising environmental effects. Ice is melting, rising the water level, which in return covering and resulting decrease in land area, affecting the livelihood of living human beings.

The future welcomes you here! A tremendous potential to create a “Lively hood transportation” option that goes over for faster implementation, to make the living at high altitudes above the risen water level and technology makers will think in the aspect of aviation programs to commute the people and their needs to make the dream of "HUMANS LIFE TURN OVER A NEW LEAF" into reality. We see much potential in, making living on the top, flying vehicles, and we anticipate that can be used not only to help humans, but also solves land decrement problem. It will also help in making the living for chaotic growth of population of humans on earth in future.

CONCLUSION:-

Think, beyond to make new living and face the challenges given by nature. Making the way for travelling over imagination in air, could be the best way to create “Lively hood transportation”.

M.Sandeep-II Year CSE, & Y.Arvind Reddy-II Year CSE
The theme for the art "What will be the future after 10 years? If you have the power to change what will it be?"

Art by
Ashutosh
1 year CSE
HEALTH BENEFITS
TAKE GOOD CARE OF HEART

By
Dr. A. G. Narayanaswamy DCH, MD, DNB, DNB(Card), MNAMS, FESC, FACC, FRCP(UK).
Senior Consultant - Cardiology

Dr. Mohd Shahid MBBS, MD (Internal Medicine), DM
PG Resident in Cardiology
As a Senior Consultant of Cardiology, I am more privileged in creating an awareness and introducing some lifestyle changing tips through this issue. Heart disease is common nowadays regardless of age and other family genetics.

Cardiovascular disease (CVD), including heart disease and stroke, is the leading cause of death, in the current years. Knowledge about CVD (Cardiovascular disease) can influence the adopting healthy lifestyle behaviours. On the other hand, lack of knowledge and misperceptions about CVD risk can lead to delays in seeking treatment and increased risk for sudden death.

Certain risk factors make some people more likely to have heart disease. Risk factors are either modifiable or non-modifiable. Modifiable risk factors are factors you can control, such as body weight. Non-modifiable risk factors are factors you can’t control, such as genetics.

Your choices can influence your heart’s health. Lifestyle changes can greatly reduce your chance of heart disease. Positive lifestyle changes include:
• healthy eating
• exercise
• managing diabetes if you have diabetes
• managing blood pressure
• stress management
Nutrition and Diet

Nutrition and diet play a huge role in preventing heart disease. Maintaining a good diet can reduce your risk for heart disease. This is true even if you have a family history or genetic predisposition for heart disease. A diet high in raw fruits and vegetables, whole grains, and omega-3 fatty acids, which are often present in fish, helps prevent heart disease. The Mediterranean diet is known to reduce the occurrence of heart disease. This diet focuses on:

- eating herbs, nuts, and olive oil, which is a healthy fat
- limiting red meat consumption to one or two times per month
- increasing your servings of fruits, vegetables, and whole grains
- eating fish twice per week

Exercise and weight loss management

Exercising and maintaining a healthy weight are also vital to lowering your blood pressure and preventing heart disease. According to the Mayo Clinic, experts recommend getting at least 30 minutes of exercise per day, or 30 to 60 minutes of exercise most days of the week. Exercise doesn’t have to be intensive. The key is to stay active. One of the main goals of exercise is maintaining a healthy weight. You have to balance your caloric intake with the amount of exercise you get. Find out what your body mass index is and use it to set weight loss goals. You’ll lower your blood pressure and reduce your risk for other complications by maintaining a healthy weight.
Managing diabetes

Diabetes is a serious risk factor for heart disease. It has harmful effects on multiple organs in the body when left untreated, and it can lead to peripheral artery disease, stroke, and other complications. If you have diabetes, manage your condition to prevent heart disease. Heart disease prevention measures for people with diabetes include:

- getting regular checkups from your doctor
- eating a healthy diet
- exercising

You may need to manage diabetes with medications. You can limit the effects of diabetes and reduce your risk of heart disease by choosing a healthy lifestyle.

Lowering your blood pressure

High blood pressure, or hypertension, can increase stress on your cardiovascular system and contribute to heart disease. You can lower your blood pressure through:

- diet
- exercise
- weight management
- avoiding stress
- quitting smoking if you smoke
- avoiding smoking
- limiting salt intake
- limiting alcohol consumption

Work closely with your doctor and monitor your blood pressure on a regular basis if you know you have high blood pressure. Take all medications your provider prescribes for your blood pressure, and take them as directed. High blood pressure is difficult to detect. Consult your doctor if you’re unsure whether or not you have it.

Managing stress

Stress affects everyone in different ways. There’s a link between people who experience high amounts of stress over long periods and heart disease. The link isn’t well understood.

Stress can cause sleep loss, pain, and headaches, and can exhaust the body. Chronic stress can cause the heart to work harder. This will worsen any other risk factors for heart disease you may have.

You can adopt many stress-reducing habits that will help improve your overall health. Physical activity or exercise is one way to reduce stress. Slowing down and performing relaxation exercises or breathing techniques, such as those used in yoga, is also helpful. Letting go of worries and spending more time with family and friends can also contribute to a healthier, more relaxed lifestyle. It’s also important to get enough sleep.
What is Heart Attack?

As a PG Resident in Cardiology, I would like to explain about heart attack, its symptoms and first aid steps when a person undergoes a heart attack. A heart attack is the death of a segment of heart muscle caused by a loss of blood supply. The blood is usually cut off when an artery supplying the heart muscle is blocked by a blood clot.

Cardiac arrest vs Heart attack

Sometimes there is confusion between the terms "cardiac arrest" and "heart attack." A heart attack, or myocardial infarction, is damage to the heart muscle that occurs due to reduced blood flow to the heart muscle, depriving the heart muscle of the oxygen it needs to function properly. Cardiac arrest means that the heart stops beating and death is imminent. A heart attack, if severe, can lead to cardiac arrest, and this is what occurs when a heart attack is fatal.

Heart attack warning signs and symptoms

Most young heart patients experience warning signs during the week before a heart attack but not all seek medical attention. The following are the general symptoms of heart attack both in men and women:

- Chest, head, jaw, and tooth pain
- Shortness of breath
- Nausea
- Vomiting
- Heartburn and/or indigestion
- Arm pain (more commonly the left arm, but may be either arm)
- Upper back pain
- General malaise (vague feeling of illness)
- Sweating

Dr. Mohd Shahid MBBS, MD (Internal Medicine), DM
PG Resident in Cardiology
The 5 first aid steps YOU need to know to save a loved one suffering from a cardiac arrest

Step 1 - Shake and shout

First things, first... check for danger and anything that could put you at risk. Gently shake the person who's unconscious and try to get them talking. If you’re on your own shout for help but don’t leave the person.

Step 2 - Check breathing

A person suffering a cardiac arrest won’t be breathing. Keeping their head back check for signs they are breathing. They include:
- regular chest movements
- listening for breathing
- feeling for breath against your cheek
Look and listen for no more than ten seconds. If you’re not sure, assume they’re NOT breathing. Open their airway, by putting your hand on their forehead and gently tilting their head back. Lift the person’s chin using two fingers of your other hand.

Step 3 - Give 30 chest compressions

Kneel next to the person. Place the heel of one hand in the middle of their chest and the your other hand on top, and interlock your fingers. Using straight arms, press down into the breast bone firmly and smoothly, so the chest is pressed down by 5-6cms. Release and repeat at a rate of around two per second. Give 30 chest compressions.

Step 4 - Two rescue breaths

Open the person's airway, tilt back their forehead and lift their chin. Pinch their nose. And take a normal breath, make a seal around their mouth and breathe out. You should see the person’s chest rise and fall as you do it. Repeat twice - the two breaths should take no longer than five seconds.

Step 5 - Repeat

Keep repeating 30 chest compressions and two rescue breaths until paramedics arrive.