

# NEWS LETTER

## IES COLLEGE OF ENGINEERING

Vol.1 Issue.1 December 2017

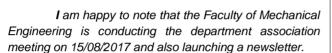


Mr. SHILLIN.K.S

HOD - ME

Every professional aims at achieving excellence in their professional career to widen the horizons of their knowledge and must be equipped to encounter the global challenges boldly. Let there be a forum to share this plethora of knowledge hidden in Nature which can lead to the overall development of the budding professionals.

I congratulate the Association of Mechanical Engineers for bringing out this wonderful bundle of ideas.



I wish that the association will help the students benefitting out of the activities to achieve their ambition and goal to become professional Mechanical Engineers.

I wish the association a great success and also the newsletter motivates for it's continue success and contribution to the area of Mechanical Engineering.



#### Assistant Professor - Mechanical Engineering



It gives me immense pleasure and happiness to note that our Mechanical Engineering students Association are bringing out the Newsletter. I am sure that the staff and students who are associated with this endeavor have put in lot of effort to see that the newsletter becomes a reality. I would like to place on record my hearty congratulations to the team who have worked for the Newsletter, and hope that the spark they have kindled in the minds of the students will sustain and continue. I am sure that the newsletter will help to supplement the theoretical knowledge gained from the text books, and keep the students well informed about the Latest developments in technology. Such activities will also go a long way in inculcating team spirit among the students and enhance their motivation levels.

Mr. SIVADAS ANIYAN T

Senior Professor - Mechanical Engineering

### **DEPARTMENT VISION**

To nurture the development of competent mechanical engineers with an emphasis on applying the concepts and principles in core engineering to real world contexts.

### DEPARTMENT MISSION

M1. To provide quality education in mechanical engineering along with a deep sense of professional ethics.

M2. To possess commitment and character for the betterment of the society.

M3. To encourage students and faculty to be life-long learners.

**M4.** To apply mechanical engineering skills and knowledge to make eco-friendly innovations on

### PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1:- Ability to solve complex engineering problems in design, manufacturing and thermal engineering to meet the needs of the industries and society.

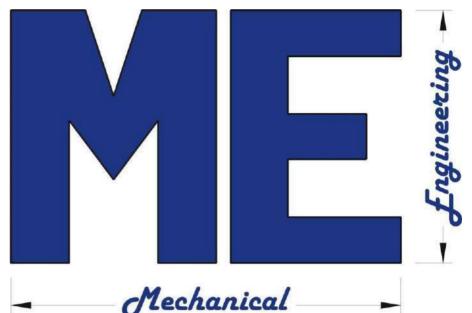
PSO2:- Inculcate curiosity in interdisciplinary learning to develop innovative and entrepreneurship capacity.

### PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Develop mechanical engineering professionals who are able to solve complex real world challenges, manage social problems and business challenges.

PEO2: The graduates of mechanical engineering program will acquire higher education and emerge successful.

PEO3: The graduates adopt ethics and exhibit their effective skills in communication leadership qualities and social responsibility.



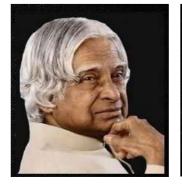
Mechanical Engineering is vital for a wide range of activities that include design, development, manufacture, management, and control of engineering systems, subsystems and their components. Mechanical Engineers are an essential part of industries like manufacturing, automobile, aerospace, materials, chemical, and

pharmaceutical sectors. In the fields of computer aided design and manufacturing, robotics, bio engineering, environmental engineering, wind and solar energy utilization and space exploration

The vision of the department is to mould the students with all inputs necessary to become a successful mechanical engineer with core competency and professional specialization. The department was started in 2007 and comprises of well qualified, experienced faculty and technical staff and has well established Labs and Library. Our Alumni are presently working in many eminent companies of national and international







The best brains of the nation may be found on the last benches of the classroom. -APJ Abdul Kalam



"Venda Bro" is a campaign against drugs, an initiative of Thrissur city police supported by the Govt.of Kerala. This is basically a two week program containing flash mob fest and awareness programs in colleges. This document gives an exhaustive report on the event. The Workshop was facilitated by Anti Narcotic Cell IESCE.

The Flash Mob Fest "Venda Bro" given a good plat form for our students to display their talents. Also our students got an opportunity to become a part of such a big campaign against drug use organized by Thrissur City Police. This campaign was very helpful between the students to increase their social commitment and responsibility to make a drug free young generation.

As part of Flash mob competition promotion program a police Team performed a flash mob in our college on 23/10/2017 and taken an oath against drug use. Also a Radio Club Fm team conducted a one hour fun games to entertain the students and they have given the prizes for the winners of the games. Teachers and students of IES engineering college and public school participated in the event very enthusiastically.

Our students performed the flash mob at North Stand Thrissur on 25/10/2017 at 5.30 pm to 5.45 pm with all the spirit of the competition. Prior to the closing ceremony of "Venda bro" campaign a rally of all the participating teams, other institutions and organizations was held from Naikannal to Thekke Nada on 31/10/2017 at 4 pm . A team of 40 students from our college participated in the rally.



The Closing Ceremony of Venda Bro Campaign was held in a grand manner at Thekke Nada Thrissur on 31/10/2017 at 5pm . The program was inaugurated by our **Minister of Agriculture Adv.V.S Sunil Kumar** and the results of the completion was declared and prizes and certificates distributed to the winners.



IN Association With



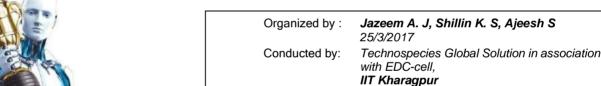
# Techvriddhi'17 Robotics Workshop



The Techvridhi "17 is a national level event organized by Technospecies Global Solution in association with E-cell, IIT Kharagpur. The first level 2-day workshop was conducted in IES College of Engineering Campus. This documents gives an exhaustive report on the event. The Workshop was facilitated by Department of Mechanical Engineering and IES-IEDC.

### Program outcomes

- The workshop helped improve technical foundations of Mechanical, Electrical, Electronics and Computer Science students
- Every student received a certification of participation from IIT Kharagpur Entrepreneurship Development-cell (EDC).
- Students winning the competition (28 Students in total) received a certification of Merit
- Students awarded merit certifications are invited to participate in the national level robotics championship at IIT Khargpur EDC. Date yet to be disclosed.
- This event will enable to begin a Robotics Club at our Institution.
- The students have received a base understanding that will enable them to participate in robotics competitions conducted at other institutions
- The Workshop abstract has been submitted to media for publication. This should be advantageous to IES reputation.



1. A Robotics Workshop will be held (2 days).
2. A competition will be held just after the workshop.
3. Winner students will get the certificate of Merit.
4. Winners of the competition will be participating in "National level championship".



# Project Expo'17 **ECCENTA**

Department of Mechanical Engineering, IESCE, as part of Project Expo 2017, ECCENTA, exhibited some of the projects. The Project expo, arranged for the students of class twelve of various institutions was inaugurated in the auditorium at 10.00 AM. All the participants, after the inauguration ceremony and keynote speech visited our project exhibits, which were arranged in the Production Lab of Mechanical Engineering Department B106. Around 500 students visited the expo and appreciated the woks done by the students. Out of the 11 project exhibited themain attraction was the "pedal powered grass cutter and the grinder". Students and staff helped for the smooth functioning of the event. Various games and activities were arranged in the department. Junkyard war and automobile quiz was the main event. Students participated and enjoyed the entire program . Project expo was closed at 3.00 pm. The entire event concluded at 4:30 PM, after the valedictory function. Entire program was a success, consider in the number of students participated in the







Campus Recruitment Drive by UNIINFO Tele communication services Pvt. at IESCE on 8th August 2017. Total 22 students from mechanical department were placed among 72 in which 20 students from current batch and 2 studentsfrom last year batch for the position of RF Engineer and DT Technician.









Mr. Binshad K S7 ME





Mr. Faras S7 ME



Mr. Miswaramjind TS Mr. Chrispaul Antony S7 ME



Mr. Mohammed Jarbir M S7 ME



Mr. Noyal Thomson VT S7 ME



Mr. Abhinav C Preej S7 ME



### MIT cheetah robot





In a leap for robot development, the MIT researc

hers who built a robotic cheetah have now trained it to see and jump over hurdles as it runs - making this the first four-legged robot to run and jump over

To get a running jump, the robot plans out its path, much like a human runner: As it detects an approaching obstacle, it estimates that object's height and distance. The robot gauges the best position from which to jump, and adjusts its stride to land just short of the obstacle, before exerting enough force to push up and over. Based on the obstacle"s height, the robot then applies a certain amount of force to land safely, before resuming its initial pace.

In experiments on a treadmill and an indoor track, the cheetah robot successfully cleared obstacles up to 18 inches tall — more than half of the robot  $^{\circ}$ s own height – while maintaining an average running speed of 5 miles per hour.

"A running jump is a truly dynamic behavior," says Sangbae Kim, an assistant professor of mechanical engineering at MIT. "You have to manage balance and energy, and be able to handle impact after landing. Our robot is specifically designed for those highly dynamic behaviors."

#### Across

- 4 Hyundai"s brand new RWD phenomenon! Made from 09" to present.
- 8 Audi's most famous car ever made from 80" to 91".
- Datsun's original ride, one that kind of started it all (for Datsun) made from 68" to
- 10 Pontiac"s car, the one that made them famous, but, the premium, top dollar car. Made from 67" to 69",
- 12 What Chevrolet set the fastest laptime ever on Nurburing race track. Made from 09" to present.
- 13 Acura"s all-aluminum supercar. Made from 90" to05"
- 15 Nissan"s predecessor for the 300ZX. Made 03" to 08"
- 16 Ford"s most recognizable car and an American classic. Made from 64" to present.
- 20 Mitsubishi"s most recognizable and successful car ever. Made from 92" to present.
- 22 Renault's amazing mid engine, rear-wheel drive masterpiece, made from 01" to 05"
- 23 Lamborghini's most famous and imfamous ride? Made from 74" to 89".
- 25 Lexus"s all new 4 door sports car. 08" to present.
- 26 Jagaur"s only true "Super car" they ever produced. Made from 91" to 94".
- 29 Lister's 1993 Supercar with a Jaguar v-12 making 546 hp
- 30 Mazda"s beautiful and amazing rotary powered machine, Japanese-spec, made from 92" to 02".

### Down

- One of Toyota"s most famous RWD Drifters, made from 83" to 87". (2 words)
- Porsches last, great (original) sports car that was air cooled, made from 93" to 98"
- Mercedes Benz amazing 670 hp twin turbo
- V12 monster! Made from 08" to present. Bugatti's original supercar. Made from 91" to 95".
- The most recognizable and sought after Nissan in the world. Made from 98" to 02".
- This Ferrari was the worlds fastest production car from 87" to 92".
- 11 Subaru's rally winning superchamp! Made from 92" to present.
- 14 Toyota"s greatest achievement (still to this day) made from 79" to 02".
- 17Opel"s 2 door sports coupe that shares platform with the Pontiac Solstice. Made from 06" to present.
- 18 Honda"s most sought after J-Spec ride! Made from 97" to present.
- 19 Chevrolet"s original "sports car" made from 53" to present.
- 20 Suzuki"s twin engined rally monster!
- 21 Carrol Shelby and Ford's most recent and most powerful accomplishment. Made from 07" to present.
- 22 Dodge's 2 door behemoth that just had a reissue in 08". Made from 70" to present.

(but there was a lapse).

- 24 The Dodge that set the second quickest laptime ever of Nurburgring race track. Made
- from 08" to present.
- 27 Volkswagen"s original badboy made from 74" to present.
- 28 BMW"s 2 door masterpiece from its performance division. Made from 86" to
- 31 McLaren made this, "the fastest NA production car" from 92" to 98".

### ASSOCIATION EXECUTIVE MEMBERS



Mr. Jaseel TA





Mr. Miswaramjind TS



Mr. Salman Yoosaf N

I would like to know,

Why a ten a.m. class on fluid flow? Conservation of energy will even state,

A body not in motion will be late.

Oh the misery of an alarm's persistence, When one must awake to a shower's flow resistance.

Bernoulli, Bernoulli, why "Hydrodynamics"?

More useful would be Opposite Gender Mechanics!

For when I explain the buoyant force of a sphere, My dinner date edges away further, not near. Oh, this boy is much more dense than Hg,

(That's okay; we pity those with a business degree!) They will never know a floating body will be stable, When the center of buoyancy is above the navel.

Or that Fluid Dynamics goes much beyond a pipe,

Density and velocity are not just hype.

When multiplied by Diameter and divided by mu, We can understand that Reynolds' numbers are TRUE! This class has had me thinking in many dimensions, Buckingham Pi I won't even mention!

Two armed sprinklers and angles galore, Just thinking about them makes my head sore. Time to take some Tylenol and load up my bag, Fluid Mechanics can be such a Drag!

Density is something We learned early in school,

Mass per volume, It's so very cool.

Velocity is

ABUDL

**1S** 

Fluid Mechanics

How fast you can go.

It can be figured With area and flow.

It's easily measured

With a ruler or tape

Just straight across The diameter of the pipe.

Viscosity however

Is new and fun

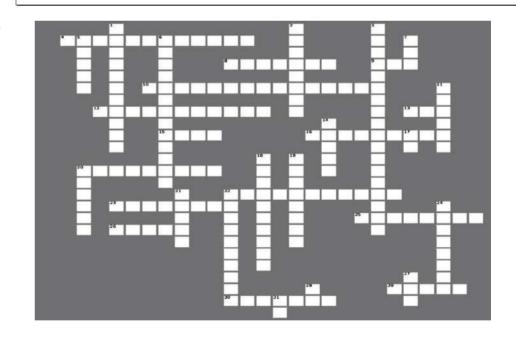
It's one of the last We're almost done.

Put this all together

With Buckingham Pi

Reynolds number is the answer

Thank you! Good-bye!





Mr. Shyam Kumar P



Mr. Abhinav C Preej



Mr. Roji Joy



Mr. Varun Krishnan TV