A CELEBRATION OF ENGINEERING—HONORING ACHIEVEMENT

mechanical engineering

THE

MECH MAGAZINE

APRIL EDITION

THE EPIC

Maathiyosi

EDITORIAL CREW

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Ms. R.S Shiva Ranjani, M.E

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GOWTHAM. R, II YEAR MECH

SANTHOSTH.S, II YEAR MECH

SEENU, II YEAR MECH

VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (60)

State the Vision and Mission of the Department and Institute (5)

Vision of the Institution

Impart an inclusive engineering education that beyond being a facilitator for a career and rudimentary skills, equips the students to offer ethically & environmentally conscious solutions to societal issues.

Mission of the Institution

Develop the Institution into a Model Self Financing College of Engineering and Technology. Professional Training to our students with State of the art Laboratories and converting them into Technocrats of international repute.

1. Create a nurturing, holistic environment of engineering education to facilitate every student realize their full potential
2. Strive to make the students strong in basic concepts armed with appropriate skills to enhance one's ability to apply the knowledge to provide solutions to real time issues.
3. Maintain an ambience that facilitates the students to strengthen their ethical value systems.
4. Actively promote R&D and institute-industry interaction.

Vision of the Department

- To become a Department of Academic Excellence in the frontier areas of Mechanical Engineering.
- To become a renown institute for Higher Learning and Research in Mechanical Engineering leading to the evolution of knowledge society.

Mission of the Department

- To train future leaders with skills and abilities.
- To pursue research in frontier areas and enhance knowledge base.
- To inculcate values leading to holistic learning.

State the Program Educational Objectives (PEOs) (5)

PEO I : To develop fundamental knowledge in engineering in order to enable them to formulate analyze and solve the application problems.

PEO II : To provide hands on training on various cutting edge technologies in order to inculcate an innovative approach towards Design, Manufacture and Maintain new products/systems.

PEO III :To provide opportunities to the students to participate/organize workshops/seminars on recent trends/research in the field of mechanical engineering.

PEO IV : To provide opportunity to students to involve themselves in various social activities.

Program Specific Outcomes (PSO)

1. Apply engineering knowledge to develop machines, equipments, process and systems for the benefit of society & self.

2. Develop job ready, billable, employableprofessionals familiar with best practices of industries.

3. Apply their acquired knowledge in the domain of applied mechanics, thermal and fluid sciences to solve engineering problems utilizing latest tools.

SAE BAJA

[1] 2016-2017 - SAE – BAJA Competition – Design and Fabrication of

Figure: Team of BAJA members in Virtual round, 2016-2017.

All-Terrain Vehicle (ATV) is a vehicle that travels on low-pressure tires, with a Seat that is straddled by the operator, along with handlebars for steering control. As the name implies, it is designed to handle a wider variety of terrain than most other vehicles.

Here a team comprising of 25 Mechanical Engineering students was formed and deigned ATV. The team presented their design in CHRIST UNIVERSITY, Bangalore on 24 and 25th June of 2016. The team SCE-FURYDO RACING secured 153rd rank in the Nation-wide competition. The team had Mr. A.Ranjith Raj and Mr. J. Sivasubramanian as Faculty advisors.

Figure: The Jarvis – E BAJA vehicle.

JARVIS- SAE Aero Model for e-baja

[3] SAE AERO DESIGN CHALLENGE

The purpose of the SAE ISS Aero Design Challenge is to promote and develop Indian expertise and experience in unmanned systems technologies at the university and college levels. Even small scale unmanned vehicles are complex systems requiring a well planned and executed design approach. In addition, safety considerations are important factors in this competition as in any other vehicle design project.

The Final Flight Competition
(3 Day Event) is divided in to 3 phases

Phase 1:
UAV Design and Design Report Submission Teams will electronically submit their proposals for competition detailing how their design has met or exceeded the design requirements.

Phase 2:
Technical Presentation
Oral Presentation, Payload Loading and Unloading Demonstration.

Phase 3:
Technical Inspection and Flight Round

Three teams from our college comprising 4 students were guided by three individual faculties and secured 7th, 14th, and 49th places.

EFFICIENCY-2K17

REPORT

Contact

Staff Coordinators

Mr. Anandhapadhmanaban

Ms. Mercy Vasan

Overall Student Coordinators

Nihal Ahamed

9489494625

Muhammed Haaris

s924546553

Event Manager

Arun Jennifer

9597909890

Ramasamy

9791623982

Raj Kumar

9047022558

Srivasan

9159269008

Finance

Prasana

9788522213

Event Coordinators

Technical

Ashwin

9789408695

Non-Technical

Kabilan

9994685741

Symposium

Efficiency 2017 is a national level technical symposium conducted by students of department of mechanical department of Saranathan College on March 10th 2017. It consisted of the following events;

Technical Events

1. Paper Presentation

The theme for paper presentation was given as “all mechanical stream” as well as “smart technologies”. The participants had to submit the abstract of their paper via email, ‘efficiency2k17@gmail.com’. Then the participants were shortlisted and then asked to present on the day of the event.

2. Project expo

The theme for project presentation was given as “all mechanical stream” as well as “smart technologies”. The participants had to submit the abstract of their project via email, ‘efficiency2k17@gmail.com’. Then the participants were shortlisted and then asked to present on the day of the event. The participants were asked either to display their project or make an presentation, in case they could not transit their work.

3. Kurzgesagt

The idea of this event was not well renowned and it was first of its kind. Kurzgesagt is a German word, which means ‘in a nutshell’. The participants were asked to choose a subject of their own and then need to present them within few minutes. The judging was based on; how big the subject was, how much the participants have covered the subject and then the clarity of the presentation.

4. The machinist

It is a core mechanical event, where the participants have to produce the component from the given raw material and the design, that is made by the coordinators of the event.

5. Water rocketry

This event is a standard one, in which the participant is expected to build a rocket model out of standard 2-liter bottle. Then the water is filled, for the participant desired amount and then compressed with issued compressor for not more than 60psi.

6. CAD modelling

Using the designing software, the participant had to bring out the 3D model from the orthographic view given. Also the weight of the model was asked to be measured. The judging criteria for this event was based on the time taken and accuracy.

Non Technical Event.

1. Chaos theory

This is also an all new event. The main objective of the event is to relate two different irrelevant things. The participants had to use logical and analytical method in order to relate the objects. The marks were based on the number of links and logics used.

2. Dubsmash

As the name suggest, this event runs on the popular mobile app, 'Dubsmash'. Participants has to give a lip sync to the played audio. The points were given based on how the participants delivers the dialogue.

3. Dumb Charades

It's the classic picnic game, where one of the participants will act out the word given to them and the other players of the team will figure the word out.

4. QuizUp

QuizUp is also a mobile application. The app is for quizzers. This event was played using the app. The players take on each other on a head to head match and move up the round. Prizes was given to the winner and runners of the finals.

Introduction

This symposium is a product of lots of hard work and dedication from both the faculties and students. A meticulous planning was required. The proceedings were carefully made and then they were scheduled and executed. It required a team able to perform lot of weeks of work, in days. The work that was performed by the team will be given down, as well the mishaps and troubleshooting that was performed will be followed.

Brainstorming

The team members of the symposium were decided by the heads of the symposium. Then a meeting was held for the core team members for brainstorming, in which major decision was taken. The proceedings of the event were discussed. The list of events was created and the rules which abide them was made. Some of the events were totally new and different, which was structured from bottom-up.

The few mishaps that we encountered regarding the brainstorming session are as follows. We were not able to convey the messages to the event coordinators successfully, since most of the decisions were tentative and bound to change. Some of the coordinators could not grasp the concept of their respective event, which actually led to confusion. Due to this, the core team had to help the coordinators through the proceedings of their events.

It is very important to build up the base for the symposium, so the first step which is the brainstorming session should be well enough. This must be followed up by further meetings.

Budget

The entire symposium would be structured by the budget that is made. The major part of the money is spent on awards. The money allotted for the prizes should fit with the budget that is made. We agreed on having different amount of prize money for different events. Also prize amount differed on the basis of the institution. We split the prizes for Saranathan and non Saranathan candidates, in order to avoid the comments on prejudicial act of the judges. The money was collected from the students of mechanical department. Also the institution will cover the expenses if approached.

The budget could be partially covered back with the money received as the entry fees and fees for the workshop. A very trustable and accountable person should be appointed as the head of finance. Every thing must be billed and submitted.

Budget Estimation

Prize Money	
Technical	*6 events*
1st Prize	Rs 1200
2nd Prize	Rs 800
TOTAL	**Rs 12000**
Non Technical 3 events	
1st prize	Rs 700
2nd prize	Rs 300
TOTAL	**Rs 3000**
TOTAL	**Rs 15000**
Certificates	
300 nos. (Approx. Rs 25- Rs20 Each)	Rs 7000
Tags	
500nos x Rs 10	Rs 5000

Publicity	
Invitation	
100nos x Rs 20	Rs 2000
Poster	
100nos x Rs 30	Rs 3000
TOTAL (including other publicity work and ambience work)	**Rs 10000**
Miscellaneous	
Pen 300nos x Rs 5	Rs 1500
Notebooks 300 x Rs 10	Rs 3000
Refreshment	**Rs 5000**
TOTAL	**Rs 46000**

GROSS Rs 50,000

(Approximate estimation including additional expense)

Publicity

The important thing for a symposium is its reach. The success of the symposium is decided by the number of people turn out on the day. The major job of the team is to make a proper publicity at various stages and in varying approaches before the day of the symposium.

1. Posters

Posters were created using Photoshop. It was designed in such a way that it conveyed the important details in a brief fashion. Then the poster was given to print and then mailed to various colleges in and around Trichy. The publicity crew were sent out to the different Institutions and conveyed the message about the symposium and handed over the posters and the invitations.

2. Websites

We created a website through wixsite, 'efficiency2k17.wixsite.com/mech'. The website carries every bit of information that is related to the symposium from venue, time till rules and judging criteria. Basically the home page contains the titles of the events and when the title is chosen the event page will open. The event page contains the 1.Description 2.Event format 3.Judging criteria 4.Contacts.

We learnt it's better to buy a domain for the website, since it's the first step of contact that the participant acquires with us. The website name must be simple and catchy so that the people would be able to identify and access it easily. The website should be made fully ready before the poster are handed out. Nothing should be left to chance in terms of the site. We had a little hiccup in making the site, anyway we improvised.

3. Social Media

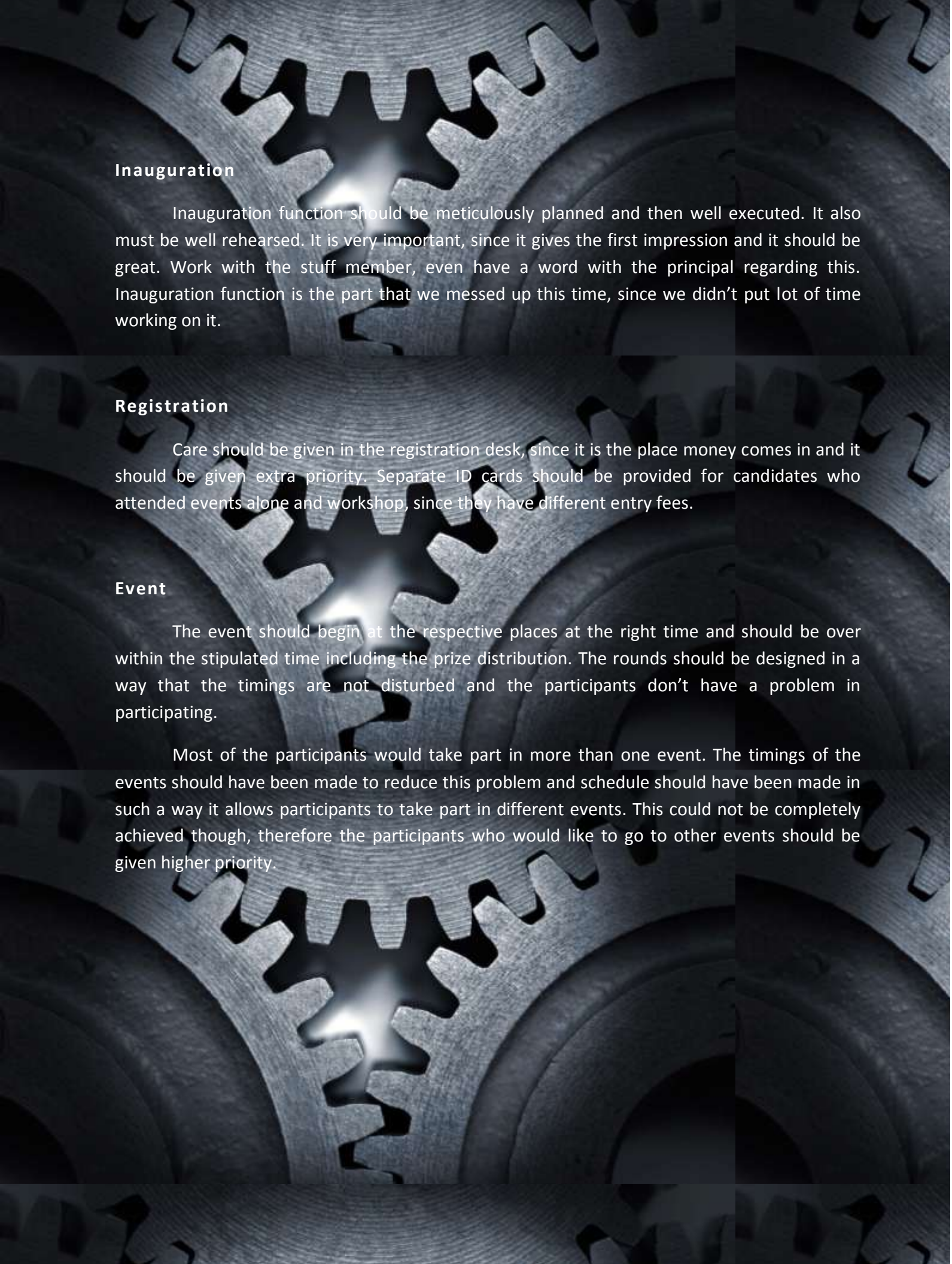
No one cares about things unless it hits the social media these day. Use them very effectively, create a page and share as much as possible relevant information via the page. We even used one of the already better known college site to share the information. There are certain famous pages within the city such as 'nammatrichy', through which we shared our information. We also paid facebook for boosting certain post, through which the reach can be extended.

Ambience

The decoration and environment is taken up by the ambience team. It's not the important part of the symposium yet it is the essence of the it. The ambience team makes up the decoration, the posters and banners. We tried to as much as economical with this, used old scrap and things to build a logo design structure. We made two banners, used college poles for flags.

Symposium day

Everything will not go as planned during the symposium day. But there are always ways to improvise, use the tactical mind, this day will bring out the best in you. It lights up the team spirits, makes you work as a unit.



Inauguration

Inauguration function should be meticulously planned and then well executed. It also must be well rehearsed. It is very important, since it gives the first impression and it should be great. Work with the stuff member, even have a word with the principal regarding this. Inauguration function is the part that we messed up this time, since we didn't put lot of time working on it.

Registration

Care should be given in the registration desk, since it is the place money comes in and it should be given extra priority. Separate ID cards should be provided for candidates who attended events alone and workshop, since they have different entry fees.

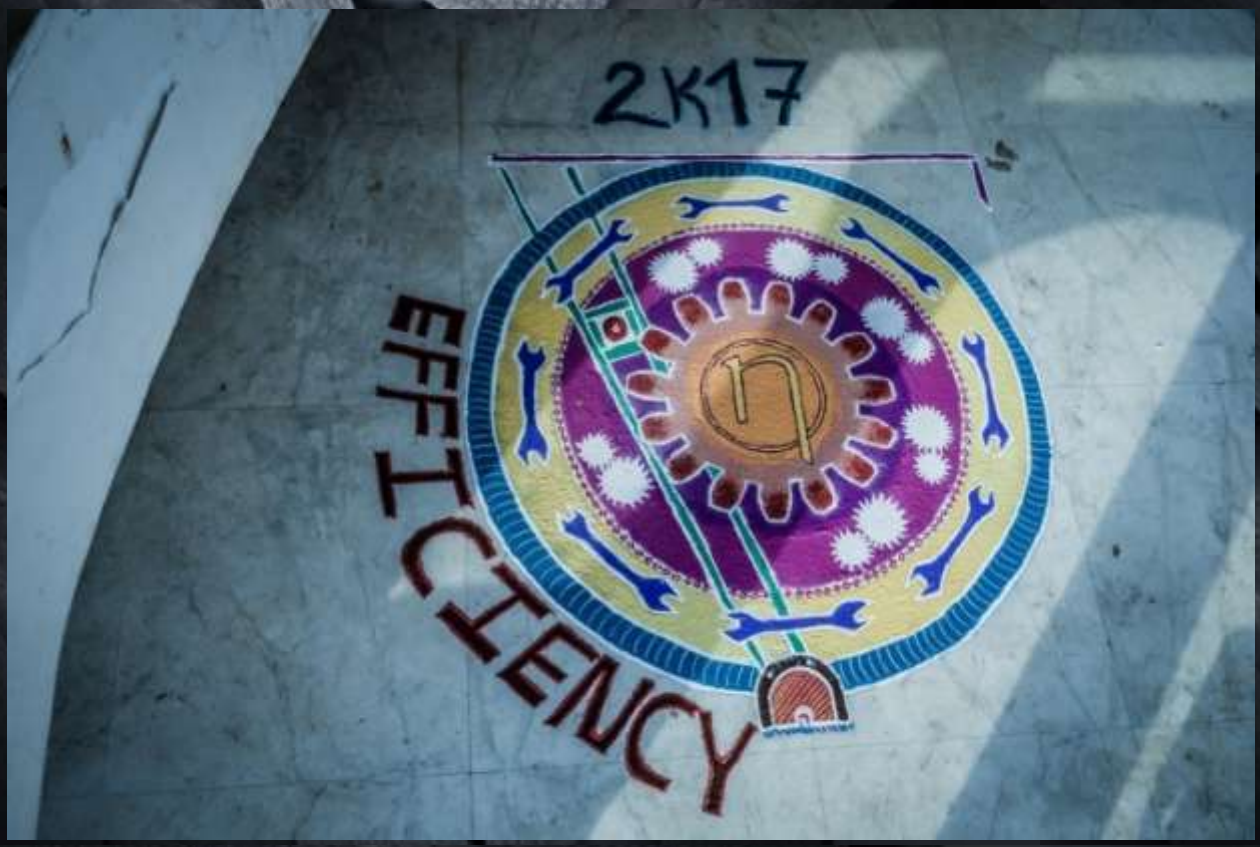
Event

The event should begin at the respective places at the right time and should be over within the stipulated time including the prize distribution. The rounds should be designed in a way that the timings are not disturbed and the participants don't have a problem in participating.

Most of the participants would take part in more than one event. The timings of the events should have been made to reduce this problem and schedule should have been made in such a way it allows participants to take part in different events. This could not be completely achieved though, therefore the participants who would like to go to other events should be given higher priority.

GALLERY

EFFICIENCY 2K17



Efficiency (2017) - Symposium

Our Department block during symposium

A welcome speech by our Honourable Principal and HOD

Students from various colleges attending our Symposium

Students performing in an non-technical event

Students fabricating water rocket

Students explaining the concept of NDT

Students listening to guest lecture

Students involving in an technical event

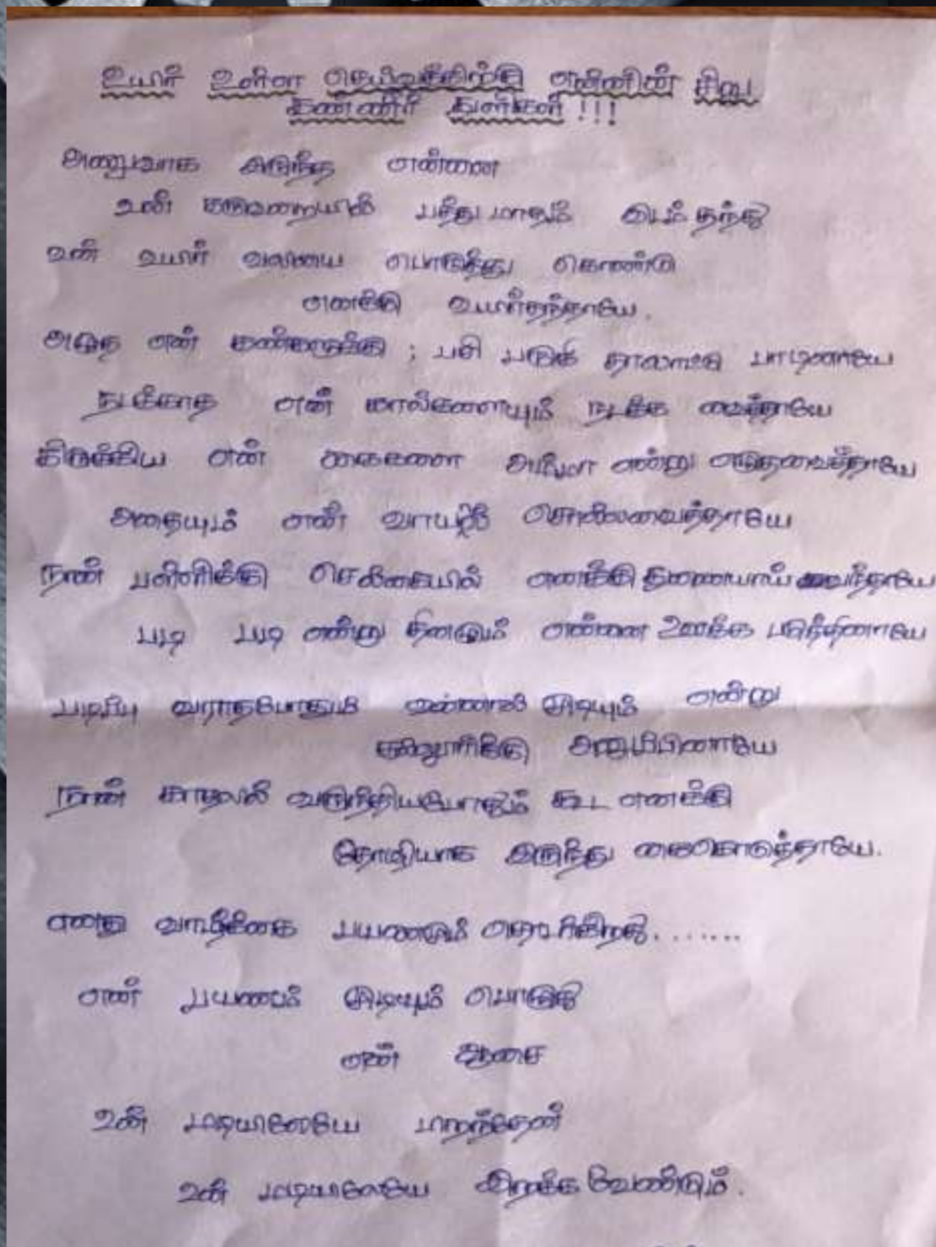
Students performing machining process in lathe for an event

Students and faculty members listening to an event

Faculty members distributing prizes for the winners

Faculty members distributing prizes for the winners

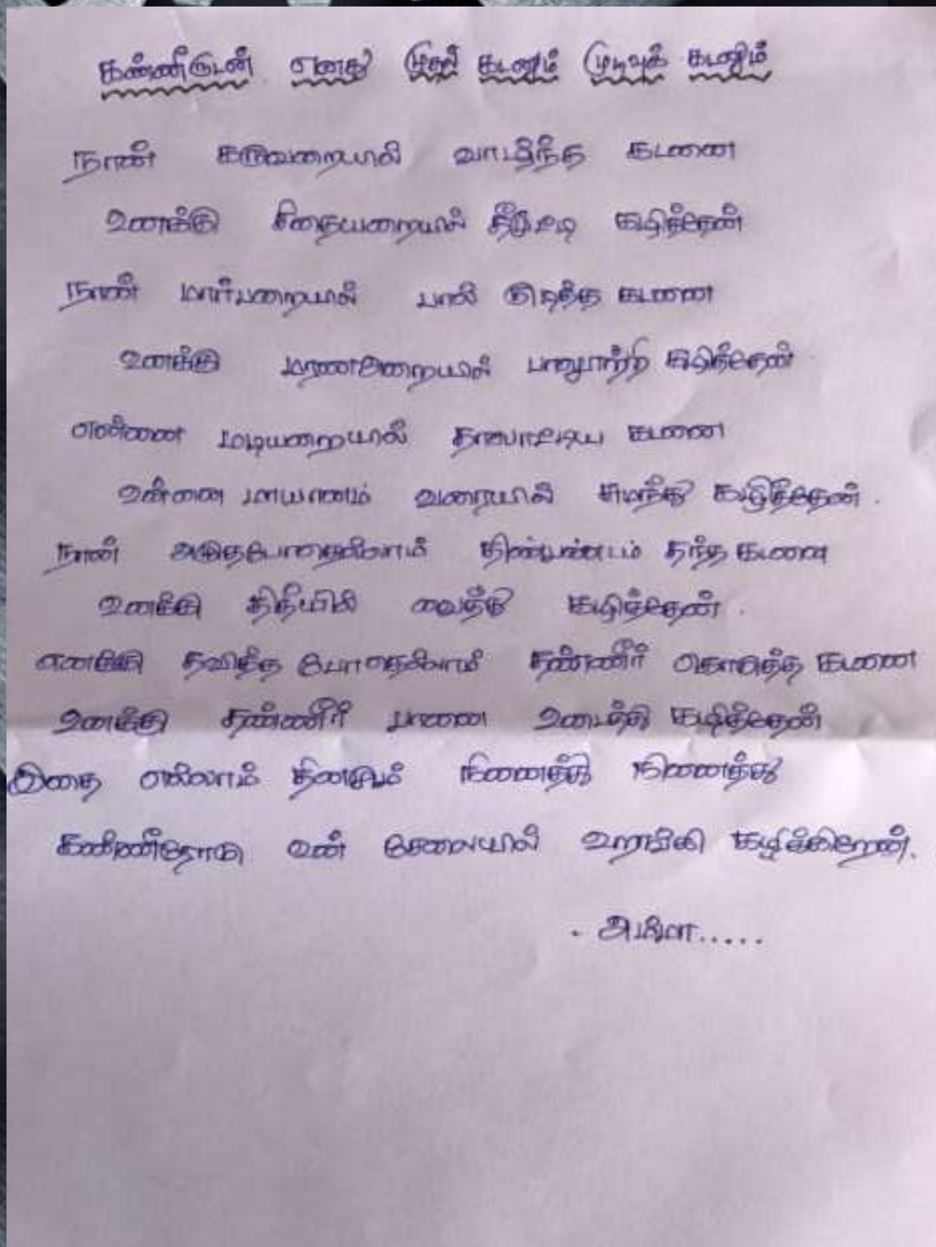
Our Team –Efficiency 2K17



உயிர் உள்ள தெய்வத்திற்கு என்னின் சிறு
கண்ணீர் துளிகள் !!!

அணுவாக அறிந்த என்னை
உன் கருவறையில் பத்து மாதம் வைத்து தந்து
உன் உயிர் வலியை பொறுத்து கொண்டு
எனக்கு உயிர்தந்தாயே.
அழுத என் கண்களுக்கு ; பசி பறிக்க தாலாட்டு பாடினாயே
நடக்காத என் கால்களையும் நடக்க வைத்தாயே
கிறுக்கிய என் கைகளை அம்மா என்று எழுதவைத்தாயே
அதையும் என் வாயில் சொல்லவைத்தாயே
நான் பள்ளிக்கு செல்கையில் எனக்கு துணையாய் அமைந்தாயே
படி படி என்று தினமும் என்னை ஊக்க படுத்தினாயே
படிப்பு வராதபோதும் என்னால் முடியும் என்று
கல்லூரிக்கு அனுப்பினாயே
நான் காதலில் விழுந்தபோதும் கூட எனக்கு
தோழியாக இருந்து கைகொடுத்தாயே.
எனது வாழ்க்கை பயணம் தொடர்கிறது. ......
என் பயணம் முடியும் பொழுது
என் ஆசை
உன் மடியிலேயே பிறந்தேன்
உன் மடியிலேயே இறக்க வேண்டும்.

TAMIL Poem Handwritten by Arun III Year Mech



கண்ணீருடன் எனது முதல் கடிதம் முடிவுக் கடிதம்

நான் கருவறையால் வாழ்ந்த கடனை
உனக்கு சிதையறையால் தீமூட்டி கழித்தேன்
நான் மார்பறையால் பால் குடித்த கடனை
உனக்கு மரணஅறையால் பாலூற்றி கழித்தேன்
என்னை மடியறையால் தாலாட்டிய கடனை
உன்னை மயானம் வரையால் சுமந்து கழித்தேன்.
நான் அழுதபோதெல்லாம் தின்பண்டம் தந்த கடனை
உனக்கு திதியில் வைத்து கழித்தேன்.
எனக்கு தவித்த போதெல்லாம் தண்ணீர் கொடுத்த கடனை
உனக்கு தண்ணீர் பானை உடைத்து கழித்தேன்
இதை எல்லாம் நினைவில் நினைத்து நினைத்து
கண்ணீரோடு உன் சேலையில் உறங்கி கழிக்கிறேன்.

- அகிலா.....

TAMIL Poem Handwritten by Arun III Year Mech

STUDENT ACHIEVEMENTS

Student Achievements:

Final year students:

Co-Curricular Activities

1. Najumudeen.SNaresh.VNeelakandan.R Nihal Ahamed.SSundarapandiyan.NVelan.S Venkat Prasanna.RVishnupriyan.A and Stanley Kishore.MP Participated in National level Workshop on 3D Printing at NIT Trichy in March.

2.Porpanesh.VRamaswaamy.ARN Participated in National level Workshop on Automobile Emission Control in BIT campus Trichy.

3.Prabakar.KSPrabhuDass.DPradeep.RSelvaganapathi.PPrakash.RSenthilkumaran.B Siva Prakash.S Participated on National level Workshop in NDT at NIT Trichy.

4.Raja Samuel.ASenthilkumar.N Participated in National level Workshop on Tools And Implementation at Sri Krishna College Coimbatore.

5.Ramaswaamy.ARN Participated in National Level Workshop on Locomotive at CIT college Coimbatore.

6.Saravana Kumar.M Participated in National level Workshop on 3D Animation at IIT Chennai.

7.Sudharsan.S Participated in National level Workshop on Autotrix at NIT Trichy.

8.Stanley Kishore.MP Participated in National level Workshop on Linen Tools And Technique at Sri krishna College Coimbatore.

9.Sankara Narayana Prasath.SSenthilkumaran.B Saravana Kumar.M Participated in National level SAE Aero Modelling Competition at Ramakrishna College of Engineering Trichy.

10.Praveen.BRaghuraman.P Arul S Participated in National level CADD Modelling Competetion at Kongu College of Engineering Erode.

11.Raj Kumar S presented a paper at P.A.College of Engineering and achieved IIIrd Prize.

12. Raj Kumar S presented a paper at Mahindra College of Engineering.

13.Mr. M.B.M. Manikandan, P. Kishore Kumar, S. Kathir Selvan, D. Albert Won State Level Best Project byInternational Society for Scientific Research and Development (ISSRD), Engineering Students Innovation Challenge – 2017 on 28-29 January 2017.

14.Mr. M. Moorthy, Mr. R. MathanBabu, Mr. E. Kumaresan received fund from The Institution of Engineers (India), R & D Grant-in- aid scheme, Experimental Investigation and Optimization of Milling Parameters for Machining Aluminum Silicon Carbide Composite using Design of Experiments Approach. (Project I.D. UG2017020) Sept 2016 - Rs. 36,000/-

15.Vineesh.Rcompiled an e-book "Basics of 3D printing" at Amazon Kindle.

Extra-curricular Activities:

Final year students:

1.PrathapAdaikalaraj.V Basketball Team Anna University-Winners

Praveen.BRaghuraman.P

2. Arul. S Presented a paper in Konggu Engineering College and secured 1st place and secured 3rd place in P.A College of Engineering.

3.Porpanesh.VPrabakar.KsPrabhuDass.DPradeep.R Basketball Team Anna University Winners.

4.Raj Kumar S Aravinth C Aswin Kumar C presented a paper on Self Balancing Of Two Wheeler Prototype Using Gyroscope and secured 1ST in National Level Symposium at MahendraEngg College.

5.Suraj S.S achieved in Table Tennis - Cm Trophy-Ditrict Level –Winner- Cm Trophy-Regional Level –Winner Colloseum-National Level-Runner - District Level -Singles- Runner - District Level -Doubles- Winner - Au Zonal-Winner - State Level-Winner - Au Level-Runner - National Level-Winner - Ictact-Winner.

6.Prasad.M achieved in Football as 3rd Place In Zonals and Won League Match Conducted By TDFA.

7. Prakash R achieved in Football and Won League Match Conducted By TDFA.

8.Raghuraman.P is in Basketball Team and one of the Anna University-Winners.

9.Eric Aloysius I is in Basketball and one of the Zonal Level-Winners.

10. Arjun R is in Chess and one of the Zonal Level-Winners.

11.Godwin Lourd Daniel. A is a Rotary District Level-Winner.

12.Ramanathan M is a runner of Zonal Level Shuttle Baminton.

13.VenkatanathanS is the State Level -3rd Place in Pits Spotiva.

14.Nandha Kumar A is District Level 3rd Place (Under 95 Kg) in Power Lifting.

15.Gowtham Vijayam I Runner in Shuttle Baminton Zonal Level.

16.Aswin J Winners Table Tennis AU Inter Zone.

17. Mohammed Hari 3rd prize in Football AU Zonal Level.

Third Year Students:

1. Eric Aloysius I Winners in Basketball Zonal level.
2. Arjun R Winners in Chess Zonal level.

Second Year Students:

1. Harigaraan G K 3rd prize on Chess in Colloseum at Sastra University,Tanjore.

STAFF ACTIVITY

Achievements of the staff members

Papers published in National/ International Journals:

1. G.Jayaprakash, "Parametric Analysis Of Laser Cutting Of Mild Steel Material" Journal Of Chemical And Pharmaceutical Sciences, Vol, Issue: 10– 1 Pages 385-388, Jan 2017.

2. G.Jayaprakash, "Optimization Of Tolerance Design For Mechanical Assembly Under Thermal Impact Using Fea." Int. Journal Of Advanced Manufacturing Technology, (Under review).

3. Baskar, N, AnanthaPadmanaban. MR,&Devakumaran, K 2016, 'Analytical Model for estimation of heat transfer in Gas Metal Arc welding torch nozzle', Asian Journal of Research in Social Sciences and Humanities, Accepted, publish on September 2016, ISSN : 2249-7315. (Updated List of Journal 2016 / sl.no. 1107).

4. Baskar, N, AnanthaPadmanaban. MR,&Devakumaran, K 2016 'A Study on Process Characteristics and Performance of Hot Wire Gas Tungsten Arc Welding Process for High Temperature Materials', Materials Research - Ibero-american Journal of Materials.

5. Kannan, S, Baskar,N, Suresh kumar, B &Varatharajulu ,M. 2016, 'Optimization of Face Milling Parameters for Material Removal Rate and Surface Roughness on Inconel 718 using Response Surface Methodology and Genetic Algorithm', Asian Journal of Research in Social Sciences and Humanities, Vol. 6, No. 9, September 2016, pp. 1198-1211. (ISSN 2249-7315)

6. Kannan G, Balasundaram, R. Baskar, N, &Asokan. P. 2016 , 'A hybrid approach for minimizing makespan in permutation flowshop scheduling Article' Journal of Systems Science and Systems Engineering,DoI: 10.1007/s11518-016- 5297-1 First online: 27 January 2016, Print ISSN 1004-3756. (Annexure-I) IF-0.68.

7. M.Varatharajulu, G.Jayaprakash, N.Baskar, B.Suresh Kumar, Comparison of Response Surface Methodology and Taguchi Analysis for Determining Appropriate Drilling Parameters of Duplex 2205, Asian Journal of Research in Social Science and Humanities, Vol. 7, No.1, January 2017, pp- 1237-1261.

8. K.Ramesh and Dr.N.Baskar, An application Traditional and Nontraditional Approach on Lock Industry for Optimization of Cutting Layout, Asian Journal of Research in Social Science and Humanities, Vol. 1, No.1, January 2017, pp- 578-593.

9. Ganesan M, Karthikeyan S, A. Ranjith Raj, "Experimental Investigation Of Titanium Based Crank Shaft Using Finite Element Method" , International Journal Of Innovative Research In Technology, Vol. 03, No.02, July 2016, pp-222- 225.

10. Mercy Vasan, A, Gopalakrishnan V, Prasanna, N &Vivekanandan, M 2016, 'Predicting Tool for Cyclone Separator with Simple Mathematical Model using RSM', Asian Journal Of Research in Social Sciences and Humanities in, ISSN:2249- 7315(online), Updated Journal List 2016-.S.No.1107.

11. Mercy Vasan, A, Prasanna, N, Vivekanandan, M &Gopalakrishnan, V 2016, 'CFD investigation of the cold hydrodynamics of a laboratory scale CFB furnace', Journal of advances in Chemistry,ISSN2321-807X, vol. 12, no. 9, pp. 4330-4340, Updated Journal List 2016 and current Annexure I.

12. Rekha. R, Baskar.N, Palanisamy.A "Regression ModelingAnd Simulated Annealing Approach For Optimization Of Cylindrical Grinding Process", International Journal Of Manufacturing Technology And Management, (Under Publication).

13. Rekha.R, Baskar.N, "Prediction Of Pareto Optimal Solutions For Multiple Responses In Cylindrical Grinding" ,Asian Journal Of Research In Social Sciences And Humanities, Volume & Issue6 & 9, pages 400-414, Sep-16.

14. Rekha.R, Raymond.A, Sabarish "Taguchi Based Optimization Of Cylindrical Grinding Process", International Journal For Scientific Research And Development (Ijsrd), Volume & Issue 4 & 7, pages 242-245, Oct-16.

Research Details of Faculty:

1.Dr.G.Jayaprkash is an active research supervisor for Anna University, Tamil Nadu. He is currently guiding Seven research scholars.

2. Mr. M. Sridharan is doing Ph.D in Anna University under the guidance of Dr.G.Jayaprakash/HOD MECH and he has completed her Ph.D course work at NIT Trichy in the odd semester 2016-2017.

3.Dr. N. Baskar is another Research Supervisor for Anna University, Tamilnadu. He did Succesfully completed guiding two people. Three staffs have Submitted their thesis among which Ms.R.Rekha and Mr. Ananthapadmanaban included.

4. One another scholar of Dr. N. Baskar has completed his Comprehensive viva-voce.

5.Mr. S. Karthikeyan and Mr. A. Maria Jackson also have registered their part time Ph.D with Anna University Chennai Under the guidance of Dr. N. Baskar.

6.Ms. A. Mercy Vasan submitted her thesis of Ph. D under the guidance of Dr. V. GopalaKrishnan on 23-02- 2017.

Sponsored / Aided projects:

1.Fund received from The Institution of Engineers (India), R & D Grant-in- aid scheme, Experimental Investigation and Optimization of Milling Parameters for Machining Aluminum Silicon Carbide Composite using Design of Experiments Approach. (Project I.D. UG2017020) Sept 2016 :-Rs. 36,000/-

Students Name: Mr. M. Moorthy, Mr. R. MathanBabu and Mr. E. Kumaresan

Guide Name : Dr. N. Baskar and Dr. M. Ganesan

2.State Level Best Project - International Society for Scientific Research and Development (ISSRD), Engineering Students Innovation Challenge - 2017 on 28-29 January 2017.

Students Name: Mr. M.B.M. Manikandan, Mr. P. Kishore Kumar,

Mr. S. KathirSelvan and Mr. D. Albert

Guide Name : Dr. N. Baskar and Dr. M. Ganesan

3.Autodesk 360 Fusion design contest was organized by ICTACT, many of our students has participated in the same.

Funding Proposals:

Funding proposals submitted to AICTE, TSCST :

S.No.	Proposal title	Members	Workshop/FDP/ Conference	Agency	Date
1	Experimental Evaluation and Analysis of Milling Process Parameters for various work piece materials.	Dr. N. Baskar Dr. M. Ganesan Mr. A. Maria Jackson	Research proposal	RPS (AICTE)	Jan 2017
2	Experimental Evaluation and Optimization of Drilling Process Parameters on Aluminium Silicon Carbide Composite using Design of Experiments Approach.	Dr. N. Baskar Dr. M. Ganesan	Project Proposal	TSCST	August 2016
3	Technological and computational advances in Mechanical Engineering.	Dr. N. Baskar Ms.R.Rekha	FDP	AICTE	Jan 2017
4	Advanced Manufacturing Technology.	Dr. N. Baskar Ms.R.Rekha	Project Proposal	DST	Jan 2017
5	Thermal Engineering Lab	Dr. D. Valavan Ms. A. Mercy Vasan	Lab Facility	MODROBS	Jan 2017
6	Thermal Engineering Lab	Dr. D. Valavan	Lab Facility	AQIS ,AICTE	Jan 2017

Students Internship details:

S.no	Student Name	Year	Company
1	RAMPRASAD G	2017	G- DMRL, Gummidipoondi
2	SENKATHIR.V	2017	Brakes India Ltd., Padi
3	VENKATESH R		
4	VIJAYARAM C		
5	SOLAMUTHU K	2017	VX Energy Pvt. ltd

Exclusive Value Added Training for Students:

S.No	Date & session	Title of the course	Trainer	Participants
1	01.06.16 to 29.07.16 Alternate working days. 5:00 to 6:30 pm	AUTODESK INVENTOR 2016	A.Maria Jackson, Department of Mechanical	60 students of Third Year Mechanical
2	02.06.16 to 22.07.16 Alternate working days. 5:00 to 6:30 pm	AUTOCAD 2016	A.Ranjith raj and B.Vikram Department of Mechanical	36 students of second Year Mechanical
3	01.09.16 to 17.02.2017	CREO	CADD centre	30 Students of Mechanical Engineering
4	14.12.2016 to 16.12.2016	Applied Hydraulics and Pneumatics	Ms. R.Rekha, Mr. R. Kumar, Mr. B. Vikram, Ms. RS. Shivaranjani	30 Third Year students
5	05.12.16 to 16.12.2016	CNC Programiing skills	Mr. R.SureshBabu and Mr. S. Karthikeyan	20 Third Year students
6	05.12.16 to 16.12.2016	CREO	Mr. M. Ganesan	20 Third Year students

Workshop/Seminar/FDP attended by Faculty:

1.Dr. G. Jayaprakash, HOD/ MECH, attended FDP on “CFD” on 06.06.16 to 10.06.16at SASTRA university.

2.Mr.A.Ranjithraj, and Mr.M.Sridharan, AP/MECH, attended TEQIP II Sponsored Workshop on “Design and Analysis of Mechanical Systems (DAMS)” 19.12.16 to 24.12.2016 in NIT Trichy

3.Mr.A. Saravanan, AP/ MECH, attended FDP on “Challenges in Manufacturing” on 26.12.16 to 30.12.16inNIT Trichy.

4.Mr.A.Maria Jackson, AP/MECH, attended TEQIP II Sponsored FDP on “Design of Experiment and Programming Skills for Advanced Research” 14.12.16 to 21.12.2016 in GCE, Salem.

5.Mr. S. Sathyanarayanan, A.P/MECH, attended the inauguration of Indian Society of Systems for Science and Engineering, ISRO at SASTRA University on 15/12/2016.

6. Mr. S. Vinothkumar AP/MECH, attended TEQUIP II sponsored FDP on “Challenges in Manufacturing – Leading to Innovation” on 26.12.16 to 30.12.16 inNIT Trichy.

7.Mr. R. Kumar, Ms. RS. Shiva Ranjani AP/MECH attended FDP on “Quantitative aptitude” Conucted by our Maths Department on 22 Dec 2016.

8.Mr. A. Maria Jackson, Mr.A.Ranjith Raj, Mr.E.Navin Prasad, Mr. S. Vinothkumar, Mr. G. Mahesh, Ms. R. Rekha, Ms. A. Mercy Vasan, Ms. RS. ShivaranjaniA.P/MECH attended an FDP on “Pedagogic communication” on 27/12/2016 organized by English department of our college.

Workshop Organised:

Two days workshop on “ANSYS - FEA” was conducted by ANSYS people for theIII year MECH students on 17/02/2017 & 18/02/2017.

2. Two day workshop on “ANSYS - CFD” wasconducted by ANSYS people for the III year MECH students on 02/03/2017 to 04/03/2017

3. One day workshop on “AUTODESK FUSION 360” conducted by ICTACT on30.12.2016.

4. Two day workshop on “AUTODESK INVENTOR 2016” by ICTACT for Third year Mechanical students on 05.08.2016 to 06.08.2016.

5. Two day workshop on “AUTOCAD 2016” by ICTACT for Second Mechanical students on 23.07.2016 to 24.07.2016.

Guest Lecture/ Training Organized By MECH Department:

S.No	Date Session	Resource Person	Title of the Lecture	Partcipants
1	07/02/2017	Prof. T. Venkatesan, Director, Fifth wheel Drive	Automobile Engineering	THIRD MECH A section
2	15/02/2017	Prof. T. Venkatesan, Director, Fifth wheel Drive	Automobile Engineering	THIRD MECH B section
3	10/02/2017 AN	Dr. M. Kanthababu, Anna University Chennai.	Abrasive water jet machining	III year
4	23.08.2016 FN	N.Lakshminarasimhan, Brakes India PvtLmt	HR MEET	IV YEAR
5	23.08.2016 AN	Vamanamoorthy.H Timken	HR MEET	IV YEAR
6	24.09.2016	Mr. S.Suresh, NIT,Trichy	Heat and Mass Transfer	III YEAR
7	24.08.2016	Mr. Naveen Alexis, Mr. Deepan Raj, INFOSYS	Mock Interview	IV YEAR

Spoken tutorial – Quality Improvement Cell:

1.SCILAB,had been thought to finalyear, third year MECH students through Spoken tutorial to improve their technical skills. The basic concepts of SCILAB software were explained in the session. Students found more interesting that it enabled the students to solve the exercises simultaneously in SCILAB window.

2.And also students successfully cleared the online certification Exam, the details are given below.

Resource Persons:

1.Dr.M.Ganesan, acted as Resource person of Faculty Development & Training Programme (FDTP), Anna University titled "Finite Element Analysis" in M.A.M. School of Engineering, Tiruchirappalli on December 2016.