



NIRZER

NEWSLETTER OF MECHANICAL ENGINEERING DEPARTMENT



Department of Mechanical Engineering
welcomes Principal

DR. M. S. KRUPASHANKARA



Kowshik Srivatsan



Saeel Gawas



Pratik Joshi

GOA UNIVERSITY TOPPERS - 2017-18

EVENTS and ACTIVITIES

1	31 st July 2018	MOTIVATIONAL TALK by COLONEL M.V.KAMAT
2	02 nd to 09 th August 2018	IIIE GRADUATE SHIP EXAMINATION - AUGUST 2018
3	11 th to 12 th August 2018	ROBOTICS and ARDUINO WORKSHOP
4	14 th August 2018	MESA COUNCIL INAUGURATION
5	14 th August 2018	ROBOTICS WORKSHOP by TEAM PHEONIX
6	16 th August 2018	SOFT SKILLS WORKSHOP by WALTER MASCARENHAS
7	22 nd September 2018	FIELD VISIT FOR FINAL YEAR MECHANICAL STUDENTS
8	27 th September 2018	ISHRAE GEC: STUDENT COUNCIL INAUGURATION
9	2 nd October 2018	MESSERGI ACTIVITY: CLEANLINESS DRIVE
10	3 rd October 2018	"INFINITY AND BEYOND" by Dr. VITTHAL TILVI
11	13 th October 2018	FIELD VISIT FOR THIRD YEAR MECHANICAL STUDENTS
12	16 th October 2018	IIIE WORKSHOP ON "INDUSTRIAL PRODUCT DEVELOPMENT"
13	19 th October 2018	WORKSHOP on LaTeX by SANKET SHET
14	20 th & 21 st October 2018	DELTA PROGRAMMABLE LOGIC CONTROLLER WORKSHOP
15	23 rd October 2018	TALK on "ROLE OF FOREST AS ECOLOGICAL RESOURCE TO CONTROL GLOBAL WARMING" by AMAR HEBLEKAR
16	24 th October, 2018	TALK on "LOAD CALCULATION FOR HVAC APPLICATIONS" by AJIT SAKHARDANDE
17	27 th October 2018	WORKSHOP on "BASICS OF AUTOCAD" by SAURAB RAIKAR
18	1 st November, 2018	MESSERGI ACTIVITY: DIWALI EXHIBITION CUM SALE

DEPARTMENTAL NEWS

- Dr. Jaganath Hirkude, Associate Professor in Mechanical Engineering, delivered a key note on the topic “Energy Audit in Buildings” for the students of third year Civil Engineering on 11th July 2018 at Don Bosco College of Engineering, Fatorda, Goa.
- Dr. Jaganath Hirkude, Associate Professor in Mechanical Engineering, attended one day workshop on NPTEL organized by IIT Madras and Don Bosco College of Engineering on 21st July 2018.
- Dr. Jaganath Hirkude, Associate Professor in Mechanical Engineering, was examiner and judge for project exhibition and competition at Kshitij - 2018 held at Don Bosco College of Engineering from 26th to 28th July 2018.
- Dr. Shridhar Mhalsekar attended FDP on Innovation, Creativity & Startups conducted by Goa State Innovation Council at BITS Pilani, Goa Campus on 18th, 24th and 25th August 2018.
- Dr. Vinay Shirodkar, Professor and Head, presented the details of the departmental activities in the Governing Council meeting held on 30th August, 2018.
- Dr. Raghavendra Naik, Assistant Professor in Mechanical Engineering, attended FDP101x! an IIT-Bombay foundation program in “ICT for Education” from 13th September to 18th September, 2018 held at Goa College of Engineering, Farmagudi.
- Goa College of Engineering, Farmagudi was awarded H. N. Thadani Award – 2017 for active involvement and recognition in innovative development of Industrial Engineering to its operations and the significant encouragement to the cause of the profession in India. The Chairman’s Special Award 2017-18 was awarded to Dr. Suraj Surendra Rane, Chairman IIIE Goa Chapter and Professor in Mechanical Engineering for continuous innovative development of Industrial Engineering in its operations and significant encouragement to the industries in India. These awards were presented at the Diamond Jubilee Convention of Indian Institution of Industrial Engineering (IIIE) and the International Conference on “Role of Industrial Engineering in Industry 4.0 paradigm” organized by the Odisha Chapter in collaboration with Sikshya-O-Anusandhan (Deemed to be University) at Bhubaneswar, Odisha from 27th to 30th September, 2018.
- Dr. Jaganath Hirkude, Associate Professor in Mechanical Engineering, was appointed as official for Goa University Students Council Election held on 10th October 2018
- Dr. Shridhar Mhalsekar attended workshop on Industrial Product Development at GEC organized by IIIE, Goa Chapter on 16th October, 2018.

- Dr. Shridhar Mhalsekar attended Seminar on Appropriate Technologies for Rural Sectors at GEC organized by IIT, Goa on 28th October, 2018.
- Dr. Jaganath Hirkude, Associate Professor in Mechanical Engineering, attended one day seminar on "CATeRS : Technologies for Rural Sectors" on 28th October, 2018 organized by IIT Goa.
- Dr. Raghavendra Naik, Assistant Professor in Mechanical Engineering, attended FDP201x! an IIT-Bombay foundation program in "Pedagogy for Online and Blended Teaching-Learning Process" from 25th October to 29th November, 2018 held at Goa College of Engineering, Farmagudi.
- Dr. Jaganath Hirkude, Associate Professor in Mechanical Engineering, was invited as a member of Academic Advisory Board of Mechanical Engineering Department of Don Bosco College of Engineering.
- Dr. Raghavendra Naik attended the GIAN course on "Aeroelasticity Fundamentals and Topic on Nonlinear Problems" from 12th to 16th November, 2018 at NIT, Suratkal.
- Dr. Shridhar Mhalsekar, Associate Professor in Mechanical Engineering, was Chief Conductor for B.E. May/June 2018 Examinations held at Goa College of Engineering,
- Dr. Jaganath Hirkude delivered an expert lecture on "Operating Parameters for Biodiesel Engine" at Department of Mechanical Engineering, Government College of Engineering, Amravati, Maharashtra, during the period 03rd to 08th December, 2018.
- Dr. Jaganath Hirkude, Associate Professor in Mechanical Engineering, participated in one week AICTE-QIP sponsored short term course on " Research Perspective in IC Engines" organized by the department of Mechanical Engineering, Government College of Engineering, Amravati, Maharashtra, during the period 03rd to 08th December, 2018.
- Dr. Suraj Rane, Professor in Mechanical Engineering, was awarded AIAP Early Career Research Award in appreciation and recognition of his work in the area of Reliability Modeling.
- Master Kowshik Srivatsan, master Saeel Gawas and master Pratik Joshi secured 1st, 2nd and 3rd place at the Goa University exam for the academic year 2017-18 respectively.

PAPERS PRESENTED/ PUBLISHED

- Anand Naik, Milind Sakhardande, Dr. Rajesh Prabhu Gaonkar, "Data Validation using Cronbach Alpha", *International conference on 'Role of Industrial Engineering in Industry 4.0 Paradigm'*, 27th - 30th September 2018, Odisha.
- V.V. sawant, Dr. Vinay Shirodkar, "Effective Heuristic to solve Assembly Line Balancing problem", *International conference on 'Role of Industrial Engineering in Industry 4.0 Paradigm'*, 27th - 30th September 2018, Odisha.
- Amey Naik Dessai, "Design and Fabrication of Compressible Car", *International conference on 'Role of Industrial Engineering in Industry 4.0 Paradigm'*, 27th - 30th September 2018, Odisha.
- Dr. Jaganath Hirkude , "Experimental analysis of the influence of antioxidant on performance and emissions of CI engine fueled with waste fried oil methyl ester", *International Conference on Startup Ventures: Technology Developments and Future Strategies (SV-TDFS)*, 08th to 09th October, 2018, Manipal University, Jaipur.
- Amey Naik Dessai, Mahesh Caisucar ,Gajesh Usgaonkar, "Application of ARAS for idea Screening Phase of NPD in Automobile Industry", *International conference on Reimagining Industrial Engineering and Technology Management for Value Creation*, 30th November to 1st December, 2018 Mumbai.
- Adlino Afonso, Dr. Shridhar Mhalsekar, Jacqueline Do Rosario e Souza, "Different Approach For Solving Generalised Assignment Problem", *International conference on Reimagining Industrial Engineering and Technology Management for Value Creation*, 30th November to 1st December, 2018 Mumbai.
- Siddhesh Umarye, Mahesh Dhawalikar, "Partial Backordering Model for Inventory Optimization in Elevator Industry", *National Conference on Industrial Engineering & Technology Management*, organised by National Institute of Industrial Engineering, Mumbai from 30th November to 1st December, 2018.
- Dr. Jaganath Hirkude, "Techno-economic conversion of Waste Fried Oil into Biodiesel through Transestrification" *IOP Conf. Series: Materials Science and Engineering* 377 (2018) 012160 doi:10.1088/1757-899X/377/1/012160. (IOP Publishing Scopus indexed Journal).
- B.S. Manohar Shankar, S.M. Kulkarni, "Investigation on electromechanical properties of solid silicone rubber composites with conductive carbon filler," *International Conference on Recent Advances in Materials and Manufacturing Technologies: Challenges and Opportunities (ICRAMMT - 2018)* 19th – 20th NOVEMBER, 2018, MLRITM, Hyderabad, Telangana.

MOTIVATIONAL TALK by COLONEL M. V. KAMAT

Report by Pradosh Prabhudesai, S.E Mechanical

"You have to dream before your dreams come true", these were the words of India's 11th President, Avul Pakir Jainulabdeen Abdul Kalam or as the world knows him as the "Missile Man" of India. We the students of S.E. Mechanical were fortunate enough to listen to a motivation talk on "Dr. A.P.J. Abdul Kalam: A Role Model- What Students can Learn" delivered by Colonel Mukundrai Kamat on



31st July 2018 in the ETC seminar hall from 2 to 4 pm. He started us off with some wonderful anecdotes about the childhood of the great man, and taught us how the most revered men can come from the most humble of origins. Colonel Kamat very beautifully with the help of charts and boards described to students the various wishes and aims that Dr Kalam had for the youth of the country.

He showed us various Do's and Dont's in life which would serve as building blocks in building a strong and honourable character. Colonel Kamat also presented to us some heart touching poems by Dr Kalam which he made the students recite. He also gave every student a pamphlet consisting of virtues which Dr APJ Abdul Kalam dreamed for every Indian citizen to possess. They were virtues



like integrity, loyalty, honesty and patriotism. He made us aware of the various books by Dr Kalam wherein every person can find a source of motivation and inspiration. At the end of the session colonel Kamat gifted one of our lucky colleague a copy of 'Wings of fire', a very famous book by Dr Kalam. The session wasnt just interesting but also an interactive one, and it left is all in awe of the great man, the People President, the man who taught us to be human first, Dr APJ Abdul Kalam. The talk was coordinated by Prof. Hari Chandekar.

IIIE GRADUATE SHIP EXAMINATION - AUGUST 2018

Report by Prof. Milind Sakhardande



IIIE Graduate Ship Examination was conducted by IIIE, Goa Chapter at GEC from 02nd August 2018 to 09th August 2018. In total 06 candidates answered Preliminary, 10 answered Section-A and 08 answered Section-B of the exam. All the candidates who answered the exam were from the Industry. The exam was conducted for 35 subjects, spread over eight sessions, with each session being of three hour duration. The timing for the sessions was in the evening from 6 PM to 9 PM on working days and on Sunday it was in the morning from 10 AM to 1PM. Prof. Milind Sakhardande, Associate Professor in Mechanical Engineering Department was the Chief Exam Superintendent for this exam, assisted by Prof. Sanket Shet, Assistant Professor (contract) in Mechanical Engineering Department. The examination was conducted smoothly under the guidance of Prof. Gajesh G S Usgaonkar, Associate Professor in Mechanical Engineering Department, Dr. Suraj Rane, Professor in Mechanical Engineering Department and Chairman IIIE, Goa Chapter and Dr. Vinay Shirodkar, Head of Mechanical Engineering Department. Many IIIE members from the Institute and Industry took active participation in smooth conduct of exam and were also involved in invigilation work. The candidates answering the exam expressed their gratitude towards the authorities of IIIE, Goa Chapter, GEC and the Principal, GEC for having the centre in the college, which was very convenient for them or else they were forced to apply for 15 days leave and go to Pune or Bangalore for answering the exam.

ROBOTICS AND ARDUINO WORKSHOP

Report by Aaditya Kamat, S.E. Mechanical



A 2-days workshop on “Introduction to Robotics and Arduino Coding” for the students was organized on 11th and 12th August 2018 by the Mechanical Engineering Department, Goa College of Engineering in association with ZetaQube. This workshop comprised of giving the participating students an idea about microcontrollers like arduino, programming on arduino IDE, interfacing different electronic sensors using arduino, different types of robots like Line Followers, etc. with doubt clarification sessions.

Day 1 of Workshop

On 11th August 2018, ZetaQube conducted the 1st day of the workshop on “Introduction to Robotics using Arduino”. The workshop was conducted by students of second year engineering. Firstly Aaditya Kamat talked about “Introduction to Robotics and Microcontrollers” using various case studies, followed by Amey Damle, who presented keynote a on “Introduction to Arduino, its IDE and programming”. Sarvajit Tilve, presented applications of Arduino on LED, RGB LED and its coding.

In the first session students got familiar with the term robot, how to differentiate between microcontrollers and microprocessors, robotics and other aspects of robotics. In the next part a brief introduction to arduino was given to students. They got familiar with various development boards of arduino and learnt the development environment for arduino. Working with arduino I/ O pin was taught and functions of various embedded components were explained. Later simple application of arduino like blinking LED and its

coding was explained. In the last part of the session, experiments on Arduino were explained and shown. This included “Controlling brightness of an LED using potentiometer” and “Controlling LED using LDR”. Students learnt the basics of working with arduino and gained knowledge of various arduino development boards; programming environment; onboard features of arduino Uno.

Day 2 of Workshop

The 2nd day of the Workshop was on “Introduction to motors, motor drivers, sensors like ultrasonic and infrared, etc.” presented by Prathamesh Bhat. All the basics of the sensors like its working and concepts were explained to the students. In next session a live demo on “Line Follower” was presented by Amey Damle and Prathamesh Bhat. They explained the wiring of motor drivers L293D to arduino and motors of Line Follower. All the doubts of students were cleared by having a question and answer session. In the end the Line Follower got finished with wiring and coding in Arduino. The operation of this Line Follower was done in front of students and it worked really well.

The course was coordinated by Prof. Manohar Shankar Bhat with active support from members of ZetaQube. In total 53 students from different branches of engineering took part in the workshop. The two-day workshop finally concluded with the certificate distribution ceremony and a lot of memories!!



MESA COUNCIL INAUGURATION

Report by Mr. Shubham Chowgule, B.E. Mechanical



Inauguration of “Mechanical Engineering Students’ Association”(MESA) 2018-2019, was held on 14th August 2018 in the Seminar Hall of Information Technology Department in Goa College of Engineering. The chief guest for the inaugural function was Mr. Dinesh Virginkar, Senior Production Manager at MRF Goa. The dignitaries on the dais were Principal Dr. Vinayak Shet, Head of the Department Dr. Vinay Shirodkar, staff advisor Prof. Milind Sakhardande, Chairman of MESA Council 2018-19 Miss. Sampada Shendure and MESA Council 2018-19 General Secretary Mast. Shubham Samant.

The function was solemnly inaugurated by lighting of the lamp by the dignitaries and a welcome song by Mast. Kedar Dicholkar. Mast. Saurabh Barve welcomed the gathering followed by a melodious performance by the Music Club. Welcome address was given by the HMED followed with the address by Principal Dr. Vinayak Shet. Mast. Shubham Samant, General Secretary of MESA Council, addressed the crowd with the past council’s achievements and the propaganda for his tenure. He also introduced other members of the council.

The function was followed with the distribution of badges to the respective members of the council through the hands of the Chief Guest. It was followed by the oath taking ceremony where the council students took an oath to abide by the rules and their responsibilities towards the council. The function also witnessed unveiling of the MESA t-shirts.

The keynote speech was delivered by the Chief Guest Mr. Dinesh Virginkar on the topic “Recent Advances in Design and Manufacture of Automotive Tyres”. Memento was given to the Chief Guest through the hands of the Principal. Also mementos were given to the Principal, Head of the Department, Staff Advisor, Chairman and the General Secretary.

The programme concluded with a vote of thanks by Miss. Sampada Shendure. The function was compered by Mast. Saurabh Barve. Later, refreshments were served and the day followed with organization of various productive activities like workshops, quizzes etc for the students of the Goa College of Engineering.





ROBOTICS WORKSHOP by TEAM PHOENIX

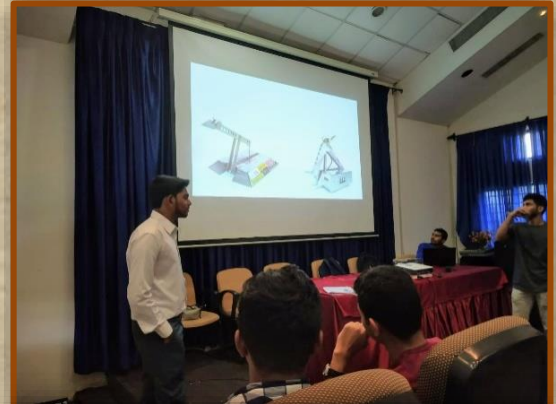
Report by Mr. Prajakt Naik (BE Executive, MESA)

Mechanical Engineering students' Association (MESA), GEC on account of the MESA student's council inauguration day organized a 3-hour duration robotics workshop on Tuesday, 14th August, 2018 in the IT Department auditorium.

The workshop was conducted by 'Team Phoenix' a renowned and leading students' team from Goa who have been actively conducting, participating, and winning the robotics events at all-India competitions. Mr. Harsh Choutaliya and Mr. Carlton Rebello were the guest speakers during the occasion. The special attraction of the workshop was the competitive robots exhibition and the 'quad-copter demonstration' at the end of the workshop. The workshop was coordinated by Mr. Prajakt Naik.

A total of 70 students from the college as well as higher secondary schools participated in the workshop. The workshop began with the speakers briefing the attendees about the basics of robotics, types of robots, and the scope for building the robots for intercollegiate as well as open robotics tournaments. Further the students and the members of Team Phoenix indulged in an interactive session where the parts of all the exhibited robots and the quad-copter were explained in detail.

Finally the students were taken to the lawn within the IT department building where the much awaited quad-copter was successfully demonstrated. The vote of thanks was proposed by Mr. Prajakt Naik. The participants of the workshop were provided with participation certificates.



SOFT SKILLS WORKSHOP by WALTER MASCARENHAS

Report by Omkar Rai, B.E Mechanical

Mr. Walter Mascarenhas conducted a 1 day workshop for the final year Mechanical Engineering students on 16th August 2018 in IT Department Auditorium related to professional grooming skills. Mr. Mascarenhas is a Motivational Speaker and a Corporate Trainer. The topics covered during the workshop were: resume writing and interview facing skills, mock interviews, group discussion, debates, dressing and grooming for the interviews.

The workshop was attended by 53 final year students. The workshop was coordinated by Prof. Harishchandra Chandekar.



PAPER PRESENTATION by M.E. INDUSTRIAL ENGINEERING STUDENTS

Students of final year Industrial Engineering (2016-2019) batch Mr. Amey Naik Dessai and Mr. Anand Naik presented paper at Diamond Jubilee Convention of IIIE and the International Conference on “Role of Industrial Engineering in Industry 4.0 paradigm” organized by Odisha chapter at Bhubaneswar, Odisha.



FIELD VISIT FOR FINAL YEAR MECHANICAL STUDENTS

Report by Vignesh Usapkar, B.E. Mechanical

The Mechanical Department of Goa College of Engineering had organised an Industrial Visit for the final year students on 22nd September 2018 to Turbocam India Pvt. Ltd., Margao and Crompton Greaves Limited, Bethora, Goa. Students were accompanied by Dr. Suraj Rane.

TURBOCAM INDIA PVT. LTD.

At Turbocam India Pvt. Ltd. students were welcomed and addressed by Quality Manager, Mr. Ameya Shirodkar. He gave a presentation about the company's history and its present status in the market. He also briefed the students about the company's manufacturing units and the products it manufactured. The



presentation was followed by the visit to the shop floor. He explained the various CNC machines and processes carried out for the manufacturing of the products such as turbine blades, nozzle rings etc.. The students were then taken to quality control department of the company where they were able to see different types of co-ordinate measuring machines. The features and working of the CMM were explained to the students. The visit to Turbocam India Pvt. Ltd. ended with questions raised by the students being answered by Mr. Ameya Shirodkar.

CROMPTON GREAVES LIMITED

Students reached the Crompton Greaves Limited, Bethora plant at 2:15 PM in the afternoon. They were welcomed and addressed regarding the safety rules at the security office in batches. Then, all the students were taken to the shop floor of the company accompanied by a company personnel. He explained to the students about the ceiling fan



manufacturing processes and different machines used for the same. The students also learnt about the sequencing and scheduling of the product at the assembly lines of the ceiling fans. The visit to the stores section enabled the students to see how hydraulic lifts were used for the stacking of the packaged products. The visit at Crompton Greaves Limited, Bethora ended with group photograph. It was indeed a learning experience for all the students to know about the various manufacturing processes and machines involved and also the functioning of the company.

PLACEMENT DATA and SPORTS DATA

Sr. No.	NAME	COMPANY
1	Ambresh Goudar	QuEST Global
2	Siddhant Naik	QuEST Global
3	Amey Nagvekar	QuEST Global
4	Shubham Samant	CG Power and Industrial Solutions Ltd.
5	Akshay Gandhi	CG Power and Industrial Solutions Ltd.
6	Siddharth Panvelkar	Vedanta Group Pvt Ltd.
7	Vignesh Usapkar	Vedanta Group Pvt Ltd.

Sr. No.	NAME	EVENT
1	Kalpesh Bhandodkar (BE)	Table tennis
2	Prathamesh Dhulapkar (SE)	Table tennis
3	Sarvesh Belgaokar (SE)	Football
4	Saket Athalye (FE)	Badminton
5	Anmol Shukla (BE)	Basketball
6	Sharven Shenvi Kerkar (TE)	Basketball
7	Piyush Chavan (TE)	Basketball
8	Vyashakh Prakashan (SE)	Basketball

ISHRAE GEC: STUDENT COUNCIL INAUGURATION

Report by Shahzeb Shaikh, T.E. Mechanical



The Indian Society of Heating, Refrigeration and Air-conditioning Engineers (ISHRAE) GEC student council inauguration was held on 27th September 2018 from 2:00pm onwards. The council was formed by the ISHRAE student members of GEC. The program began with the lighting of the traditional lamp. The chief guest for the installation ceremony of the council was Mr. Manoj Pandey, President of ISHRAE Goa Chapter. Speaking on the occasion, he expressed the importance of HVAC Industry in the modern world and its effect on the Indian as well as on the world economy.

Prof. Vivek Kamat, Director of Technical Education, graced the occasion as the Guest of Honour for the inaugural ceremony. He emphasized that the Mechanical Department of Goa College of Engineering attracts the cream of students every year who have excelled in all spheres of life with some of them occupying some critical positions in leading firms. He re-quoted the ideas of MR. Pandey on the importance of HVAC Industry and encouraged students to take up projects and career in the same domain. He drew the students attention towards the fact that thousands of crores of rupees are spent annually in importing patent HVAC products in our country.



The newly formed council pledged to do their respective duties, with Mr. Sunil Shetye, Student Activities Chair of ISHRAE Goa Chapter, giving them the oath. They were then given their respective badges. He then motivated the newly formed council to continue with the good work. Mr. Anish Souza, an alumni of GEC, an accomplished Entrepreneur in Solar Power Industry (**SUN 360**) and Membership Chair of ISHRAE Goa Chapter delivered an Expert talk on “Solar Powered Heat Pumps :- Future of Centralized Water Heating”. He emphasized on the need to switch to renewable sources of energy mainly sunlight as it was readily available and manufacturing necessary products in the country itself instead of importing which would reduce the importing costs to a large extent and also help in improving the economy. He further discussed the recent technological development across the globe. Dr. Vinay Shiroadkar, HMED, wished success to the council and advised to take up activities that will showcase the talents of the students. Dr. Jagannath Hirkude, ISHRAE Faculty Coordinator proposed the vote of thanks.



MESSERGI ACTIVITY: CLEANLINESS DRIVE

Report by Sarvesh Sadhale, MESSERGI Advisor, MESA



On the auspicious occasion of Gandhi Jayanti, MESA organized a cleanliness drive on 2nd October 2018, under its social branch MESSERGI in GEC with the objective of cleaning the campus. The event began at 9:00 am in the morning and it was already noon by the time the task at hand was over.

The event was marked not only by the enthusiastic participation of students but equal involvement of the faculty. The HMED Dr. Vinay Shirodkar, Workshop Superintendent Dr. Akshay Nigalye and MESA Staff Advisor Prof. Milind Sakhardande along with several other teaching and



non-teaching staff displayed astonishing keenness towards the drive. The work done included removal of plastic, paper wrappers and also weeding out of unwanted plants in the vicinity of Mechanical Engineering Department, Workshop and the GEC Shopping Complex. The social activists residing in the area surrounding the campus also took part in the cleanliness drive.

The collected garbage was sent to the Ponda Municipal Corporation for disposal. To prevent further littering in these areas in the future, banners were hung raising awareness to maintain cleanliness. The 30-35 students who participated were served refreshments as a token of gratitude. The students enjoyed a lot and dispersed with a sincere hope that such events should be organized time and again giving students a window of opportunity to give back to the society.



“INFINITY AND BEYOND” by Dr. VITTHAL TILVI

Report by Amey Deshprabhu, Asst. Technical Advisor, MESA

On 3rd October, 2018 a talk was organized by MESA in association with the GEC Astronomy Club. The speaker for the function was Dr. Vitthal Tilvi who is a renowned researcher (currently working at Texas A&M University) in the field of astronomy. He along with his colleagues are credited for the discovery of the farthest galaxy known to mankind.

The event began at 3:00 pm in the IT department auditorium hall. The topic for the talk was “INFINITY AND BEYOND”. The event was marked by the presence of the Principal Dr V.N. Shet, HMED Dr. Vinay Shirodkar, MESA Staff Advisor Prof. Milind Sakhardande and several other faculties from the Mechanical Engineering Department. Dr Vinay Shirodkar welcomed the guest speaker. Dr. Raghavendra Naik introduced the guest speaker to the audience. Students throughout the college across all departments participated in huge numbers. The speaker briefed the audience regarding various research projects which he had worked with, and also about various career opportunities in the field of astrophysics and space research. The audience showed enthusiastic behavior and keen interest during the whole programme.

There was an interactive session between the speaker and the audience. The inquisitive audience asked many questions to the speaker. The principal gave a memento to the guest speaker. The General Secretary of MESA Mr. Shubham Samant proposed the vote of thanks. The speaker motivated us and inspired us to decipher some of the mysteries of the universe.



FIELD VISIT FOR THIRD YEAR MECHANICAL STUDENTS

Report by Vardhan Prasad Kamat, T.E. Mechanical

The Department of Mechanical Engineering, Goa College of Engineering organized a one day Industrial visit for T.E. Mechanical (2018-2019) students to Madkai Industrial Estate on 13th October 2018. The students visited Godrej and Boyce Manufacturing Company Ltd. and Rututek Enterprise. The visit was organised by HMED, Dr. Vinay A. Shiroadkar and Dr. Jagannath Hirkude. Dr. Raghavendra Naik and Dr. Shridhar Mhalsekar, faculty of Mechanical Engineering Department accompanied the students during the visit.

GODREJ AND BOYCE MANUFACTURING COMPANY LTD.

Godrej & Boyce Mfg. Co. Ltd., a Godrej Group Company, started its journey with the manufacture of high quality locks in 1897. Today, they have 15 diverse business divisions offering consumer, office, and industrial products and services of the highest quality to every corner of India and across the globe. The students could connect with what they were taught in the subject of manufacturing technology to the actual shop floor production. They were able to understand how the production sequence works and how time plays an important role in avoiding delays and meeting deadlines. Students saw various processes such as punching, pressing, die casting, bending to name a few along with the CNC machines. The students were able to interact with the engineering staff leading to lot of technical discussions.



RUTUTEK ENTERPRISE

Rututek Enterprise was mainly a sheet metal and component fabrication Industry. It dealt with sheet metal bending, cutting, punching and welding operations. They also worked on small scale fabrication using pipes and tubes. The parts were manufactured with tolerances in microns using sophisticated equipment's such as CNC bending machine, CNC laser cutting machine etc. It was observed that they generally used TIG (Tungesten inert gas welding) and MIG (Metal inert gas welding) as it gave better results compared to SMAW (Shielded metal arc welding) in terms of weld strength and also it was possible to weld thin metal sheets with TIG. Later the students were taken to the finishing section where they were able to see the surface finishing, plating and powder coating processes.



IIIE WORKSHOP ON “INDUSTRIAL PRODUCT DEVELOPMENT”

Indian Institution of Industrial Engineering (IIIE), Goa Chapter organized a One Day Workshop on Industrial Product Development at Goa College of Engineering, Farmagudi on 16th October 2018. The workshop was inaugurated by Prof. Vivek Kamat, President IIIE Goa Chapter and Director of Technical Education, Goa in the presence of Dr. Vinayak Shet, Principal, Goa College of Engineering, Farmagudi and IIIE chapter council members, Dr. Suraj Rane, Chairman, Shri Sameer Khawte, Vice Chairman, Dr. Vinay Shirodkar, Secretary, Shri Vinayak Nayak, Treasurer, Prof. Milind Sakhardande, Founder Secretary and Prof. Suraj Marathe, Joint Secretary.

There were four sessions delivered by experts from industry. The speakers were Mr. Ravikumar Patil and Mr. Mahesh Kothawale, from DesignTech System Ltd. They delivered a talk on “3D Printing Application”. Mr. Deepak Pathania, from Design Intervention Pvt. Ltd. Goa talked on the topic “Looking Sideways to get ahead: A multidisciplinary Design Journey”. Mr. Mayur Nadkarni, from Crompton Greaves Consumer Electricals, Bethora Goa gave an overview on “New Product Development in consumer durable industry” and Mr. Nikhil Naik, from Netzsch Technologies, Verna delivered talk on “Project Execution – Pumps”.

The workshop was attended by industry professionals and faculty members from Engineering and Polytechnics in Goa. The workshop was coordinated by Dr. Suraj Rane, Chairman IIIE Goa Chapter.



WORKSHOP on LaTeX by SANKET SHET

Report by Mr. Saurabh Barve, B.E. Mechanical

The Mechanical Engineering Students' Association organized a workshop on LaTeX on 19th October, 2018 in the ETC department Auditorium. The workshop was conducted by Mr. Sanket Shet, PhD Student, Dept. of Mechanical Sciences, IIT Goa. It was coordinated by Dr. Suraj Rane, Project Coordinator of Mechanical Department..

LaTeX is a free document preparing software. It is designed for the production of scientific documentation. The workshop was targeted for the final year Mechanical Engineering students. In total 70 students participated in the workshop. The resource person started by talking about the significance of LaTeX and its advantages in technical writing. Students had installed the software on their laptops before the session. The workshop was primarily meant for BE students for their final year project documentation, resume writing, paper publications etc. Fundamental concepts of LaTeX were introduced with an aim to give students hands on experience in project report writing.

The session was interactive with comprehensive discussion on a lot of topics. The session ended by presentation of memento to Shri. Sanket Shet by Mast. Shubham Samant, General Secretary, MESA. The students who were present for the workshop were awarded with participation certificates.



DELTA PROGRAMMABLE LOGIC CONTROLLER WORKSHOP

Report by Shreyas S. Ambe and Sarvesh P. Kerkar, S.E. Mechanical



A two day workshop on “Delta PLC” was organized by Mechanical Engineering Department of Goa College of Engineering in association with Autotech Technologies on 20th & 21st October, 2018 for the second year mechanical students. The course instructor for the workshop was Mr.Subodh Mone, owner of Autotech Technologies.

The workshop covered the concept of PLC’s including introduction to the basics and the different parts with its functions. The practical aspects and various applications of PLC including its use in industries were discussed. The detailed working of PLC was also explained. The participants learnt to programme the PLC’s which included ladder programming on software. The workshop consisted of individual assignments including brain storming, problem solving, hands on session, individual programming tasks.

The sessions were highly interactive. Total of 46 students attended the workshop. The course was coordinated by Prof. Manohar Shankar Bhat with active support from second year mechanical students.



TALK on “ROLE OF FOREST AS ECOLOGICAL RESOURCE TO CONTROL GLOBAL WARMING”

Report by Shreyas S. Ambe, S.E. Mechanical

A value addition talk on “Role of forest as ecological resource to control global warming” was organised by Mechanical Engineering Department of Goa College of Engineering on 23rd October, 2018 between 2.30pm to 4.30pm in the academic section hall, GEC. The speaker for the event was Mr. Amar Heblekar- Principal, Forest Training School, Forest Department and Ex-Assistant Conservator of forest. Dr. V.N. Shet, Principal, GEC, gave a speech stating the importance of such value addition talks. The resource person was welcomed by Dr. Vinay Shiroadkar, HMED. Mast. Kedar Dicholkar was the anchor. He introduced the speaker and welcomed the audience with an invocation. The participants were second, third and final year Mechanical students. The total strength of the participants was around 200.

Mr. Amar Heblekar began with mentioning the various species of trees found in Goa and their importance. The speaker also made audience aware about different laws existing related to the forest. The causes and consequences of global warming were explained. The audience were enlightened on how forest helps to control global warming. This was followed by series of questions asked by the audience to which the speaker responded. A memento was presented to the resource person.

Prof. Gajesh Usgaonkar and Prof. Mahesh Caisucar were faculty coordinator for the event. Sunay Dharwadkar, Vardhan Kamat, Shreyas Ambe & Digjay Gaude took active part in organising the event. The departmental newsletter NIRZER was released during the event.



TALK on “LOAD CALCULATION FOR HVAC APPLICATIONS” by AJIT SAKHARDANDE

Report by Mr. Saurabh Barve, B.E. Mechanical

Mechanical Engineering Students’ Association (MESA), GEC organized a 3-hour duration expert talk on the topic “Load Calculation for HVAC Applications” on Wednesday, 24th October, 2018 in the ETC Department auditorium.

Shri Ajit Sakhardande, Managing Director, Comfort Air Conditioning Co., HVAC expert with more than 25 years of experience in the HVAC domain, was the resource person for the event. Prof. Vivek Belokar coordinated the event along with Prof. Milind Sakhardande, staff advisor-MESA. Principal Dr. V.N. Shet addressed the audience. Mr. Omkar Rai formally welcomed and introduced the speaker, Mr. Ajit Sakhardande.

The session started with student orientation towards various basic aspects of HVAC domain which included geographical aspects, reading and interpreting psychrometric charts and other important data tables. The speaker shared his experiences and expertise with the audience. Basic functionality of air conditioning systems along with various design aspects for indoor and outdoor application was discussed. Heat load components, heat gain process, heat balance terminology was introduced to students. Meteorological, technical and human aspects in HVAC load calculation were nicely explained by the speaker. A memento was presented to Mr. Ajit Sakhardande by Prof. Vivek Belokar, faculty coordinator for the event. Mr. Shubham Samant proposed the vote of thanks.



WORKSHOP on "BASICS OF AUTOCAD" by SAURABH RAIKAR

Report by Shreyas Ambe, S.E. Executive, MESA

Mechanical Engineering Students' Association (MESA), GEC organized a 1 day workshop on "Basics of AutoCAD" on Saturday 27th October 2018 in the drawing hall at main building, GEC. Prof. Saurabh Raikar, Assistant professor, Don Bosco College of Engineering was the resource person for the event. Prof. Milind Sakhardande, staff coordinator MESA, was the faculty coordinator for the event. Mr. Shreyas S. Ambe, SE Executive MESA was the student coordinator. The workshop was targeted towards the second year Mechanical Engineering students and saw a huge participation wherein around 65 students attended the workshop. The event commenced at 9:00 am with the floral welcome to the speaker. Mr. Shubham Samant, General Secretary-MESA formally welcomed and introduced the speaker.

The session started with introduction to the history and importance of AutoCAD software in various fields of Engineering. The speaker systematically began by mentioning and explaining the functions of various keys and commands to perform tasks using the software. The whole session was very interactive. The speaker gave various exercises, group solving activities and individual assignments. The session concluded at 4.00pm.

A memento was presented to Prof. Saurabh Raikar by Mr. Shubham Samant, General Secretary -MESA. Mr. Sarvesh Sadhale proposed the vote of thanks. The students who attended the workshop were awarded with participation certificates.



MESSERGI ACTIVITY: DIWALI EXHIBITION CUM SALE

Report by Miss Sampada Shendure, Chairman, MESA

MESA through its social unit MESSERGI, GEC in association with the Gujarati Samaj Educational Trust for special children, organized an Exhibition cum Sale of decorative items for Diwali on Thursday, 1st November, 2018, in the college's main building premises.

The items were made by specially abled students of the Gujarati Samaj Educational Trust Special School Aquem, Margao, Goa.

The sale started in the morning at 9:00 am. The principal, Dr. V. N. Shet, HMED, Dr. Vinay Shirodkar and staff advisor Mr. Milind Sakhardande inaugurated the programme. The items which were sold included candles, lanterns, handmade bags etc. The stalls saw visitors in huge numbers across students as well as faculties which made this sale a huge success. MESA members managed to take the responsibility of the stalls and



helped in the sale of the items.

DR. SURAJ RANE AWARDED AIAP EARLY CAREER RESEARCH AWARD

Dr. Suraj Rane, Professor in Mechanical Engineering at Goa College of Engineering, Farmagudi was awarded AIAP Early Career Research Award in appreciation and recognition of his work in the area of Reliability Modeling. The award was presented at the 1st International Conference of Association of Inventory Academicians and Practitioners on “Emerging Trends in Inventory, Supply Chain & Reliability Modeling”, held during December 21-23, 2018, at Department of Operational Research, University of Delhi.

During this conference, Dr. Rane also delivered an invited talk on Design for Robustness and Reliability: Approach and Application. The conference was organized by the Department of Operational Research, University of Delhi and Department of Mathematics, Gujarat University. In another conference viz 9th international Conference on “Quality, Reliability, Infocom Technology & Business Operations, Dr. Rane delivered an Invited talk on “Mahalanobis-Taguchi System: Applications in Industrial Engineering”, held during December 27-29, 2018, at University of Delhi. This conference was organized by Department of Operational Research, University of Delhi, Society of Reliability Engineering, Quality and Operations Management and Lulea University of Technology, Sweden.



IIIE AWARD TO GEC and DR. SURAJ RANE

Goa College of Engineering, Farmagudi was awarded H. N. Thadani Award – 2017 for active involvement and recognition in innovative development of Industrial Engineering to its operations and the significant encouragement to the cause of profession in India. This award was presented at Diamond Jubilee Convention of Indian Institution of Industrial Engineering (IIIE) and the International Conference on “Role of Industrial Engineering in Industry 4.0 paradigm” organized by Odisha chapter in



collaboration with Sikshya O Anusandhan (Deemed to be University) at Bhubaneswar, Odisha from 27-30 September, 2018. Dr. Vinayak N. Shet, Principal, Goa College of Engineering, received the award at the hands of Dr. Rajkeshwur Purryag, Former President, Republic of Mauritius in the presence of Dr. Santosh Kumar Kamilla, Chief Post Master General, Odisha Circle, Prof. (Dr) Bhaskar Bhandarkar, Director General, IIIE NHQ, Mumbai, Dr. Khageswar Pradhan, Chancellor, Sikshya O Anusandhan (Deemed to be University), Prof. R. P. Mohanty, Former Vice-Chancellor, Sikshya O Anusandhan (Deemed to be University) and President of IIIE Odisha Chapter and Mr. D. V.



Bhagat, National Chairman IIIE. During this event Chairman's Special Award 2017-18 was awarded to Dr. Suraj Surendra Rane, Chairman IIIE Goa Chapter and Professor, Mechanical Engineering, for continuous innovative development of Industrial engineering in its operations and significant encouragement to the industries in India. IIIE Goa Chapter is a vibrant and active chapter and have bagged various awards for their immense contributions. Earlier in 2014 Dr. Rajesh S. Prabhu Gaonkar was conferred Fellowship of IIIE during 56th National Convention of IIIE held at Vizag. Dr. Rajesh S. Prabhu Gaonkar was also awarded Dr. J. M. Mahajan Award for the year 2016-17 for contributing substantially to the spread of Industrial Engineering in education, during 59th National Convention at Aurangabad in 2017.

STUDENTS OF T.E. (MECH) DEPUTED FOR INTERNSHIP IN JUNE/JULY 2018

Sr No	Company Name	Students names	Period
1	Crompton Greaves,Bethoda	1.Shivam Dessai	21 st June to 14 th July 2018.
2	Dhavalikar Automobiles, Dhavli-Ponda-Goa.	1. Manish Revankar 2. Shreyas Naik 3. Vignesh Usapkar 4. Akash parab	25 th June to 7 th July 2018.
3	Lift Control Pvt. Ltd., Khandepar-Goa.	1. Rahul Patil 3. Kishor Chitrigemath	26 th June to 9 th July 2018.
4	Dhavalikar Automobiles, Dhavali-Ponda-Goa.	1. Sainath Samant 2. Prasanna Gaonkar	26 th June to 9 th July 2018.
5	Goa Shipyard Ltd., Vasco-Da-Gama, Goa.	1.Anmol Shukla	2 nd July to 14 th July 2018.
6	Chemtrol Industries Pvt. Ltd., Kundaim	1.Amey Nagvekar	2 nd July to 14 th July 2018.
7	Sky Rider Automotive, At- Gram Tarang, CIT Campus, Jatani, Odisha	1. Poornapragya G.Joshi 2. Siddhant V. Naik 3. Parth P.Kunkolienkar 4. Sharmad S. Madkaikar 5. Abhijeet V.Mordekar 6. Shubham A. Kale 7. Saurabh K. Barve 8. Vardhan Kinjawadekar 9. Nilesh Rane	2 nd July to 14 th July 2018.

STUDENTS OF S.E. (MECH) DEPUTED FOR INTERNSHIP IN JUNE/JULY 2018

Sr No	Company Name	Students names	Period
1	Volkswagen Goa Verna Industrial Estate, Verna-Goa	Emmanuel De Souza	2 nd July to 14 th July 2018
2	Goa Shipyard Ltd. Vasco Da Gama.	Ezbon Valton Fernandes	2 nd July to 14 th July 2018
3	ACGL, Bhuipal sattari Goa.	Saish Paryekar Vijeet Pednekar	21 st June to 7 th July 2018.
4	Diebold Nixdorf Thivim	Shantanu Ajgaonkar	2 nd July to 14 th July 2018
5	Power Engineering India Pvt. Ltd. Tuem	Ved Bhobe	20 th June to 4 th July 2018.
6	IFB Industries Ltd. Verna	Sunay V.Dharwadkar Shahzeb Shaikh	21 st June to 12 th July 2018.
7	Sharayu Toyota, Sharayu Automobiles,	Keegan Antonio Menezes	20 th June to 4 th July 2018.
8	Kineco Ltd., Pilerne	Richa Umesh Kamat	20 th June to 4 th July 2018.
9	EM DG PRO, Verna-Goa.	Ugam Nitant Prabhu Kholkar Sharven Hiren Shenvi Kerkar	15 th June to 15 th July 2018.
10	Uneeco Group of Companies, Manama, Kingdom of Bahrain.	Sagar Vijay Sakhardande	23 rd June to 12 th July 2018
11	Zuari Agro Chemicals Pvt. Ltd., Zuarinagar-Vasco Goa.	Rahul Kundaikar Raj Lotlikar Shrey Kamat Dikshay Mairrenkar Siddhant Khandeparkar Trisco P.J. Moniz Prithviraj Naik Mandar Shirodkar	25 th June to 14 th July 2018.
12	ACGL, Bhuipal- sattari-Goa.	Nichal Majik Gautamesh Gaonkar Shantesh Parab	21 st June to 7 th July 2018.
13	MRF Ltd. Usgao-Ponda-Goa.	Pratik Gaonkar Swapnil Mense.	1 st June to 15 th July 2018.

Sr No	Company Name	Students names	Period
14	Bosch India Pvt. Ltd. Verna Industrial Estate, Verna-Goa.	Uthara Nair Prabhu M.Nair Leyden Dias Gandhish Phaldessai Agnesh Ghadi	26 th June to 14 th July 2018.
15	Goa Shipyard Ltd. Vasco-Goa.	Gautam Bhat Omkar Satardekar Sunil Pujari Aniketh Aeer	2 nd July to 14 th July 2018.
16	Zuari Industries Ltd. Zuarinagar-Vasco-Goa.	Zibern Correia	25 th June to 14 th July 2018.
17	Goa Shipyard Ltd. Vaco-Da- Gama-Goa.	Piyush Chavan	29 th June to 14 th July 2018.
18	Kineco Ltd. Pilerne	Shubham Ballikar Deelip Govekar	20 th June to 4 th July 2018.
19	Alcon Hyundai, Porvorim-Goa.	Chirag Naik Clarry Mascarenhas	21 st June to 7 th July 2018.
20	Navayuga Engineering Company Co-Ltd. Banihal Quazigund, Jammu and Kashmir.	Aamir Amin Wani	28 th June to 12 th July 2018.
21	Turbocam India Pvt.Ltd. Margao Industrial Estate.	Miss Hegde Risha Milind	2 nd July to 14 th July 2018
22	Essel Propack Ltd. Valsad Gujrat	Jaykumar Prajapati	25 th June to 10 th July 2018
23	ACGL Honda, Honda Sattari Goa.	Govind Shivram sawant Sarvesh Narayan Khandekar	21 st June to 7 th July 2018.
24	Crompton Greaves Ltd. Kundai	Atharv Joshi Sanket madkaikar Amey Naik	21 st June to 5 th July 2018.
25	ACGL Honda, Honda Sattari Goa.	Dipraj Dhuri Gaurav Shiroadkar Sachin Govekar	21 st June to 7 th July 2018.
26	Aerocoach Pvt. Ltd. Honda	Prathamesh Gauns Ravikiran Malwade	21 st June to 7 th July 2018.
27	Chowgule Industries Pvt. Ltd. Fatorda-Goa	Kishor Velip	21 st June to 5 th July 2018.
28	Chowgule Industries Pvt. Ltd. Fatorda-Goa.	Vivekanand Tendulkar	21 st June to 14 th July 2018.
29	Modern Plastic Industry, Bethora	Akhil Pallathe Aniket Khedekar	21 st June to 6 th July 2018.
30	Diebold Nixdorf pvt. Ltd. Thivim	Eshant Kunkalkar	26 th June to 13 th July 2018.

FINAL YEAR PROJECTS - 2018-19

	ROLL NO	NAME	TITLE	GUIDE
1	151102031	MAYENKAR JAYESH BRAHMANAND	FIXED WING UNMANNED AERIAL VEHICLE FOR SURVEILLANCE	Dr. RAGHAVENDRA NAIK
	151102009	DIUKAR ROHIT SUNIL		
	151102047	PHADTE AKASH AUDUMBER		
	151102040	NAIK ROHIT CHANDRAKANT		
2	151102048	POWAR SAIESH RAJENDRA	AUTOMATED LAWN CUTTER AND SPRINKLER SYSTEM	PROF. GAJESH USGAONKAR
	151102021	HOBLE PRATIK PRASAD		
	151102039	NAIK RAGHUVIR MAHANAND		
	151102032	MOHAMMED SALIF SAYED		
3	141102054	SHIRODKAR AMAY MAHADEV	AUTOMATED FLOOR CLEANER	DR. JAGANATH HIRKUDE
	151102063	VAINGANKAR DATTRAJ CHINTAMAN		
	141102058	TARI ANISH JAIPAL		
	151102001	ALVANI VIGHNESH VINOD		
	151102041	NAIK SHREYAS GANGARAM		
4	151102019	GOVARDHAN PURUSHOTTAM PARKAR	DESIGNING, MODELING AND ANALYSIS OF A STEEL PRESSURE VESSEL	PROF. B. R. KULKARNI
	151102038	NAIK PRAJAKT PRAMOD		
	151102056	SAWANT JAYESH JANARDAN		
	131102064	VICKY GURUDAS PEDNEKAR		
5	161202009	SAINATH VASUDEV SAMANT	STRATEGIC PLANNING AND SCHEDULING OF THE CONSTRUCTION OF MULTIPURPOSE CARGO VESSEL AT CHOWGULE SHIPYARD	DR. SHRIDHAR MHALSEKAR
	141102062	VELGUENKAR SHRINATH GURUNATH		
	141102064	VIEGAS GAYLON CAVIN		
	141102015	GAONKAR PRASANNA KUSHALI		
6	151102071	SHENDURE SAMPADA VIJAYKUMAR	USING INDUSTRIAL WASTE BYPRODUCTS TOWARDS A GREENER INITIATIVE	PROF. MILIND SAKHARDANDE
	151102072	SIRVOICAR SOHAN RAJ		
	151102067	NAIK SHASHANK PRAVIN		
	151102068	PADIYAR NEELABH GOVINDRAJ		
7	151102064	VENGURLEKAR SAI EKNATH	A CNC PLOTTER FOR PATTERN DEVELOPMENT	PROF. MAHESH CAISUCAR
	151102050	RAIKAR DEEPESH UDAY		
	151102028	KUNDAIKAR SAI VIJAY VASUDEV		
	151102043	NAVELKAR SARANG SADANANAD		

FINAL YEAR PROJECTS - 2018-19

8	161202008	PRABHU VELGUENKAR SIDDHANT	IMPLEMENTATION OF LEAN CONCEPTS AT CGP ISL COMMERCIAL MOTORS GOA.	DR. MAHESH DHAWALIKAR
	161202006	PARAB AKASH SUNIL		
	161202011	SINARI VISHAL VASANT		
	151102003	BANDODKAR KALPESH R.		
9	151102005	CHARI SHANKAR SURYAKANT	PNEUMATIC PAPER AND LEAF PLATE PRESS	DR. VINAY SHIRODKAR
	151102006	CHAUDHARI PRASHANT KISHAN		
	151102016	GAUDE AJAY KRISHNA		
	151102060	SINAY KUNDE SHAUNAK DAMODAR		
10	151102017	GAURAV THAKUR	OMNIDIRECTIONAL INDUSTRIAL ROBOT WITH GRIPPER MODULE	PROF. GAJESH USGAONKAR
	131102067	MARGE MAHESHKUMAR KANTILAL		
	141102022	KALEKAR NIPUN SANJAY		
	151102025	KASKAR KRUPESH SHIVANAND		
11	151102008	DHARWADKAR AKASH	REMOTELY CONTROLLED AUTOMATIC SEED SOWING MACHINE	PROF. HARICHANDRA CHANDEKAR
	151102013	GANDHI AKSHAY		
	151102018	GOUDAR AMBRESH VEERAYYA		
	151102065	VISHWAKARMA SHAILESH S		
12	151102037	NAIK PANVELKAR SIDDHARTH LAXMIKANT	BANANA PSEUDOSTEM FIBRE EXTRACTION MACHINE	PROF. HARICHANDRA CHANDEKAR
	161202004	MACGYVIR CUSTODIO DCUNHA		
	161202012	SUTAR NISSAR AHAMMAD		
	141102013	DIAS ABHISHEK FRANCIS XAVIER JOY		
13	151102027	KINJAWADEKAR VARDHAN KISHOR	AUTOMATED BIKE WASHING MACHINE	Dr. AKSHAY NIGALYE
	151102046	PARANJAPE OMKAR DILIP		
	151102035	NAGVEKAR AMEY VINAYAK		
	151102070	RANE NILESH DIWAN		
14	151102055	SAMANT SHUBHAM VALLABH	T-SHIRT FOLDING MACHINE	Dr. RAGHAVENDRA NAIK
	151102051	REBELLO ALLAN DICKSON		
	151102052	REVANKAR MANISH VINOD		
	151102054	SADHLE SARVESH SURESH		

FINAL YEAR PROJECTS - 2018-19

15	131102017	DESSAI SHIVAM SATYAVAN	ROBOTIC ARM CONTROL USING MACHINE LEARNING	PROF. BHAT MANOHAR SHANKAR
	141102013	CHOLERA DEVANSHNASHISH		
	151102011	D'SA KEEGAN ANTHONY		
	151102015	GAONKAR SHUBHAM PREMANAND		
16	151102033	MORAJKAR MANTHAJ RAMDAS.	AUTOMATED FOOD SERVING SYSTEM	Dr. AKSHAY NIGALYE
	151102012	FURTADO SAVIO MASCHIO		
	151102002	AMRE ROUNAK RAMMUIRTI		
	151102057	SHINDE SIDDHARTH SHRAD		
17	151102010	D'MELLO GAVIN LUIS	DESIGN AND PROTOTYPING OF PORTABLE CNC PLATE METAL CUTTING MACHINE	DR. SURAJ RANE
	151102069	PRABHU DESAI DESHPRABHU AMEY		
	151102049	RAI OMKAR DILIP		
	151102062	VIGNESH USAPKAR		
18	161202002	KARAPURKAR SUMEET UMESH	CONTROL AND ANALYSIS OF DIFFERENTIAL PRESSURE PROPULSION SYSTEM	PROF. BHAT MANOHAR SHANKAR
	161202007	PATIL RAHUL BABASAHEB		
	161202010	SHETKAR SARTHAK VASUDEV		
	161202003	LOLYEKAR NIKHIL NARESH		
19*	121102011	ASLAM REHMAN	SMART HELMET FOR MOTORBIKE	PROF. MAHESH CAISUCAR
	151102066	ANMOL SHUKLA		
	150002053	RITESH SING		
	121102011	CHARI VIKRAM VILAS		
20	141102023	KARAPURKAR DEEPEN DATTARAM	ENHANCEMENT OF TOURISM SUPPLY CHAIN DRIVERS IN GOA	DR. SHRIDHAR MHALSEKAR
	141102042	PHADTE RUSHAB ROHIDAS		
	141102016	GAUDE BORKAR HARSHAD PRABHAKAR		
	121102005	ROGER BARRETO		
21	151102007	CHOWGULE SHUBHAM RAJENDRA	SOLAR POWERED EVAPORATIVE AIR COOLER	DR. JAGANATH HIRKUDE
	151102024	KALE SHUBHAM ARUN		
	151102023	JOSHI POORNAPRAGYA GURURAJ		
	151102004	BARVE SAURABH KIRAN		
22	151102029	KUNKOLIENKAR PARTH PRASAD	REMOTE PUMP MONITORING SYSTEM AT NETZSCH	PROF. MAHESH CAISUCAR
	151102030	MADKAIKAR SHARMAD SANJIV		
	151102034	MORDEKAR ABHIJEET VIVEK		
	151102044	NAIK SIDDHANT VINAYAK		

EXPERT LECTURE by DR. JAGANATH HIRKUDE

Dr. Jaganath Hirkude delivered an expert lecture on “Operating Parameters for Biodiesel Engine” at a one week AICTE-QIP sponsored short term course on “ Research Perspective in IC Engines”, organized by Department of Mechanical Engineering, Government College of Engineering, Amravati, Maharashtra, held during the period 03rd to 08th December, 2018.



PAPER PRESENTATION by M.E. INDUSTRIAL ENGINEERING STUDENTS

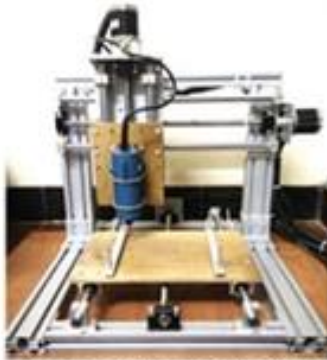
Students of final year Industrial Engineering (2016-2019) batch Mr. Amey Naik Dessai presented his paper titled “Application of ARAS for idea Screening Phase of NPD in Automobile Industry” and Mr. Adlino Afonso presented his paper titled “Different Approach for Solving Generalised Assignment Problem” at the 3rd National Conference on Industrial Engineering and Technology Management (NCIETM 2018), held from 30th November to 1st December 2018 at National Institute of Industrial Engineering (NITIE).



IN NEWSPAPERS

YounginnovatorsofGoa

Computer Numeric Control Router (CNC Router)



Team members: Varun Dinkar, Sohan Naik, Ashwin Naik and Prajot Gaonkar

Guide: Mahesh Caisucar

Wood work is a historic art practiced over the centuries by man using chisels and hammers, requiring tremendous amount of skill, labour and time. A group of students of Goa Engineering College, Ponda thus decided to automate this hard work so that wooden designs can be accurately created with less effort and in shorter span of time. Thus the idea of CNC Router evolved; this is generally a computer-controlled cutting machine, able to run any number of custom programs to cut, carve, engrave and slice with laser-like precision. The machine is designed for engraving logos and carving two-or-three-dimensional representative or abstract forms (sculpture) on flat wooden/Plaster of Paris surfaces.

The CNC Router works simultaneously in three directions, enabling it to produce complex shapes. A very easy to use device, the required engraving or carving needs to be fed into the software and the CNC controller and computer system then work together to direct the motors and drive system in their movement. The router is

mounted on machine to perform the cutting operation in the given directions.

"The skill required by craftsmen to produce sculpture design is lessened, there is increase in productivity and thus increase in profit in the business," says group leader, Varun Dinkar.

Solar Photovoltaic Water Pumping Irrigation System



The overview of the control panel

Team members: Jhonty Barreto, Sushantkumar Raikar, Pranab Sawant and Vismay Tari.

Guide: Milind Sakhardande

The students of Goa Engineering College, Ponda developed a solar powered irrigation system, to overcome the deficiency of electricity in rural areas. A battery is used to store the solar energy to deal with the inconsistent availability of sunlight. The project also optimises the use of water through a drip irrigation system, where water is directly given to roots of the plants in required amount for their proper growth. The use of automation reduces manual labour.

Dr Rane awarded AIAP Early Career Research Award

THE GOAN I NETWORK

PANAJI

Dr Suraj Rane, Professor in Mechanical Engineering at Goa College of Engineering, Farmagudi was awarded AIAP Early Career Research Award in appreciation and recognition of his work in the area of Reliability Modeling.

The award was presented at the 1st International Conference of Association of Inventory Academicians and Practitioners on "Emerging Trends in Inventory, Supply Chain & Reliability Modeling", held in December 2018, at Department of Operational Research, University of Delhi.

During this conference, Dr Rane also delivered an invited talk on Design for Robustness and Reliability: Approach and Application. The conference was organised in by Department of Operational Research, University of Delhi and Department of Mathematics, Gujarat University.

In another conference - 9th international Conference



on "Quality, Reliability, Infocom Technology & Business Operations, Dr Rane delivered an invited talk on "Mahalanobis-Taguchi System: Applications in Industrial Engineering", held in December 2018, at University of Delhi.

This conference was organised by Department of Operational Research, University of Delhi, Society of Reliability Engineering, Quality and Operations Management and Lulea University of Technology, Sweden.

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