



Estd.2000



# CRESCENT

Department of  
**Mechanical**  
Engineering

Volume VI, Issue I

Jan. 2019 to June 2019  
Bi-Annual Newsletter

### Message from Director

Prof. Shailesh Tiwari



#### **Crescent is for growth and so is the research.**

Our institute has always levied huge stress on all the aspects of research for the growth of its employees in all the domains of life. Excelling in the field of research is yet another persuasion which has brought the magnificent results in the field of research publications, patent filing & publishing and industrial consultancy for our conglomerate.

We have achieved a lot and a lot is yet in the air to blot. Undoubtedly, research related activities have been the building blocks of this achievement. I specially congratulate the Department of Mechanical Engineering for leading the edge in this avenue and setting benchmarks for all the departments.



### Message from HOD

Prof. R.K. Shukla

It is an opportunity to present the fourth issue of **“ME-CRESCENT”**. This internal departmental newsletter is one of the ways in which we disseminate information regarding professional life of members in the department. The last year has witnessed abundant student and faculty oriented activities in academic, co-curricular, extra-curricular as well as research & development fields. As you read through the pages you will realize that the department had a productive year especially in the R&D arena. I congratulate all the faculty members involved in the entire process of this accomplishment. Best of luck to all for their future endeavors.

### Message from Editor

Ms. Gaganpreet Kaur

Associate Prof. (ME)



***“As for the future, your task is not to foresee it, but to enable it.”*** By Antoine de Saint-Exupery

Research is an organized method of trying to find out what you are going to do after you cannot do what you are doing now. The current issue is to mainly showcase the family members of the department who have contributed in research related activities by publishing vital research papers and filing patents in different fields of science.

Our 'Crescent' is a perfect platform to highlight the segments of the Mechanical Department. The purpose of this newsletter is to inspire to unlock the hidden potential within faculty, staff and student members and help them through self-motivation for excelling in the avenue of research.

I want to extend my sincere thanks to my editorial team for their support to make this newsletter stand out.



## Vision

To create globally competent mechanical engineers capable of working in an interdisciplinary environment, contributing to society through innovation, entrepreneurship and leadership

## Mission

- M1: To provide excellent teaching learning environment.
- M2: To create supportive surroundings for innovative research, and develop capabilities to analyze interdisciplinary engineering problems.
- M3: To inculcate ethical values and leadership qualities to produce successful professionals.
- M4: To promote Industry-Institute relationship.

## Program Educational Objectives (PEOs)

**PEO1:** To apply basic science and engineering knowledge, critical thinking across the disciplines and emerging areas of mechanical engineering for higher studies, research and employability to handle real life problems.

**PEO2:** To inculcate communication skills, ethical conduct and understand legal and cultural aspects to serve the society.

**PEO3:** To develop managerial skills, team spirit, leadership qualities and engage in lifelong learning for a successful professional career.

**PEO4:** To strengthen their ability to adopt technological changes for developing innovative and sustainable solutions considering health, safety and environmental aspects.

## PROGRAMME SPECIFIC OUTCOMES (PSOs)

Mechanical Engineering Program at ABESEC will be able to:

**PSO1:** Empower students to apply their practical skills and knowledge in major streams such as thermal, design, manufacturing and

industrial engineering.

**PSO2:** Prepare students for building their career in different industries or pursue higher studies in mechanical engineering and able to solve interdisciplinary problems along with values and professional ethics.

## PROGRAMME OUTCOMES (POs) (by NBA)

**PO1: Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**PO2: Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering

problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO3: Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO4: Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**PO5: Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**PO6: The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**PO7: Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO9: Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO10: Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**PO11: Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**PO12: Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



❖ **Research Publication.**

- ❖ Prof. (Dr.) Rajendra Kumar Shukla ( 2019 ) ,  
“Development of AHP framework of sustainable product design & manufacturing of electric vehicle”, Springer nature Singapore Pvt.Ltd.,
- ❖ Dr. Pikeshe Bansal (May-June 2019), “Design and fabrication of Automatic Speed Controller for Automobile”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3, Issue- 4,e-ISSN-2456-6470
- ❖ Mr. R.S. Raman (2019), “A Review on Implementation of six sigma techniques I Manufacturing Industries and Benefits derived.”, Springer Nature IJITJ/IOP Publication Science Journals,
- ❖ Dr. Manish Saraswat (2019), “Potential assessment of biogas in internal combustion engine: A review”, International Conference on Computational & Experimental methods in mechanical engineering,
- ❖ Dr. Manish Saraswat (2019), “Impact of Variable affecting biogas production from biomass”, International Conference on Computational & Experimental methods in mechanical engineering,
- ❖ Dr. Manish Saraswat (43617), “Environment Impact of butanol & algae oil addition in gasoline at different compression ratio”, Journal of scientific & Industrial ResearchVolume- 78,PP 382-385
- ❖ Mr. Abhishek Goel (43580), “Experimental study of heat transfer characteristics of an impinging jet solar air heater with fins”, Springer, Print ISSN 1387-585X Online ISSN 1573-2975
- ❖ Mr. Abhishek Goel (), “Energy and performance analysis of a new solar dryer”, International Conference on Computational & Experimental methods in mechanical engineering,
- ❖ Mr. Yogesh Chandra Mr. Parag Sigal (2019), “Factors to Increase the Efficiency of Solar Panel: A Review”, Journal of Energy, Environment & Carbon Credits Volume 9, Issue 1 ,ISSN:2249-8621 (Online)
- ❖ Mr. Shivam Sharma (), “Optimization/benchmarking using multi criteria Decision making”, Intech Open Limited,
- ❖ Mr. Shivam Sharma ( 43586 ) , “ Design and Implementation of Advanced Helmet”, International Journal of Research in engineering & Management (IJRESM)Volume-2, Issue- 5, ISSN (online):2581-5792
- ❖ Mr. Shivam Sharma (May-June 2019), “Regenerative Breaking System”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3, Issue- 4,e-ISSN-2456-6470
- ❖ Dr. Kishor Kumar Guru (43593), “Effect of temperature on elastic properties of CNT reinforced nanocomposites”, IOP Publishing Ltd,
- ❖ Dr. Kishor Kumar Guru (May-June 2019), “Design and working of pedal operated flour mill”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3, Issue- 4,e-ISSN-2456-6470
- ❖ Mr. Manish Mangal (2019), “Finite Difference Analysis of Plane Couette Flow using MATLAB”, Journal of Experimental & Applied Mechanics Volume 10, Issue 1, ISSN:2230-9845 (Online), ISSN:2321-516X (Print)
- ❖ Prof. (Dr.) Rajendra Kumar Shukla Mr. Manish Mangal (2018), “Numerical Study of a Turbulent Flow Past a Rotating Sphere”, Journal of Aerospace Engineering & Technology (JoAET)Vol 8, Issue No 3,
- ❖ Mr. Ankur Dixit (43556), “Analysis of emission on variable compression engine with using biogas as a fuel.”, International Journal of scientific & engineering research Volume-10, Issue-4, ISSN- 2229-5518
- ❖ Mr. Vijay Kumar Gupta (Mar-Apr 2019), “Automatic Temperature controlled air cooler: Design, assembly and testing”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-2, ISSN- 3, e-ISSN-2456-6470
- ❖ Mr. Vijay Kumar Gupta (May-June 2019), “Design of Fin for Various Variables”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3, ISSN- 4, ISSN-2456-6470
- ❖ Mr. Saurabh (May-June 2019), “CFD Simulation of air conditioning system of the classroom”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3, ISSN- 4, ISSN-2456-6470





- ❖ Mr.Parag Singhal (May-June 2019),“Thermoelectric Air conditioning”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3, ISSU- 4,ISSN-2456-6470
- ❖ Mr. Sanjay Kumar (Mar-Apr 2019),“Portable centre pivot irrigation system with advanced control through sensors: A Review”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3, ISSU- 4,e-ISSN-2456-6470
- ❖ Mr. Animesh Kumar (2019), “Experimental study of mechanical properties on AL 6063 composite reinforced with silicon carbide”, International Journal of trends & Innovation (IJTSRD)Volume-4, Issue- 4, ISSN:2456-3315
- ❖ Mr.Animesh Kumar (Mar-Apr 2019),“Reduction in size of var by using different materials in generator”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3, Issue-3, E-ISSN-2456-6470
- ❖ Mr. Naveen Kumar (Mar-Apr 2019),“Review on the development of road cleaning & scrap collecting robotic vehicle”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3, Issue-3,e- ISSN- 2456-6470
- ❖ Mr.Naveen Kumar (Mar-Apr 2019),“Analysis of energy generation from Exhaust of automobile using Peltier (Thermoelectric Generator)”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3,Issue-3,e-ISSN- 2456-6470
- ❖ Mr. Naveen Kumar (2018),“Multi-response Optimization of Friction Stir Welding Process Parameters Using Standard Deviation (SD) Based Preference Indexed Value (PIV) Method”, International journal of advanced production and industrial engineering IJAPIE Vol 3 (4),44- 48
- ❖ Dr. Rahul Saini (Mar-Apr 2019),“Multi operational machining and controlling with the help of electromagnetic clutch”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3,Issue-3,e-ISSN- 2456-6470
- ❖ Ms. Gaganpreet Kaur /Dr. Rahul Saini (May-June 2019), “Design and construction of a shredding Machine for recycling and management of organic waste”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3, Issue- 4, e-ISSN- 2456-6470
- ❖ Ms. Gaganpreet Kaur /Dr. Rahul Saini (),“Arduino Based smart analyzing system for development stages of wheat Kernel”,
- ❖ Mr.VIKAS (2019),“An Insight into the Notion of Gameful thinking for learning”, International Journal for scientific Research & DevelopmentVolume-7, Issue- 2, ISSN (online):2331-0613
- ❖ Mr.VIKAS (2019),“Development of a Heat Actuator Using Liquid-Vapor Phase Change of R134a”, Journal of Thermal Engineering and Applications Volume 6, Issue 1, ISSN: 2349-8994 (Online)
- ❖ Mr. Manbendra Saha (43586), “Development and optimization of process parameters of microwaved cured polymers based natural fiber (Cair) reinforced composite”, Journal of Emerging Technology and Innovative research (JETIR)Volume-6, Issue-5, ISSN- 2349-5162
- ❖ Mr. Manbendra Saha (May-June 2019),“Development and optimization of process parameters of microwaved cured polymers based natural fiber (Cair) reinforced composite”, International Journal of trends in Scientific research & Development (IJTSRD) Volume-3, Issue- 4,e-ISSN-2456-6470
- ❖ Mr. Chetan Rajoria (Mar-June 2019),“Study of effect of friction on pantograph mechanism”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3,issue-3,e-ISSN-2456-6470
- ❖ Mr. Chetan Rajoria (May-June 2019), “Steering controlled Adaptive Head light using sensor”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3, Issue- 4, e-ISSN- 2456-6470
- ❖ Mr. Abhishek Pandey (May-June 2019), “Self healing capabilities in polymeric materials: An Introduction to techniques”, International Journal of trends in Scientific



research & Development (IJTSRD)Volume-3,Issue- 4,e-ISSN-2456-6470

- ❖ Mr. Arun Pratap Singh (May-June 2019),“Smart solar Grass cutter robot”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3,Issue- 4,e- ISSN-2456-6470
- ❖ Mr. Arun Pratap Singh (43556),“Operating mechanism and design hydraulic scissor Lift.”, International Research Journal of Engineering and technology (IRJET)Volume-6,Issue-4,e- ISSn-2395-0056 p-ISSN-2395-0072
- ❖ Mr. Navendra Pratap Singh (43556),“Automatic bike side stand”, International Journal of research in engineering, Science and managementVolume-2, Issue-4,ISSN (Online) 2581-5792
- ❖ Mr. Neeraj Kumar Sharma (Mar-Apr 2019),“Multiple products testing on single circular conveyor.”, International Journal of trends in Scientific research & Development (IJTSRD)Volume-3, Issue-3,
- ❖ Mr. Rahul Verma (2019),“Vibration analysis of functionally graded materials for cylinder liner used in agricultural engine part”, De Gruyter.,258–266

### Patents

Sl	Applicant Name	Application No	Date of Filing	Inventers Name	Branch	Product Name	Status
1	ABES Engineering College Ghaziabad	201911008557	5/3/2019	Dharmendra Singh	ME	System And Method For Tracking And Locating Misplaced And Lost Objects Through Voice Command	Filed
				Narbedha Prasad Gupta	EC		
2	ABES Engineering College Ghaziabad	201911010265	15/03/2019	Monika Chauhan	ME	AN AEROFOIL FAN BLADE AND FANS WITH AEROFOIL BLADES	Filed
				Ankur Dixit	ME		
				Praval Lumar			
				Rajnesh Kumar Singh	EC		

### Ph.D registration

Mr. Mayank Kushwaha and Mr. Ankur Dixit registered for a PhD program in Delhi Technological University in January 2019.

### Professional Societies:

Networking with one's fellow scientists and engineers is extremely important for personal and professional development. Professional organizations sponsor conferences, publish journals, and serve as reviewers or editors. They set professional and educational standards and provide job and career services for their members. flight for fuel economy in Simulation & Scale Model Category on 17 Feb 2017 in competition Technomemtum 2017.

S. No.	Name of the Faculty	Designation	Name of the Society	MEMBERSHIP Number	Year	MEMBERSHIP Validity
1	Dr. Abhinav Gupta	Professor	ISHRAE	49818	2019	Lifetime
2	Mr. Amit Singh	Assistant Professor	The Indian Institute of Welding -Kolkata	Applied	2019	Lifetime



## STUDENT ACHIEVEMENT SECTION

### AP-Expo

“AP-EXPO 2019” is organized by the Department of Mechanical Engineering. The event includes the display of project posters, project working models, and the research publications from the student's projects. The assessment of these projects under different categories based on outcome-based learning would be done by honorable guests from Academia and Industry.

The projects are appreciated by distribution of certificates under various categories.

Project Category	Position Achieved	Name of Project	Team Member(S)
MOST INNOVATIVE	1 <sup>st</sup>	AUTOMATIC PLATE DISPENSER SYSTEM	ABHIRAJ KASANA ADITYA VAISH HARSH CHAUDHARY HARSHIT DHIMAN
	2 <sup>nd</sup>	STEERING CONTROLLED ADAPTIVE HEAD LIGHT	MAYANK BHARDWAJ (FW) DIGVIJAY RAJPUT KUNAL GIRI MOHD SAMSH
	3 <sup>rd</sup>	AUTOMATIC TEMPERATURE CONTROLLER WITH COOLING ARRANGEMENT	ABHINAV KUMAR VISHWAKARMA MOHAK GUPTA HIMANSHU SINGH KUNWAR UTKARSH
ECONOMICALLY VIABLE	1 <sup>st</sup>	ADVANCE HELMET	ANSHUL SONI MAYANK SHARMA DISHANK SINGH SANTOSH KUMAR MAYAND MALIK
	2 <sup>nd</sup>	ORGANIC WASTE MANAGEMENT	ABHAY KATIYAR ABHISHEK GAUR AVIRAL SHRIVASTAVA NAVNEET PRATAP SINGH (LE -16) MOHAMMAD AHMAR KHAN
	3 <sup>rd</sup>	MULTI-OPERATIONAL MACHINING AND CONTROLLING WITH THE HELP OF ELECTRO-MAGNETIC CLUTCH	ANKIT SHARMA(FW) ASHUTOSH KUSHWAHA DESH DEEPAK AMBRISH KUMAR PANDEY SAURABH PRIYADARSHI
MOST SUSTAINABLE	1 <sup>st</sup>	BROOMING MACHINE	VIVEK PAL VIVEK SINGH RAM GOPAL PANDEY VISHAL RANJAN MALL MANISH PRAKASH SHIVAM KUMAR SINGH SHIVANG RATHI VISHAL SHARMA SHUBHAM AGRAWAL
	2 <sup>nd</sup>	EXHAUST GAS ANALYSIS USING PRODUCER GAS AS A FUEL	ABHISHEK SRIVASTAVA AKASH GUPTA ANMOL NISHANT GARG
	3 <sup>rd</sup>	FABRICATION OF ROAD CLEANING AND SCRAP COLLECTING ROBOTIC VEHICLE	AYUSH GOEL PEEYUSH KUMAR GUPTA VIPUL VERMA VISHAL GUPTA (LE-16)



## Industrial Visit

The objective of an industrial visit is to provide students with an insight into the corporate world. It provides students with a practical real-world perspective on different functions in organizations

- ❖ An Industrial visit, coordinated by Mr. Abhishek Pandey and Mr. Manoj Kumar, to Honda Cars India Limited, Greater Noida was organized for B. Tech. 3rd year section C students on Thursday February 14, 2019. Honda Cars India Ltd., (HCIL) is a leading manufacturer of premium cars in India. The company was established in 1995 with a commitment to provide Honda's latest passenger car models and technologies to the Indian customers. The company is a subsidiary of Honda Motor Co. Ltd., Japan.
- ❖ An Industrial visit, coordinated by Mr. Sanjay Kumar and Mr. Naveen Kumar, to MOTHER DAIRY Patparganj, New Delhi - I 10092 was organized for B. Tech. 3rd year section C students on Wednesday March 13, 2019. MOTHER DAIRY Patparganj, New Delhi. Mother Dairy was commissioned in 1974 as a wholly owned subsidiary of the National Dairy Development Board (NDDB). It was an initiative under Operation Flood, a dairy development program aimed at making India a milk sufficient nation. Mother Dairy sources a significant part of its requirement of liquid milk from dairy cooperatives and village level farmer centric organizations.
- ❖ An Industrial visit, coordinated by Mr. Sanjay Kumar and Mr. Naveen Kumar, to MOTHER DAIRY Patparganj, New Delhi - I 10092 was organized for B. Tech. 3rd year section B students on Thursday March 14, 2019. MOTHER DAIRY Patparganj, New Delhi. Mother Dairy was commissioned in 1974 as a wholly owned subsidiary of the National Dairy Development Board (NDDB). It was an initiative under Operation Flood, a dairy development program aimed at making India a milk sufficient nation. Mother Dairy sources a significant part of its requirement of liquid milk from dairy cooperatives and village level farmer centric organizations.
- ❖ An Industrial visit, coordinated by Mr. Sanjay Kumar and Mr. Naveen Kumar, to MOTHER DAIRY Patparganj, New Delhi - I 10092 was organized for B. Tech. 3rd year section A students on Friday March 15, 2019. MOTHER DAIRY Patparganj, New Delhi. Mother Dairy was commissioned in 1974 as a wholly owned subsidiary of the National Dairy Development Board (NDDB). It was an initiative under Operation Flood, a dairy development program aimed at making India a milk sufficient nation. Mother Dairy sources a significant part of its requirement of liquid milk from dairy cooperatives and village level farmer centric organizations.
- ❖ An Industrial visit, coordinated by Dr. Rahul Saini, to National Power Training Institute, Faridabad was organized for B. Tech. 3rd year section B students on Thursday March 28, 2019. National Power Training Institute (NPTI), an ISO 9001 & ISO 14001 organization under Ministry of Power, Government of India is a National Apex body for Training and Human Resources Development in Power Sector with its Corporate Office at Faridabad. NPTI had been providing its dedicated service for more than five decades.
- ❖ An Industrial visit, coordinated by Mr. Naveen Kumar, to National Power Training Institute, Faridabad was organized for B. Tech. 3rd year section C students on Thursday March 29, 2019. National Power Training Institute (NPTI), an ISO 9001 & ISO 14001 organization under Ministry of Power, Government of India is a National Apex body for Training and Human Resources Development in Power Sector with its Corporate Office at Faridabad. NPTI had been providing its dedicated service for more than five decades.





## **“Protagonists”**

### **Efficycle – 2019**

#### **AIR- 4**

#### **Overview**

Efficycle is an intercollegiate design competition which is intended to engage engineering students in developing the eco-friendly future mobility solutions for India. “Efficycle” derived from Efficient-Cycle promote the objective of providing opportunity to the students to conceive, design and fabricate a three-wheel configuration vehicle powered by human-electric hybrid power and capable of seating two passengers catering to the day to day mobility needs. The event gives participant a challenge of conceptualizing, designing and fabricating an electrically assisted-human powered, 3-wheeled, 2-seater vehicle. The vehicle must be aerodynamic, engineered for performance & safety and ergonomically designed. The objective is to promote innovation and generate consciousness amongst the young engineers towards environment friendly mobility solution.

#### **Team outline:-**

A 14-member team (13 main members +1 Guest member) “Protagonists” has participated in Efficycle-2019 from ABES Engineering College, Ghaziabad. Mr. Harsh Vishwakarma was team captain.



**Team  
“Protagonists”**

**Team  
“Protagonists”**



**Team  
“Protagonists”**



## Awards/ Participation in national and international events.

S. No.	Participant Name	Roll No.	Title of event	Participated at	Date	Awards/ Certification
1	Gaurav Chandra Mishra	1703240058	Cricket Tournament	KIET, Ghaziabad	02-03-2019	Participation Certificate
2	Navneet Kushwaha	1703240081		KIET, Ghaziabad		Participation Certificate
3	Shivam Kumar Singh	1703240126		KIET, Ghaziabad		Participation Certificate
4	Navneet Kushwaha	1703240081	Cricket Tournament	GLA, Mathura	08-03-2019	Participation Certificate
5	Utkarsh Tripathi	1803240167	Nukkad Natak	IIT Roorkee	08-02-2019	Participation Certificate
6	Shikhar Verma	1603240148	Participant	IIT Kharagpur	19-01-2019	Participation Certificate
7	Shaswat Kulshrestha	1603240147	Participant	IIT Kharagpur	19-01-2019	Participation Certificate
8	Mohit Kumar	1603240085	Participant	IIT Kharagpur	19-01-2019	Participation Certificate
9	Aryan Dwivedi	1703240037	Process Simulation Using Aspen HYSYS	ASME	03-03-2019	Participation Certificate
10	MohdAnas Ansari	1603240084	Technical Event	IIT Kharagpur	19-01-2019	Participation Certificate
11	Kamad Bhatnagar	1603240070				Participation Certificate
12	Shikhar Verma	1603240148				Participation Certificate
13	Mohit Kumar	1603240085				Participation Certificate
14	Rishabh Mittal	1803240114	Solid Works corporation nationwide product design contest	Dassault System	11-07-2019	Participation Certificate
15	LavkushYadav	1803240079				Participation Certificate
16	Yash dixit	1603240174	Table Tennis	IIT ROORKEE	29-03-2019	Participation Certificate
17	Puneet Sharma	1603240113	4*400 mtr Boys	GLA Mathura	15-02-2019	Gold Medal
18	Varun Kumar	1703240153	4*400 mtr. Boys	GLA Mathura	15-02-2019	Gold Medal
19	Puneet Sharma	1603240113	4*100 mtr. Boys	GLA Mathura	15-02-2019	Silver Medal
20	Varun Kumar	1703240153	4*100 mtr. Boys	GLA Mathura	15-02-2019	Silver Medal
21	Utkarsh Singh	1803240165	800 mtr. Boys	GLA Mathura	15-02-2019	Silver Medal
22	Puneet Sharma	1603240113	400 mtr. Boys	GLA Mathura	15-02-2019	Bronze Medal
23	Rishabh Nehra	1703240107	5000 mtr. Boys	GLA Mathura	15-02-2019	Bronze Medal
24	Abhay Kumar Gupta	1703240002	Badminton	VIET, Ghaziabad	24-09-2019	Silver Medal
25	Varun Kumar	1703240153	4*400 mtr Relay Boys	VIET,Ghaziabad	24-09-2019	Bronze Medal
26	Puneet Sharma	1603240113	4*400 Mtr. Relay Boys	VIET, Ghaziabad	24-09-2019	Bronze Medal



## NPTEL CERTIFICATIONS

S. No.	Course Name	Name	Role	Score From Assignment	Exam Score	Final Score	Certificate Type
1	Kinematics Of Mechanisms And Machines	Anoop Kumar Yadav	Student	10.04	33	43	Successfully completed
2	Matlab Programming For Numerical Computation	Shubham Agarwal	Student	18.65	48.75	67	Elite
3	Engineering Mechanics - Statics And Dynamics	Shubham Agarwal	Student	19.5	37.5	57	Successfully completed
4	Problem Solving Through Programming In C	Shubham Agarwal	Student	22.22	34.5	57	Successfully completed
5	Problem Solving Through Programming In C	Ritik Verma	Student	22.91	30	53	Successfully completed
6	Problem Solving Through Programming In C	Rajdeep Kumar Gautam	Student	7.47	33	40	Successfully completed
7	Problem Solving Through Programming In C	Nandita Chowdhury	Student	22.81	35.25	58	Successfully completed
8	Problem Solving Through Programming In C	Ashutosh Singh Chauhan	Student	24.84	39.75	65	Elite
9	Problem Solving Through Programming In C	Aman Maurya	Student	23.94	44.25	68	Elite
10	Problem Solving Through Programming In C	Ayush Tripathi	Student	6.19	33.5	40	Successfully completed
11	Problem Solving Through Programming In C	Vaibhav Kumar Bhaskar	Student	23.63	37.5	61	Elite
12	Problem Solving Through Programming In C	Arun Kumar	Student	22.34	36	58	Successfully completed
13	Problem Solving Through Programming In C	Ankit Kumar Pal	Student	20.72	32.25	53	Successfully completed
14	Problem Solving Through Programming In C	Vimal Kumar Yadav	Student	19.31	43.5	63	Elite
15	Problem Solving Through Programming In C	Himanshu Dixit	Student	22.41	46.5	69	Elite
16	Problem Solving Through Programming In C	Jatin Mahato	Student	22.13	32.25	54	Successfully completed
17	Problem Solving Through Programming In C	Amit Dhar Dubey	Student	22.13	24.75	47	Successfully completed
18	Problem Solving Through Programming In C	Yash Kumar	Student	7.13	33.75	41	Successfully completed
19	Programming In Java	Sandeep Kumar Sharma	Student	18.78	46.5	65	Elite
20	Enhancing Soft Skills And Personality	Rajat Gupta	Student	23.17	48	71	Elite
21	Enhancing Soft Skills And Personality	Sparsh Kataria	Student	23.17	29.25	52	Successfully completed
22	Enhancing Soft Skills And Personality	Baij Nath Verma	Student	23.67	40.5	64	Elite
23	Enhancing Soft Skills And Personality	Vishal Bhargav	Student	21	39.75	61	Elite
24	Enhancing Soft Skills And Personality	Aman Maurya	Student	23	52	75	Elite+Silver
25	Enhancing Soft Skills And Personality	Ayush Tripathi	Student	9.17	54.75	64	Elite
26	Enhancing Soft Skills And Personality	Avinav Tyagi	Student	21.5	39.75	61	Elite
27	Enhancing Soft Skills And Personality	Gagan Chander Pandey	Student	0	51	51	Successfully completed
28	Enhancing Soft Skills And Personality	Vaibhav Kumar Bhaskar	Student	24.33	59.25	84	Elite+Silver
29	Enhancing Soft Skills And Personality	Saurabh Vishvakarma	Student	24.17	56.25	80	Elite+Silver
30	Enhancing Soft Skills And Personality	Saurabh Tripathi	Student	25	69	94	Elite+gold
31	Enhancing Soft Skills And Personality	Vishal Kumar	Student	24	44.25	68	Elite
32	Enhancing Soft Skills And Personality	Ashish Sharma	Student	23.33	51.75	75	Elite+Silver
33	Engineering Mathematics - I	Avinash Yadav	Student	18.16	22	40	Successfully completed
34	Steam And Gas Power Systems	Rituraj Singh	Student	11.04	45	56	Successfully completed
35	Introduction To Fluid Mechanics	Shubham Agarwal	Student	22.34	42	64	Elite
36	Six Sigma	Rishabh Maurya	Student	18.5	42.38	61	Elite





## RESEARCH PAPERS

S. No.	Name	Roll No.	Title	Name of Conference/Journal	Issue and Volume
1	Ayush Goel	1503240052	Development of Road Cleaning and Scrap Collecting Robotic Vehicle	International Journal of Trend in Scientific Research and Development (IJTSRD)	Volume 10  Issue 4
	Vipul Verma	1503240173			
	Peeyush Kr Gupta	1503240114			
	Vishal Gupta	1603240907			
	Prithvi Sisodia	1503240120			
	Priyanshi Tripathi	1503240121			
2	Satyam Upadhyay	1503221066	Air Conditioning Using Exhaust of a Vehicle	International Journal of Scientific & Engineering Research	Volume 10   Issue 4
	Vaibhav Setia	1503240169			
	Sunil Kr. Patel	1503240161			
	Saurabh Chauhan	1503221067			
3	Aaryan Singh	1503240001	An Insight into the Notion of Gameful thinking for learning	International Journal for scientific Research & Development	Volume7   Issue- 2
	Anmol Gupta	1503240036			
	Anurag Rao	1503240039			
	Ankit Shishodia	1503240034			
	Mohit Singh Jatela	1503240102			
4	Shivam Gupta	1503240145	Analysis of emission on variable compression engine with using biogas as a fuel.	International Journal of scientific & engineering research	Volume 10   Issue 4
	Shivam Varshney	1503240149			
	Shubham Mehrotra	1503240154			
	Utkarsh Bhan	1503240166			
5	Satyam Upadhyay	1503221066	Analysis of energy generation from Exhaust of automobile using Peltier (Thermoelectric Generator)	International Journal of trends in Scientific research & Development (IJTSRD)	Volume3   Issue3
	Saurabh Chauhan	1503221067			
	Sunil Kumar Patel	1503240161			
	Prakhar Bajpai	1503240116			
	Vaibhav Setia	1503240169			
6	Harshana Gupta	1503240169	Application of Industrial Engineering to increase the productivity of an E-Rickshaw factory	International Journal of trend in scientific Research and Development (IJTSRD)	Volume2   Issue4
7	Divyansh Garg	1503240161	Approach for Machine Health Monitoring system of a Machine	International of Engineering & technology	Vol 7   No 4.39
8	Abhinav Kumar Vishwakarma	1503240014	Automatic Temperature controlled air cooler: Design, assembly and testing	International Journal of trends in Scientific research & Development (IJTSRD)	Volume3   Issue3
	Ankit Kumar	1503240151			
	Mohak Gupta	1503240170			
	Himanshu Singh	1503240008			
	Kunwar Utkarsh	1503240078			
9	Anant Agarwal	1503240006	Automatic bike side stand	International Journal of research in engineering, Science and management	Volume2   Issue4
	Anas Khan	1503240032			
	Anil Kumar Rajpoot	1503240098			
	Anshul Verma	1503240075			
	Sandeep Kumar Verma	1503240089			
10	Dipti Chandel	1503240131	CFD Simulation of air conditioning system of the classroom	International Journal of trends in Scientific research & Development (IJTSRD)	Volume3   Issue4
	Gaurav Srivastava	1503240007			
	Harsh Dabas	1503240016			
	Ashish Mishra	1503240069			
	Aman Kumar	1503240072			





## RESEARCH PAPERS

11	Divyansh Garg	1503240062	Condition based Monitoring & fault Diagnostics of a machine	Journal of experimental & applied mechanics	Volume 9   No 2
	Shubham Kaushiek,	1503240067			
	Vaibhav Kumar	1503240071			
12	Abhay Katiyar	1603240801	Design and construction of a shredding Machine for recycling and management of organic waste	International Journal of trends in Scientific research & Development (IJTSRD)	Volume3   Issue4
	Abhishek Gaur	1503240024			
	Aviral Shrivastava	1403240066			
	Navneet Pratap Singh	1403240149			
	Mohammad Ahmar Khan	1403240171			
13	Aadil Zaya	1503240003	Design and fabrication of Automatic Speed Controller for Automobile	International Journal of trends in Scientific research & Development (IJTSRD)	Volume3   Issue4
	Abhinav Srivastava	1503240009			
	Bhuvnesh Sharma	1503240049			
	Anuj Upadhyay	1603240903			
14	Anshul Soni	1503240099	Design and Implementation of Advanced Helmet	International Journal of Research in engineering & Management (IJRESM)	Volume2, Issue5
	Mayank Sharma	1503221001			
	Dishank Singh	1503221005			
	Santosh Kumar	1503221020			
	Mayand Malik	1603240902			
15	Saurabh Kumar Shukla	1503240037	Design and working of pedal operated flour mill	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-3
	Saurabh Pal	1503240094			
	Saurabh Pratap Singh	1503240063			
	Saurabh Tiwari	1503240133			
16	Archit	1503240092	Design of Fin for Various Variables	International Journal of trends in Scientific research & Development (IJTSRD)	Volume 3   Issue 4
	Ayush Patel	1503240135			
	Kshitij Srivastava	1503240136			
	Mayank Srivastava	1503240137			
17	Sarvesh Thakur	1503240140	Design of fixed wing Unmanned Aerial vehicle based on mangiest frigate bird	International Journal of engineering & technology	Volume 7   No 4.39
18	Jitendra Sharma	1503240042	Development and optimization of process parameters of microwaved cured polymers based natural fiber (Coir) reinforced composite	International Journal of trends in Scientific research & Development (IJTSRD)	Volume3   Issue 4
	Krishna Gupta	1503240054			
	Shubham Singh	1503240084			
	Ujjwaldeep	1503240095			
19	Ayush Goel	1503240165	Development of Road Cleaning and Scrap Collecting Robotic Vehicle	International Journal of Scientific & Engineering Research,	Volume-3   Issue-3
	Vipul Verma	1503240074			
	Peeyush Kr Gupta	1503240081			
	Vishal Gupta	1503240112			
20	Rishabh Kumar Sahu	1503240122	Development of Subsonic Wind Tunnel	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-3
	Saurabh Sharma	1503240052			
	Vishal Kumar	1503240173			
	Vivek Swaroop	1503240114			
21	Akhil Tyagi	1603240907	Energy and performance analysis of a new solar dryer	International Conference on Computational & Experimental methods in mechanical engineering	IOP Conference Series
	Ashish Sharma	1503240126			
	Ayushman Gupta	1503240139			
	Kuber Singh	1503240175			
	Tirath Prasad	1503240180			
22	Navneet Pathak	1503240020	Estimation and parametric analysis of heat transfer	International Journal of Advance Research, Ideas	Volume-6   Issue-1
	Piyush Tiwari	1503231059			



## RESEARCH PAPERS

	Saurabh Pati Tripathi	1503240056	coefficient for a solar still: A review	and Innovations in Technology	
23	Yash Kumar	1503210115	Estimation and parametric analysis of heat transfer coefficient for a solar still: A review	International Journal of Advance Research, Ideas and Innovations in Technology	Volume-6   Issue-1
	Himanshu Dixit	1503240163			
24	Amit Kumar Yadav	1603240093	Experimental Investigations and analysis of thermoelectric Refrigerator with multiple Peltier modules	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-3
	Durgesh Srivastav	1603240101			
	Akshay Goswami	1603240140			
	Gaurav Kumar	1603240175			
	Harvind Yadav	1603240065			
25	Mohd Khurshed Rashid	1503240026	Experimental study of mechanical properties on AL 6063 composite reinforced with silicon carbide	International Journal of trends & Innovation (IJTSRD)	Volume 4   Issue 4
	Sankalp Srivastava	1503240064			
	Shubham Srivastava	1503240021			
	Vishal Ashok Kumar	1503240066			
26	Mehul Bhardwaj	1503210094	Impact of Variable affecting biogas production from biomass	International Conference on Computational & Experimental methods in mechanical engineering	691 (2019) 012043
	Monika	1503240100			
	Mridul Mehrotra	1503240132			
	Ritik Singhal	1503240158			
27	Ankit Sharma	1503240174	Multi operational machining and controlling with the help of electromagnetic clutch	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-3
	Ashutosh Kushwaha	1503240097			
	Desh Deepak	1503240103			
	Ambrish Kumar Pandey	1503240104			
	Saurabh Priyadarshi	1503240128			
28	Aayushi Pandey	1503240046	Multiple products testing on single circular conveyor.	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-3
	Akarsh Gupta	1503240059			
	Apoorv Sharma	1503240059			
	Chandrakant Jaiswal	1503240046			
29	Prakhar Singhal	1503240025	Operating mechanism and design hydraulic scissor Lift.	International Research Journal of Engineering and technology (IRJET)	Volume 06   Issue 04
	Shivam Srivastava	1503240002			
	Uttam Panwar	1503240018			
	Yash Guryal	1503240041			
30	Pranav Upadhyay	1503221021	Optimization of chassis for a solar powered vehicle	International Conference on Mechanical and Energy Technologies (ICMET 2019)	IOP Conf. Ser.: Mater. Sci. Eng. 748 012021
	Sachin Kumar Sharma	1503240117			
	Gautam Kumar	1503240148			
31	Ashish Gaur	1503240167	Portable center pivot irrigation system with advanced control through sensors: A Review	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-3
	Ashwini Mishra	1503240181			
	Awanish Kumar Yadav	1603240105			
	Ayush Goel	1603240132			
	Amul Baranwal	1603240058			
32	Gaurav Adhikari	1503240065	Potential assessment of biogas in internal combustion engine: A review	International Conference on Computational & Experimental methods in mechanical engineering	IOP Conf. Series: Materials Science and Engineering 237 (2017) 012013
	Gyanendu Kumar Singh	1503240068			
	Neelesh Kumar	1503240107			
	Praval Kumar	1503240119			
	Vipin Kumr	1503240172			
33	Nishi Yadav	1503240110			Volume3   Issue 3



## RESEARCH PAPERS

	Om Singh Patel	1503240111	Reduction in size of var by using different materials in generator	International Journal of trends in Scientific research & Development (IJTSRD)	
	Muzaffar Ayoob Khan	1503240105			
	Pooja Shakya	1503240115			
34	Abhinav Kumar Jha	1503240005	Regenerative Braking System	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-4
	Ashish Narayan Singh	1503240045			
	Rahul Yadav	1503240123			
	Kumar Vanshaj	1503240087			
	Md Fahim	1503240096			
35	Ayush Goel	1503240051	Review on the development of road cleaning & scrap collecting robotic vehicle	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-3
	Peeyush Kumar Gupta	1503240114			
	Vipul Verma	1503240173			
	Vishal Gupta	1603240907			
36	Aman Jain	1503240023	Self-healing capabilities in polymeric materials: An Introduction to techniques	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-4
	Ankit Kumar	1503240031			
	Avinash Pratap Singh	1503240048			
	Kuldeep Singh	1503240085			
37	Ajit Singh Shekhawat	1603240901	Smart solar Grass cutter robot	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-3
	Nikesh Kumar	1503240108			
	Siddharth Tyagi	1503240159			
	Roopal Yadav	1503240129			
38	Mayank Bhardwaj	1503240093	Steering controlled Adaptive Head light using sensor	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-4
	Digvijay Rajput	1503240060			
	Kunal Giri	1503240088			
	Mohd Samsh	1503240101			
39	Alok Shukla	1503240022	Study of effect of friction on pantograph mechanism	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-3
	Ayush Johri	1503240053			
	Ajeet Kumar Yadav	1503240017			
	Harshit Nangia	1503240073			
	Abhinav Goswami	1503240004			
40	Shardul Kumar Vijay	1503240141	Thermoelectric Air conditioning	International Journal of trends in Scientific research & Development (IJTSRD)	Volume-3   Issue-3





## Our Patrons

### Chief Patron

Shri. Neeraj Goel  
Chairman

### Patrons

Shri. Sachin Kumar Goel  
Vice Chairman

Prof. Gajendra Singh  
Director

### Chairman, Publication

Prof. (Dr.) R.K. Shukla  
Head, ME Dept.  
hodme@abes.ac.in

## Editorial

### Editor & Compiler

Ms. Gaganpreet Kaur  
Associate Prof., ME Dept.  
gaganpreet.kaur@abes.ac.in

### Proof Reading

Dr. Kishore Guru  
Associate Prof., ME Dept.

Ms. Monica Chauhan  
Assistant Prof., ME Dept.

## Editorial Board



Mr. Sharad Bhardwaj  
Sr. Assistant Prof., ME Dept.



Mr. Mayank Kushwaha  
Assistant Prof., ME Dept.



Mr. Shailendra Pratap Singh  
Assistant Prof., ME Dept.



Mr. Harvir Singh  
Assistant Prof., ME Dept.

## ABES Engineering College

19th Km Stone, NH 24, Ghaziabad 201009, UP  
Ph: 0120-7135112, Fax : 0120-7135115 Mobile: +91-9999889341  
Email: info@abes.ac.in, Website - www.abes.ac.in