

BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT
Yelahanka, Bengaluru-560 064

DEPARTMENT OF MECHANICAL ENGINEERING



2 WEEK

INDUCTION PROGRAMME REPORT FOR I SEM MECHANICAL

ACADEMIC YEAR: 2018- 19

Co-ordinator (Reporting) :

Shripad Diwakar

Assistant Professor

Department of Mechanical Engineering, BMSIT&M

From 13/08/2018 to 01/09/2018

About Mechanical Engineering Department:

Mechanical engineering is a diverse subject that derives its breadth from the need to design and manufacture everything from small individual parts and devices to large systems. The role of a mechanical engineer is to take a product from an idea to the marketplace. In order to accomplish this, a broad range of skills are needed. One skill that is the mechanical engineer's exclusive domain is the ability to analyze and design objects and systems with motion.

The Department of Mechanical Engineering, headed by Dr. K M Sathish Kumar, was established in the year 2002-03 with an approved intake of sixty students. The Department consists of twenty efficient faculty members of which five are Doctoral members. All the faculty members are well experienced and research oriented. Presently many of the faculty members are pursuing their doctoral degrees. All the laboratories are furnished with state-of-the-art equipment, licensed software and IBM PCs. The Department is consistently achieving good results over the years. Many of the students are placed in MNCs and other core companies.

The Department also offers a post-graduate course in Machine Design established in the year 2014. The department is recognized as research centre under VTU

Machine design is a specialization in the field of mechanical engineering that focuses on the development and design of components, mechanical devices and other equipments. Other aspects include the improvement of current designs as well as the creation or alteration of new and existing manufacturing systems. Graduates make use of ANSYS and MATLAB; along with various other modeling and simulation tools to develop components and systems. Mechanical Designers have various skills ranging from conceptualization of design as well as intuitive knowledge and familiarity of manufacturing methods.

VISION

To develop technically competent Mechanical Engineering professionals for the benefit of the society.

MISSION

Impart quality education in Mechanical Engineering and allied areas by state-of-art-of infrastructure and dedicated faculty

To provide conducive environment for both students and faculty to pursue higher education and research and to work ethically for the benefit of the society.

PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

Graduates of the program will:

PEO-1: Be successful professionals in the field of Mechanical Engineering and allied areas

In a global scenario there is a need of professionals enriched with knowledge and skill in the field of mechanical engineering. The primary objective of our programme is to produce mechanical engineering graduates who can excel in both manufacturing and service sectors.

PEO-2: Exhibit skills to work effectively and ethically in multiple domains of engineering as part of a team

In the present context most of the disciplines are integrated because of technological advancement. The graduates are expected to work as a team member in multiple domains of engineering to succeed in their profession.

PEO-3: Excel in higher studies, research and adapt in a world of constantly developing technology

Present technology has a high degree of automation which requires qualified and innovative professionals for technological developments. Graduates are required to upgrade their knowledge by continuous learning to meet the challenges of changing technology.

PROGRAM OUTCOMES(PO's)

PO-1- Apply knowledge of mathematics and science in solving mechanical engineering problems.

PO-2 - Identify, formulate and solve mechanical engineering problems.

PO-3: Design and conduct experiments to get solutions for mechanical engineering problems.

PO-4: Analyze data and interpret the experimental data for complex mechanical engineering problems.

PO-5: Use the techniques, skills and modern engineering tools necessary for engineering practice.

PO-6: Understand the impact of engineering solutions in environmental and societal circumstances.

PO-7: Understand the legal and cultural aspects relevant to mechanical engineers.

PO-8: Understand professional and ethical responsibilities for engineering practice

PO-9: Work independently and also to work in a team

PO-10: Communicate effectively with superiors and subordinates.

PO-11: Apply the management and engineering principles to work effectively and to reduce cost.

PO-12: Change according to latest technical developments.

As a part of course curriculum for I year B.E students during the academic year 2018-19, A three week long induction programme was conducted to make the students feel comfortable in their new environment, open them up, set a healthy daily routine and create bonding in the batch as well as between faculty and students.

The Induction programme was inaugurated by the distinguished chief guest Dr. S.K.Shivakumara, Trustee, BMSET, Former Director, ISRO Satellite Centre and Padmashree Awardee and other guests of honour - Dr.B S Ragini Narayan, Donor Trustee, Member Secretary and Chairperson, BMSET, Sri. M. Madan Gopal, IAS(Retd.), Trustee, BMSET, Former Additional Chief Secretary, GOK, Sri Ravi Gururaj, Founder and CEO, Quik pod and Sri Jaisim K. Rao, Founder, Fountain head Bengaluru. The inaugural function was presided by Dr. P. DayanandaPai, Trustee, BMSET and Chairman, BMSCE. The principal Dr. Mohan Babu G N welcomed all the students and parents to the programme.

On the first two days the students were educated by HoD, Dr. H.K.Govindaraju and other professors about the VTU , BMSIT &M and department rules and regulations, placement activities, overview of the programme and various club activities like SAE, Aero club, FPSI, IET and Robotics club. The students were grouped into three mentor- mentee batches and were mentored by their respective mentors ie. O.Gurumurthy, T.G.Sriganesh and Y. J.Jagadeesha, Assistant professors of the department. The mentors also took the students for lab visits.

The day wise activities conducted are as follows

Daily Reports

Day: 1

Date: 13-08-2018

Planned Schedule of the Day:

Time	Activity
2.00pm to 3.30pm	Presentation on rules and regulations of VTU by Dr.A.V.Suresh
3.30 pm to 4.30 pm	Departmental placement presentation by K.Chandrasekara Reddy

Activity Name: Department placement Presentation

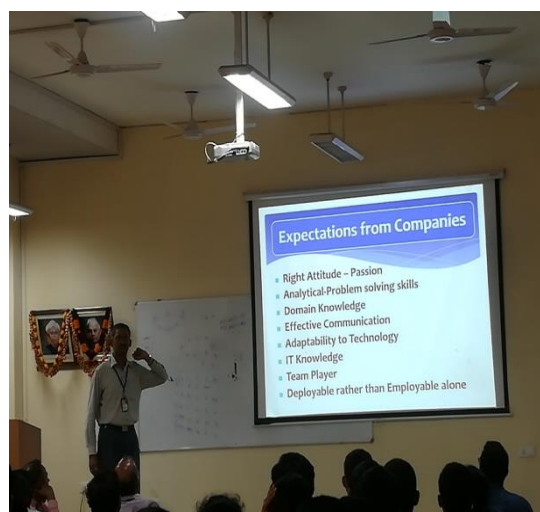
Resource Person with affiliation: Mr.K.ChandraSekhara Reddy,Assistant Professor

BMSIT&M,Bengaluru-64

Number of Students attended: 36 , Time: 2.40 to 3.20 PM, Venue: MCA seminar Hall, 2nd floor , BSN block

Highlights of the activity:

- Dr. A. V.Suresh Professor has given presentation on VTU rules and regulations
- Mr.K.Chandrasekara Reddy, Assistant Professor and Placement co ordinator briefed about departmental placement cell and its activities
- At the end of the day, students were aware about the department, faculty members, VTU rules and regulations, departmental placement cell and its activities in BMSIT&M



Day: 2

Date: 14.8.2018

Planned Schedule of the Day:

Time	Activity
10.20am-11 am	Presentation on Department rules and regulations by HOD
11am-11.20 am	Overview of the program by HOD
11.20am-12.20pm	Information about various clubs like SAE, FPSI, Aero club, IET club& Robotics club
1:30 pm – 4:30 pm	Mentor-mentee groups - Introduction within group. allotted mentors well in advance with approximately 20 mentees equally, late admission students to be distributed among all the mentors Lab visit & college tours by mentors for their mentees Respective mentors From Roll 1 to Roll no 20 –Mr.O.Gurumurthy, From Roll 21 to Roll No- 40 – Mr.Sriganesh.T.G ,From Roll 41 to 60 – Dr.Y.J.Jagadeesh

Activity Name: Introduction to the Department and various clubs , Mentor Mentee groups and Visit to all the labs in the department

Resource Person/s with affiliation: HOD, Dept of ME, Co-ordinators of various clubs like SAE, FPSI, Aero club , IET Club and Robo Club

Number of Students attended: 49

Time: 10.20 am to 4:30 pm

Venue: CR202 and Departmental labs

Highlights of the activity:

- Department Vision & mission, PO and PSO 's of the department were discussed
- Awareness to various club activities given to the students
- Mentor-mentee groups - Introduction within group.
- All the students along with their Mentors visited all the departmental laboratories
- At the end of the day, Students were aware about department Vision, mission, PO and PSO's , various club activities and all the labs



Presentation on college club activities : Day-2



Presentation on college club activities: Day-2

Day: 3

Date: 16.8.2018

Planned Schedule of the Day:

Time	Activity
9:30 – 11 am	A Talk on self motivation by AnuradhaParakkat
11.30 am - 12.50 pm	A talk on Universal Human Values by Suma Podduval, HR, Cargill
2 pm - 4 pm	Performing arts(Songs, dance & mimicry)

Activity Name: Talk on Self motivation, Universal human values (MS)_Performing Arts(AS)

Resource Person with affiliation: Anuradha Parakkat, Manager,NGO, Sriramanahalli,Yelahanka

Suma Podduval, HR, Cargill

Number of Students attended: 59, Time: 9:30 - 4 pm

Venue: MCA Seminar Hall (Morning Session) CAED & GIS Lab Civil Lab (Afternoon Session)

Highlights of the activities:

- A Talk on self motivation by Anuradha Parakkat, who is managing a NGO at Sriramanahalli, Yelahanka and an Ex-Director of student affairs, SRM University. She spoke on self esteem, responsibility and behavioural changes in youth.

- A talk on Universal Human Values by Suma Podduval, HR, Cargill, She spoke on individual perceptions, ethics and leadership



A talk on Universal human values



Dr.H.K.Govindaraju, HoD, ME with speaker



Day: 5

Date:18.8.2018

Planned Schedule of the Day:

Time	Activity
9.30 am – 11 am	Career Guidance, Alumni interaction
11.30 am – 12.45 pm	Literacy activity – Essay writing

Activity Name: Alumni interaction, Literacy activity - Essay writing

Resource Person with affiliation: 1. SiddharthKashyap, Alumni, Mechanical EnggDept

2. Mr.Naveenkumar , Alumni, Mechanical Engg

Number of Students attended: 42

Time:9:30 - 2.45 pm

Venue:MCA Seminar Hall and CR-202 (Main Academic block)

Highlights of the activities:

- Mr. Siddharth Kashyap and Mr.Naveenkumar, AlumnisMechanical Engineering interacted with the students
- 42 students were participated in the literary activity conducted in the Dept of ME from 11:30 to 12.45 pm on 18th August,students were briefed about the significance of creative writing and asked to write an essay on any of the 4 topics-
 - (1)Technology and its impact on employment
 - (2) Social media and its impact on the youth.
 - (3) Internet and cyber security
 - (4) Importance of higher education.



ME Alumni interacting with First year students

Day: 6

Date: 20/08/2018

Planned Schedule of the Day: Creative Arts and Proficiency Session

Time	Activity
9:30 AM – 11 AM	Creative Arts
11:30 AM – 1 PM	Creative Arts
2:00 PM to 3:00 PM	Proficiency Session by Mr.Vijay Kumar-MathsDept
3:00 PM to 4:00 PM	Proficiency Session by DrThippeswamy- CSE Dept

Activity Name: Creative Arts, Proficiency Session

Resource Person with affiliation: 1. NithyaPoornima - ME dept ,2. DrTippeswamy (CSE Dept, 3. Vijaykumar – Maths Dept ,Number of Students attended: 47

Time: 2:00 PM to 4:00 PM

Venue: **CR 201 Academic Block**

Highlights of the activity:

- In the creative Arts session, students learnt some creative ideas like bottle painting
- A brief introduction about engineering mathematics and computer science along with applications.

- Application of mathematics and computer science in various fields of engineering.
- Importance of logical reasoning with few puzzles.
- Machine learning.



Students are in proficiency session

Day: 7

Date: 21/08/2018

Planned Schedule of the Day:

Time	Activity
9:30 AM – 1 PM	Universal human values - ISKON Centralised
2:00 PM to 4:00 PM	Universal human values

Activity Name: Universal human values from ISKON

Resource Person with affiliation: 1. Resource person from ISKON

2. Chethana Srinivasan

Number of Students attended: 56 (MS) and 40(AS), Time: 9:30 AM to 4:00 PM

Venue: Seminar Hall III (Academic block) and CR- 201 Academic Block

Highlights of the activity:

- Resource person from ISKON has given a talk on Student related issues
- He has focused on concentration, goals and meditation.

- Resource person conducted many activities related to set up the goals and how to achieve the goals
- Students participated in the session where Counsellor ChethanaSrinivasan spoke on values and healthy use of technology.
- She spoke on addiction to mobiles and internet and students actively responded to all her concerns.



Students of I year in human resource values



Chetana Srinivasan – Resource person



Participants interacting with resource person



Proficiency Session by Vijay Kumar



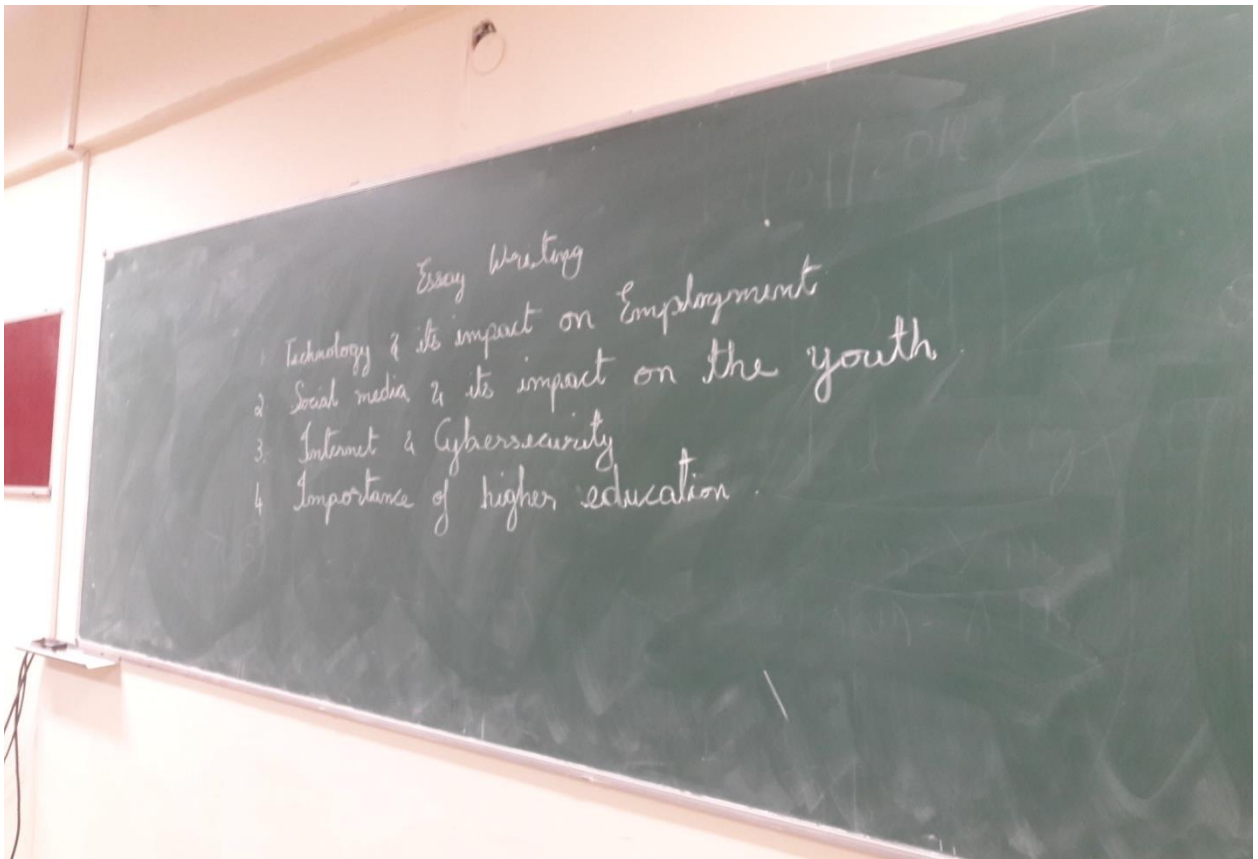
Proficiency Session by Dr.Thippeswamy



ME Alumni interacting with First year students



Mr.SiddharthKashyap, ME Alumni interacting with First year students



Essay topics



Students are writing Essay

Day: 8

Date: 23/08/2018

Planned Schedule of the Day:

Time	Activity
9:15 AM – 3.30PM	Visit to Horaginabetta near Nandi hills

Activity Name: Visit to Horaginabetta near Nandi hills

Resource Person with affiliation: 1. Mrs. Tejaswini B.J and Dr.Shreya Banerjee(ME Dept)

Number of Students attended: 42 , Time: 9:15 AM to 3:30 PM

Highlights of the activity:

- 42 students visited to horaginabetta near Nandi hills which is 40 kms away from the college.
- The students left the campus at [9.15.am](#) along with faculty in charge/sDr. Rajesh Gopinath, CV, Ozwin and Suma Umesh from EEE &Tejaswini B J and Dr.Shreya Banerjee from ME dept.
- The ME students along with Civil students were grouped into 4 batches.
- One batch was under Dr. Rajesh Gopinath from eco club who educated the students about birds and butterflies.
- Ozwin from photography club educated the students about photography.
- Other 2 batches was taken care by Tejaswini B J, Dr.Shreya Banerjee from ME dept. and Suma Umesh from EEE dept wherein the students collected all the plastics and other waste littered in the vicinity in gunny bags.
- This visit was educational as well as a kind of nature walk.
- The students were enthralled with the nature and pollution free environment.
- The students returned to the campus by 3.30 pm



Students along with faculty members visit to Horaginabetta before leaving the college campus



Students collected all the plastics and other waste littered in the vicinity in gunny bags.



Students are in pollution free environment



Students on their way to Horaginabetta (Near Nandi hills)

Day: 09

Date: 24/8/2018

Planned Schedule of the Day:

Time	Activity
9:30 am – 11 am	Universal human values
11.30 am – 1 pm	Orientation on Project work
2 pm – 4 pm	College level Clubs like NSS,Library and their activities

Activity Name: Universal human values, Orientation on project work, College level clubs like NSS and Library etc.

Resource Person with affiliation: (1) Dr. A.V. Suresh (2) Mr.G.L.Ananthkrishna

(3) Dr.N.Suresh ME department

Number of Students attended: 33 , Time: 9.30 am to 4 pm

Venue: MCA seminar Hall, BSN Block

Highlights of the activity:

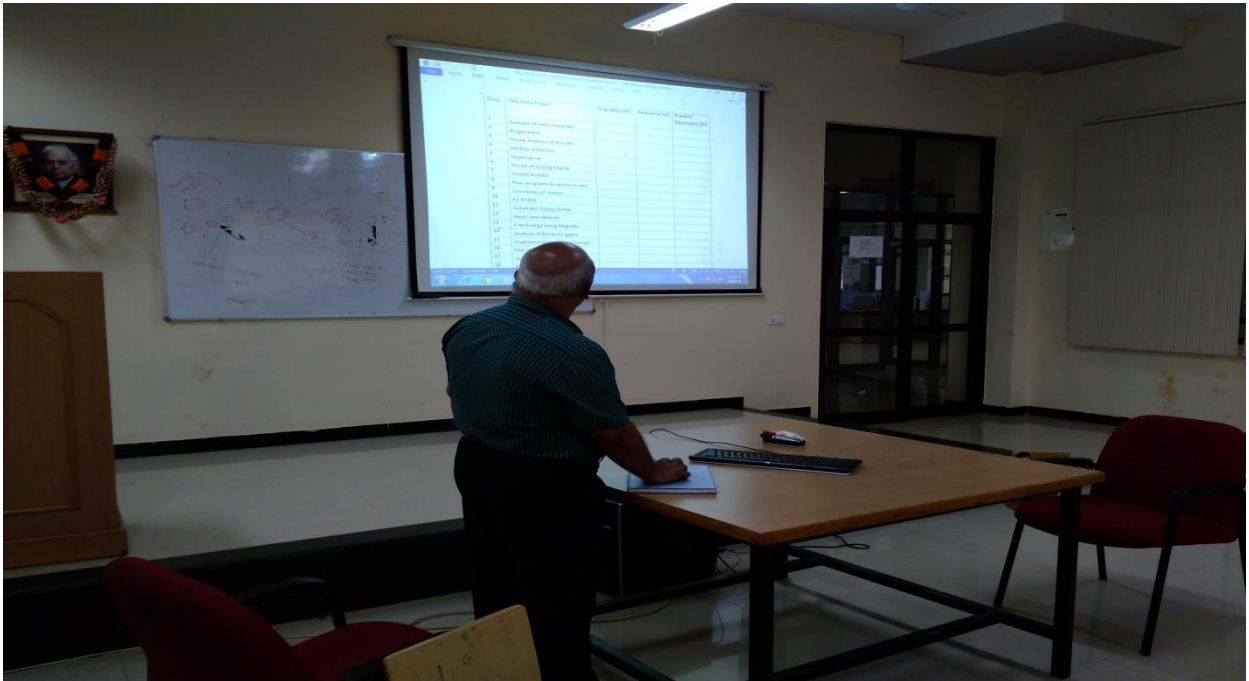
- Dr.A.V.Suresh gave a talk on Universal values, He explained about present education system and its concern
- G.L.Ananthkrishna has presented on project work
- Course outcomes of the project work highlighted
- Sensitized on the importance and procedure of project work
- Informed about the placement opportunity because of project work in industries
- Shown few videos of project work carried out by previous batches
- Sensitized on how the learning of subjects culminates into project work
- Informed about Project Based Learning and its advantages
- Dr.N.Suresh has presented on activities of NSS and its advantages



Participants during a talk on human resource values



Participants during a talk on NSS and its activities in BMSIT&M



Mr.G.L.Ananthakrishna explained about projects in the department of Mechanical Engineering

8th semester project batch & guide list. 2014 – 2018 batch.

Sl no	USN	NAME	PROJECT TITLE	GUIDE
1	1BY14ME001	A HEMANTH KUMAR	Vibration studies in magnetically levitated shaft	TNP NAL
	1BY14ME011	ARVIND UDAY M		
	1BY14ME026	M PRAMOD		
	1BY14ME040	RAHUL HEGDE		
2	1BY14ME023	K V SHESHADRI	Finite element modelling & analysis of a piezoelectric type gripper end effector	Shreya Banerjee KSCST
	1BY14ME031	N ABDULLA SAWAD		
	1BY14ME038	R. AASHISH		
	1BY14ME070	MYVIN BARBOZA		
3	1BY14ME027	RAJATH M	Design & analysis of SD110BA drum frame structure for VIF loading	Dr. K.M.Sathish Kumar VOLVO
	1BY14ME060	VARUN R		
4	1BY14ME013	B ALLAN JONES	Product design, manufacture & analysis of a shackle used in Sukhoi 30MKIV aircraft	M.C.Madhu HAL
	1BY14ME015	EASWAR SANKAR		
	1BY14ME034	P P SAFEER		
	1BY14ME074	ASHWIN NAGESH		

Various projects done by 2014-18 batch students



Day: 10

Date:25-08-2018

Planned Schedule of the Day:

Time	Activity
9:30 to 11:00	Performing Arts
11:30 to 1:00 pm	Performing Arts

Activity Name: Performing Arts

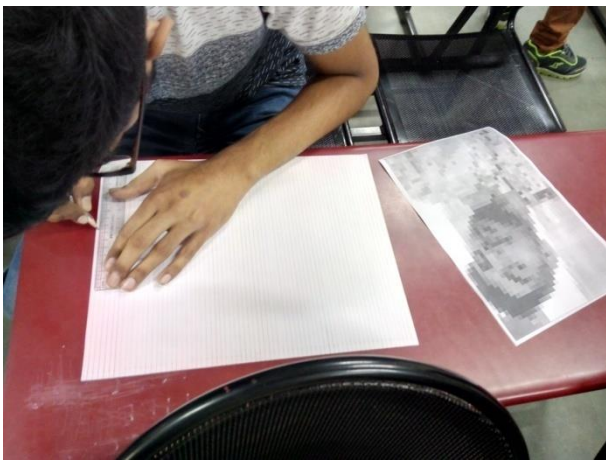
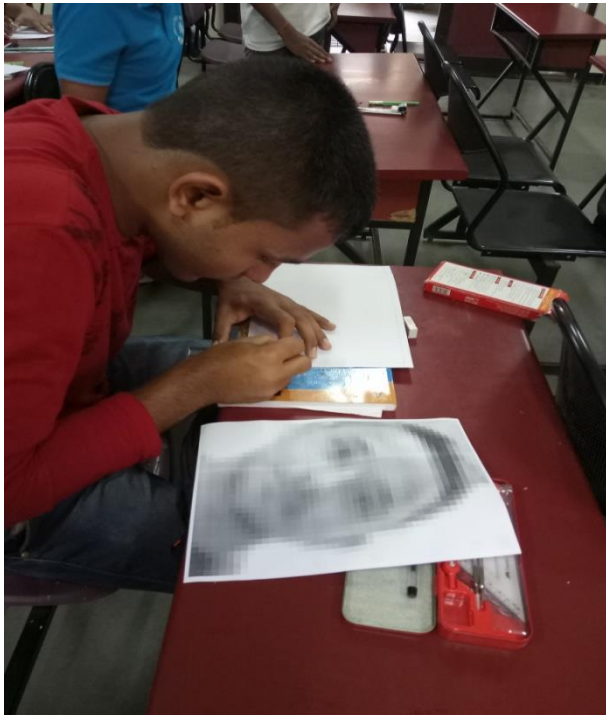
Resource Person/s with affiliation: Mr.Kiran M.D, Dept of ME, Prof. Chandan, BMS School of Architecture

Number of Students attended: 37 ,Time: 9.30 to 1.00 PM ,Venue: CR 201

Highlights of the activity:

- Resource person explained to the students about visual arts.
- Explained and demonstrated to the students about self-portraying.
- Explained how to portrait the photos by converting into pixels.
- Conducted the activity of portrait by re-arranging of pixels of images of Dr. APJ Abdul Kalam and Sri SirM. Visvesvaraya.
- Students are actively participated in the event and created the portraits.

Students of I semester performing their arts



Day: 11

Date:27-08-2018

Department: Mechanical Engineering

Planned Schedule of the Day:

Time	Activity
9:00 to 9:30 am	Ice breaking session
9:30 to 4:00 pm	Visit to local area - Sriramanahalli

Activity Name: Ice breaking session and Visit to local area

Resource Person/s with affiliation: Dr.H.K.Govindaraju, Dr.N.Suresh, Dept of ME, BMSIT

Number of Students attended: 46 , Time: 9.00 to 4.00 PM

Venue: CR 201, Sriramanahalli

Highlights of the activity:

- In ice breaking session Dr.H.K.Govindaraju, HoD Dept of ME informed about academic activities, importance of Induction program and discipline among the students etc
- In local area visit, 46 students of I year Mechanical were taken to People's Trust, Sriramanahalli, Near Rajanakunte
- They were explained various ways in which they can help the under privileged children of the school
- Set up simple Science experiments in the school
- Teach Science and Maths to weak students
- Volunteer to work during events organized by the trust



Dr.H.K.Govindaraju addressing I year students during Ice breaking session



Students of I year visited to people's Trust Rural Development Project, Sriramanahalli



Students are playing in People's Trust, Sriramanalli

Day: 12

Date: 28-08-2018

Planned Schedule of the Day:

Time	Activity
9:30 to 1:00 pm	Creative Arts - To make name plate and pen stand
2:00 to 4:00 pm	Sports

Activity Name: Creative arts, Sports

Resource Person/s with affiliation: Mrs.Babitha and Sandhya -Pidilite,

Mrs.NithyaPoornima – BMSIT&M (Creative arts)

Mallikarjungowda Patil , Yeshavanthakumar and Murali

Number of Students attended: 47 (9.30 to 1 pm) and 36 (2 pm – 4 pm) , Time: 9.30 to 4.00 PM
Venue: CR 201, Sports department

Highlights of the activity:

- In creative arts, Resource persons from the pidilite explained how to make name plate and pen stand

- Students actively participated in the event and have created pen stand and Name plates
- In sports, Resource persons explained to the students about the fitness and its importance.
- Explained and demonstrated to the students about regular exercises.
- Students played indoor and outdoor games



Students are performing their arts



Students are performing their arts



Students with resource persons of creative arts



Resource person from the sports departs explaining the importance of sports

Day: 13

Date: 29-08-2018

Planned Schedule of the Day:

Time	Activity
9:30 to 1:00 pm	Creative Arts
2:00 to 4:00 pm	Proficiency session

Activity Name: Creative arts, Proficiency session

Resource Person/s with affiliation: SandhyaPai -Pidilite,

T.N.Praveenkumar – BMSIT&M

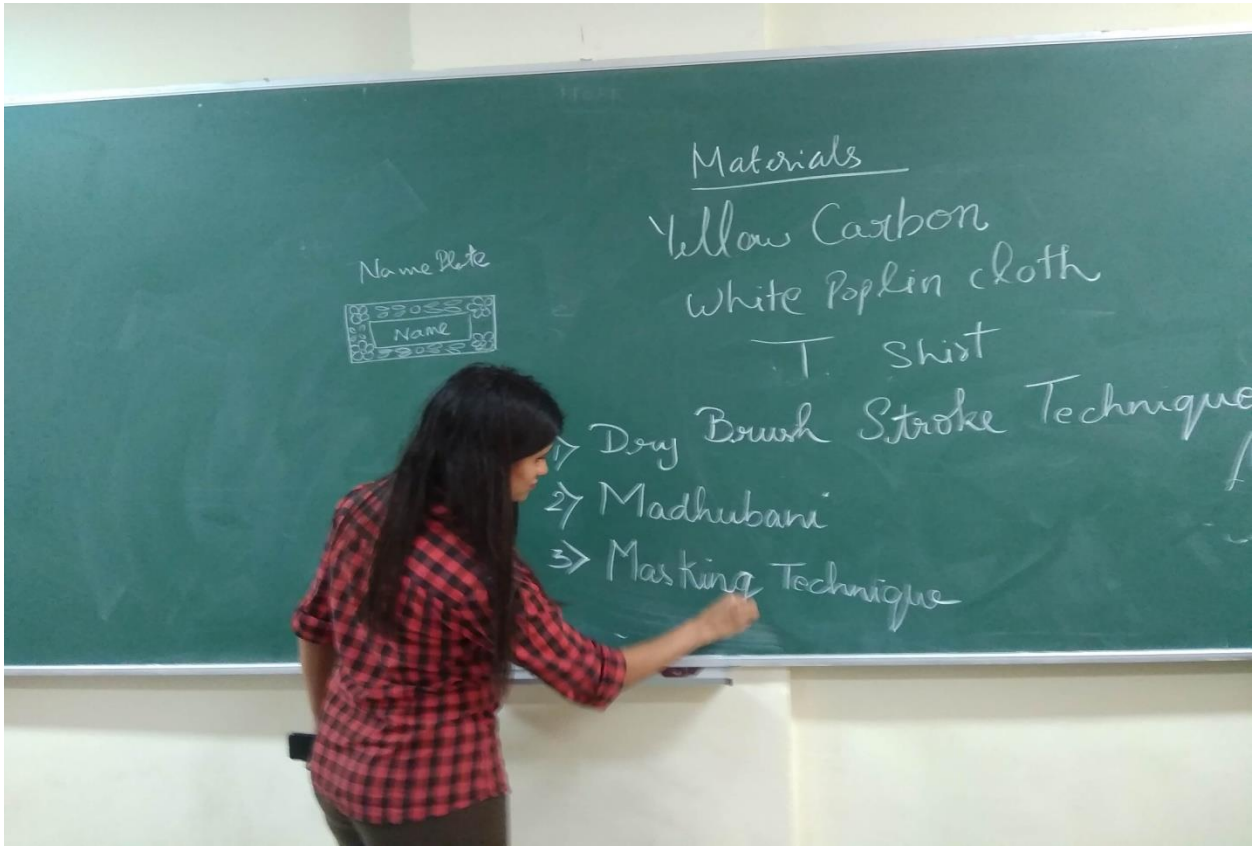
Number of Students attended: 50

Time: 9.30 to 4.00 PM

Venue: CR 201

Highlights of the activity:

- In creative arts, Resource persons from the pidilite explained the materials required for the creative arts
- She demonstrated dry brush stroke technique method – a kind of creative arts without using water
- Resource person also taught different creative art techniques like Madhbani and Marking techniques.
- Students participated in the session and have created their arts with enthusiasm
- In proficiency session, Resource person explained to the students about prospects and careers in Mechanical Engineering department



Resource person from the pidilite demonstrating different creative art techniques



Students performing their arts

Day: 14

Date: 30.8.2018

Planned Schedule of the Day:

Time	Activity
9:30 – 1:00 pm	Universal Human Values – Gandhi movie
2:pm to 4:00 pm	Literacy activity - Instant talk on selected topic

Activity Name: Universal Human Values, Literacy activity

Resource Person with affiliation: Dr. Shreya Banerjee, Mrs.B.J.Tejaswini – ME department

Number of Students attended: 51 (9:30 to 1:00 pm) and 35 (2:00 pm to 3:45 pm)

Time: 9:30 am to 3:45 pm

Venue: MCA Seminar Hall, BSN Block

Highlights of the activity:

- ‘Gandhi’ movie was shown to the students
- The students were asked to give 1 page write-up on what human values they learnt from the movie in terms of human values
- Interaction session with the students
- An impromptu activity was conducted to 1st year ME as part of literary activity on 30th august from 2.00 to 3:45 pm.
- Students were asked to pick the topics and talk instantly on the selected topic. Each student was asked to speak for 2 mins. Around 18 topics were given like Indian in Asian Games 2018, cyber bullying, women in politics, punishment in schools, organic food, blue whale game, momo game, death penalty, rights of animals, games and TV, Mechanical Engineering, value education etc. 35 students participated in this activity.
- This activity helped in showcasing their knowledge, confidence and communicational skills.



Students are watching 'GANDHI' movie as a part of human resource values



Students were participated in Literacy activity



Students participated in instant talk on selected topic as a part of literacy activity

Day: 15

Date: 31.8.2018

Planned Schedule of the Day:

Time	Activity
9:30 – 4:00 pm	Student activities

Activity Name: Student activities

Resource Person with affiliation: Mr.Sriganesh.T.G and Mr.Sundaresh.S (ME department)

Number of Students attended: 35 ,Time: 9:30 am to 4:00 pm,Venue: Fluid Mechanics lab

Highlights of the activity:

- First year students shared about their strengths and weakness with their classmates.
- One of the first year student performed guitar for their classmates.
- Quiz program conducted by III Semester students to I Semester students
- Students performed beat boxing
- At the end of the session,Dr.H.K.Govindaraju, HOD, Mechanical Engg distributed the prizes to the winners in essay writing, arts and other activities
- First year students shared about their strengths and weakness with their classmates.



One of the first year student guitar performances for their classmates.



Quiz program conducted by 3rdsem students to first year students.



Aerodynamics completion conducted by 3rd sem students.



Beat boxing by 3rdsem students.



Prize distribution by Dr.H.K.Govindaraju, HOD, Mechanical Engg to winners in essay writing, arts and other activities

Day: 16

Date: 01.09.2018

Planned Schedule of the Day:

Time	Activity
9:30 – 12:45 pm	Valedictory function

Activity Name: Student activities

Resource Person with affiliation: Mr.Sriganesh.T.G and Mr.Sundaresh.S (ME department)

Number of Students attended: 35 , Time: 9:30 am to 12:45 pm

Venue: Amphitheatre

Highlights of the activity:

- Students of all the departments gathered in Amphitheatre for valedictory function
- Exchanged their thoughts, what they had learnt so far during induction program
- Students performed various cultural activities during the function
- 3 weeks induction program concluded with grand success



Induction program report delivery by Rishi Dineshwar first year student.



Dialogue delivery performance by Abhishek H first year student



Singing performance by Charisma first year student

All the sessions were well received by the students and they were fully engaged throughout the day for the entire duration of the programme.
