

**DEPARTMENT OF ELECTRONICS & INSTRUMENTATION ENGINEERING  
KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE: WARANGAL - 15**

# **EIE ASSOCIATION ACTIVITIES 2018 - 2019**

# Students Activities during 2018-2019

Engineering education and practice is major driver of transformation, development, national growth and technological advancement across the globe. Reflections and rethinking were done on current educational research and teaching for engineers. Methodology adopted includes survey on level of impacts of virtual learning, knowledge acquisition, educational activities, technical and engineering practice during this pandemic.

Some challenges were identified for proper focus, rethink and reflection. It has been concluded that there is need for adequate transformation, empowerment of educational system for achievement of sustainable development goals and smooth running of education in all institutions. Parents, teachers and all stakeholders need to key into the latest technology.

The impact of this disruption is very variable and depends, first, on their ability to stay active in their academic activities. This period of disruption in education has given us a chance to bring more autonomy and self-learning, better assessments and outcomes, and more technology to the classroom. Technology-based strategies are being adopted by teachers and academic institutions to supply education and to conduct technical events as a part of association.

## **ELECTRONICS AND INSTRUMENTATION ENGINEERING ASSOCIATION (EIEA)**

### **Vision**

To provide quality education in Electronics & Instrumentation Engineering by nurturing the students with strong technical, analytical, practical skills and ethics to make them engineering professionals who cater to the societal needs with a high degree of integrity and social concern.

### **Mission**

1. To provide progressive and quality educational environment with the help of dedicated faculty and staff by fully utilizing the information technology aiming at continuous teaching and learning process.
2. To produce engineering graduates fit for employability with a competence to design, develop, invent and solve instrumentation engineering problems.
3. To make the students ethically strong by inculcating sense of brotherhood.
4. To make the students research oriented by providing latest technical knowledge and thus cater to the changing needs of industry and commerce



DEPARTMENT OF ELECTRONICS & INSTRUMENTATION ENGINEERING  
KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE: WARANGAL - 15

No: /EIE/KITS/2018

Date: 31.08.2018

The list of programs and activities to be conducted in the "Electronics & Instrumentation Engineering Students Association" for the academic year 2018-2019.

	<u>Date</u>	<u>Activities</u>
<b>I-Semester</b>	09.08.2018	Introduction to EIEA Committee Formation
	16.08.2018	Guest Lecture on Career through GATE/PSU & IES
	23.08.2018	Express to Impress
	06.09.2018	Technical Events planning for Sumshodini '18
	20.09.2018	Sumshodini'18 Events Plan
	27.09.2018	Preparation for Sumshodini'18
	11.10.2018	Importance of Instrumentation[PPT]
	25.10.2018	Debate and JAM
	28.09.2018	Talk On Inspirational Personalities

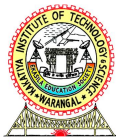
I/c E&IE Association

K.Shailaja

K.Raju

**Head, Dept. of EIE**

**Dr K.Sivani**



DEPARTMENT OF ELECTRONICS & INSTRUMENTATION ENGINEERING  
KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE:: WARANGAL - 15

No: /EIE/KITS/2019

Date: 19.12.2018

The list of programs and activities to be conducted in the “Electronics & Instrumentation Engineering Students Association” for the academic year 2018-2019.

	<u>Date</u>	<u>Activities</u>
<b>II-Semester</b>	20.12.2018	Express to Impress
	27.12.2018	Guest Lecture on GRE-Scholarship Test- Deliverables
	03.01.2019	Brain Storming
	10.01.2019	A Brief study on Industries [Slide show]
	24.01.2019	GATE Preparation Tips
	31.01.2019	Debate and JAM
	07.02.2019	Guest Lecture on Higher Education
	21.02.2019	Technical Puzzles
	28.02.2019	PPT on latest Technologies
	14.03.2019	Role of Instrumentation Engineers in Industries
	21.03.2019	Alumni Talk
	28.03.2019	PPT on Bio-Medical Technologies
	04.04.2019	Talk on Inspirational Personalities

I/c E&IE Association

K.Shailaja  
K.Raju

**Head, Dept. of EIE**

**Dr K.Sivani**



**DEPARTMENT OF ELECTRONICS & INSTRUMENTATION ENGINEERING  
KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE:: WARANGAL - 15  
(An Autonomous Institute under Kakatiya university, Warangal)**

All the Electronics and instrumentation Engineering students are hereby informed that the executive council body of EIEA is constituted for the academic year 2018-19. The following are the office bearers nominated for various positions of EIEA.

S.No	Position	Section	Name of the Student	Roll No
1.	President	4EI	P.Rajesh	B15EI053
2.	Vice President	4EI	Ch.Swanthana Srivatsava	B15EI051
3.	General Secretary	4EI	M.Anvesh Reddy	B15EI022
		4EI	P.Sravanthi	B15EI039
4.	Joint Secretary	3EI	Ch.Sai Nikhil Reddy	B16EI013
		3EI	B.Thejaswini	B16EI035
5.	Treasurer	4EI	Syed Aamir	B15EI001
6.	Public Relations Manager	3EI	M.Naga Sai Sree	B16EI054
		2EI	P.Sai charan	B17EI010
7.	Executive Members	4EI	T.Lakshmi Durga	B15EI041
		4EI	M.Sri Chandana	B15EI008
		4EI	D.Sai Madhu Shailendra	B15EI006
		3EI	P.Meghana	B16EI052
		3EI	N.Sai Sindhu Reddy	B16EI018
		3EI	M.Sravya	B17EI066L
		2EI	M.Vishnu	B17EI001
		2EI	A.Jeevana	B17EI004
		2EI	Ch.Naga shivapriya	B17EI008

Faculty In-charges (EIEA)

1. K.Shailaja
2. G.Raju

Head of Department EIE

Dr K.Sivani

Association Hour:

09.08.2018	Introduction to EIEA Committee Formation
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All the students of **Electronics and Instrumentation Engineering** are here by informed that the Executive Council body of Electronics and Instrumentation Engineering Association (EIEA) is constituted for academic year 2018-19. The following are the office bearers selected for various positions of Electronics and Instrumentation Engineering Association & Electronics Communication and Instrumentation Engineering Association.

On this Association hour the executive council body of EIEA is constituted for the academic year 2018-19 in order to conduct the various events in the association hours. The council body was declared by the Head of department Dr K.Sivani Mam.

S.No	Position	Section	Name of the Student	Roll No
1.	President	4EI	P.Rajesh	B15EI053
2.	Vice President	4EI	Ch.Swanthana Srivatsava	B15EI051
3.	General Secretary	4EI	M.Anvesh Reddy	B15EI022
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4.	Joint Secretary	3EI	Ch.Sai Nikhil Reddy	B16EI013
		3EI	B.Thejaswini	B16EI035
5.	Treasurer	4EI	Syed Aamir	B15EI001
6.	Public Relations Manager	3EI	M.Naga Sai Sree	B16EI054
		2EI	P.Sai charan	B17EI010
7.	Executive Members	4EI	T.Lakshmi Durga	B15EI041
		4EI	M. Sri Chandana	B15EI008
		4EI	D.Sai Madhu Shailendra	B15EI006
		3EI	P.Meghana	B16EI052
		3EI	N. Sai Sindhu Reddy	B16EI018

		3EI	M.Sravya	B17EI066L
		2EI	M. Vishnu	B17EI001
		2EI	A. Jeevana	B17EI004
		2EI	Ch. Naga shivapriya	B17EI008

The students took their responsibilities.as elected and appointed in the executive body. All congratulated with best wishes and greetings.

Association Hour:

<u>Date</u>	<u>Activities</u>
20.12.2018	Express to Impress



The EXPRESS TO IMPRESS event was all able to let the people come out of their stage fear and impress the audience with their communication skills.

Dr.K.Sivani Mam, Head of the Department; Smt.M.Sreelatha madam, Dr.K.Srinivas sir, guided the students and presented the gifts for the active participants. Event was conducted by Faculty coordinators Smt.K.Shailaja and Sri.G.Raju as a part of EIE Association with committed efforts of student committee

<u>Date</u>	<u>Activities</u>
4.10.2018	Workshop: Sixth Sense Robotics

The Department of Electronics and Instrumentation Engineering was established in the year 1981, with an intake of 30 students and subsequently it increased to 60. The Department has strength of 15 faculty members, all the faculty members hold PG Degree, out of which 7 faculty members are pursuing Ph.D

The students fared well in national level competitive exams like GRE, CAT, GATE, TOFEL etc., and most of them are pursuing their higher studies in premier and prestigious institutions like IITs, NITs, IIMs and many reputed Universities abroad.

The students of the department conduct various programs in the students Association, "Electronics and Instrumentation Engineering Association" every week, which is scheduled as a part of academic program. This includes activities like Group discussions, JKC activities, Mock interviews, and many other activities which help students to excel in their soft skills and organizing capabilities.

#### **E & I in SUMSHODHINI'18:**

As part of sumshodhini'18 Dept. of E&I has organized various technical events like Paper presentations, Instantrix, NFS 2.0, Techwizard, E-Hunt, Virtual Wiring, Placement Fever and Workshop: Sixth Sense Robotics. The most highlighted event of the department is the SIXTH SENSE ROBOTICS Workshop, conducted in collaboration with IIT Hyderabad, an official zonal center for this workshop. A total number of 21 teams participated in this event. Each team comprising of five members. Best 2 Teams selected for internships. Total no. of registrations for workshop was 105.

#### **TECHNICAL EVENTS:**

1. WORKSHOP : SIXTH SENSE ROBOTICS
2. PAPER PRESENTATIONS
3. INSTANTRIX
4. NFS 2.0
5. TECH WIZARD
6. E-HUNT
7. VIRTUAL WIRING
8. PLACEMENT FEVER

#### **WORKSHOP: SIXTH SENSE ROBOTICS**

As part of SUMSHODHINI'18 the Department Of Electronics and Instrumentation Engineering had organized a workshop on sixth sense robotics. The focus of the workshop is on wearable gestural interface that enhances the physical world around us with digital information and lets us use natural hand gestures to



interact with that information. It is based on the concepts of augmented reality and has well implemented the perceptions of it. Sixth sense technology has integrated the real world objects with digital world. The fabulous 6th sense technology is a blend of many exquisite technologies. The Department Of Electronics and Instrumentation Engineering is privileged to introduce this latest technological workshop as part of sumshodhini'18.

The hands-on practical workshop taught the students about the fundamental about sixth sense technology and its fascinating applications. Learn Arduino Architecture, Arduino Programming and Image Processing technology. Using an Arduino board and other electronic components, you will develop a robot that can be controlled through digital information. The digital information is processed using the image processing technique which takes the input data from the user who can give commands using hand gestures.

## 2-Day Workshop on Sixth Sense Robotics



Sixth Sense is a wearable gestural interface that enhances the physical world around us with digital information and lets us use natural hand gestures to interact with that information. It is based on the concepts of augmented reality and has well implemented the perceptions of it. Sixth sense technology has integrated the real world objects with digital world. The fabulous 6th sense technology is a blend of many exquisite technologies. The thing which makes it magnificent is the marvellous integration of all those technologies and presents it into a single portable and economical product. It associates technologies like hand gesture recognition, image capturing, processing, and manipulation, etc. It superimposes the digital world on the real world.

This course helps you to have got a brief introduction to sixth sense technology and its fascinating applications. Learn Arduino Architecture, Arduino Programming and Image Processing technology. Using an Arduino board and other electronic components, you will develop a robot that can be controlled through digital information. The digital information is processed using the image processing technique which takes the input data from the user who can give commands using hand gestures.

### Workshop Highlights:

- In-depth learning of Sixth Sense Technology
- Practical sessions on Image Processing

- Learning real time Image Processing techniques
- Video Acquisition and Manipulation
- Understand Arduino Architecture and programming
- Develop and test an Sixth Sense Robot

Why to attend our Courses?

- The idea is that sometimes you have to take a break from the work of your work to sharpen your skills. A dull axe won't cut a tree nearly as effectively as a sharp one.
- Learn new information from the expert.
- Allow time for creativity by getting away from your daily routine and working on your domain instead of in your domain.
- Brainstorm your ideas and get immediate feedback.
- Hear the information you might know already but from a different angle from a different speaker so that you have an even better understanding of the topic
- Discover there's more to know even if you think you knew it all.
- Learn something that changes your life (in a good way) & because it's fun.

What student will learn after attaining the Course?

- Get new product or service ideas by hearing about needs in your industry.
- Receive large volumes of usable content within a compressed amount of time.
- Intensive exposure to a topic through presentations and discussions led by experts.
- Confidence and motivation for rising and participating in different events that improves the personality of a student.
- Develop a connection that might help you with future employment.

**Workshop Session Details: This is a 2-Days Workshop with 6-7 hours per session**

**Day 1:**

*Session 1*

- Introduction to embedded system and their significance in industrial system.
- Introduction to Sixth Sense Technology.
- Concepts of digital image and its type(Vector image and Raster image).
- Explaining Digital image processing.
- Introduction to microcontrollers.
- Basics of microcontroller ATmega328 its architecture and Working Principal.
- Software Installation 1) Arduino IDE 2)MATLAB.

*Session 2*

- Working with Arduino.
- Basic programming like LED blinking.
- Interfacing and programing variable resistance sensor.
- Interfacing deferent sensors.
- Starting with serial communication.
- Programming for motor its direction and interfacing with motor driver.
- Assembling 4WD Robot.

- Programming to control Robot.

## Day 2:

### Session 3

- Working with MATLAB.
- Introduction and basic programming of the MATLAB.
- Digital image processing like Image Manipulation, Pixel Value Operations.
- Working with computer vision.
- Camera Selection in MATLAB.
- Capturing Images in Real Time Processing.
- Sending data serial trough serial communication.

### Session 4

- Writing final code for the robot executing and testing.
- Controlling direction of robot using image processing.
- Controlling windows music playback using windows media player control.
- Troubleshooting.
- Task assignments to the participants.

### Kit Content:

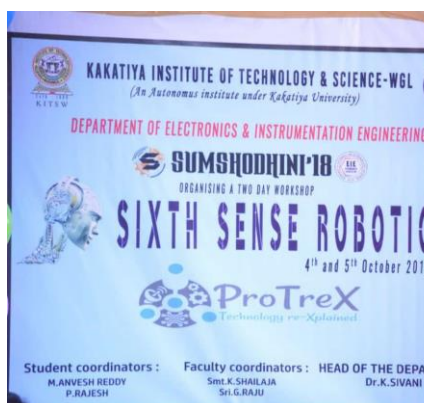
- Arduino Nano
- Robot Chassis
- Wheels
- Motors
- Motor driver
- Ultrasonic sensor
- Connecting wires
- Screw packer
- Screw driver
- USB Cable
- Caster wheel



Principal Professor K.Ashoka Reddy  
felistating resource person,  
Mukesh Chowdary



Principal Professor K.Ashoka Reddy  
felistating resource person,  
Balakrishna



**Registration Fee:**  
Rs.1000/- per head

**Venue:**  
Block-IV, Seminar Hall,  
Room No. 301B

**Student Coordinators:**  
M.Anvesh Reddy  
P.Rajesh

**Faculty Incharge:**  
K.Shailaja  
G.Raju

**Number of Participants:** 105 members (21 Teams, Each team consists of 5 Members).  
The students from different disciplines like EEE,MECH,CSE,ECE from different colleges ;like SR Engineering College, University college of engineering and technology for women ,KU college engineering and technology. The workshop completed successfully on 5<sup>th</sup> Oct by 07.30PM. The best two teams was awarded by the Head of the Dept. Dr.K.Sivani, Professor M.Sreelatha and Faculty Coordinators K.Shailaja, G.Raju.

<u>Date</u>	<u>Activities</u>
5.10.2018	Technical Events

**PAPER PRESENTATIONS**

Presentation combines both visual and verbal elements. It is the way one "exhibits" his message on paper. Many abstracts were received from various engineering colleges throughout the state. A Cash prize of was awarded to best three presentations. Received 17 Papers from various branches.



**Venue:**  
Block-I,  
MPMC Lab

**Student Coordinators:**  
T.Lakshmi Durga  
D.Navya Rao  
N.Swathi

**Faculty Incharge:**  
B.Venumaheshwar

## INSTANTRIX

"Instantrix" is a technical and non technical event which requires presence of mind, spontaneity and basic logical thinking.

### Round 1: Build the word

This round consists of 10 technical questions and the answers for that are to be written in the space provided (Boxes) Within the time limit.

### Round 2: Instant video

4 videos each of 2 minutes will be shown to the participants and 5 questions for each video will be asked based on the video and they need to answer them within the time limit.

### Round 3: Circuit building

A circuit will be shown and the participants need to connect the circuit as shown and whoever connects it and gets the output first will be the winners. On the day of the event the organizers M. Naga Saisree , CH.Sainikhil ,B.Thejaswini have organized the event and in total fifteen teams ( each containing two students) have participated in the event and winners are declared based on their scores in different rounds.

Some Pictures of the Event:



**Venue:**  
Block-I,  
Project Lab

**Student Coordinators:**  
B.Tejaswini  
M.Naga Sai Sri  
Ch.Sai Nikhil Reddy

**Faculty Incharge:**  
B.Smitha

## **NFS 2.0**

**Event: NFS 2.0(Need For Speed)**

REG Fee :Per head 50/-

Each team of 2 members

Participation certificates are provided

On OCT 6th 2018

Venue: Measurements laboratory

NFS 2.0 is both technical and non-technical event which requires "speed in response, and basic knowledge in electronics

Technical+entertaining and general quiz

Open for all branches

Participate in the event & know many things you don't know

It's about what an engineering student should know, challenge everything, let your caliber rule.

It consists of 3 rounds

1. Separation Anxiety:

We will be giving different components names &ask them to separate the components &place in the correct jar.

2.Cross Wording :

Only electronic words are to be used,who fails to say the words are given less score.

3.Grand Finale:

It consists of general quiz, technical questions.

**Organised by:**

B.Sai Prathap Reddy:

9948016719

N.Sai Sindhu Reddy:

9515050406

K.Sindhuja Reddy

**Cash prize details.**

1st Prize: 500/-.

2nd Prize: 300/-.

3rd Prize: 200/-.

**Winners details:**

1st Prize: M.Anusha,G.Naveena

2nd Prize: N.Divya,Soniya

3rd Prize: Naveena, Nikhitha



**Venue:**  
Block-I,  
Project Lab

**Student Coordinators:**  
B.Sai Prathap Reddy  
N.Sai Sindhu Reddy

**Faculty Incharge:**  
B.Krishna Sundeep

K.Sindhuja Reddy

## **TECH WIZARD**

### **Event Name: Tech wizard**

Reg.fee: Rs.50/-

It consists of 3 rounds

#### 1. Crossword of Electronics:

Here cross word puzzle, inside crossword we will have some words which it related to our technical word's

#### 2. Circuit correction:

We will give some circuit and we will ask them to correct the circuit to get right output.

Ex-1: Let's say, we want differential amplifier. But we give some voltage follower and ask them to make correction

Ex 2: we will give some circuit with wrong values of resistance, capacitor. Ask them to find right values of R and C

#### 3. Lab view:

Some circuit/ Application implementation by using Lab view.

Date of Event-06/10/18

Number of participants: 51.

Prize money 1<sup>st</sup> place: 500

2<sup>nd</sup> place: 300

3<sup>rd</sup> place : 200

### **Event winner names**

1st place-

1. Safa maher
2. Arishiya jabeen

2nd place-

1. Shaik samreen
2. V.malleshwari

3rd place-

1. P.swathi
2. M.Akanksha

### **Organisers:**

K.supriya

Nancy kumari





**Venue:**  
Block-I,  
E CAD Lab & VI Lab



**Student Coordinators:**  
K.Supriya  
Nancy Kumari



**Faculty Incharge:**  
Dr.K.Srinivas

## E-HUNT

### **Event: E-Hunt**

Reg Fee: Rs.50/-

Team: 2 Members

#### Round 1: Image Puzzle

An instrument image will be shown to us for 30 sec and we need to arrange the jumbles image pictures as shown by event organizers (time limit)

#### Round 2: The dice game

Each team will be provided with two dices and based on the number we get questions will be asked.

Note: Questions include tech + fun.

#### Round 3: Instruments hunt

A circuit will be shown and the equipments required for the circuit will be hidden based on the given clues we need to hunt the equipments and connect the circuit and those who connect the circuit first will be the ultimate winner.

**Cash-Prize:** Exciting Prize

#### **Organised by:**

P.Meghana Rao

V.Sai Priya

Ch.Rakshitha





**Venue:**  
Block-I,  
LIC Lab

**Student Coordinators:**  
P.Meghana Rao  
V.Sai Priya  
K.Rakshitha

**Faculty Incharge:**  
O.Anjaneyulu

## VIRTUAL WIRING

### **Event: Virtual wiring**

Technical event involving logical thinking in analyzing a problem and speed in implementation.

It consists of 2 rounds:

Round 1: Based on knowledge of subject told by us, you have to implement the logic given (There is no elimination. This is just for hands on with labVIEW software)

Round 2: Asute

A question will be given and you have to build the circuit in labVIEW. The team which builds the circuit first with proper output will be declared as winners.

**Reg fee:** Rs.50/- per head

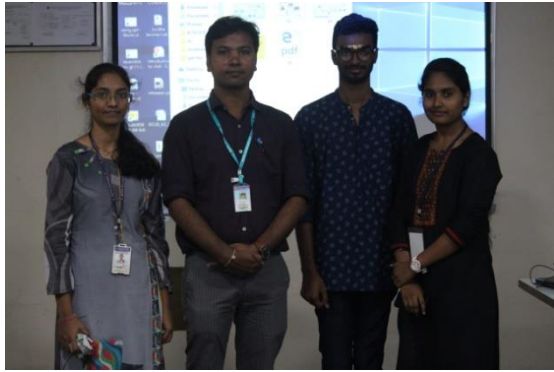
**Team:** 2 Members.

Winners will awarded exciting cash prize.

**Organisers:**

M.Revanth

V.Sai Shashank



**Venue:**  
Block-I,  
VI Lab

**Student Coordinators:**  
M.Revanth  
M.V.Sai Shashank  
V.Pavani  
P.Niharaika

**Faculty Incharge:**  
B.Jeevan

## PLACEMENT FEVER

### **Event: Placement Fever**

Round 1: will be aptitude test to test your ability to crack the “tough nuts”

Round 2: will be group discussion, where they will be divided into certain number of groups.

Round 3: will be HR round and top 10 members will emerge the “megadeth” round.  
\*TOP 3 STUDENTS WILL RECEIVE MERIT CERTIFICATES

However participation certificate is given for all students.

### **Organisers:**

K.Vishunvardhan  
V.Sai Shashank  
R.Pranay Reddy





**Venue:**  
Block-I,  
PC Lab

**Student Coordinators:**  
K.Vishnuvardhan  
V.Shashank  
R.Pranay Reddy

**Faculty Incharge:**  
B.Shashikanth

Association Hour:

Date	Activity
03.01.2019	Brain Storming



Engineering education and practice is major driver of transformation, development, national growth and technological advancement across the globe.

The impact of this disruption is very variable and depends, first, on their ability to stay active in their academic activities. This period of disruption in education has given us a chance to bring more autonomy and self-learning, better assessments and outcomes, and more technology to the classroom

With the help of the Technical Puzzle event, the students were given an opportunity to explore the technical topics more in a better way that included the surprising prizes to motivate the active participation of the students.

Association Hour:

Date	Activity
24.01.2019	Guest Lecture on GATE Preparation Tips



The guest lecture was on career guidance by Chinthala Ramesh, Dept. of Telecommunication (ITS), IES, Govt. of India. Lecture started with an inspirational speech about his journey in becoming an IES officer, which motivated the students that, key to success depends only on hard work and the zeal to reach the goal. The key points in his lecture include what is GATE, why GATE, gate eligibility and exam pattern and finally the preparation plan.

#### What is GATE:

The Graduate Aptitude Test in Engineering (GATE) is an All-India examination administered and conducted in eight zones across the country by the gate committee comprising of faculty members from IISc Bangalore and other seven IIT's on behalf of national coordinating board, Dept of education, Ministry of Human resources development.

#### Why GATE:

GATE is considered to be the standard examination conducted not only for post graduate admissions (M.E, M.Tech., Direct Ph.D.) but also to open gates for lucrative opportunities in several public sector enterprises and research organizations. Based on the score achieved in GATE, admissions are offered in IIT's, IISc, NIT's etc and abundant opportunities for campus placements with attractive salary packages. Candidates on qualifying GATE, get a financial assistance of 8000 per month.

#### GATE eligibility and exam pattern:

Bachelor's degree holder in engineering/Technology and those who are in final year of such program are eligible for GATE exam. It is an on-line examination of 3 hrs,

conducted during the month of February .It consists of 65 multiple choice questions (out of which 35 questions are '2' marks and 30 questions are '1' mark).Hence the total exam is for 100 marks. There will be negative marking for each wrong answer, therefore students must be careful while answering. Virtual calculator is provided for mathematical calculations.

He educated the students that preparation plan plays a crucial role in reaching the target. Hence students must carefully frame their preparation. Students must go through the complete syllabus before starting preparation, then select an appropriate and concise study material. He instructed the students to mainly target on '6' important subjects. Prepare a timetable for each subject, understand the concepts clearly, write a short note, practice related questions and revise them regularly. Finally, upon completion of all subjects, solve the previous gate question papers, practice mock tests to improve the performance.

At the end of the guest lecture, most of the students were enlightened and realized the importance of GATE exam. Students were boosted up to build career with a sharpened target.

Under the Guidance of Dr.K.Sivani, Mam Head of the Department. Event was conducted by Faculty coordinators Smt.K.Shailaja and Sri.G.Raju as a part of EIE Association with committed efforts of student council.