

SL NO	EVENT NAME	REG FEES	1ST PRIZE	2ND PLACE	COORDINATOR	CONTACT NO
1) ARCHITECTURE						
1	Future Cities and Technology	50/Head	4000	Nil	Hamsa	8861115159
2	Product Design	100/Group of 2	1000	700	Yashas N R	9008576055
3	Picture This!	100/Head	1000	700	Chamundeshwari	9886181603
4	Panel Discussion (BMS)	Nil	Nil	Nil	Rachana H	9740146274
5	JIG Saw	100/Group of 4	1500	1000	Chaitra U	9482860233
6	Automation- IOT & Architecture (BMS)	Nil	Nil	Nil	Vaishnavi S	9019362228
2) ASTRONOMY CLUB						
1	Astrophotography workshop	50/person	Nil	Nil	Akshatha	9945489210
2	TARDIS	50/person	1000	500	Ankith R	9731160844
3) BIOTECHNOLOGY (BT)						
1	ALLELES- a Biohunt!	100/person	1500	750	Priyank K	9035895423
2	Bio entertainment quiz	100/Team of 2	2000	1000	Devayani J	9535110569
3	Courtroom Genetics	100/Team of 2	1400	750	Hamsanandini	8861634539
4	Molecular Simulations using GROMACS (W)	100/Head	Nil	Nil	Avinash K	9741500191
5	Rise of Mutants	150/Team of 3	1500	750	Nihal K	7760284612
6	START UP WARS	150/Team of max 3	1500	1000	Jonathan J	9632221994
4) CHEMICAL						
1	CHrash	100/Team of 2 or 3	1800	1000	Nikitha	9916470865
2	Scifi battle	100/Team of 2	1400	900	Priyanka S	7795240104
3	The Great mole relay race	100/Team of 4	1600	800	Rashmita	7795645763
4	Workshop on CFD (BMS)	150/person	Nil	Nil	Shubham	9482100864
5	Congrats! You're Placed.	100/person	1000	800	Tanya Gopal	8095735719
6	CheMUN (BMS)	100/person	1000	800	Avishek	9008796499
7	The Sprinting Chemist	100/team of 3	1600	800	Shireesh Gupta	8088804913
5) CIVIL						
1	Hunting with coordinates	150/Team of 3	2000	1500	Sucharitha R	8884801014
2	Mixed Bag	100/Team of 2	2000	1500	Nishal S	8792522497
3	Life saving applications of laser scanning (W)	250/person	Nil	Nil	Manoj V	9538575812
4	Retrofitting & Maintainance of Structures Using Smart IOT Devices (ISE)	150/person	Nil	Nil	Nyamgouda	7411858821
6) COMPUTER SCIENCE (CSE)						
1	Android App Development Embedded with IoT	250/person	Nil	Nil	Ranjini R	8123244404
2	IOT Code-A-Thon	100/person	1500	1000	Karthik R	9741036752
3	Current Trends & Opportunites in IoT (BMS)	100/person	Nil	Nil	Nidhi	9845505253
4	IoT & its Applications using Arduino	250/person	Nil	Nil	Sumedha	9663523435
5	IoT Ideathon(BMS)	200/team of 3 or 4	10K	3000	Govind	8971526662
6	IoT Tech Hunt	Refer to rulebook	1500	1000	Siddhartha	9454178342
7	Tech JAMBoree	100/person	1000	750	Apoorva S	7760600390
8	Techzibition	200/person	1500	1000	Sumedha	9663523435
9	Workshop on understanding Business Architecture in IoT context	100/person	Nil	Nil	Nidhi Jagadeesha	9845505253
7) ELECTRICAL & ELECTRONICS (EEE)						
1	ABB Makethon	200/Team of 4	5000	3000	Anirudh	9448496283
2	IoT with INTEL EDISON (BMS) (EIE)	100/person	Nil	Nil	Deeksha	8553928159
3	BOMB DIFFUSION 3.0 (Circuit challenge-TCE)	100/Team of 2	1500	1000	Uma R	8884322997
4	IOT IN APPLICATION OF RENEWABLES WORKSHOP	100/person	Nil	Nil	Kavya R	9686302812
5	MACHINE LEARNING (BMS)	100/person	Nil	Nil	Sachin K	9060630130
8) Electronics & Communication(ECE)						
1	Electro Blitz (BMS)	150/Team of 3	3000	1500	Nikitha N	9008858220
2	Workshop on Wirless Sensor Networks	200/Team of 3	Nil	Nil	Bharath R	8792458460
3	Workshop on IOT by Mediatek (BMS)	200/Team of 3	Nil	Nil	Jayprakash	9632024724
4	Escape If You Can	150/ team of 3	3000	1500	Anjana	9035070780
5	Fury Road v2.0	150/team of 4	4000	2000	Heethesh	9611122852
6	Mega Mind	150/Team of 3	3000	1500	Srinivas S	8884171828
7	Online Questionnaire (IEEE)	50/person	1000	500	Rishab	7760534154
8	Short Movie Making	150/Team of 4-6	3000	1500	Faraz Khan	8050332624
9) IEEE						
1	Abstract It!	100/person	1000	750	Vidhya T	9663740919
2	LaTeX Workshop	200/person	Nil	Nil	Srinivas S	8884171828
3	Paper Presentation	IEEE members-300/ Non-IEEE members-400 Teams of 1-4	3500	2500	Tarun Varma	7406323829
10) INDUSTRIAL ENGINEERING & MANAGEMENT (IEM)						
1	Ad-Apt	100/Team of 3-4	1500	1000	Hansa N	8951621517
2	Ez-Rider (geared)	50/person	1500	1000	Nikhil J	7406495475
3	Ez-Rider (non geared)	50/person	1500	1000	Pratik R	7829000373
4	Materialistic	100/Team of 2-3	1500	1000	Apoorva	9740041642
5	PANIC!	150/Team of 3 or 4	2000	1000	Pranab D	9902103103
11) INFORMATION SCIENCE (ISE)						
1	IO SQL Workshop	100/person	2000	Nil	Jigar	9408849704
2	IOT Intelligence	120/Team of 2	3000	1000	T Mithun	9535262771
3	Logo Mania 3.0	50/person	3000	1000	Rayapeddi	8095372333
4	Route IT	100/Team of 2	3000	1000	Nataraj	9739646185
5	Hands-on Workshop on IoT Applications	500/Team of 5	Nil	Nil	Amarnath KV	9980770631
12) MBA						
1	Workshop on "Invest like Warren Buffet"	100/person	Nil	Nil	Madhuri S	9066642452
2	High Growth Job Roles for Engineers	100/person	Nil	Nil	Aishwarya G	7259389543
3	InQUIZitive	100/Team of 2	3000	2000	Sannidhi	7406678375
4	Business Plan Competition	100/Team of 2	2000	1000	Pawan A	9738644173
5	Ad making	100/Team of 2	2000	1000	Ranjith	9902264822
6	Block and tackle	50/person	2000	1000	Prannay	9886099624
13) MCA						
1	Ideas Galore	100/Team of 2	1500	1000	Abhishekkappa	8722661138
2	Workshop on Recent advances in IoT	50/person	Nil	Nil	Nagashree BA	8904641443
3	Code Storm	150/Team of 2	2000	1000	Harish R	9611261166
4	Project Emblazon	100/person	1500	1000	Anil K	9739280907
14) MECHANICAL ENGINEERING						
1	Assemble Me	200/Team of 2	1500	1000	Suraj S	9916052713
2	Best Mechanic	300/Team of 4	1500	1000	Shubam	8088439668
3	Junkyard Javelin	300/Team of 2	1500	1000	Ajay S M	9480413996
4	BOT WARS	400/Team of max 4	4000	Nil	Ayush k	9620628571
5	Utility Chain	Refer rulebook	1500	1000	Anand M	7204216379
6	Workshop on Home Automation	50	Nil	Nil	Shubam	8088439668
15) MEDICAL ELECTRONICS						
1	Criminal Case 3.0 : CYBER	400/Team of 4	2000	1000	Madhusudana H J	9741335084
2	Mystery Inc.	200/Team of 2	2000	1000	Vinutha	9741058711
3	Cimeathon (BMS)	100/person	Refer rule book		Divya	9986618110
16) PENTAGRAM						
1	Confoundo 2.0	100/ Team of 2	1500	1000	Vivek	7022150431
2	Gridlock 2.0	100/Team of 2	1500	1000	Sharada	8762666076
17) QUIZ						
1	Biz-Tech Quiz	100/Team of 3	6000	3000	Rahul S	7829076699
2	General Quiz	100/Team of 4	6000	3000	Anand K	9449340844

18) TELECOMMUNICATION(TCE)								
1	Project Race (BMS)	250/Team of 4-5	Free Kits	Free Kits	Sushmitha	7406997920		
2	H.A.M (BMS)	250/Team of 2-3	Nil	Nil	Suman	9980551187		
3	Pictonnect (in collaboration with Mech)	100/Team of 2	1000	500	Sarayu M	9880106670		
4	Project J	300/Team of 3	1000	750	Rohini Raj	8553578476		
19) ELECTRONICS & INSTRUMENTATION(EIE)								
1	App Development	500/team of 3	3000	2000	Anusha K G	8892963124		
2	IOT TECHNIQUES, IMPLEMENTATION USING ARDUINO	750/Team of 3	2000	1000	Sarika J	9611591382		
3	PROJECT DISPLAY ON HOME AUTOMATION	200/Team	3000	2000	Chetna B	9880928324		
4	SENSOR TO CLOUD CONNECTIVITY (BMS)	250/Team of 4-5	Internship	Nil	Neha M	8197328283		
5	Buoyant	300/Team of 2	2000	1000	Ashwin	9743067056		

BMS COLLEGE OF ENGINEERING

Phase Shift 2016

Rule book



23rd and 24th September 2016

For more details,contact:

Amogh Kashyap - 8904655657

Arun – 8123456006

Subramanya - 9880271855

Phase Shift 2016

Phase Shift 2016

Architecture Events

1. **Panel Discussion – Contemporary Architecture** Rachana Hemanth - 9740146274
{BMS Exclusive}
4-5 architects discuss based on a given topic.
Topic: Contemporary Architecture / Sustainable Architecture
Registration Fee: Nil
Venue: Library Auditorium
Date: 23 September
2. **Picture This!** Chamundeshwari-9886181603
Day 1: A brief introduction about the theme given to the participants on the day of the event.
Day 2: The participants are desired to submit their works by 12 PM and they are evaluated on the same day
Participants must get any devices that can be used to capture images with a minimum of 8 megapixels.
Registration Fee: 100 (single participant)
Venue: Architecture studio
Date: 23 September
3. **Product Design – Tile/furnishing designing** Yesnas N Raj-9008576055
2 Participants per group will have to design a composition on a tile or design a Furniture. Materials will be provided.
Registration Fee: Rs.100
Venue: Architecture studio
Date: 24 September
4. **Jig Saw** Chaitra U -9482860233
Team event which involves two parts. First, the participants have to paint based on a given theme. Later, there will be an element of surprise. Materials to be brought by the participants. No. of participants – 4 per group
Registration Fee: Rs. 100
Venue: Architecture studio
Date: 23 September
5. **Future Cities And Technology** Hamsa - 8861115159

Phase Shift 2016

A Group event with maximum of 4 participants in a group, allowed to design their dream city. Materials will be provided.

Registration Fee: Rs. 50 per person

Venue: Architecture studio

Date: 23 September

6. **Automation- Iot And Architecture**

Vaisnavi Shetty - 9019362228

{BMS EXCLUSIVE}

Representatives from two automation company in the industry conducting the seminar based on the theme of 'Internet Of Things'

Registration Fee: NIL

Venue: MESH Hall

Date: 24 September

Astronomy Events

1. **TARDIS**

Ankit Ravi – 9731160844

Are you a capable of becoming a Time Lord and forgo all barriers and travel through space? Step into the TARDIS and experience the universe. The event will entail knowledge sharing of how IoT is used in space exploration and astronomy.

Rules: This quiz consists of three rounds . Total duration of the event is 90mins inclusive of all the three rounds. Cross College teams are allowed. No Use of Electronic Gadgets which otherwise will lead to disqualification. Teams of 2.

- Round 1- Initiation game:
Race time to solve puzzles related to the cosmos.(PS- A little grasp of TV series isn't so bad after all.)
- Round 2-Guardians of the Galaxy
To be a guardian, you need to know the Galaxy like the back of your hand. (PS-Who knew recognising faces and patterns would come so handy?)
- Round 3-Oblivion
Are you oblivious to everything happening around your world or are you really listening? Find out who is communicating to you by cracking the riddles.

Registration Fee: 50 per team

Venue: PG 6004

Date: 23 September

2. **Astrophotography Workshop**

Akshatha Gopinath - 9945489210

2-3 hour session on the basics of Astrophotography by Mr. Johann Nishat. Learn to capture star trails, deep sky objects and explore the possibilities of applying IOT in astrophotography! Get your Cameras (preferred, not compulsory).

Registration Fee: Rs. 50/-

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Venue: PG 6003

Date: 24 September

Bio-technology

1. **Courtroom Genethics**

Hamsanandini Radhakrishnan -

8861634539

Think animal testing is absolutely brutal? Or are you more inclined to believe that it's worth it if it saves human lives? Battle with your opinions on relevant cases in this classroom courtroom debate.

- Individual event.
- Participants will be paired up. Each pair will be given an existing or fictional court case regarding bioethics- where one person will be the plaintiff and the other will be the defendant. They must then advocate for the cause of the entity they're representing.
- No Knowledge Of Biology Or Law Is Required. The participants will be judged on their reasoning skills and delivery.
- The case will be given on the day of the event, and the participants will be given time to prepare.
- Further rules will be explained on the spot.

Topics for debates will include IoT.eg danger of smarter systems, RFID etc

Registration Fee: 100 per team of two

Venue: M V Hall

Date: 24 September

2. **Molecular Simulations using GROMACS (Workshop)**

Avinash Kumar 9741500191

- Gromacs is a molecular dynamics package primarily designed for simulations of proteins, lipids and nucleic acids.
- Workshop involves hands on session on molecular assemblies of liposomes.
- Workshop will follow after a free seminar on the tool. Concepts of IOT may be included in the seminar by the resource person.

Registration Fee: Rs. 100

Venue: Bio-informatics Lab

Date: 24 September

3. **ALLELES- a Biohunt!**

Priyanka K - 9035895423

Rounds include a clue to crack in each. It includes clues regarding various fields of biotechnology and life sciences. Skipping of rounds shall add a penalty to the team. Participants are required to get a smartphone.

Registration Fee: Rs. 100

Phase Shift 2016

Venue- PG Block Biotech Department

Date: 23 September

4. **Bio-Entertainment Quotient** Devayani J – 9535110569

Quiz combining pop culture and high school biology.

Round 1-preliminary round

Round 2-final round, max of 10 teams will qualify.

Registration Fee: 100 per team of 2.

Venue: M V hall

Date: 24 September

5. **Start-Up Wars** Jonathan J - 9632221994

Ideating start up enterprises in the biotech field (pharma, agri, env, etc).

Max of 3 participants per team

All teams are to report at the allotted time where further details will be given

All teams will participate in all the rounds

Winners will be judged by points earned

Teams that have integrated IoT into their start up ideas will earn bonus points

Registration Fee: 150 per team

Venue: PG Block BT Classroom 3rd floor

Date: 23 September

6. **Rise of Mutants** Nihal Kulkarni - 7760284612

There will be two rounds. All scenarios must be explained scientifically. Each team will have 2-3 minutes to present their findings. Scoring will be done based on scientific accuracy and presentation skills. Participants need to get their own devices (smartphone, laptop) with internet access. Team of 3 members.

Registration Fee : 150 per team

Venue: BT Classroom

Date: 24 September

Chemical Engineering

1. **CHrash**

Nikita S Poll - 9916470865

Phase Shift 2016

Teams of 2 or 3.

Prelims: pen and paper test. Participants have to brainstorm and come up with solution to the set of engineering disaster related videos shown.

Final round: participants will be given to solve real time case on disasters and present their solution.

For both the rounds the final decision rests in the hands of judges.

Registration Fee : 100 per team

Venue: 3001 PG block

Date: 23 September

2. Scifi Battle

Priyanka Surendra – 7795240104

- Teams of 2 have to participate
- There will be a preliminary round with elimination before the final round
- Questions pertaining to IoT will be included
- Questions can be posed in the form of logo identification and/or pictorial as well
- Googling will lead to disqualification

Registration Fee: 100 per team of 2

Venue: PG block 3001

Date: 24 September

3. CheMUN

Avishek 9008796499

{ BMSCE Exclusive }

Formal debate protocols will be followed. No cross talking, address only to the chair. If you want to speak, raise the placard of your name and we will recognize you. Duration of the event will be 3 hours with a break in between. The final decision will be by the judges discretion and cannot be challenged. The judging will be based on the quality of the content, confidence of the speaker and body language while addressing

Registration fees: 100

Venue: PG Block-3002

Date: 24 September

4. The Great Mole Relay Race

Rashmita - 7795645763

Group of 4.

1st round- 4 simple equations to be balanced.

2nd round- Enhanced stoichiometric questions including no. of moles, avogadro's number etc., for the equations given in 1st round.

3rd round- Picture quiz.

4th round- Crossword puzzle having clues for terminologies of IoT in Chemical Engineering industries.

Rules

Phase Shift 2016

- Elimination- Teams completing the fastest in every round will be given the limited no. of batons (scrolls of questions for next round), leading to successive elimination
- No mobile phones, smart watches and other electronic gadgets to be used during the race.
- Dropping of baton leads to disqualification.
- Scientific calculators without the covers can be used (brought by participants)

Registration Fee: 100

Venue: Outside Library Audi

Date: 24 September

5. **Workshop on CFD**

Shubham 9482100864

Hands on workshop to learn ANSYS from experienced industry personnel. The event will help students understand the uses of computational fluid dynamics and its applications in Internet of things.

Registration fees: 150

Venue: Chem lab

Date: 24 September

6. **Congrats, you are placed!**

Tanya Gopal 8095735719

The event depicts a mock placement process which consists of three rounds. The first round constitutes a general aptitude test: Basic yet Tricky. The second round is a Group Discussion on IOT in today's world , Current affairs and Challenges faced in the Industry. The final round is an interview / stress test conducted by an industrial person or a faculty member. The best candidate wins!

Registration fees: 100

Venue: PG CH 3002

Date: 23 September

7. **The Sprinting Chemist (Alchemy Run)**

Shireesh Gupta - 8088804913

Team will be of 3 peoples. Each team will be assigned one starting element. A set of clues corresponding to locations in the college will be given. Every location will correspond to a compound or element.

Teams will have to go to the locations and write down the combinations they can make from the elements and compounds they already have. Teams will be informed in the sheet itself which clue will be leading to which element or compound so that they can preferentially solve clues depending on the elements and compounds they already have in their inventory from the starting element or from compounds collected by solving previous clues.

Time limit of 1 hour is decided. Team making maximum compounds will win.

Registration fees: 100

Venue: PG CH-6002

Date: 23 September

Civil Engineering

1. **Mixed Bag** Nishal Sharon-8792522497
2 Rounds shall be conducted. Round 1- Case study (Topic will be given 3 days prior to the event and will be related to IoT in Civil engineering). Round 2-Quiz round (Questions related to IoT in civil engineering). Participants will be required to bring their laptops. Teams of 2.
Registration Fee : 100
Venue: PG Block 7010
Date: 23 September
2. **Workshop- Life saving applications of laser scanning** Manoj Vasudev- 9538575812
One day workshop on “Life saving applications of laser scanning” in civil engineering perspective will be taught by Ansari Precision Instruments Pvt. Ltd. In case of floods, landslides,during defense, etc. laser scanning technology plays a very important role in identifying people,strategic points in surveying or any particular object. The data monitoring of which will require Internet. Students are required to bring their laptops.
Registration Fee: 250
Venue: MV Hall
Date: 23 September
3. **Hunting with coordinates** Sucharitha R- 8884801014
Latitudes and longitudes shall be provided and participants will use GPS on their phones, reach that place and search for their next clue. Teams of 3.
Registration Fee: 150
Venue: CR 7003
Date: 24 September
4. **Workshop on Retrofitting and Maintenance of Structures Using Smart IOT Devices** Nyamgouda - 7411858821
In collaboration with Information Science Department.A workshop on maintenance of Buildings using smart devices. Gives an idea of maintenance of buildings using smart devices.
Registration Fee: 150
Venue: PG Block 6002

Phase Shift 2016

Date: 24 September

Computer Science Engineering

1. **Tech JAMboree**

Apoorva Shetty 7760600390

- Round 1: Tech Taboo - Participants will be put into groups of four and each participant will have to get their team members to guess the word written on their card sheet without using the four other clue words specified on their card. Each Participant will get one minute to get maximum word guesses. 3 Teams with maximum word guesses will qualify to the second round.
- Round 2: Jargon Jam - Now each participant will compete with the other three members in the team in an intensive round of JAM (Just A Minute). Each group of four contestants will be given a minute to talk on any debatable topic regarding current trends in technology, and each contestant must "JAM" or buzz the current speaker in case of a) Repeating ideas, b) Stating contradictory opinions as his/her own, c) Speech errors such as stammering etc. A successful JAM or buzz will result in the caller of the JAM now becoming the speaker. Points will be awarded based on the time each contestant spoke for, and the number of accurate JAMS. 4 top scoring participants will move on to the final round.
- Round 3: System Crash: All the participants will be given a common problem scenario and a unique collection of devices that he/she has at his/her disposal. They must come up with a solution using Internet of Things using the devices given to them, and pitch their ideas to the judges, explaining why their idea would be the best idea to prevent a "System Crash"

Registration Fee : 100

Venue: PG CS 5003

Date: 23 September

2. **IoT Code-A-Thon**

Karthik Ramanathan 9741036752

Two rounds, each of 2 hours duration.

Participants will be given a problem set in the first round and will be asked to code their solutions on the computer provided.

Based on their performance, they will be selected for the second round.

In the second round, they will be given a harder problem set.

The participants with the best scores at the end of both rounds will win cash prizes

& T-shirts by HackerEarth.

Participants will be allowed to code in C, C++ or Java.

Phase Shift 2016

Registration Fee: 100

Venue: Internet Lab

Date: 23 September

3. **Techzibition**

Sumedha 9663523435

Provides a platform for budding innovators and creators to present their ideas and projects related to IoT.

The event is categorized into 2:

1. Idea based
2. Prototype based.

Participants can participate in either category and they will be evaluated separately. First & Second prizes will be given in each category.

Participants should get:

- Presentation - if the participants are proposing an idea.
- Presentation and prototype if they have the product implemented.

Registration Fee: 200

Venue: CR 101

Date: 24 September

4. **IoT Tech Hunt**

Siddhartha M. 9454178342

Before the start of the event a brief tutorial on how to code on an Arduino board will be given to the participants.

Details:

- An encrypted key that reveals a location in the CS/TC block is given to each group.
- On successfully decrypting the key, a location will be obtained. At this location a sequence or a task that must be completed on an Arduino Board will be given.
- Once the task is completed successfully, the next encrypted location will be given to the group.

The group to cover maximum locations/finish the entire course at the end of 2 hours will win the event.

Registration Fee: Individual - Rs. 150, Team of 2 - Rs. 250, Team of 3 - Rs. 250

Venue: CSE Seminar Hall(1st floor EC Block)

Date: 24 September

5. **IoT And It's Applications Using Arduino**

Sumedha 9663523435

Contents of Workshop :

- Introduction to Internet of Things (IoT)

Phase Shift 2016

- Applications
- IoT device Prototype developing using
 - a.Sensor
 - b.Actuators
- Arduino Architecture
- Prototype making using Arduino
 - a.Home automation using Bluetooth
 - b.Fire alarm alert
 - c.Smart irrigation system
 - d.Smart lighting
 - e.Reverse parking system
 - f.Weather monitoring
 - g.Identification system using RFID
 - h.Infrared Red technique

Registration Fee:Rs. 250/-

Venue: CS Lab

Date: 23 September

6. **Android App Development Embedded with IoT**

Ranjini Rao HS:8123244404

Content of the workshop:

- Cypress BLE Solution Overview
- BLE Architecture Overview
- Cypress BLE Modules
- Set Up and Install PSoC Creator
- CySmart Tool
- Android Architecture
- Developing Android Application to communicate with BLE
- Storing the data to google form through Android App

Participants will have to get Laptops, Android Phones.

Registration Fee: Rs. 250/-

Venue: CS Lab

Date: 24 September

7. **IOT Ideathon**

Govind 8971526662

{ BMSCE Exclusive }

- Part I : Startup Sutra by Kedar Kulkarni
Kedar, CEO and founder of HyperVerge, will deliver an interactive talk on how HyperVerge started off in IIT Madras and went on to raise funding from the biggest VC firms in the Bay Area. The talk will cover different stages in the lifecycle of a startup, what one needs to do at each stage and what it takes to be an entrepreneur. He will also delve into the space of computer vision and how it can contribute in the IoT age.
- Part II : Magic Share - PhaseShift Ideathon

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Just like hackathons where groups of students work on hacking a project together in a short period of time, the Ideathon will be an open contest where the best minds of any background from different colleges (in groups of 3-4 per team) will work on generating innovative ideas on a real life problem statement (in the IoT space) in a short period of time. At the beginning of the competition, the problem statement will be released and teams will have one hour to play with the prototype/app/case, understand its working, suggest changes and generate new, creative ideas revolving around the problem statement. The merit of each submission will be judged based on the creativity of the ideas, feasibility and relevance.

Registration fees: Rs. 200/-

Venue: PG Block CS 5002

Date: 23 and 24 September

8 Current Trends & Opportunities in IoT Nidhi 9845505253

{ BMSCE Exclusive}

This workshop covers

1. Drawbacks(Security issues) in IoT
2. Current technological trends in IoT
3. Scope for growth(Research opportunities) in IoT

Details: Cloud computing has become an integral part of IoT and performance of sensors largely depending on the performance of cloud. However, due to various challenges in cloud computing such as high latency, intermittent communications, bandwidth and energy constraints, etc., a new paradigm called fog computing is shaping up lately. Moreover, Many of such applications such as remote sensing, AR, VR based communication, etc., require very low latency communication with higher degree of reliability and availability. For such highly demanding applications Tactile Internet has been envisioned. In addition, all these advanced technologies require very sophisticated security and privacy mechanisms in place. Thus in this workshop we plan to start with Fog Computing and Communication – which is more relevant for IoT or Sensor Networks and then proceed towards

Tactile Internet – as the way forward for our future, and the end plan to take up the security/privacy challenges related to IoT frameworks.

Registration Fee: 100

Venue: PG block CS 5004

Date: 23 September

Electrical and Electronics Engineering

Phase Shift 2016

1. **ABB Makeathon**

Anirudh-9448496283

Sl.No.	Activity	Important Dates
	Submission of proposals with a modular approach to the solution	18th Sept 2016
	Announcement of short-listed proposals(5Nos.)	21st Sept 2016
	Presentation with hardware of the working module developed over two days 23rd and 24th Sept. Announcement of incentives to the winners	24th Sept 2016 at 2.30pm

Problem Statement :

Design of next generation automation system using low cost matured technologies

In recent times, the low cost sensors have become inevitable in using them for various applications, Example: gyro, gps, accelerometers, magnetic compass in smartphones. Can a similar concept can be extended to automation system making use of low cost sensors, smart-phones, edge devices, cloud computing, smart historian. What can be done that would result productivity enhancement through integrating all of these low cost matured technologies, such as internet, low cost handheld computing devices, wireless connectivity, social media, ..etc.

Template for the proposal:

1. Title:
2. Abstract: In 200 words
3. Objectives:
4. Outcomes:
5. The overall block diagram :
6. Brief description of the Methodology:
7. Expected Results:
8. Conclusion:
9. Future Scope :

The team with their affiliation :

Registration Fee: 200/- per team of 4(Teams of 4 is compulsory)

Take away: The students may be selected by ABB resource personnel for internships based on their creativity and overall performance during the course of the competition.

Venue: Measurements lab EEE

Date: 23 September

2. **Internet of Things With Intel Edison** (In collaboration with EIE) Deeksha : 8553928159

{BMSCE Exclusive}

Phase Shift 2016

Hands on Workshop followed by encouragement of students to pitch their project ideas and submit via registration form to student yatra team of Intel.

Workshop Followed By Competition. Intel have come up with new microcontroller based boards called 'Edison' which designed for expert makers, entrepreneurs, and some industrial IOT applications. This workshop will be hands on with resource persons from Intel conducting the workshop.

Registration Fee: 100/individual

Venue: IT department computer lab

Date: 24th September

3. **IoT In Application Of Renewables Workshop** Kavya R - 9686302812

The participants will be exposed to smart energy systems like smart meters etc. The workshop is organized by a pioneer in the field, Fluxgen Technologies, a start-up ranked among top 50 start-ups of the country. The real life applications of these concepts is infinite, and incorporation of IoT, learnt during the course of the workshop can be applied to other fields also. In addition participants will also be awarded certificates by the organizers.

Registration Fee: 100

Venue: Library Auditorium

Date: 24 September

4. **Bomb Diffusion** Uma R- 8884322997

The preliminary round will have a written test on analog and digital electronics circuits. The teams qualifying for the next round/s shall be given incomplete/ incorrect circuits which have to be debugged or completed to get the expected output in the shortest time. In collaboration with Circuit Challenge.

Registration Fee: 100/- per team of 2. (Teams of 2 is compulsory)

Venue: PG block EE-6002 and PE Lab

Date: 23 September

5. **Machine Learning** Sachin K - 9060630130

{Bms exclusive}

In today's world of IoT and 'Smart systems', it is becoming increasingly popular to add on to the user experience with technology, an element of machine learning, which comprises of techniques like pattern recognition, artificial intelligence to name a few. This workshop will provide the students an introduction to the world of machine learning, and consequently teach them about the concept of probability theorems,

Phase Shift 2016

neural networks and data structures, and their applications to develop algorithms for real-life data using suitable programming languages like Python, Java and Julia.

Registration fees- 100 per head

Venue: BSN Hall

Date: 23 September

Electronics and Communication Engineering

1. **Mega Mind**

Srinivas S - 8884171828

The event comprises of three rounds in which, the first round shall be a written round and the other two shall be hardware-based rounds. The fastest of them all who can maintain accuracy takes home the prize!!.

- A team must consist of three participants. Inter-collegiate teams shall be allowed.

Round 1: Roll And Don't Stroll

- Questions of varying difficulty levels are distributed into different sets.
- The teams roll a die and the number decides the difficulty level of their question set.
- 40% of the questions in this round will pertain to IoT and Wireless Communication.
- Each team will be given a maximum of 30 minutes to answer the set.

Round 2: Ready Set Glow

- Each problem will involve a circuit, corresponding to a question, in which a component which uniquely completes the circuit will be missing.
- The teams will have to connect the correct black box which will answer the question and complete the circuit.
- 40% of the questions in this round will be related to IoT and Cloud computing.

Round 3: Rectifier

- Each team will be given a pre-constructed circuit which contains unwanted and redundant components.
- The team will have to first identify the working of the circuit, and then optimize it by identifying and removing dispensable components without affecting the circuit's functioning. For each component removed, they get a block of an IoT circuit. These blocks must be put together to get a complete IoT circuit.

Registration Fee: 150. Team of 3.

Venue: EC 201, AEC Lab

Date: 23 September

2. **Fury Road v2.0**

Heethesh - 9611122852

A team may consist of a maximum of 4 Members. Cross-college teams are allowed.

About the Event:

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The aim of this event is to design and build a single remote controlled car that can compete in various challenges such as a Maze, a Football Match and an Obstacle Course. Teams must build their OWN RC Car for this event.

A workshop on building RC Cars will be conducted for all registered participants during the second week of September at BMSCE. The details of the workshop will be communicated to all the registered participants soon. Laptop, Soldering Iron, Batteries must be brought by the participants.

General Rules:

The maximum dimensions of the RC Car should be within 13cm (width) x 20cm (length). Robot must be controlled manually via wireless communication (Eg: Bluetooth, Radio). The event consists of three rounds:

- Round 1 – Temple Run: Teams are required to complete a given maze and collect a maximum number of coins within a given time period. The maze will be a flat arena with bricks placed as walls. Top scoring teams will be qualified for the next round.
- Round 2 – Football Knockouts: Teams will have to score goals in a match of football, using the same RC Car. The game will consist of two halves each of 5 minutes duration. The winners of each match will be qualified for the next round.
- Round 3 – Death Race: This final round will consist of an obstacle course where all finalists will race simultaneously to cross the finish line. Winners of this round will be declared as the winners of this event.

Registration Fee: 150

Venue: PG Block 1st floor

Date: 24 September

3. Escape If You Can

Anjana Niranjana - 9035070780

Teams have to perform various tasks like algorithm design, coming up with block diagrams for smart things and solving puzzles while managing their teamwork and time. Teams must consist of 3 students. All students with a valid identity card of their respective educational institutes are eligible to participate. Teams from different colleges can form a team. In case of disputes, judges' decision will be final.

- Round 1: The Road Not Taken
 1. Find a path from the start to finish line.
 2. The path will have components pertaining to IoT devices and also symbols of trending IoT terminologies.
 3. Use the shortest path or collect more components along the path, scores will vary.
- Round 2: Do you have it all?
 1. Based on the game of sets
 2. The objective is to complete the flow diagram of a given IoT application.
 3. Each team has 5 passes.

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4. You can use extra passes at 50 points each, if you get another team to trade cards with you (there will be a risk of the team not having the card you want) or use your own blocks.

5. Finally, get the whole block diagram.

- **Round 3: Prison Break**

Each person in the team will have a specific task in this room. One person will be blindfolded and will be guided by the second teammate to reach the place where the clues are placed. The third person in the team is the solver, who has to solve the clues. Roles can't be switched during the course of the game. Maximum time limit is 20 minutes. The first team to efficiently solve all the clues will get the key.

Clues will be based on IoT and Basic Electronics.

Registration Fee: 150

Venue: EC 2nd Floor

Date: 23 September

4. **Short Movie Making**

Faraz Khan – 8050332624

Teams have to showcase their creativity in short video to capture the importance of technology.

A team may consist of a maximum of 4-6 participants. Students from different educational institutes can form a team.

All students with a valid identity card of their respective educational institutes are eligible to participate. Teams are allowed to use any media for recording and editing. Teams will have

to bring their own equipment. In case of disputes, judge's decision will be final.

Video Recording

Device, Laptop with editing software must be brought by participants.

General Instructions:

The reference video will be sent to their respective mails and will be informed on phone. The video

can't be a montage, slide show movie.

Judges decision will be final.

Gameplay:-

- **Round 1: Remakedaaa!**

In this round, all participating team will be given a reference video, which they need to remake. The

reference video will be released to all participants 5-6 days before the event. The finished. Remake

should be based on the theme IoT. All videos will be screened on day 1 and 6 teams will be selected

for 2nd round.

- **Round 2: Off the Spectrum**

After round 1, selected teams will have to shoot another video inside the campus itself. Genre of their

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choice can be selected and the video needs to be prepared on the theme IoT. They can edit the video overnight and submit it for screening on next day. The length of the video should be 5 mins max.

Registration Fee:150

Venue- EC 201

Date- 23 and 24 September

5. **Online Questionnaire**

Rishab - 7760534154

This is an individual event that consists of complex questions under the following 5 domains:-

- 1) IoT and wireless networks.
- 2) Digital Signal Processing & Microcontrollers
- 4) RF / Microwaves / Antennas / Waveguides
- 5) Analog, Digital and Computer Communication
- 6) Analog and Digital electronics / Digital IC's

The questions could be MCQs or subjective.

The event will be hosted online on a portal which will be made available to the participants by mail. The portal will be opened at 7pm on 23/09/2016 and will be closed at 11pm.

All participants who have registered online for the event must mail a scanned copy of their ID card to the event co-ordinator (rishab9996@gmail.com)

Duration:- 4 hours

Registration Fee : 50

Date- 23 September (7 PM to 11 PM)

6. **Workshop on Wireless Sensor Networks (WSN)**

Bharath R - 8792458460

Resource person: Intel and Nihon Communications.

The content of the workshop will be:

- 1) Interfacing the sensors to a control unit
- 2) Communication of real time data from sensors to control unit.
- 3) Introduction to Bluemix Cloud Platform
- 4) Introduction to IoT application demo.
- 5) Tools required for WSN deployment

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- 6) Cloud storage and analytics.

The workshop will begin with a talk by Intel on IoT and its applications.
The hands on workshop will be conducted by Nihon Communications.

Registration Fee: 200 per team.

Teams of 3

Venue- Digital Electronics Lab PG Block 1st Floor

Date- 24 September

7. **Workshop on IoT by MediaTek on LinkitOne Board**

Jayprakash-9632024724

{BMSCE Exclusive}

The students will have a hands on experience with the working of IoT. The various aspects of IoT like hardware, cloud platform and the application device will be discussed.

The LinkitOne Board will be used to interface various other modules like WiFi, GPS and GSM.

It will also explore the different ways to send data to the cloud and show some action on the application device.

Receiving sensor values/data from the application device and reacting to it will be another domain of interest.

Overall workshop aims to teach the students everything that one needs to know about IoT.

Teams of 3, first come first serve. Max teams – 20

Registration fees- 200 per team

Venue- eyantra Lab, PG block 6th floor

Date- 24th September

8. **Electro Blitz**

Nikitha Nimbalkar – 9008858220

{ BMSCE Exclusive}

Teams will be subjected to rounds which will test their theoretical, practical and logical understanding of electronics at different difficulty levels.

- Teams of 3
- Teams only from BMSCE are allowed to participate.
- Participants with valid ID cards of their respective institutions are eligible
- Prerequisites include knowledge of basic electronics

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Round 1: WORDSWORTH

A set of letters will be displayed on the screen using which the teams will have to frame as many words as possible in a time limit of 15 mins. The words should be related to the theme IoT.

Round 2: KNOW THE UNKNOWN

Teams will be given set of codes. They will have to decode each code to get a name of a component (like Bluetooth). Once they get all the components names they will be provided with one more code. On decoding that they will get the name of an IoT system. They should draw a block diagram using the components that they have, to form the given system. Clues are given at the cost of points obtained in previous round. Top 4 teams which finish the task will be qualified for the next round.

Round 3: TAG YOUR PARTNER

Each team will be assigned a circuit. One from each team will design it and tag his/her mate who then rigs it up. The last teammate will have to power on the circuit and get correct outputs. Absolutely no form of communication is allowed among the teammates.

Registration Fee : 150

Venue- EC 203

Date- 23 September

BMSCE IEEE

1. **Paper Presentation**

Tarun Verma : 7406323829

It should be 2-6 pages long PDF manuscript in IEEE conference format. All the papers will be peer reviewed. The paper should have an original idea, implementation, simulation and experimentation. The IEEE plagiarism policy is applicable to all submissions.

Selected papers will be published in journals.

Last date of Submission: 16th Sep 2016

The presentation of accepted papers will be on day of Phase Shift.

Each author of the accepted paper will get a participation certificate.

Registration Fee : 300 (for IEEE members) and 400 (for non IEEE members)(1 to 4 in a team)

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Venue- BSN Hall

Date- 24 September

2. **LaTeX Workshop**

Srinivas S- 8884171828

LaTeX is a free program for mankind scientific and technical documents and is the standard for professional in many STEM fields. Its purpose is to make it easy to write elegant technical documents. All participants will bring their personal laptop. Software will be provided.

Registration Fee : 200

Venue-BSN Hall

Date- 24 September

3. **Abstrakt It!**

Vidhya T- 9663740919

IoT related IEEE paper will be provided with title and abstract covered printed on page.

Participants have to read the paper and write the abstract and title in the best possible way (30 minutes).

Registration Fee : 100

Venue- PG block EC 6001

Date- 23 September

Industrial Engineering and Management

1. **Materialistic**

Apoorva - 9740041642

Team of 2/3. Round 1: Jenga , game based on structures. Round 2:Connect , Derive answer from three related pictures. Round 3: Junkart , build useful items with provided junk. Jenga sets as well as junk will be provided. Internet usage permitted only for answering. Participants need to have a mobile phone with working data connection.

Registration Fee: 100.

Venue- IEM CR 101 (Mech block 1st floor)

Phase Shift 2016

Date- 24 September

2. **PANIC!**

Pranab D – 9902103103

- Round 1 : Geoguessr www.geoguessr.com

Uses google streetview to drop you off at a random location on earth. You need to navigate to find clues about your location. Then after gathering intel, make an educated guess on the map. The closer you are to your actual location, The more points you get. Max 5000 per round. 5 rounds. Team of 3 or 4. (Left to their choice). 2 people per team allowed inside lab. Each team given link for the same 5 locations. Points are added to or subtracted from the total score if they finish the challenge within the given time, or use the internet to google.

Within 15 minutes : +5000 points

Within 20 minutes : +4000 points

Within 25 minutes : +3000 points

Google once : -1000 points

Google twice : -5000 points

Each team is allowed to Google only once per round, with a maximum of 2 lifelines allowed per team. Time limit for the first round is 30 minutes.

- Round 2 : Escape Room

The top 5 teams from the previous round will be selected. Each team will be locked into the room. Solving each clue will lead to the next. Upon solving the final clue, a password is revealed. They must use this password to escape from the room. The theme is " Bank Heist". Each team will start from within the bank and try to break into the safe. A rare artifact in the safe is what the teams are after. Time will be added for utilizing lifelines. The two quickest teams to escape the room wins.

Registration Fee: 150 per team

Venue- ERP Lab, Taylor Hall

Date- 23 and 24 September

3. **Ez-Rider (non-g geared)**

Pratik R – 7829000373

Only for girls(boys who do not know geared). Participants must navigate through an obstacle course on a MOPED(gearless vehicle). They should not keep their feet on the ground. Time penalty of +3 seconds each time they place their feet on the ground. Time penalty of +5 seconds for collision with obstacles. Whoever finishes the course in the shortest time wins. Sensor will be fitted to the vehicle to measure the time.

Registration Fee : 50

Venue- Gopi wall

Date- 23 September

4. **Ez-Rider (geared)**

Nikhil Jacob – 7406495475

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Participation is allowed only upon the production of a driver's license (photocopies or soft copies are accepted). Participants are not allowed to take part in the event with their own vehicle. Both for girls and boys. Participants must navigate through an obstacle course on a geared vehicle. They should not keep their feet on the ground. Time penalty of +3 seconds each time they place their feet on the ground. Time penalty of +5 seconds for collision with obstacles. Whoever finishes the course in the shortest time wins. Sensor will be fitted to the vehicle to measure the time.

Registration Fee : 50

Venue- Gopi wall

Date- 23 September

5. **Ad-Apt**

Hansa Nataraja - 8951621517

Teams of 3-4 are allowed. In first round the teams have to market certain products to a target audience within the campus. According to the marketing skills, the audience will give the teams fake currency. The top 4 teams with the most 'money' will progress to the second round. In the second round, the teams will be given a failed product which they have to make "smart" using IoT and sell. (Basic IoT briefing will be given).

Registration fee : 100

Venue- CIM Lab IEM Department

Date- 23 September

Information Science and Engineering

1. **IOT Intelligence**

T Mithun - 9535262771

A gruelling team coding event where participants are given real life IoT problems and a coding solution is expected from them. Participants are expected to enter in teams of 2.

- Preliminary round – Walk-in any time from 9am - 2pm to an open round where an IoT problem is given to the participants and they are expected to give a solution, but they are timed. The fastest 15 teams progress to round 2.

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- Second Round – A common problem is given to the 15 teams. Fastest 7 will be selected for final round.
- Final round – A common problem is given to the remaining teams. The quickest team to solve will be declared the winner.

Registration Fee: 120 per team

Venue: ISE Lab ECE Block

Date: 23 September

2. **Logo Mania 3.0**

Rayapeddi - 8095372333

The most awaited event with highest participation is here, put your logo quiz (the game you play in class) skills to test, at Phase Shift; with a IoT based logo mania.

- Preliminary memory round – A written quiz is given. It will have 30 logo based questions. Top 40 participants will be selected for the second round.
- Second round – A slide containing 80 logos will be shown to the participants for 30-40 seconds. Soon after, the participants should write down as many logos they can remember. Top 15 will be selected for final round.
- Final round – A logo based quiz, which is conducted by a quiz master. The participants are expected to answer. The best participant will be declared winner.

Registration Fee: 50

Venue: PG Block IS 4001

Date: 23 September

3. **Route IT**

Nataraj 9739646185

Is an exciting team treasure hunt event modelled after recent sensation Pokémon Go. Participants are expected in teams of 2 students each.

- Preliminary round – A basic IoT quiz is conducted. Top 20 teams progress to round two.
- Second round - 50 QR code Posters are scattered around the campus of BMSCE, the top 10 teams to find as many of these codes and retrieve passwords after scanning them, proceed to final round.

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- Final Round - 5 private network routers to be placed in various spots around campus.

The teams are then set off on a password hunt, 5 at a time. The teams are given a beginning router name, which they will have to find and solve a small puzzle to find the password and next router name. The Fastest team to retrieve 3 consecutive passwords wins.

Registration Fee: 100 (team of 2)

Venue: PG IS 4004

Date: 24 September

4. **IO SQL Workshop**

Jigar - 9408849704

An easy way to learn your way around IoT clouds. Attend our Workshop on basics of IOT, SQL, Knowledge about IoT cloud DBMS and queries. A quiz will be conducted on the contents of the workshop and the winner is given Rs. 2000.

Registration Fee: Rs.100

Venue: PG IS 4004

Date: 23 September

5. **Hands-on Workshop on IoT Applications** Amarnath KV 9980770631

Come and learn IoT applications with Arduino, Raspberry Pi and cutting edge App Integrated Beacon Technology with our hands on workshop on Internet of Things with Ellipsonic. All components and equipment will be provided on a use and return basis. The participants are expected in teams of 5.

Registration fees: 100 per head in a team of 5.

Date-23rd of Sept (PG Block IS 4001) and 24th of Sept (ISE Lab EC Block)

MBA Department

1. **Workshop on “Invest like Warren Buffet”**

Madhuri.S - 9066642452

An Introduction on Warren Buffet and Pillars of Investment and how IoT can be used to make better investments decisions.

Registration Fee:100

Venue- MBA classroom 1 (PG block 2nd floor)

Date: 23 September

Phase Shift 2016

2. **High Growth Job Roles For Engineers** Aishwarya.G - 7259389543
Industry awareness workshop on data analytics, consulting, market research, digital marketing and IoT.
Registration Fee: 100
Venue- PG Block 3rd floor MBA classroom 2
Date- 24 September
3. **inQUIZitive** Sannidhi - 7406678375
This is a business quiz event which will test the participant's knowledge about various aspects of business and related issues including IoT based business.
Registration Fee: 100 per team of 2
Venue- PG block 3rd floor MBA classroom 1
Date- 24 September
4. **Business Plan Competition** Pawan A- 9738644173
Participants would be proposing a business plan based on the theme IoT. The outcomes include Idea Generation to Launch - Feasibility of the plan.
Last date for registration is 19 th September 2016. NO SPOT REGISTRATIONS.
All the registered participants will be updated on 19 th September 2016.
Registration Fee : 100 per team of 2
Venue- PG block 3rd floor MBA Finance class
Date- 23 September
5. **Ad making** Ranjith - 9902264822
Participants will be shooting a video ad about the theme IoT.
Last date for registration is 19 th September 2016. NO SPOT REGISTRATIONS.
All the registered participants will be updated on 19 th September 2016.
Registration fee : 100 per team of 2
Venue- PG block 2nd floor MBA classroom 2
Date- 23 September
6. **Block and tackle** Prannay - 9886099624
Block and tackle puts participants in situations where they have to contradict their

Phase Shift 2016

own opinion on many issues including IOT.

Registration Fee :50 per participant.

Venue-PG block 3rd floor MBA Finance class

Date- 24 September

MCA Department

1. Code Storm

Harish Raghav V-9611261166

IoT is the network of interconnected devices or things with sensors embedded, software, network connection and necessary electronics that enables them to collect and exchange data enabling responsiveness. Code storm event is about implementing use cases of IoT using “Raspberry Pi” board, sensors and personal computers.

Rules:

- Team of 2.
- Three rounds: Every round will be an elimination round. In Each round a single problem is defined to all the teams. The teams should come up with solutions. Based on the timing and the efficiency of the solution, the team advances to the next round. Two of the teams based on their performance in the final round will be awarded.
- Any of the programming language can be used.

Registration Fee: 150

Venue- MCA Lab

Date-23 September

2. Workshop on Recent advances in IoT

Nagashree B A -8904641443

Today IoT is the main force driving change in industries and society. IoT will be the smart technology of tomorrow and 2020 will be the year of IoT. IoT will be seen as the catalyst responsible for leveling the playing field between humans and machines. The objective of the workshop is to explore the recent advances in Internet of Things (IoT). **Content:** Introduction to IoT Architecture and Technologies. Exploring various use cases of IoT. Current trends in IoT. The future of IoT.

Registration Fee: Rs 50/Head

Venue- FDC Hall

Date-24 September

Phase Shift 2016

3. **Project Emblazon**

Anil Karwa-9739280907

Demonstration of IoT project developed by the participant. Participants must get their project material for demonstration. Project should be demonstrated in front of the judge.

Registration Fee: 100

Venue- ICL Lab, PG block 1st floor

Date-24 September

4. **Ideas Galore**

Abishekappa B R-8722661138

Poster presentation themed “SMART CITIES” expects participants to present the ideas to provide innovative, implementable and cost effective solutions for transportation, infrastructure, and water management system in Indian cities.2 in a team.

Phase I:

- Submission of presentation should be done using ACM template.
- Poster size is A3
- Participates should send their posters before 19 th September 2016 to ideasgalore2016@gmail.com
- All the submitted ideas will be evaluated by judges and top 10 teams will be shortlisted for Round 2.

Phase II: Presenting the poster in front of the judge and top 2 teams will be awarded.

Registration Fee: 100

Venue- Computer applications classroom 4

Date-23 September

Mechanical Engineering

1. **Junkyard Javelin**

Ajay Samuel Mathew 9480413996

This Event Requires the Participants to construct a Throwing Mechanism from the given Junk to throw a ball, the range being the deciding factor to get a winner. We are integrating IOT and Junkyard Javelin by making use of iot based measuring system (Sonar being used in this case). This will measure the distance traversed by the ball, process it and calculate the initial velocity of the ball by taking in the Release angle as input. All teams will get 3 chances with the farthest out of the

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three considered for getting a winner. In case of a tie, the one with the highest sum of the 3 chances combined wins. No Slingshots allowed.

Registration Fee: 300 per team. 2 members in a team.

Venue- EC block Parking lot

Date- 24 September

2. Utility Chain

Anand Mani-7204216379

In 1st round, the competitors will have to make the specific model using workshop tools. To include IoT into the event, we will have one die for a model in which the model of the competitor should fit in. If the model fits in the sensor should indicate it by glowing lights.

In 2nd round, a presentation on problems utility chain management with IoT solutions. Participants must participate in both rounds.

Registration Fee: Rs.100 per person, 200 for a team

Venue- Mechanical workshop

Date- 23 September

3. Assemble Me

Suraj Simha - 9916052713

Contestants must know SOLID Edge software. Parts to be designed and assembled will be having the theme of IOT. The parts will contain sensors and actuators shown as different shapes which form an integral part of IOT.

Participants will be given the task of modeling these shapes and assembling them to obtain a system that can perform specific function. Teams of 2.

Registration Fee: 200 per team of 2

Venue- CAD Lab Mechanical Block

Date- 23 September

4. Robowars (Botwars)

Ayush Kohli - 9620628571

Multiple robots battling among themselves for the survival within the arena. Various rounds will be conducted based on the number of participants. Participants will be asked to submit their robot specs with pictures two days prior to the event which will be further updated on the Facebook page for strategic discussions. Participants have to get required robots and materials. Robot which is unable to move even after 30 sec after damage loses. The dimensions of the robot are 2ftx1ftx1ft.

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Registration Fee: 400 per team. Team of max 4 members

Venue- MPH

Date- 24 September

5. **Best Mechanic**

Shubham 8088439668

The event consists of a single round where a team of 4 members are supposed to assemble the parts of an object given. The thing which has to be assembled will be said at the time of the event. Example: a car, an automotive part etc. They are supposed to assemble within the given time. The team which finishes first wins. All the components are provided by us. If they ruin any of the part, it will not be provided again. At the end of the event, the object they assemble should work properly. The model they make when connected to a controller, should work when controlled from any location using the process of IoT.

Registration Fee: 300 per team.

Date: 23 September

Venue: SOM Lab, Mechanical Department

6. **Workshop on Home Automation:**

Shubham 8088439668

This workshop will help participants to get to know about Iot in this field. Mr Aravindan will be briefing them about the current trends in this sector and demonstrate some of the models with his kits.

Registration Fee: 50

Venue: MESH Hall, Mechanical Department

Date : 24th September

Medical Electronics

1. **Mystery Inc**

Vinutha 9741058711

2 participants per team. The event requires basic understanding of electrical, electronics and IoT concepts to solve the given problems. Usage of any electronic devices or taking outside help is NOT allowed.

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- Round 1- A written round where the participants will have to answer puzzles and solve riddles fast enough to move onto the next round.
- Round 2- A round where top 10 teams from the previous round will be selected to solve the clues leading them to the next successive location. In the end, they will have to answer the given questions correctly to be given the components for the next round.
- Round 3- 5 top teams from the previous round will be selected to complete the IoT based circuit and implement it.

Registration Fee: 200

Venue: Medical Electronics Department 5th floor PG Block

Date – 23 September

2. **Criminal Case 3.0 : CYBER**

Madhusudana HJ 9741335084

Think your team can solve the crime better than Sherlock and Watson? Beat your competitors to solve a mystery filled criminal case!

- Round 1: Make use of all the random pieces of information you've gathered over the years about computers and IOT to solve a crossword in a given time frame to move to the next round.
- Round 2: Analyse the crime scenes and come up with a list of what could be clues to find the root cause of the series of disasters.
- Round 3: Solve the crime. Yes, it's that simple.

1)4 participants in a team.

2)15 teams will move on to round two. In case of ties, a tie breaker round will be conducted for which the rules will be given on spot.

3)6 teams will move on to the final round.

4)The participants shall not procure help from anyone not in their team and no usage of cell phones.

Registration Fee: 400 per team (4 in a team)

Date : 24 September

Venue: Venue: Medical Electronics Department 5th floor PG Block

3. **CIMEATHON**(Centre for Innovation in Medical Electronics Hackathon)

{BMSCE Exclusive}

Divya 9986618110

Phase Shift 2016

The Hackathon will convene the interdisciplinary students from different disciplines over a period of 8 hours on Medical IOT in order to develop innovative ideas/prototype solutions (hardware/software) to address healthcare challenges of in India.

Rules of the Hackathon:

The participants should work on one of the themes mentioned above during the above said hackathon.

Team Formation: Teams should have members with a mix of different technical background. You are welcome to form teams beforehand. But we do encourage to form the team at the start of the event so that you could really have a force of Multidisciplinary learning.

Resources: Participants in the hackathon can carry any materials with them related to the hackathon. For the Hackathon, participants are requested to carry their laptops. Wi-fi would be provided for all participants.

Mentorship: The team would get access to plethora of mentors who have expertise of clinical, technical, business, designing, etc.

Partners: Ellipsonic, Philips, InnAccel, Villgro Foundation

Prizes for winners: Cash prize upto 25,000INR

Date- 23rd September 2016

Venue- Department of Medical Electronics, BMSCE

Registration fees- 100/- per person

Pentagram

1. **Gridlock 2.0**

Sharada - 8762666076

Single Round event. You will be given a paragraph containing clues. The paragraph will be loosely based on IOT. With the help of clues, you have to arrange data in a grid. The answer to the proceeding question will help you unravel the next.

Registration Fee: 100 for team of 2

Venue : PG Block CS 5005

Date: 23 September

Phase Shift 2016

2. **Confoundo 2.0**

Vivek - 7022150431

Confound your senses by taking our maths quiz. Answer the question to score points. Answers to questions will be in encrypted form and the teams have to decode it to get the required IOT term.

3 Rounds:

1st Round: A set of questions will be provided to the teams. The top 6 teams will qualify for the next round.

2nd Round: Buzzer Round. The team which answers the question first correctly gets the point.

3rd Round: Final face-off between top two teams.

Registration Fee: 100 per team of 2

Venue : PG Block CS 5005

Date: 23 September

Quiz Team Events

1. **Biz-Tech Quiz**

Rahul S - 7829076699

A quiz having everything from the world of business and technology. The quiz tracks business and technology trends through history till the cutting edge technologies like IoT, cyber systems etc. helping participants gain the perspective of businesses across the world.

Registration Fee: 100 per team of 3

Venue: Indoor Stadium

Date: 24 September

2. **General Quiz**

Anand K - 9449340844

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A Regular quiz based on anything and everything. As IoT is inextricable linked to every-thing, there is a need to know about the things which involve IoT in general. This general perspective for novices in IoT is served in this quizzing format.

Registration Fee: 100 per team of 3

Venue: Indoor Stadium

Date: 24 September

TELECOMMUNICATION ENGINEERING

1. **Pictonnect**

Sarayu M - 9880106670

In collaboration with Mechanical department. How well are you being updated to the current trends and applications of IOT technology advancements.? Come test and update yourselves. Pictonnect will consist all of it with a twist. Team of two will participate in two rounds. In the first round guess the word Related to IOT with the pictures shown. First ten teams will be selected to the second round , in which the output and input to a system is to be given through the keywords guessed found in round one.

Registration Fee : 100

Venue – EC 207

Date – 24 September

2. **Project J**

Rohini Raj - 8553578476

Team of 3. Teams will be given electronic junk. They have to come out with a working IOT related device using the Junk. Details of the junk provided will be intimated 1 week prior to event to all registrants.

Phase Shift 2016

Registration Fee : 100 per head

Venue – AC Lab

Date: 23 September

3. **H.A.M** { BMSCE Exclusive} Suman - 9980551187

What is the first thing that we do with internet.? communicate. HAM radio is all about the same thing in a more basic way, hence to overcome all its limitations IOT is the way out. the participants are given an opportunity to learn how to design their own FM receiver in a group of 2-3 which are formed on spot with the basic components provided being R, L, C Components, speaker and an Arduino Kit.

Registration Fee: 250

Venue : 24 September

Date: AC lab

4. **Project Race** Sushmitha Krishna - 7406997920

{BMSCE Exclusive}

The Internet of things can change the way citizens live, travel, and take care of each other. Arduino has been part of the conversation since early on. Teams of 4-5 members will perform in two rounds, first round is a common project to the all the teams followed by second round in which only 3 teams will be selected will be comprise of a little more advanced projects .In both rounds Arduino kits ,user manual and all necessary components are provided to all the teams . First two winners will get to take away their kits with them.

Registration Fee: 250 per head (4-5 in a team)

Date: 24 September

Venue- MC lab

Electronics and Instrumentation Engineering

1. **Iot Techniques and Implementation Using Arduino** Sarika J 9611591382

Phase Shift 2016

- IoT applications using sensors.
- Using IoT technologies to improve industrial requirement ,with specialized focus on the areas of industries, media, IT, and networks.
- To learn how IOT it is useful in social cause like using connectivity to address poverty, human rights and climate change.

Teams of 3 members

Registration Fee: 750 per team of 3

Date : 23 and 24 September

Venue: PG Block 2nd floor EEE DSP Lab

2. **Buoyant**_____Ashwin 9743067056

Single Round To Keep Thermocol And Cardboard Floating And Be Able To Move Through a given path using own methods. The model should hold good for buoyancy principle. Should only use thermocol and dc motor. Should move in the given track. Good design . Teams of 2.

Registration Fee : 300/ team

Date: 23 September

Venue: IT Classroom 3

3. **Workshop and competition on App Development:**

Anusha KG 8892963124

Garner knowledge of how to get started with app development. Use the concept for their mini / major projects. Use in IOT. Associated with Herman Technologies.

Requirement: Students should possess basic programming skills.

Teams of 3.

Phase Shift 2016

Registration Fee : 500 per team

Date: 23 and 24 September

Venue: IT Project lab PG BLOCK 2nd Floor

4. **Workshop And Competition On Sensor To Cloud Connectivity**

Neha M 8197328283

{BMSCE Exclusive}

Interface sensors to cloud by using different communication modules for IoT and INDUSTRIAL INTERNET OF THINGS (IIOT).

- Day 1: Theory on sensors and communication on with hands on experience to establish IOT framework , Temperature, humidity and CO2 Sensors and Emergency lighting will be used as basic hands on for sensors to communication modules. IoT demo with Roomba vacuum cleaner – A Multiple sensor , iot enabled moving cart to showcase a complete IoT solution in IoT
- Day 2 : From gateway to cloud Theory and hands on exercise. , Web based SCADA widget's will be built as hands on exercise one Telamon gateway from Sunlux shall be provided for the event.

The event shall have a competition in the second half of DAY 2 for giving a solution with sensor to cloud connectivity based on workshop learning. Use of Object Oriented Programming / C Programming or modelling software to interface various types of sensors. Teams of 4 or 5.

Registration fees- 250 per team

Venue: RK Hall PG BLOCK 1st Floor

Date: 23 and 24 September

5. **Project Display On Home Automation**

Chetna B - 9880928324

Participants will demonstrate and showcase their project. Evaluation of the project will be done by the industrial representative. Use the knowledge of sensors and various communication protocols. Use the concept for their mini / major projects multi-disciplinary areas. Application of IOT

Phase Shift 2016

Registration Fee: 200

Venue: IT Classroom 2, PG Block

Date: 23rd & 24th September