

P.B.SIDDHARTHA COLLEGE OF ARTS AND SCIENCE

DEPARTMENT OF ELECTRONICS

DEPARTMENTAL ACTIVITIES FOR YEAR 2019-20

S.NO	DATE	ACTIVITY PERFORMED
1	1-07-19	Students of II B.SC (M.E.Cs) presented PPT's to I & III B.SC in seminar hall
2	4-07-19	Students of II B.SC (CA.M.E) presented PPT's to I & III B.SC in seminar hall
3	11-7-2019	Guest lecturer in " DSP IN BROAD CASTING " by P.Kalle Prasad, Assistant Engineer, Doordarshan.
4	16/7/19	Students of II B.SC (M.E.Cs) conducted Mini project expo to I & III B.SC .
5	17/7/19	Students of II B.SC (CA.M.E) conducted Mini project expo to I & III B.SC .
6	3/8/19	Students of II B.Sc (M.E.Cs) Visited " EFFTRONICS " as part of technical visit
7	29/8/19 to 31/8/19	Students of II B.Sc(M.E.Cs) & II B.Sc(M.E.Cs) Participated in SCIENCE FAIR 2019 held at S.R.R & C.V.R GOVT DEGREE COLLEGE and won second prize in project expo.
8	16/11/19	Sri D.Srinivasareddy, Attend B.O.S meeting in Department of Electronics at Sri.C.R.REDDY , COLLEGE, Elluru.
9	27/11/19	Sri K.S.V.Sambasivarao, Attend B.O.S meeting in Department of Electronics at St.Maris stella College , VZA.
10	2/12/19	Guest lecturer in " INTERNET OF THINGS " by Dr.GRKPRASAD, Associate dean, K.L.University
11	4 & 5/12/19	Students of final and second year participated in 59TH GORA SCIENCE CENTER and won
12	16/12/19	Sri D.srinivasareddy attended workshop on Embedded systems using arduino at sri.c.r.reddy college, elluru.
13	18/12/19	Sri.K.S.V.Sambasivarao acted as a resource person in National one day workshop on " INTERNET OF THINGS AND IT'S APPLICATIONS " organized by sri.y.n.college, narsapur.

14	4/1/2020	Students of III &II B.Sc(M.E.Cs) participated in NALANADA DEGREE COLLEGE Electro2k20 and won first prize in quiz, first prize in PPT, first prize in art carnival, Second prize in code hunt, second prize in tik-tok
15	6/1/2020	Students of III B.Sc (M.E.Cs) conducted “ E.A.S.S QUIZ COMPETITION ” to I st and II nd years and screening test for selecting the students held on 24-12-2019.
16	21/1/2020	ISO VISIT TO ELECTRONICS DEPARTMENT
17	23/1/2020	Students of III &II B.Sc(M.E.Cs) participated in Sidhartha mahila degree college Mindsparkle 2k20 and won second prize in project.
18	28/1/2020	Final year students visited to SRIHARIKOTA , Andhrapradesh as part of INDUSTRIAL VISIT .
19	12/2/2020	FINAL,SECOND,FIRST YEAR STUDENTS OF ESAS ORGANIZED ELECTROVISION 2020
20	2/3/2020	Sri K.S.V.Sambasivarao, Attend B.O.S meeting in Department of Electronics at St.Maris stella College , VZA.
21	12/3/2020	Final MECs Students conducted major project expo to first and second year students.

K.S.V.SAMBASIVARAO,

HEAD, DEPARTMENT OF ELECTRONICS

POWER POINT PRESENTATION:

Students of **II B.SC (M.E.Cs)** presented PPT's to I &III B.SC in seminar hall on 1-07-19.

- The students of second year presented PPT'S on modern technology with the base of electronics and this PPT'S.
- These PPT'S can develop communication skills for their better presentation.
- They can also explain more innovative PPT'S.





POWER POINT PRESENTATION:

Students of II B.SC (CA.M.E) presented PPT's to I & III B.SC in seminar hall on 05-07-19.

- The students of second year presented PPT'S on modern technology with the base of electronics and this PPT'S.

- These PPT'S can develop communication skills for their better presentation.
- They can also explain more innovative PPT'S.





GUEST LECTURE:

Guest lecturer in “**DSP IN BROADCASTING**” by P.Kalee prasad on 11-7-2019

- A guest lecture organized by the department of Electronics on **DSP IN BROADCASTING** which makes the students of Electronics to understand about Digital signal processing.
- DSP means is the process of analyzing and modifying a signal to optimize or improve it's efficiency or performance.
- In the year 1959 Doordarshan was started .It was implemented in TV at 1960 and later in the year 2000 HDTV was implemented in TV's.
- Kondapalli transmitter was constructed in the year 1983 with the cost of 10 crores, around India 1500 transmitters were build up.
- The highest height of an Antenna is 128m that is parabolic dish antenna.
- The highest height of an antenna is 64m telescope parabolic antenna is located near kodikanal through which we can observe remaining seven planets.
- In space we are eight geo stationary orbits covering 100 channels.
- One channel requires 36MHZ receiving frequency from satellite in this transponder and it act as MODEM.
- MP3- act as MPEG2 and 8 channels are compressed in one analog channel.
- Low frequency transmits the signal for Long distance, High frequency transmits the signal for short distance communication systems.
- Three Geo stationary satellites are required to cover the whole earth.
- For every country who launch their satellite ,certain angles were provided to park their satellites.
- Angles 42° , 83° , 93° are given to India to rotate their satellites in orbits.



16 JUL 2019

బ్రాడ్ కాస్టింగ్‌పై విద్యార్థులకు అవగాహన

బ్రాడ్ కాస్టింగ్ అనేది ఒక ప్రత్యేకమైన పద్ధతి. ఇది అనేక రకాల పదార్థాలను ఒకేసారి పోయేటట్లు చేయడానికి ఉపయోగించబడుతుంది. ఇది ఒక ప్రత్యేకమైన పద్ధతి. ఇది అనేక రకాల పదార్థాలను ఒకేసారి పోయేటట్లు చేయడానికి ఉపయోగించబడుతుంది. ఇది ఒక ప్రత్యేకమైన పద్ధతి. ఇది అనేక రకాల పదార్థాలను ఒకేసారి పోయేటట్లు చేయడానికి ఉపయోగించబడుతుంది.



బ్రాడ్ కాస్టింగ్ అవగాహన

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విద్యార్థులలో బ్రాడ్ కాస్టింగ్ పద్ధతిని పరిచయం

విద్యార్థులలో బ్రాడ్ కాస్టింగ్ పద్ధతిని పరిచయం చేయడానికి ఒక ప్రత్యేకమైన పద్ధతి. ఇది అనేక రకాల పదార్థాలను ఒకేసారి పోయేటట్లు చేయడానికి ఉపయోగించబడుతుంది. ఇది ఒక ప్రత్యేకమైన పద్ధతి. ఇది అనేక రకాల పదార్థాలను ఒకేసారి పోయేటట్లు చేయడానికి ఉపయోగించబడుతుంది.



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MINI PROJECTS EXPO:

Students of II B.Sc (M.E.Cs) conducted mini project expo to final and first year students on 16-7-2019.

- Students are progressively taking up mini projects to build up their skills
- By doing mini project they will gain practical knowledge in spite of theory concepts
- They can also show their capability by doing such innovative projects.
- These Experiences definitely help in designing major project as well as higher education.

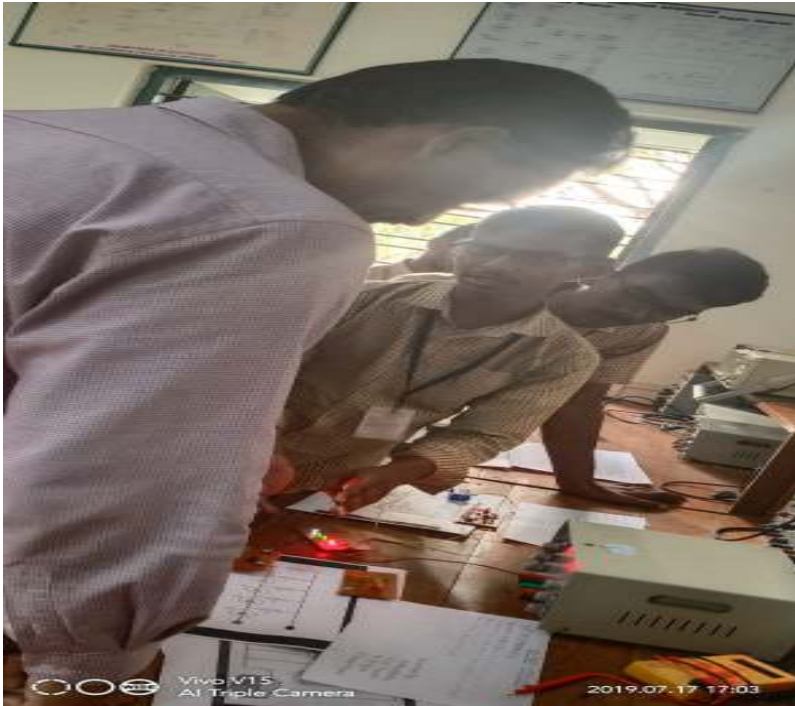


MINI PROJECTS EXPO:

Students of II B.Sc(CA.M.E) conducted mini project expo to final and first year students on 17-7-2019.

- Students are progressively taking up mini projects to build up their skills
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- They can also show their capability by doing such innovative projects.
- These Experiences definitely help in designing major project as well as higher education.





TECHNICAL VISIT:

The students of III B.Sc (M.E.Cs) visited **EFFTRONICS** as part of Technical visit on 3-08-2019.

Efftronics:

1985 with collaboration of two persons and the first product for this organisation is single colour LED display board after they introduce so many product like multicolour LED display board etc.

➤ **Smart Cities:**

In smart cities LED's are used.

In LED there is RGB colours.

In can be done by using different light techniques.

These LED's can be used in Railway signalling.

The initial stage of smart cities LED's are 60v.

These smart LED's save the 1/10 part and they saves the voltage and make to 5v.

➤ **LENS operation on LED's and angle operation.**

There are some applications like Two way switches and They can be operate one switch to operating many LED's.

IOT: IOT means interconnections of physical and visual objects.

➤ **Applications of IOT**

IOT system is used in Ambulance system when there is any call from patient the call connect to all server's of the ambulance where the patient call is near to ambulance that ambulance go to that patient.

➤ **Smart Signalling:**

Smart signalling can be used in many ways:

1. Railway signalling: In railway signalling smart cities can be used to communicate between two stations. They done operations between stations also mean block part.

2. Types of signalling:

Automatic signalling: In this signalling the signal will pass by itself.

Manual signalling: In this signalling the signal will pass by operators.

3 .By smart signalling we have to set the tracks easily.

➤ **Smart building:**

In smart building there is some products like 3D printer.

3D printer: 3D printer means soft engineering program or process change theoretical to practical.

It has cost estimation which is correct for the production there is some optimum production of products into the market.

IOT also used in apps like OLA , UBER .

IOT also used in upcoming experiments like tesla.

IOT used in customer oriented services.

Food deliveries

Travelling services

These IOT has sensor application is used to develop the idea for research to give a proper result.

In IOT some updated technologies for developing applications for the market to get good profit.



SCIENCE FAIR -2019:

Students of IIIB.Sc (M.E.Cs) &II B.Sc(M.E.Cs) Participated in **SCIENCE FAIR 2019** held at **S.R.R &C.V.R GOVT DEGREE COLLEGE** and won second prize in project expo.



Amaravathi Balotsavam Science Fair 2019



Guest lecture:

Guest lecturer in “**INTERNET OF THINGS**” by Dr.GRKPRASAD,Associate dean,K.L.University.

He has given a brief idea on IOT it relates to physical objects and visual objects, these devices can collect and exchange data embedded with sensors, internet connectivity. He said that father of IOT is Kevin Ashton discovered that entire data is processing by a third party server known as cloud computing.

Sensor is a device to convert physical to electrical examples: gas,temperature,wind miles,,

Actuators can convert physical in to electrical examples: fan, AC,Hydraulic,

The life cycle of IOT is collect, communicate, analyze, act.

IOT are playing a vital role in smart cities, smart grid, Agriculture, Energy waste management, Industries, cars.

Albert Einstein use 10% of his brain our brain has 200tb of data storage and laptop is 20tb.





18/12/19:

National one day workshop on internet of things and Applications acted as Resource person by K.S.V.Sambasivarao at sri.y.n.college, narsapur.



జగదీష్ చంద్రబోస్ ను సన్మానిస్తున్న వైఎస్ పాలకవర్గం
'అంతర్జాలం వినియోగించుకోవాలి'

నరసాపురం, డిసెంబరు 18 : యువత అంతర్జాలాన్ని సద్వినియోగం చేసుకుని ఎదగాలని చైన్మె యగ్గుమయ్య చీఫ్ టెక్నీషియన్ జగదీష్ చంద్రబోస్ అన్నారు. వైఎస్ కళాశాలలో బుధవారం అంతర్జాల విషయాలు, వాటి అనువర్తనాలు అనే ఆంశంపై నిర్వహించిన జాతీయ సదస్సులో ఆయన మాట్లాడారు. అంతర్జాలంలోని విషయ పరిజ్ఞానాన్ని విద్యార్థులు అందిపుచ్చుకోవాలన్నారు. విజయవాడ సిద్ధార్థ కాలేజీ ప్రొఫెసర్ సాంబశివరావు మాట్లాడుతూ అంతర్జాలంలో విషయాలను యువత ఆకలింపు చేసుకోవాలన్నారు. అనంతరం బోస్ ను ఘనంగా సన్మానించారు. ఈ కార్యక్రమంలో కళాశాల కరస్పాండెండ్ డాక్టర్ చినమిల్లి సత్యనారాయణ, కోశాధికారి రామారావు, ప్రీన్సిపాల్ వెంకటేశ్వరావు, అధ్యాపకులు కనకారావు, అండే రమణ, తోట సత్యనారాయణ, మల్లేశ్వరి, చినమిల్లి శ్రీనివాస్ తదితరులు పాల్గొన్నారు.

ఆంధ్రజ్యోతి

ABN

Thu, 19 December 2019

<https://epaper.andhrajyot>





Students of III & II B.Sc(M.E.Cs) participated in NALANADA DEGREE COLLEGE Electro2k20 and won first prize in quiz, first prize in PPT, first prize in art carnival, Second prize in code hunt, second prize in TIK-TOK



E.S.A.S QUIZ COMPETITION:

Final year students conducted ESAS quiz program to I B.sc(M.E.Cs)&II B.Sc(M.E.Cs) students and to select participants a Screening test on 24/12/19.This type of activity conducted every year to increase their subject skills and organizing skills on 6/1/2020.





ISO VISIT:



ISO visited Electronics department on 21/1/2020.

Students of III & II B.Sc(M.E.Cs) participated in **SIDHARTHA MAHILA DEGREE COLLEGE MIND SPARKLE 2K20** and won second prize in project.



ISRO: (INDIAN SPACE RESEARCH ORGANIZATION)

Final students visited sriharikota as part of Industrial visit.

The headquarters of ISRO is in Bangalore. There was another vehicle making & control system centre in Trivendrapuram. In is ISRO, having MCC (Machine control centre) & having two launch pads which are far away from 6 to 7 kms. In the 2nd launching pad they have launched GSLV's & 2nd launch pad they launched CHANDRAYAN-I, II.

In MCC, they have variable parts to authorised launching a rocket, they have VVIP's sitting space here. They communicate while launching a rocket with nearly 700 NEWS channels.

While launching process there count down time (CDT), when it reaches to 15 mins time launch with auto controlling method.

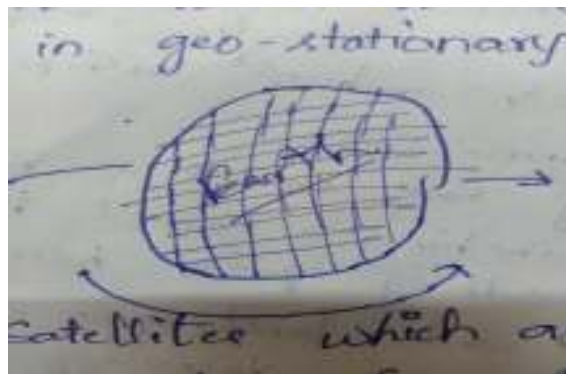
There was a hold button for all if anyone press the hold button then the launching process being stopped. Later director only can able to start the launch.

LAUNCH PADS:

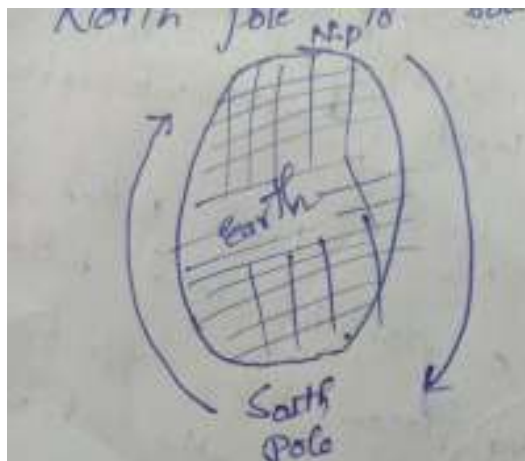
SDSC has two launch pads

- One is used for GSLV (Geo-stationary Launching Vehicle)
- Another for PSLV (Polar Satellite Launching Vehicle)

The satellites which are launched by GSLV rotates in Geo-stationary orbit.



The satellites which are launched by PSLV are rotated from pole to pole i.e. North pole to South pole.



Launch pad I	Launch pad II
1. The capacity is 2.5 ton.	1. The capacity is 5 ton.
2. Same reaction time & it boosts the rocket at 18km/sec.	2. Same reaction time & it boosts the rocket at 18km/sec.
3. It is used for PSLV & other.	3. It is used for GSLV
4. The satellites which are launched from this pad (PSLV's) are used for GSM &	4. The satellites which are launched from Lp-II (GSLV) are used for

Surveillance.	Communication process.
5. It has 4 stages of Assembling Ground stage Mark-1 Mark -2 Mark-3	5. It has 3 stages of Assembling Ground stage Mark-1 Mark -2 Mark-3 Mark-4

- The main purpose of launch pads is to assemble the launching vehicle and essentials required for mission.

- The coding part is from Hyderabad.
- The Mectronics i.e. R&D from Bangalore.
- For ISRO, there are more than 100 Communication Satellites.
- Till 2020 ISRO did not collect any satellite or rocket parts from space.
- From 2021 ISRO, planned to reuse the Satellites.

For ex: If a satellite has a life span of 5 years then it returns to earth with help of parachute.

- There are 4 series of launching vehicles:
 1. SLV
 2. ASLV
 3. PSLV
 4. GSLV
- The satellites & rockets are controlled from MCC (Machine Control Centre) which is responsible for all activities done in ISRO
- And LCC (Launch Control Centre) is responsible for controlling of launching pads.





ELECTROVISION 2020

ELECTROVISION:

Electronics department of P.B.Siddhartha College of arts and science organized Electro vision 2020 " A one day state level symposium in this event our chief guest is D.Haribabu Prasad,DGM,BSNL ,K.Sridhar(P.B.S college-poster),V.Rohini kusuma- and our honourable guest of event Principal is Dr.M.Ramesh garu, V.Baburao garu (Director) ,Dr.Rajesh.c.jampala garu(DEAN) ,our principal have his valuable speech thereafter. Our chief guest address the students that in our competitive world, we are behind the technology and we have to improve our knowledge about new technology. In this 10 colleges are been participated and students participants are 178.

12వ సిద్ధార్థులలో 'ఎలక్ట్రోవిజన్-2020'

మొగ్గలజంక్షనులో ఏర్పాటుచేసిన ఈ కార్యక్రమంలో ప్రముఖ విద్యావేత్తలు, ప్రజావేత్తలను కలిపి ఉద్ఘాటించి కార్యక్రమం ప్రారంభమైంది. ఈ కార్యక్రమంలో ప్రముఖ విద్యావేత్తలు, ప్రజావేత్తలను కలిపి ఉద్ఘాటించి కార్యక్రమం ప్రారంభమైంది. ఈ కార్యక్రమంలో ప్రముఖ విద్యావేత్తలు, ప్రజావేత్తలను కలిపి ఉద్ఘాటించి కార్యక్రమం ప్రారంభమైంది.



ఈ కార్యక్రమంలో ప్రముఖ విద్యావేత్తలు, ప్రజావేత్తలను కలిపి ఉద్ఘాటించి కార్యక్రమం ప్రారంభమైంది. ఈ కార్యక్రమంలో ప్రముఖ విద్యావేత్తలు, ప్రజావేత్తలను కలిపి ఉద్ఘాటించి కార్యక్రమం ప్రారంభమైంది.

12వ పీఠ సిద్ధార్థులలో ఎలక్ట్రోవిజన్-2020

మొగ్గలజంక్షనులో ఏర్పాటుచేసిన ఈ కార్యక్రమంలో ప్రముఖ విద్యావేత్తలు, ప్రజావేత్తలను కలిపి ఉద్ఘాటించి కార్యక్రమం ప్రారంభమైంది. ఈ కార్యక్రమంలో ప్రముఖ విద్యావేత్తలు, ప్రజావేత్తలను కలిపి ఉద్ఘాటించి కార్యక్రమం ప్రారంభమైంది.

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