



Dr. Shilpa Shrigiri <shilpashrigiri.ece@hsit.ac.in>

Queries/Suggestions Regarding Syllabus of ECE Dept 2018 Scheme.

1 message

HOD ece <hod.ece@hsit.ac.in>

Sat, Apr 13, 2019 at 10:14 AM

To: kunterk@yahoo.com, bos.vtu@gmail.com

Cc: academicsyl2018@gmail.com, Principal HIT <principal@hsit.ac.in>, "Dr. Shilpa Shrigiri" <shilpashrigiri.ece@hsit.ac.in>, Duradundi Madihalli <dbmadihalli.ece@hsit.ac.in>

Dear Sir/Madam,

This Email is with reference to your letter Ref. No.:VTU/Aca/SO/2018-19/217 dated 05/04/2019 regarding queries/suggestions on 3rd to 8th semester (2018 scheme) of Electronics and Communication Engineering Department. We the faculty members of ECE Dept., Hirasugar Institute of Technology, Nidasoshi have noted following observations/points in our department meeting held on 12.04.2019. Kindly go through the points which may be helpful in enriching the syllabus of ECE Dept.

1. The total number of weeks available per semester is 16, and we feel three lecture hours/week may not be enough to cover the entire course of 50 Hours. This can be compensated by reducing the number of modules to four or 40hours/semester.
2. One course (either professional or open elective) must be on Video/Television Engineering for 6th /7th semester students.
3. MEMS course shall be included as core subject rather than Professional Elective.
4. Microprocessor 8086 shall be included as professional elective.
5. High Performance Communication Network (HPCN) shall be included as professional elective in the 7th semester.
6. Course on Linear Integrated Circuits shall be included in either 3rd/4th semester.

Thanks for giving us the opportunity to participate in the process of syllabus framing.

Thanks and Regards,

HOD & ECE Faculty, HSIT, Nidasoshi

Dr. Veeresh G. Kasabegoudar

HOD, ECE Dept.

HSIT, Nidasoshi.

Contact: 9449074094

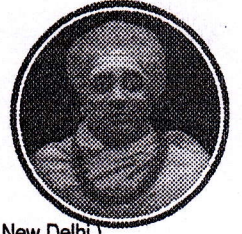


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Nidasoshi - 591 236

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Prof. S. C. Kamate, Ph.D.
Principal

Accredited at 'A' Grade by NAAC

Ref. : HIT/NDSE/EC/03/19-20

Date : 02/04/2019

To,
 The BoS Chairman,
 E&CE Department,
 Visvesvaraya Technological University, Belagavi

Subject: Feedback on 2017-18 & 2018-19 CBCS curriculum for E&CE department.

Sir,

With reference to the above cited subject, we the faculty of E&CE, Hirasugar Institute of Technology, Nidasoshi, have discussed the curriculum of 2017-18 & 2018-19 schemes. Following are our observations related to these schemes.

2017-18 Scheme:

1. **Principles of Communication System (17EC44)** - The syllabus framed meet the current industry demands. However, it would be better if the Module-1 addresses all communication transducers (Ex. Speakers, Microphones, LCD displays etc. in detail).
2. **Signals & Systems (17EC42)** - Topics related to LTI systems are to be shifted from Module 3 to Module 2.
3. **Microprocessor 8086 (17EC46)**: Module 1 is too vast. Instruction set part may be included in Module 2. Pin configuration of 8086 is essential in Module 1.
4. **Field theory (17EC36)**: Syllabus content is more for the prescribed number of hours.

2018-19 Scheme:

1. **Basic Electronics (18ELN14/24)**: Study of Transistor configurations, Types and biasing methods are essential for the subject.

To train the students and make them fit for current employments, we need to conduct expert talks & workshops etc. for one to two weeks of duration. Hence it is advised to reduce curriculum to 40-45 hrs for all courses.

This is for your reference and needful action.

HOD
Dr. V. G. Kasabegoudar
 Professor & Head
 Electronics & Communication Engg. Dept

PRINCIPAL
 Hirasugar Institute of Technology
 NIDASOSHI-591 236



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EEE

2018-19

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGG.

Date: 28/02/2019

To,

The Chairman

BOS (EEE)

Visvesvaraya Technological University, Belagavi.

Dear Sir,

Sub: Suggestions for 2018-19 CBCS Syllabus for EEE Scheme.

With respect to the above cited matter the following points are observed and suggested.


1. PSA-I (18EE55) may be shifted to 6th Semester to have continuation with PSA-II (18EE71) of 7th Semester.
2. Tutorial classes may be included every week for Signals & System (18EE54) subject.
3. Industrial Drives & Applications may be included in the Professional Electives of 7th Semester.
4. It is observed that Sensors & Transducers subject has appeared in both Professional Elective (18EE732) and Open Elective (18EE752) for 7th Semester.
5. Professional Electives suggested
 1. Smart Grid
 2. AI & Its Applications to Electrical Sciences.
 3. Nano Electronics

This is for your reference and needful action.

Dr. B. V. Madiggond

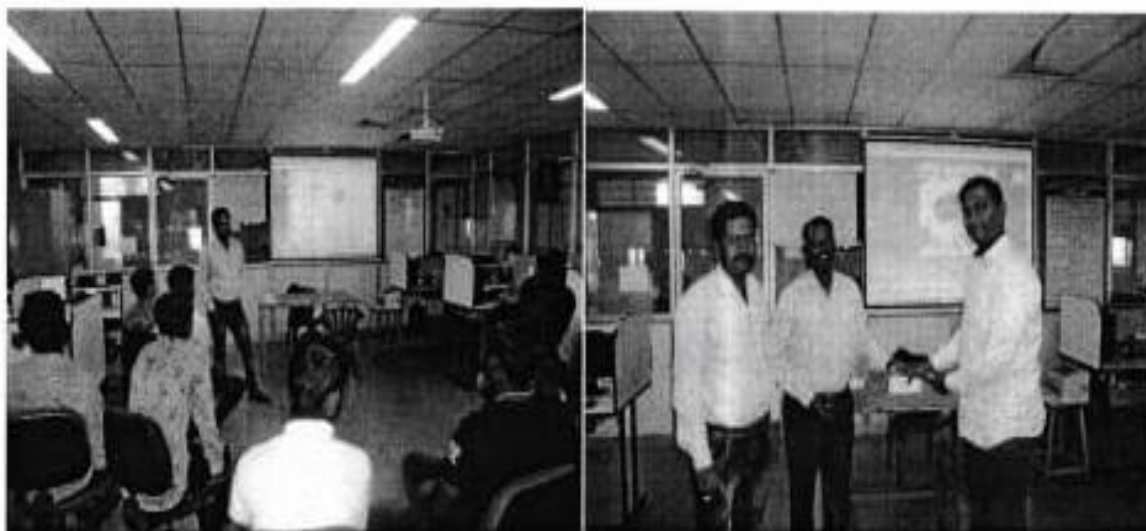
Prof. & Head BE,ME,Ph.D.
Dept. of Electrical & Electronics Engg.
HIT NIDASOSHI-591 236



	<p style="text-align: center;">S J P N Trust's Hirasugar Institute of Technology, Nidasoshi <i>Inculcating Values, Promoting Prosperity</i> Approved by AICTE, Recognized by Govt. of Karnataka and Affiliated to VTU Belagavi. Accredited at 'A' Grade by NAAC Programmes Accredited by NBA: CSE, ECE, EEE & ME.</p>	Mech. Engg. Dept.
		AIMSS
		Training Programme
		2019-20 (Odd)

Training Programme on CATIA and GD&T

Training Programme on CATIA and GD&T was organised by Department of Mechanical Engineering from 27th January 2020 to 15th February 2020 between 10.00 AM to 5.30 PM in the Computer Aided Machine Drawing Lab for pre final and final year students. Mr. Shivanand D. Centre Head, CADD Centre, Belagavi were resource person for this event. Dr. Basavaraj M. Shrigiri, Professor and Head, Department of Mechanical Engineering welcomed the gathering. Prof. M.I. Tanodi, Asst. Professor, Department of Mechanical Engineering and Prof. M. M. Shivashimpi, Asst. Professor, Department of Mechanical Engineering were the coordinator for the event. Dr. K. M. Akkoli, Asst. Professor HOD, Department of Mechanical Engineering distributed certificates to participants. Total 23 students have attended the event.



CO's, PO's and PSO's Correlation:

CO No.	CO Defined	RBT Level	Relevance to PO's and PSO's
CO	Exposure on Usage of Modern Tools and Problem Analysis	L3 and L4	PO2,PO3,PO4,PO5 PSO2 and PSO3


 AIMSS Coordinator
 (Prof. M. M. Shivashimpi)


 HOD
 (Dr. K. M. Akkoli)


 HOD



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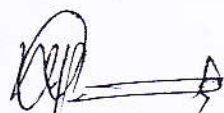


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ECE Dept.

IIIC, Alumni

Workshop

2018-19 (Even)

Date of Activity held and Time:	22/02/2019 to 24/02/2019 9.00am to 5.00pm
Name of Activity:	"IoT Workshop using NodeMCU"
Type of Activity: (cultural/curricular/co-curricular)	Co-curricular
Resource Person/Invitee:	Mr. Shitalkumar Borganve
Professional Details of Resource Person:	Senior Technical Lead, HCL Bangalore.
Year / Class:	6 th Sem and 8 th Sem Students of ECE Dept.
No. of students:	44
No. of Staff:	-
Activity In charge:	Prof. D. M. Kumbhar, Prof. N. M. Patel and Prof. D. B. Madihalli
<p>Description of Activity: An "IoT Workshop using NodeMCU" was jointly organized by Institute Industry Interaction Cell (IIIC) ECE Department and Alumni Association HIT, Nidasoshi for 6th and 8th Semester ECE students from Friday 22nd to 24th, February 2019. Resource person was Mr. Shitalkumar Borganve, Senior Technical Lead, HCL Bangalore.</p> <p>The workshop focused on cutting edge technology "Internet of Things (IOT)". It provided hands on exposure about interface of various sensors and driver circuit with embedded system and then it is connected to real word things through internet.</p> <p>The workshop was inaugurated by Dr. V. G. Kasabegoudar, HOD ECE Department, he encouraged students to participate such activities to enhance their knowledge beyond syllabus. Resource person Mr. Shitalkumar Borganve introduced embedded system architecture and IoT outline in first session. Afternoon session he explained about Arduino IDE and its features. Second day students interfaced various sensors with NodeMCU. On third day participates developed a simple project of home appliance control i.e. lamp control and fan control. Last session was an interactive one and students gave their feedback.</p>	
 IIIC Convener	 Alumni Association Coordinator
 HOD	 PRINCIPAL
Electronic & Commun. Engg. Dept. HIT, Nidasoshi	



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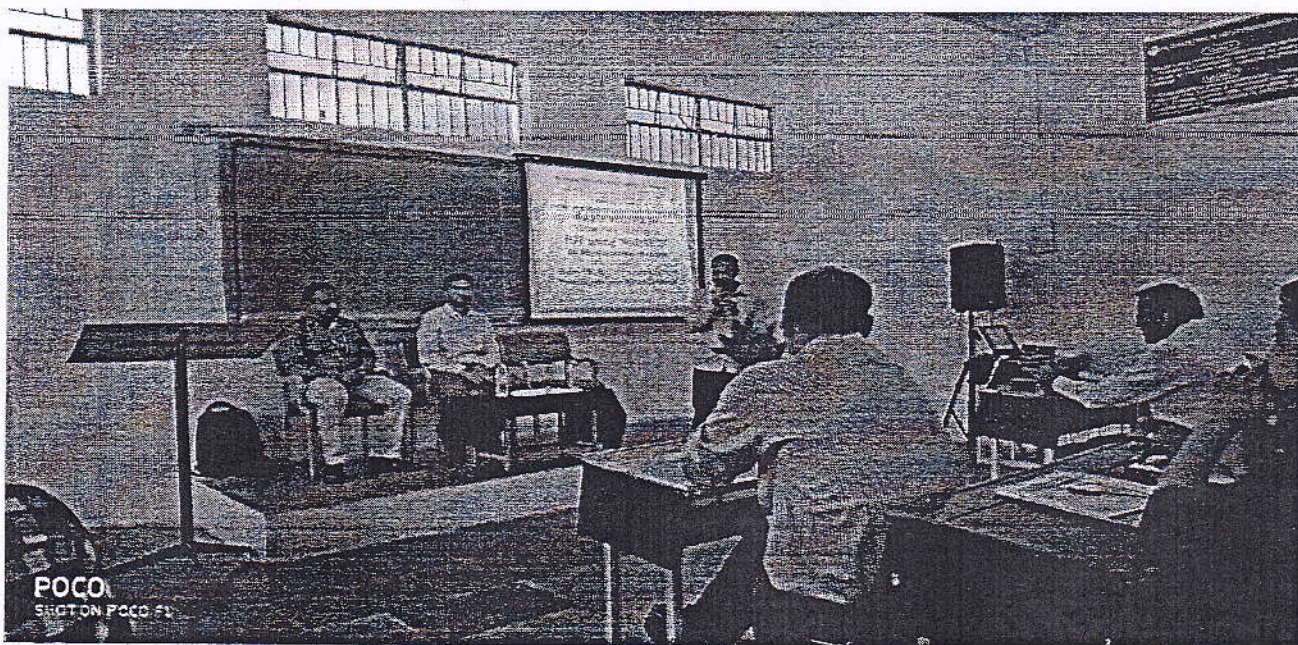
ECE Dept.

IIIC, Alumni

Workshop

2018-19 (Even)

Inauguration of "IoT workshop using NodeMCU"



Presidential remarks by Dr. V. G. Kasbegoudar HOD ECE Dept. at the time of inauguration of workshop on "IoT Workshop using NodeMCU".



Students attending introductory session of IoT workshop.

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ECE Dept.

IIIC, Alumni

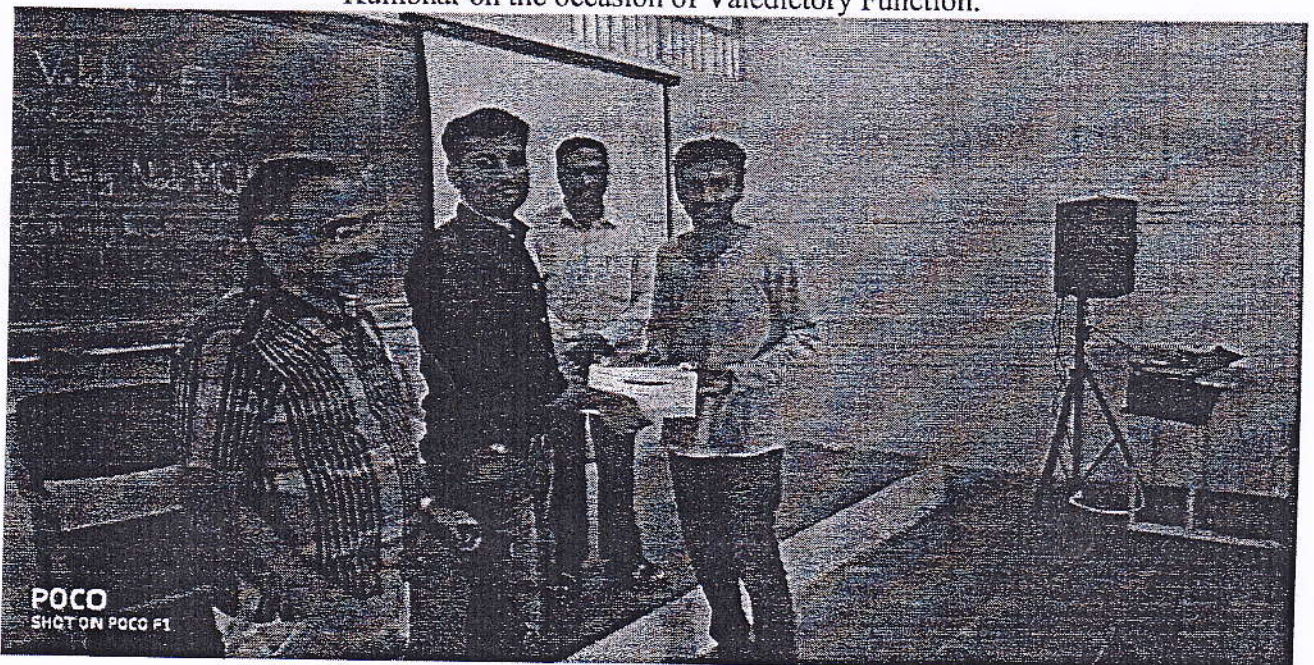
Workshop

2018-19 (Even)

Valedictory Function



HOD Dr. V. G. Kasbegoudar, resources person Mr. Shitalkumar Boreganv and IIIC coordinator Prof D M Kumbhar on the occasion of Valedictory Function.



Workshop participation certificate distribution by resource person Mr. Shitalkumar Boreganve.

Je

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Dept. of CSE
Workshop
IOT: Report
2018-2019

****Activity Report****

Two-Day Workshop: "Practical Hands on Internet of Things"

Organized by

Department of Computer Science and Engineering

In Association with

aMSa embedded solution, Hubli

On

3rd and 4th May 2019

Resource Persons: Mr. Venkatesh D and Mr. Sagar D

Coordinators: Prof. S.G. Gollagi and Prof. A A Daptardar

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Dept. of CSE

Workshop

IOT: Report

2018-2019

Date: 16/04/2019

2-Days Workshop on:

"Practical Hands on Internet of Things using ARDUINO"

On: 3rd and 4th May, 2019

Objectives

- This Program aims at providing an opportunity for participate to enrich their knowledge and skill in developing various solutions for solving engineering problems in the society.
- This program serves as a platform for faculty, students to interact on IOT.
- This platform is used to interact software application with electronic for monitoring and controlling application.

Learning Outcomes:

- Learn the basics of Internet of Things and its applications
- Build your own IoT system using Arduino Uno
- Work with DHT sensors to detect humidity and temperature
- Setup IoT connectivity using ESP8266 WiFi Module
- Understand Arduino Architecture and programming
- Develop and test an IoT weather monitoring station
- Developing Software Application
- Generating API for Application
- Integration of Application with Hardware

Minimum Eligibility Criteria: Basic Knowledge of Computer, Experience with a C/C++ Language is plus.

Target Audiences: 6th Semester students from CSE, ECE, EEE and Staff

Outline of Course: Basics of IOT, Arduino Uno-Architecture, Programming & Trouble-shooting ,ESP8266-Concepts, Architecture & Applications ,DHT Sensor - Sensing Temperature and Humidity, Building IOT Weather Station - Design and Implementation, Programming ,Designing and Developing Application

Coordinator

- 1) SGG
- 2) AAD

HOD

Dr. Parashuram Baraki

Principal

Dr. S C Kamate

PRINCIPAL

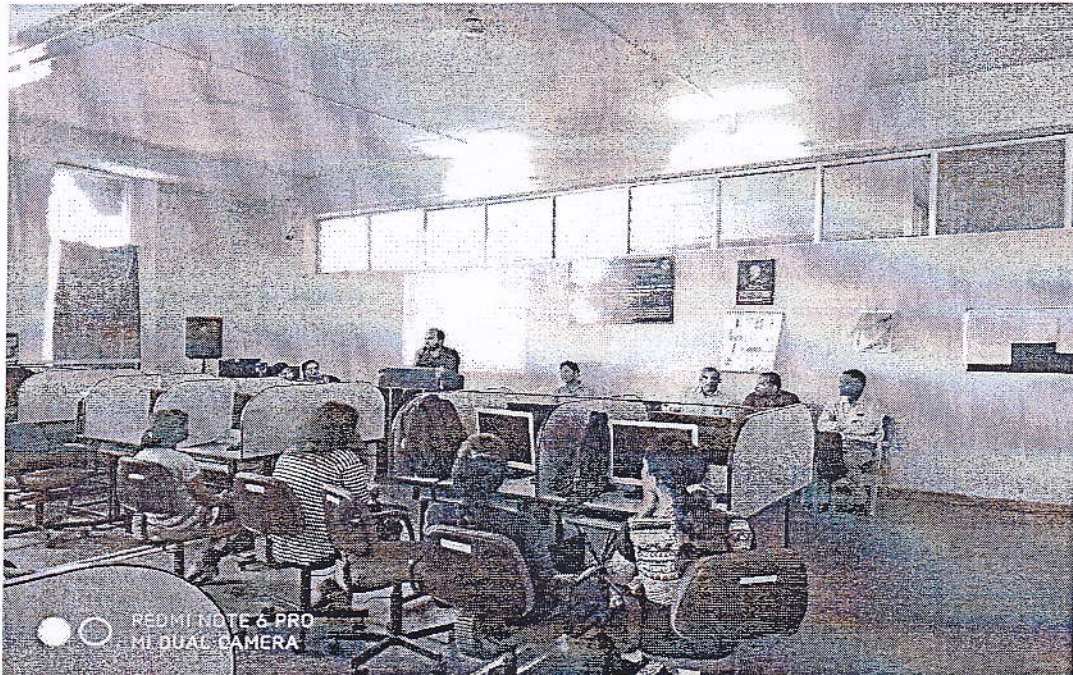
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Dept. of CSE -
Workshop
IOT: Report
2018-2019

PHOTO GALLERY



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Dept. of CSE

Workshop

IOT: Report

2018-2019



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Dept. of CSE -
Workshop
IOT: Report
2018-2019



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Two days Workshop on "PLC Programming and Industrial Automation" held during 12th & 13th Nov 2018 at Hirasugar Institute of Technology, Nidasoshi

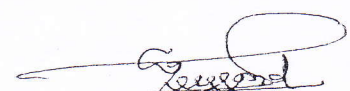


Department of Electrical & Electronics Engineering in association with Alumni Association Hirasugar Institute of Technology, Nidasoshi has successfully organized Two days workshop on "PLC Programming and Industrial Automation" during 12th & 13th Nov 2018. Total 75 students of EEE & ECE departments of HSIT participated in the workshop. Mr. Vilas Patil Design & Automation Engineer, Infysky, Belagavi was the resource person to the workshop.

The workshop was inaugurated on 12th Nov 2018. Dr. B V Madiggond, HOD, EEE department welcomed the gathering and briefed about the objectives of the workshop. Prof. O B Heddurshetti Introduced the resource person. Speaking on the occasion, chief guest Mr. Vilas Patil Design & Automation Engineer, Infysky, Belagavi explained the importance of PLC in the changing Industrial scenario.

Dr. S C Kamate Principal HSIT, Nidasoshi presided over the function and gave presidential remarks. He spoke to inculcate and learn the ongoing technologies to get better job. Prof. P M Murari gave vote of thanks. The workshop was concluded with valedictory function on 13th Nov 2018.


Prof. O. B. Heddurshetti
Workshop Co-ordinator.


16.11.18
Dr. B. V. Madiggond
Prof. & Head
Dept. of Electrical & Electronics Engineering
Hirasugar Institute of Technology, Nidasoshi



Project & Assembly Laboratory





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Mech. Engg. Dept.

Academic

Lab Facilities

AY:2021-22

Simulation & Coding Laboratory and Robotics & Automation Lab/Idea Lab (Tech Fortune & Creintors Industry Academia Collaboration)



Ardino Kits & Sci lab, Origin & Graphers software

MAT LAB R2018b-Basic Software with MAT Lab Tool Boxes: 1. Simulink-MAT LAB 2. Neural Network (for deep learning) 3. Partial Differential Equation 4. Curve Fitting







Date of Activity held and Time:	25/03/2019 11.00 am
Name of Activity:	Circuit Debugging
Type of Activity: (cultural/curricular/co-curricular)	Curricular
Jury member:	1. Prof. D B Madihalli, 2. Prof. D M Kumbhar
Professional Details of coordinators:	1. & 2. Assi. Prof., Dept of ECE, HSIT, Nidasoshi
Year / Class:	Students of ECE Dept. of various colleges
No. of students:	30 (15 Teams)
No. of Staff:	2
Activity In charge:	Prof. S S Patil

Description of Activity: There was a event Circuit Debugging organized at ECE department. There were 30 students from different college participated. ECSA was sponsored the event. **Debugging** is the process of finding and resolving defects or problems within a computer program that prevent correct operation of computer software or a system.




ECSA Coordinator


HOD 25/03/19


Principal



Date of Activity held and Time:	29/03/2019 02.00 pm
Name of Activity:	Rangoli
Type of Activity: (cultural/curricular/co-curricular)	Co-curricular
Staff coordinators:	1. Prof. S B Hosagoudar 2. Prof. S S Kamate
Professional Details of coordinators:	Assistant Professor, Dept of 1.CSE 2.ECE, HSIT, Nidasoshi
Year / Class:	3 rd , 5 th & 7 th Sem Students of ECE Dept.
No. of students:	10
No. of Staff:	5
Activity In charge:	Prof. S S Patil

Description of Activity: Rangoli is an art form, originating in the Indian subcontinent, in which patterns are created on the floor or the ground using materials such as colored rice, dry flour, colored sand or flower petals. It is usually made during Diwali or Tihar, Onam, Pongal and other Hindu festivals in the Indian subcontinent. There were 5 teams in a program RANGOLI at ECE department. The whole event is organized by ECSA. There were many Girls and Boys from different semester participated. The student shows their creativity by making various designs and patterns. The judges evaluated for best two Rangoli arts.





Date of Activity held and Time:	29/03/2019 02.00 pm
Name of Activity:	Mehandi
Type of Activity: (cultural/curricular/co-curricular)	Co-curricular
Staff coordinators:	1. Prof. J A Nadagouda 2. Prof. B P Khot
Professional Details of coordinators:	Assistant Professor, Dept of 1.FYE 2.ECE, HSIT, Nidasoshi
Year / Class:	3 rd , 5 th & 7 th Sem Students of ECE Dept.
No. of students:	18
No. of Staff:	5
Activity In charge:	Prof. S S Patil

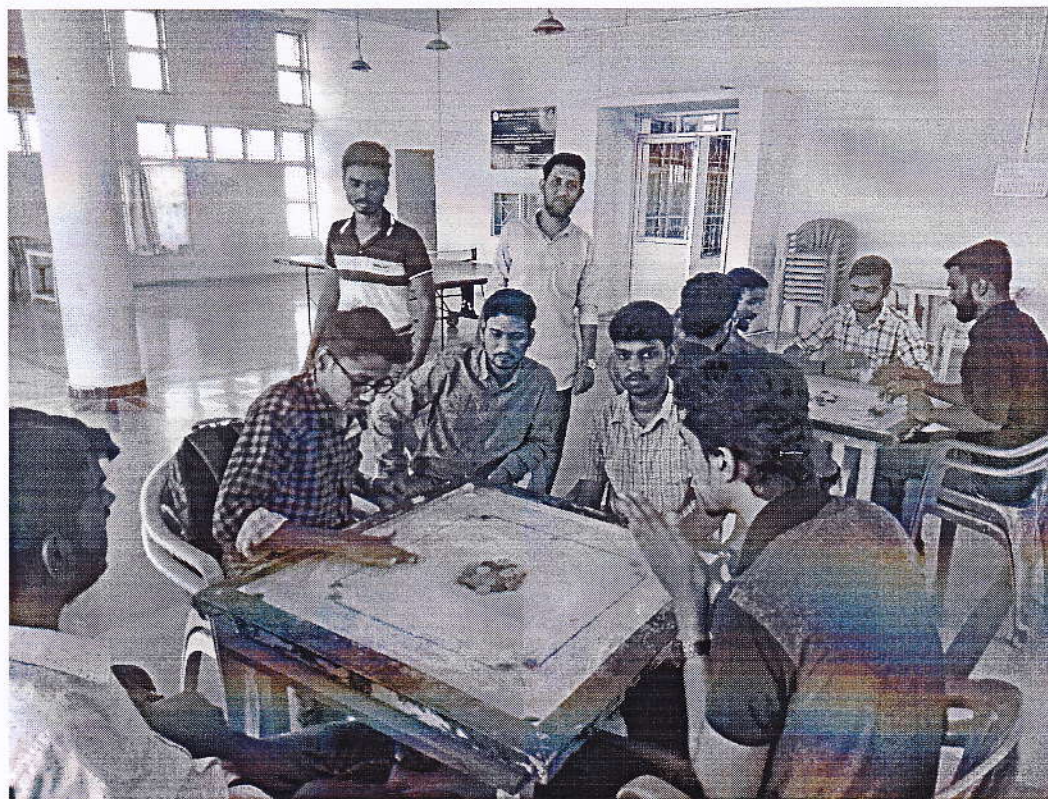
Description of Activity: There was a program MEHANDI ART at ECE department. There were 9 teams. The whole event is organized by ECSA. There were many Girls from different semester participated. The student shows their creativity by making various designs and patterns. The judges evaluated for best two mehandi arts.





Date of Activity held and Time:	29/03/2019 02.00 pm
Name of Activity:	Carrom Doubles
Type of Activity: (cultural/curricular/co-curricular)	Co-curricular
Staff coordinators:	Prof. P V Patil
Professional Details of coordinators:	Assistant Professor, Dept of ECE, HSIT, Nidasoshi
Year / Class:	3 rd , 5 th & 7 th Sem Students of ECE Dept.
No. of students:	12
No. of Staff:	6
Activity In charge:	Prof. S S Patil

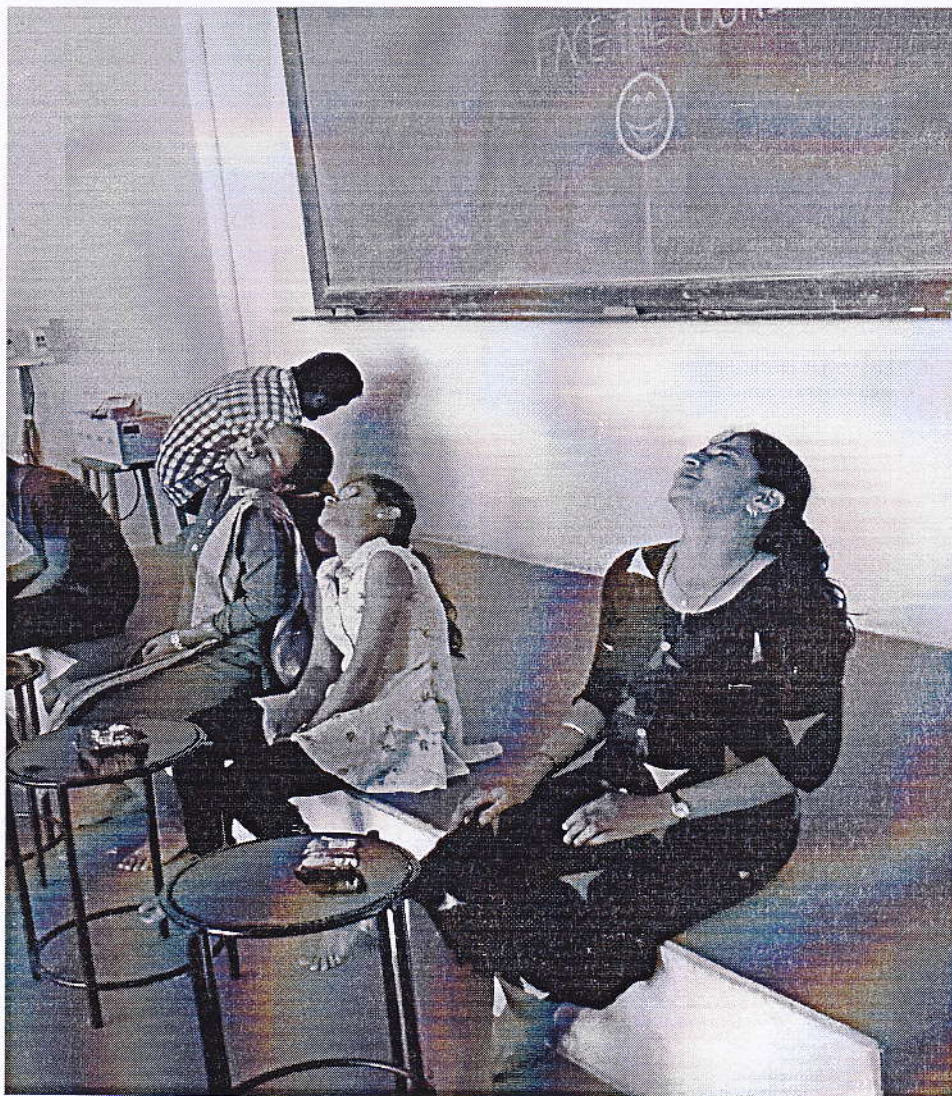
Description of Activity: There was a program Carrom Doubles at ECE department. There were 6 teams. The whole event is organized by ECSA. There were many Girls and Boys from different semester participated. The judges evaluated for best two teams. **Carrom** (also spelled **carom**) is a cue sport-based tabletop game of South Asian origin. The game is very popular in India, Bangladesh, Afghanistan, Nepal, Pakistan, Sri Lanka, Arabian countries and surrounding areas, and is known by various names in different languages. In South Asia, many clubs and cafés hold regular tournaments. Carrom is very commonly played by families, including children, and at social functions. Different standards and rules exist in different areas





Date of Activity held and Time:	05/04/2019 02.00 pm
Name of Activity:	Face the Cookie
Type of Activity: (cultural/curricular/co-curricular)	Co-curricular
Staff coordinators:	1. Prof. N M Patel 2. D M Kumbhar
Professional Details of coordinators:	Assistant Professor, Dept of ECE, HSIT, Nidasoshi
Year / Class:	3 rd , 5 th & 7 th Sem Students of ECE Dept.
No. of students:	16
No. of Staff:	10
Activity In charge:	Prof. S S Patil

Description of Activity: Face the Cookie turns treats into physical fun! The audience has just as much fun as the players, watching their friends and family make silly, contorted faces to complete the task in time. There was a event Face the Cookie at ECE department. There were 12 students from different semester participated. The whole event is organized by ECSA.





Date of Activity held and Time:	05/04/2019 02.00 pm
Name of Activity:	Cook without fire
Type of Activity: (cultural/curricular/co-curricular)	Co-curricular
Staff coordinators:	1. Dr. S B Shrigiri 2. Prof. B P Khot
Professional Details of coordinators:	1. Asso. Prof. 2. Assi. Prof. , Dept of ECE, HSIT, Nidasoshi
Year / Class:	3 rd , 5 th & 7 th Sem Students of ECE Dept.
No. of students:	16
No. of Staff:	10
Activity In charge:	Prof. S S Patil

Description of Activity: There was a event **Cook without fire** organized at ECE department. There were 12 students from different semester participated. The whole event is organized by ECSA. *Cooking* can also occur through chemical reactions *without* the presence of heat, such as in ceviche, a traditional South American dish where fish is *cooked* with the acids in lemon or lime juice. Preparing food with heat or *fire* is an activity unique to humans.





Photo showing student presenting Technical Paper during HSIT-QUEST-2019



Photo showing student participating in Robo Race and Robo Path Finder events during HSIT-QUEST-2019



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Mech. Engg. Dept.


Academic

Lab Facilities

AY:2021-22

LIST OF THEORY SUPPORTED LABORATORIES

Sl. No	Name of Laboratory
1	Basic Workshop Lab
2	Fluid Mechanics Machinery Lab
3	Energy Conversion Engg. Lab
4	Machine shop Lab
5	Foundry & Forging Lab
6	Design Lab
7	Heat & Mass Transfer Lab
8	Metallurgy & Material Testing Lab
9	Mech. Measurement & Metrology Lab
10	Computer Aided Modeling & analysis / CIM & Automation
11	Computer Aided M/c Drawing Lab
12	Comp. Aided Engg. Drawing Lab
13	Alternative Fuel Laboratory (Additional R& D Lab)
14	Aerodynamic Laboratory (Additional R& D Lab)
15	Project & Assembly Laboratory (Additional R& D Lab)
16	Simulation & Coding Laboratory and Robotics & Automation Lab/Idea Lab (Additional Tech Fortune & Creintors Industry Academia Collaboration Industry Attached Lab for Emerging Courses)
17	Skill Development Laboratory (Additional BOSCH Industry –Academic Collaboration Attached Lab)
18	Research Computerized VCR Engine Setup: Open ECU Connected, Single Cylinder CRDI with EGR Multi Combustion Arrangements (Additional R & D Lab)
19	VTU- ALTEM Design and Analysis Laboratory (Additional R& D Lab)


HOD

Mechanical Engg.
HIT, Nidasoshi



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Academic

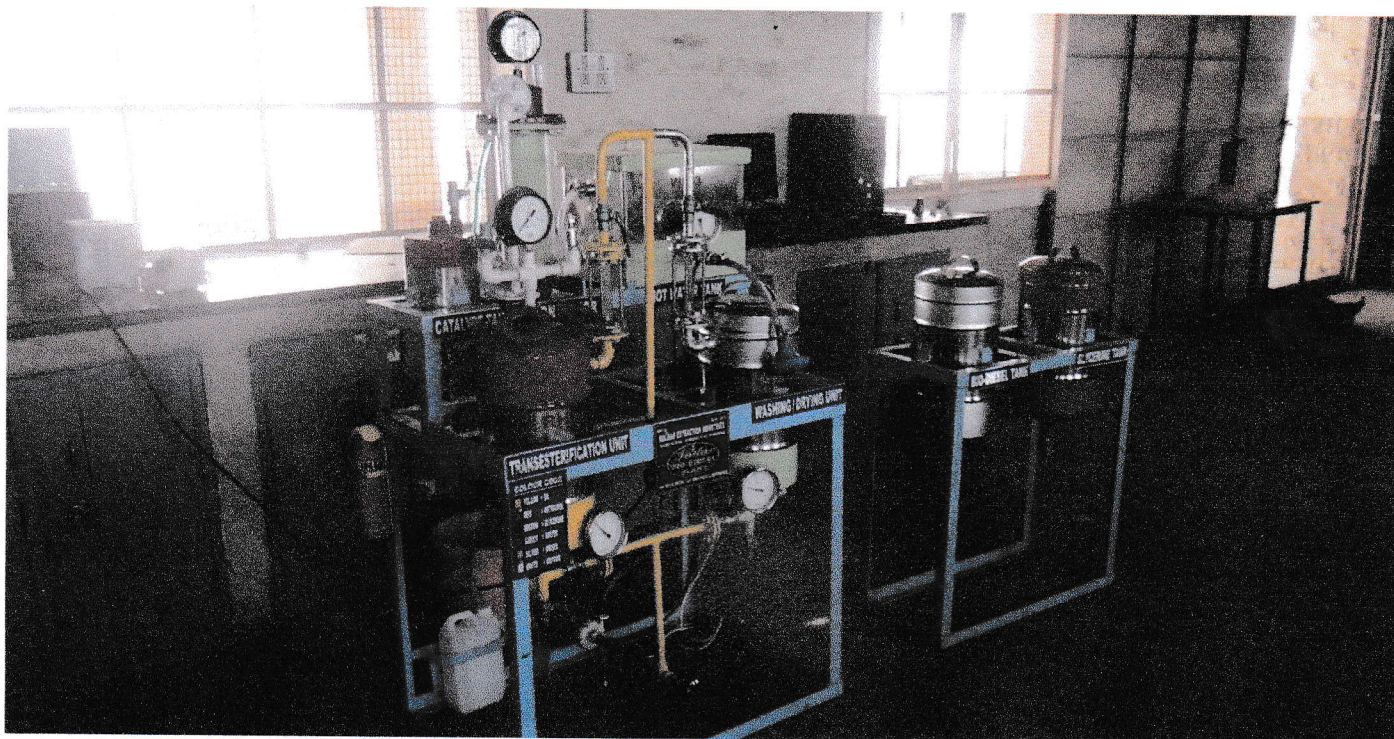
Lab Facilities

AY:2021-22

Lab facilities to support and strengthen theory content

Alternative Fuel Laboratory

Bio-Diesel Plant:



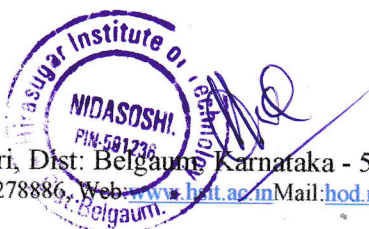
Technical Specification:

Trans-etherification Reactor: S.S 304, 15 Liters volume Trans-esterification reactor with S.S Electric heating coil of 0.5KW, Thermo well with thermometer, S.S liquid flow indicator, Reaction view port, Reaction pressure indicator, Charge/Loading port, Polypropylene circulation pump for liquid transfer and Uniform mixing Reaction test cork, safety valve, etc.

Washing and drying vessel: Washing inlet and outlet and drain valves and drying vessel in SS 304 with 15 liters volume Bio-Diesel with top lid and bottom cone. The vessel is fitted with 0.5KW SS heating-coil, thermo meter.

M.S Structure: The structure is a angular structure to mount reactor and equipment's. This structure is specially designed in the form of a portable skid. If required; the structure can be transported to different sites.

Reflux Condenser: S.S 304 Vapor condensing tubes in M.S Body, water inlet & outlet, vapor inlet & condensate outlet with control valve and pipelines like Final vent, Pressure indicating gauge, Vapor inlet, Water inlet & outlet Condensate outlet



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Mech. Engg. Dept.

Academic

Lab Facilities

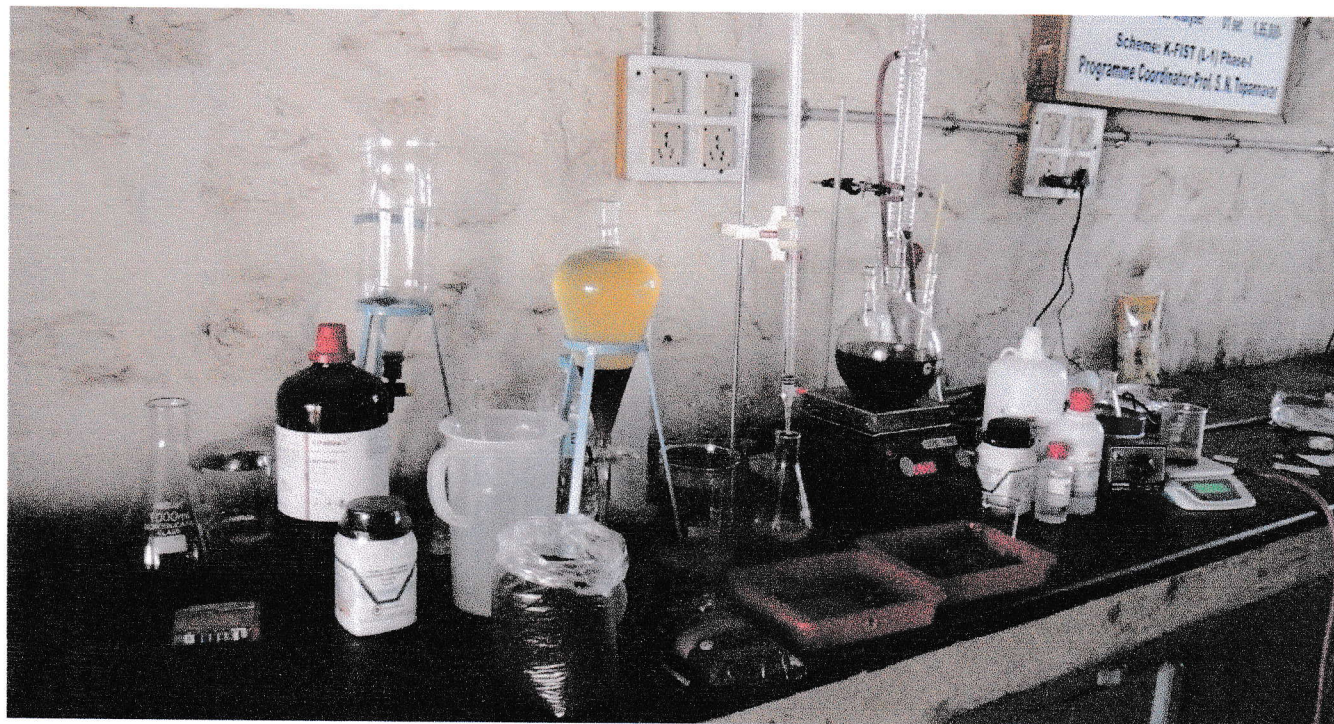
AY:2021-22

Hot water tank: Hot water tank with 20 liters holding capacity equipped with 1.5KW heating-coil, water inlet & outlet, over flow, drain control valves, temperature indicating thermometer mounted on a M.S Stand connected with flexible washing shower

Electric control panel: A traditional electric control panel with single phase/ heating system equipped with indicators, volts and amps meter



Oil Expeller: 5-10 Kgs per hour oil expeller along with bag filter and compatible accessories.



Bio-fuel Titration Kit: B-Beaker low form 250ml Boro lab, B-Beaker lowform 100ml Boro lab, F-Conical flask 250ml Boro lab, Conical Flask 100 ml, T-Thermometer 10' C TO 110' C, H-

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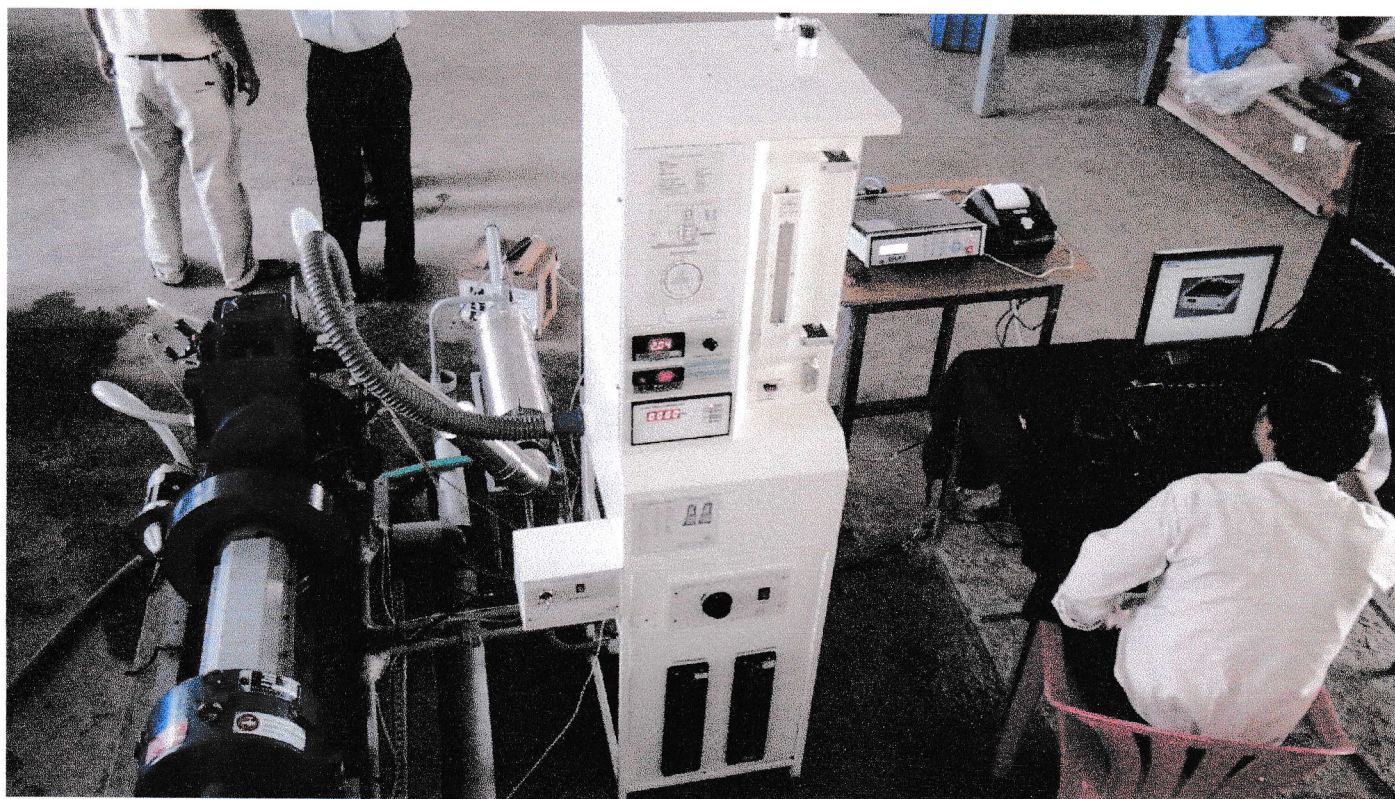
Lab Facilities

AY:2021-22

Hydro meter Range: 0.7 TO 1.0, J-Measuring jug 2ltr Poly Propylene, J-Measuring jar 500 ml Poly Propylene, Test tube 25x150 mm (3 Nos), Burette stand with clips, P-Phenolphthalein solution 125ml P40871, I-Isopropyl alcohol 500ml. I11129, Indicator paper ph 0-14Nice I-40656, Heating mantel-250 ml, Graduated glass measuring cylinder 10 ml.

Bio Diesel Testing Lab Equipments as per BIS IS15607:2005: Viscometer bath with Viscometer, Pensky-Martin Flash point Apparatus Digital, Copper Strip Bath with Bomb with Standard Strip, Top Pan Balance - 300 gm capacity, sensitivity 0.1 gm, Supporting Literature.

The computerized VCR Engine set-up:



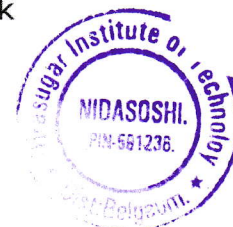
Technical Specification and Details:

1Cylinder, 4 Stroke, Multi Fuel , Kirloskar TV1, constant speed, Power 5.2 kw @ 1500 rpm, 661cc The is a single cylinder, four stroke, VCR (Variable Compression Ratio) Diesel Engine. The set up has stand-alone panel box consisting of air box, twin fuel tank for duel fuel test, manometer, fuel measuring unit, transmitters for air and fuel flow measurements, process indicator and piezo powering unit. Rota meters are provided for ooling water and calorimeter water flow measurement. The setup enables study of VCR engine performance for both Diesel and Petrol. Single cylinder four stroke, water cooled, Kirloskar engine modified to VCR Diesel. The compression ratio can be changed without stopping the engine and without altering the combustion chamber geometry by specially designed tilting cylinder block arrangement.

Features: • Changing CR without stopping the engine

• Diesel operation • Diesel injection point advancement

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Lab Facilities

AY:2021-22

• Electric starting arrangement • PO-PV plots, IP, IMEP, FP indication • Combustion analysis
Dynamometer :Type eddy current, water cooled, with loading unit Propeller shaft With
universal joints Air box M S fabricated with orifice meter and manometer Fuel tank Capacity
15 lit, Type: Duel compartment, with fuel metering pipe of glass Calorimeter Type Pipe in
pipe Piezo sensor Combustion: Range 350BA, Diesel line: Range 350 BAR, with low noise
cable Crank angle sensor Resolution 1 Deg, Speed 5500 RPM with TDC pulse.

Data acquisition device NI USB-6210, 16-bit, 250kS/s.

Temperature sensor Type RTD, PT100 and thermocouple, Type K Temperature transmitter
Type two wire, Input RTD PT100, Range 0-100 Deg C, Output 4-20 mA and Type two wire,
Input Thermocouple, Load sensor Load cell, type strain gauge, range 0-50 Kg Fuel flow
transmitter DP transmitter, Range 0-500 mm WC

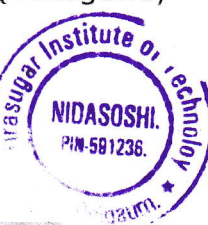
Air flow transmitter Pressure transmitter, Range (-) 250 mm WC Software "Enginesoft" Engine
performance analysis software Rotameter Engine cooling 40-400 LPH; Calorimeter 25-250 LPH
Pump Type Monoblock

Software:EngineSoft is Labview based for engineperformance monitoring system. EngineSoft
can serve most of the engine testing application needs including monitoring, reporting, data
entry, data logging. The software valuates power, efficiencies, fuel consumption and heat
release. Various graphs are obtained at different operating condition. While on line testing of
the engine in RUN mode necessary signals are scanned, stored and presented in graph.
Stored data file is accessed to view the data graphical and tabular fo mats. The data in excel
format can be used for further analysis.

Instrumentation:Product is supplied with best quality instruments. The dycurrent
dynamometer is SAJ,Pune make. The components like Combustion pressure sensor (PCB
Piezotronics, USA), Crankanglesensor(Kubler, Germany), Fuel flow ansmitte r(Yokogawa,
Japan), Temperature & pressure transmitters(Wika, Germany),

High speed data acquisition device (National instruments, USA) are of MNC grades

Diesel Smoke meter:





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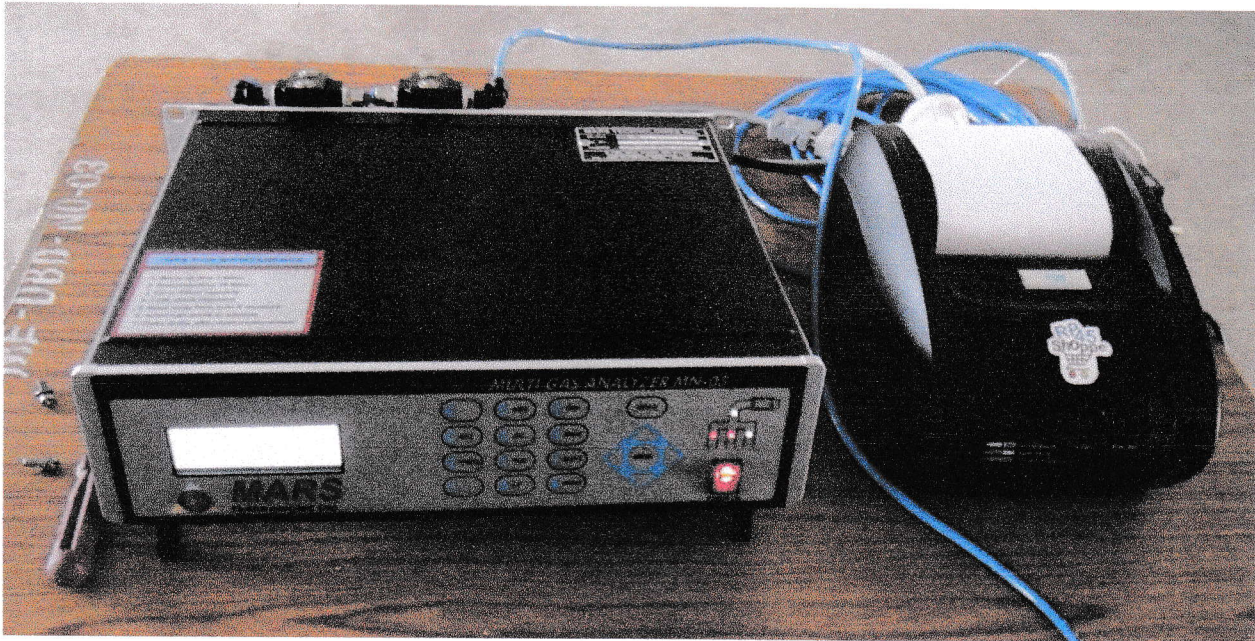
Lab Facilities

AY:2021-22

Measurement range: Absorption 0-99.99 m⁻¹, Opacity 0-100%. Resolution: Absorption 0.01m⁻¹ Opacity 0.1% Better than +/- 0.1m⁻¹. Operating temperature: 0°C-50°C. Calibration: Automatic Linearity Check: Around 50% of measurement range at the press of key/lever. Measurement length: 430mm +/- 5mm, Dimension: 600x260x370mm. (W X H X D). Weight: Approximately 22 Kg s. Power supply: AC 190-240V AC 50. DC 11 V-36V DC within built inverter. Printer: Built in impact printer with provision for multiple print out. Computer interface: RS 232 serial interface to operate on PC for communicating data.

Display: Digital, Clear and visible in all natural conditions. Approval: A.R.A.I. Pune. Results compatibility: Measurement results are fully compatible with Hatridge Smoke Units (HSU). Range/Accuracy/Resolution: The Device should have Calibration for low and high speed with indication. The device should calibrate before each free acceleration test.

Exhaust Gas Analyzer:



Technical Specification and Details:

"MARS" make Microprocessor based Multi Gas Analyser for CO, CO₂, O₂, NO_x & HC model MN-05 with standard accessories with printer Operating System: PIC- Micro Controller Display: LCD Display

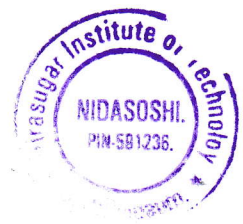
Interface: RS-232 & RS-485 Power Supply: 230v AC 50 Hz 12 v DC (Optional)

Dimensions: 450 mm X 300 mm X 120 mm Approx. Weight: 5 kg Approx.

Measurements:

1. CO (Range: 0 – 9.99% vol Resolution: 0.001% vol)
2. HC (Range: 0 – 15000 ppm Resolution: 1 ppm)
3. CO₂ (Range: 0 – 20% vol Resolution: 0.01% vol)
4. O₂ (Range: 0 – 25% vol Resolution: 0.1% vol)
5. NO_x (Range: 0 – 5000 ppm Resolution: 1 ppm)
6. Engine RPM (Range: 500 – 6000 rpm Resolution: 1 rpm)
7. Oil Temperature (Range: 0 – 150° C Resolution: 1°C)
8. Lambda (λ) (Range: 0.200 – 2.000% Resolution: 0.001)

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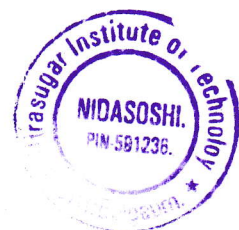
Lab Facilities

AY:2021-22

Aerodynamics Laboratory



- **Technical Specification:** Type : Open Type Wind Tunnel.
Test Section : 300 X 300 X 1000mm
Blower Fan/Axial fan : 5 Blades Aluminum Dia Cast Fan.
Motor : 3 H.P. AC Induction Motor. 2880 Rpm., 440 V / 15 Amp.
Controller : LG Make / Delta Make. Wind Speed in Test Section: 30 M/sec by Suitable Blower Fan/Axialfan.
Duct : Manufactured Out Of Fiber Glass With Inside Smooth Finish .
Length Of Tunnel : 4.2 Meter Approx.
Air Length : 9.5 Meter.
Contraction Ratio : 9:1
- **Instrumentation :** Two Component Digital Force Indicator with Strain Gauge Balance.
- **Measuring Capacity :** Lift Force Up To 25 Kg. Drag Force Up To 10kg.
- **Multitube Manometer :** Acrylic/Galss 400mm Height, 500mm Width (approx) 12 Tubes, 6mm, Dia 0 - 45 Inclination With Vertical Axis.
- **Micromanometer :** 50mm
- **MicropitotTube :** 15cm. Long Along With Micrometer 0-25mm.
- **Anemometer :** 10-30 M/sec.





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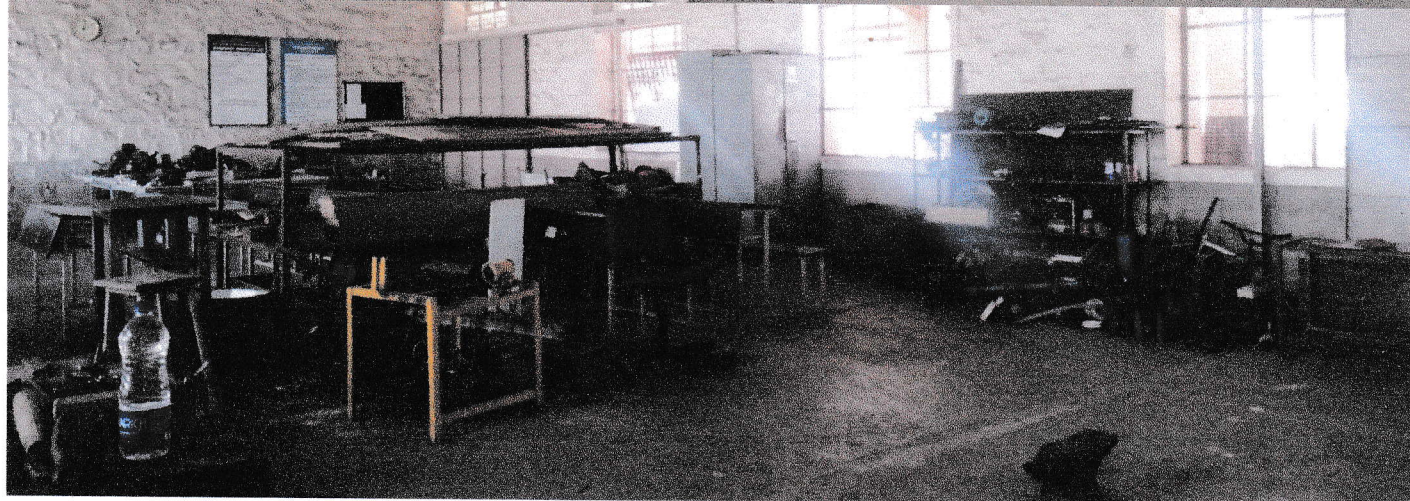
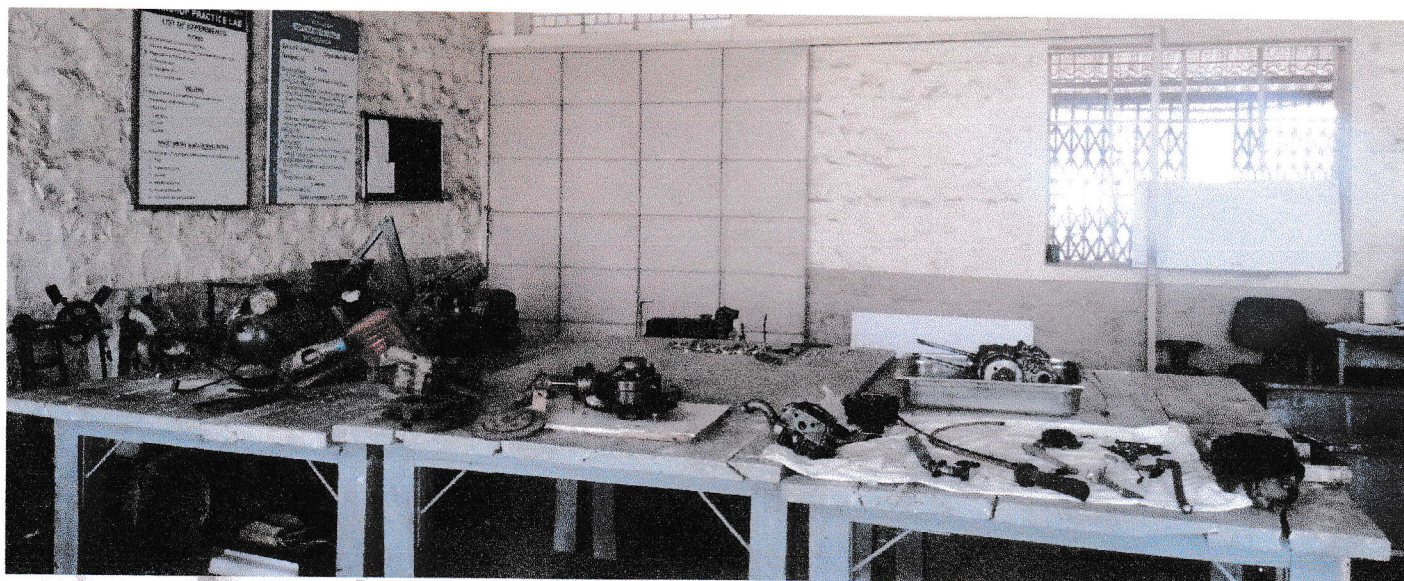
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Lab Facilities

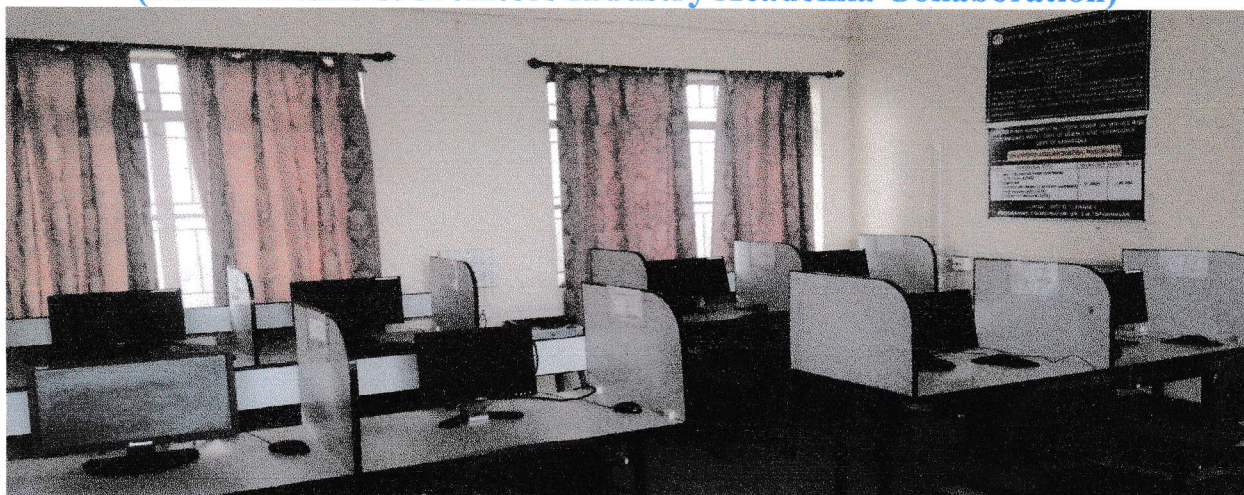
AY:2021-22

Project & Assembly Laboratory

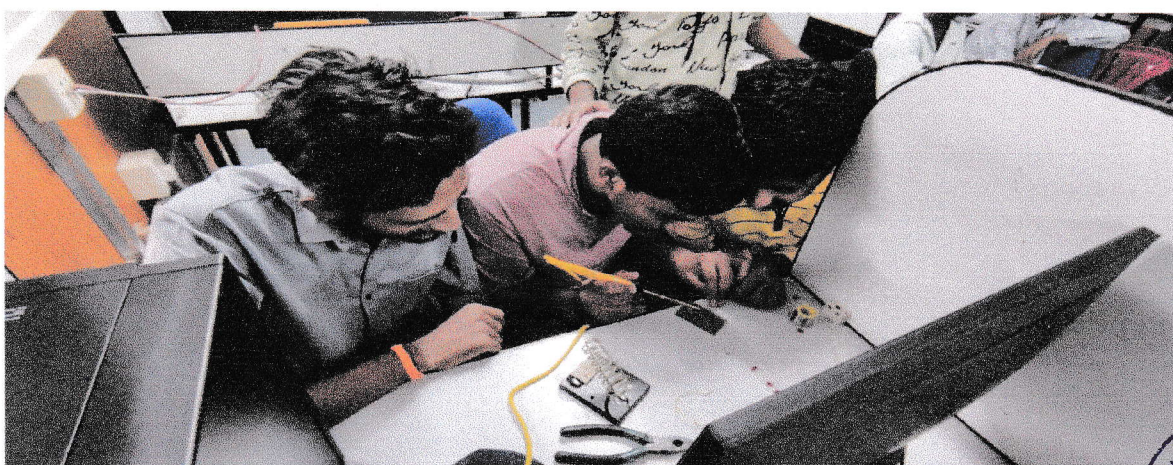
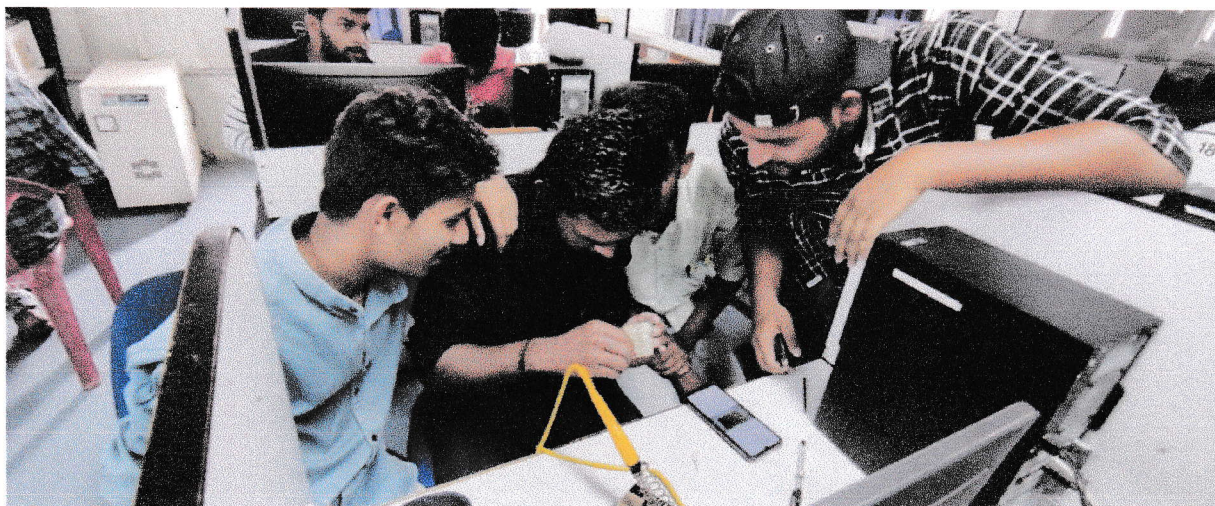




Simulation & Coding Laboratory and Robotics & Automation Lab/Idea Lab (Tech Fortune & Creintors Industry Academia Collaboration)



Aurdino Kits & Sci lab, Origin & Graphers software
MAT LAB R2018b-Basic Software with MAT Lab Tool Boxes: 1. Simulink-MAT LAB 2. Neural Network (for deep learning) 3. Partial Differential Equation 4. Curve Fitting







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Lab Facilities

AY:2021-22

**Skill Development Laboratory
(BOSCH Industry-Academia Collaboration)**



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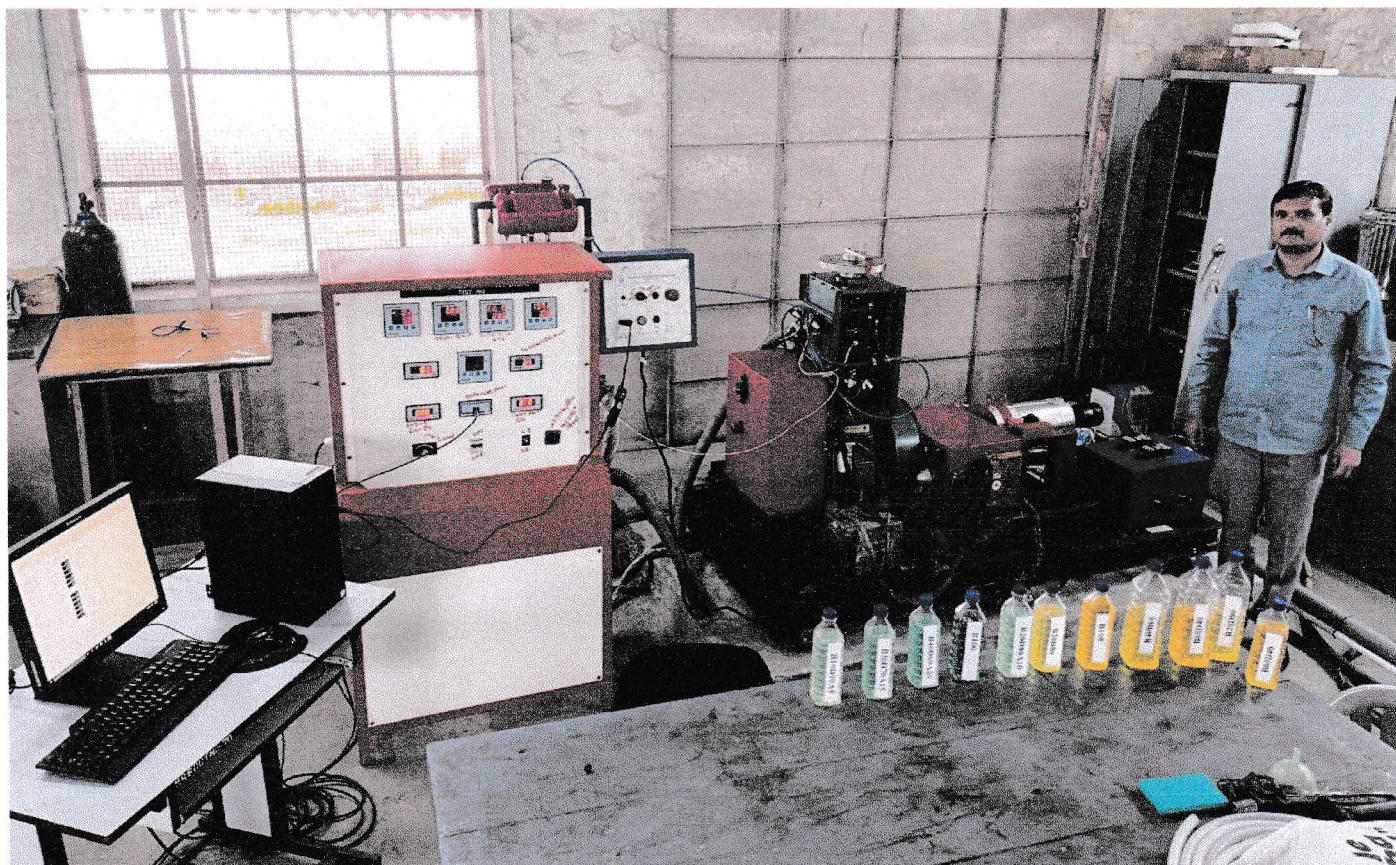
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Academic

Lab Facilities

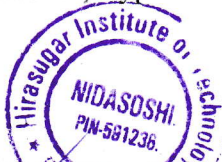
AY:2021-22

Research Computerized VCR Engine Setup: Open ECU connected, Single Cylinder CRDI with EGR Multi fuel combustion Arrangements.



Technical Specifications:

Product: CRDI-VCR Engine test (Computerized) Engine: Make Kirloskar, Single cylinder, 4 stroke, water cooled, stroke 110 mm, bore 87.5 mm, 661 cc. Power 3.5 KW, 1500 rpm, CR range 12-18. Dynamometer: Type eddy current, water cooled with loading unit, Propeller shaft: Make Hindustan Hardy, with universal joints, ECU: Model Nira i7r (with solenoid injector driver) with programmable ECU software and Calibration cable, Common rail: With pressure sensor and pressure regulating valve, EGR: SS, Water cooled, Injector: Type Solenoid driven, Piezosensor: Make PCB USA. Combustion: Range 350 Bar with low noise cable, Crank angle sensor: Make Kubler Germany, Resolution 1 Deg, Speed 5500 RPM with TDC pulse., Data acquisition device: Make NI Instrument USA, NI USB-6210, 16-bit, 250kS/s., Temperature sensor: Make Radix, Type RTD, PT100 and Thermocouple, Type K, Temperature: Make ABUSTEK USA, Type two wire, Input RTD PT100, Range 0-100 DegC, Transmitter: Output 4-20 mA and Type two wire, Input Thermocouple., Load sensor: Make VPG Sensotronics, Load cell, type strain gauge, range 0-50 Kg, Fuel flow transmitter: Make Yokogawa Japan, DP transmitter, Range 0-500 mm WC, Fuel tank: Capacity 15 lit, Type: Dual compartment, with fuel metering pipe of glass, Calorimeter: Pipe in pipe, Air flow transmitter: Make Wika Germany, Pressure transmitter, Range (-) 250 mm WC, Software: "Engine soft" Engine performance analysis software, Rotameter: Make Eureka, Engine cooling 40-400 LPH, Calorimeter 25-250 LPH, Pump: Make Kirloskar, Type Monoblock.



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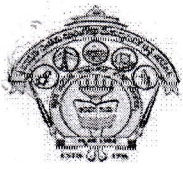
VTU – ALTEM DESIGN & ANALYSIS LABORATORY



List of Application Soft wares

S. No.	MSC Software	Short Description of Visualizing Engineering Software Package
1	MSC Nastran	Multidisciplinary Industry Standard Structural Analysis Simulation
2	Patran	Comprehensive Pre- and Post- Processing Environment Finite Element Modeling
3	MSC Apex	Unified CAE Environment for Virtual Product Development
4	Marc Mentat	Advanced Nonlinear Simulation Solution
5	Adams	Advanced Multi-Body Dynamics Simulation Solution
6	Digimat	Nonlinear Multi Scale Material and Structure Modeling Platform
7	Digimat –AM	Application for simulation of Additive Manufacturing Process of Polymer Parts
8	Easy5	Multi-Domain Modeling of Controls & System Solution
9	scFLOW	New Generation CFD Software with Multi-Physics
10	Dytran	Explicit Dynamics and Fluid Structure Interaction
11	Simufact Additive	Simulation Tool for Distortion Prediction in Powder Bed Additive Manufacturing
12	Simufact Forming	Simulate Metal Forming, Heat Treatment & Mechanical Joining Process
13	Simufact Welding	Simulate Complex Welding Process, Predicts Distortions & Stress Relief
14	Sinda	Industry Proven Advanced Thermal Simulation Solution
15	MSC Fatigue	Predict Fatigue Life, Durability and Damage Predictions (within Patran)

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Mech. Engg.

AIMSS

Hobby / Mini
Project
Exhibition

2018-19 (Even)

Date: 11-03- 2019

NOTICE

Mechanical Engineering Department is conducting, Department Level "**Hobby / Mini Project Exhibition**" on 9th April 2019 at 02.00 PM in the workshop corridor. Hence, all the students of Mechanical Engineering Department are hereby informed to enroll your group with Mr. M. B. Badiger, Instructor, Mechanical Engineering Department on or before 5th April 2019.

Important Notes:

- Hobby / Mini Projects are related to Mechanical Engineering Domain.
- Hobby / Mini Projects are innovative and creative type.
- The maximum two numbers of student must be in one group.
- The participants must present their project model with jury member during exhibition
- Jury member of exhibition will select best two projects.
- The selected projects are award with cash prize and certificates.

Circular To:

Semester	Division	Signature
IV	A	
IV	B	
VI	A	
VI	B	
VIII	A	
VIII	B	

AIMSS Coordinator
(Prof. M.M. Shivashimpi)

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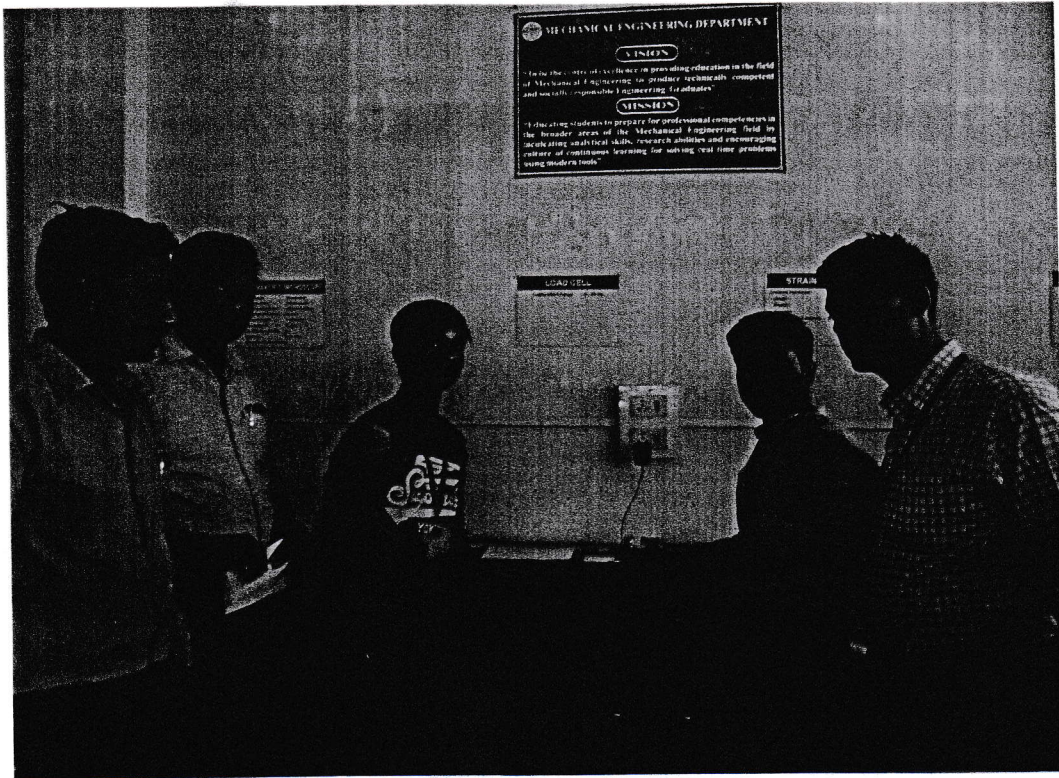


Photo showing students participation in Hobby / Mini Project Exhibition



Photo showing students participation in Hobby / Mini Project Exhibition

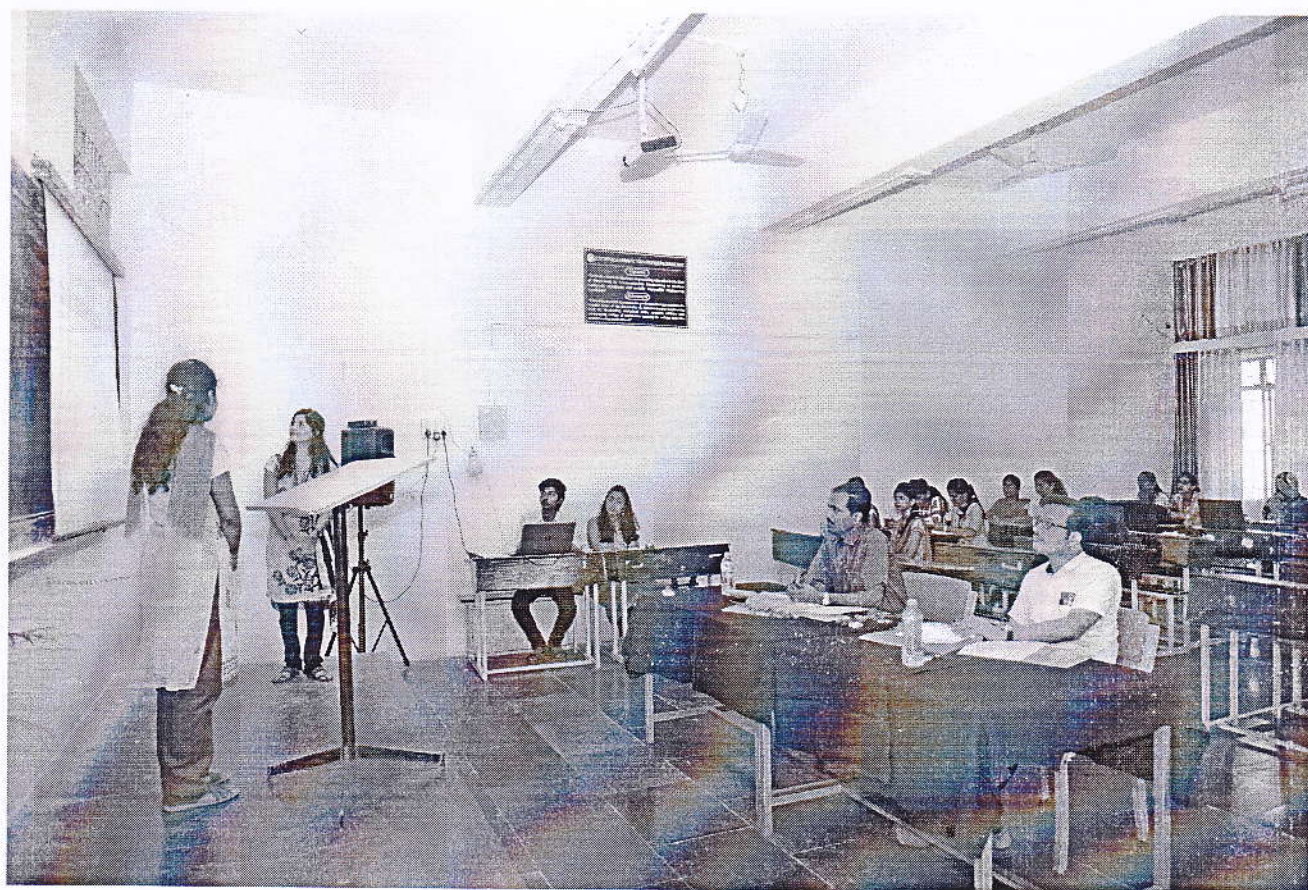
ROZ
HIT

Mechanical Engg.
HIT, Midwadi



Date of Activity held and Time:	25/03/2019 11.00 am
Name of Activity:	Paper Presentation
Type of Activity: (cultural/curricular/co-curricular)	Curricular
Jury member:	1.Prof. M C Sarasamba 2. Prof. Veeresh H
Professional Details of coordinators:	1. Assi. Prof. 2. Assi. Prof. , Dept of ECE, 1. VSM SRKIT, Nipani 2. SGBIT, Belagavi
Year / Class:	Students of ECE Dept. of various colleges
No. of students:	30
No. of Staff:	10
Activity In charge:	Dr. S B Shrigiri , Prof. S S Patil


Description of Activity: A **presentation** is the process of presenting a topic to an audience. It is typically a demonstration, introduction, lecture, or speech meant to inform, persuade, inspire, motivate, or to build good will or to present a new idea or product. The term can also be used for a formal or ritualized introduction or offering, as with the presentation of a debutante. There was a event Paper Presentation organized at ECE department. There were 30 students from different college participated. ECSA was sponsored the event .






ECSA Coordinator

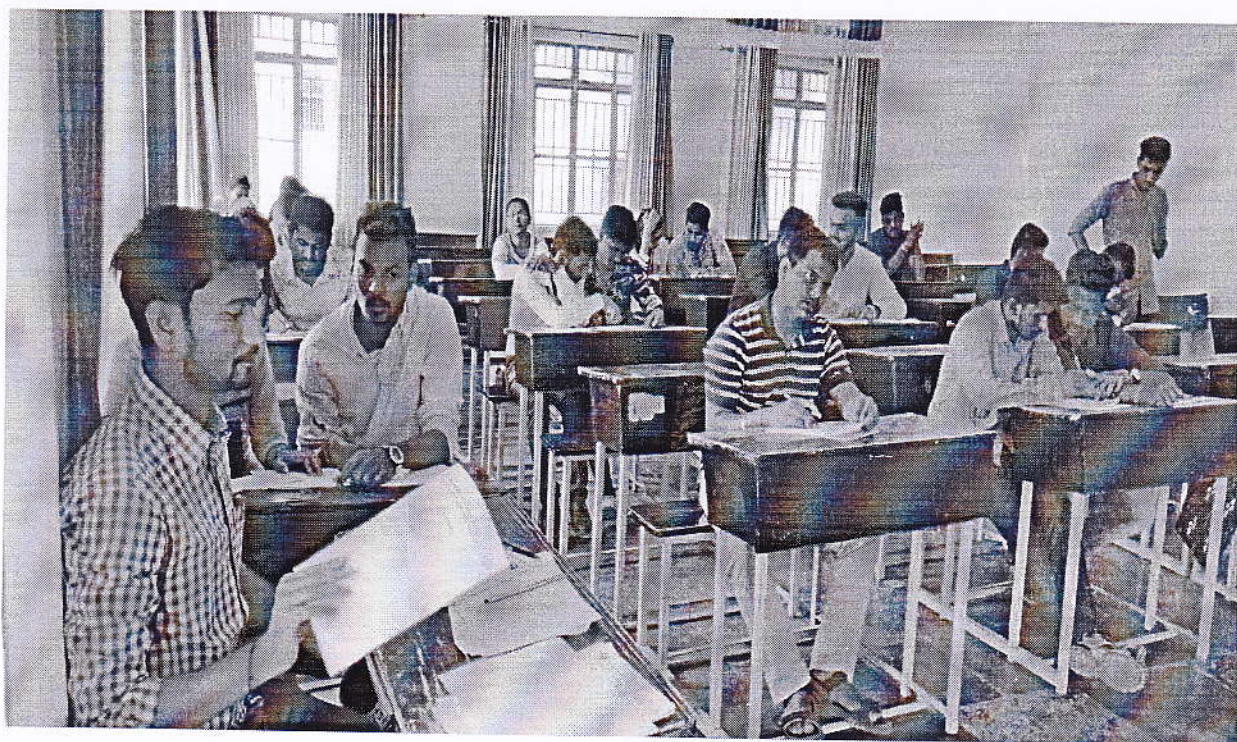

HOD 28/3/19


Principal



Date of Activity held and Time:	25/03/2019 11.00 am
Name of Activity:	Technical Quiz
Type of Activity: (cultural/curricular/co-curricular)	Curricular
Jury member:	1.Prof. P V Patil
Professional Details of coordinators:	Assi. Prof., Dept of ECE, HSIT, Nidasoshi
Year / Class:	Students of ECE Dept. of various colleges
No. of students:	32 (16 Teams)
No. of Staff:	2
Activity In charge:	Prof. S S Patil

Description of Activity: There was a event Technical Quiz organized at ECE department. There were 32 students from different college participated. ECSA was sponsored the event. A **quiz** is a form of game or mind sport, in which the players (as individuals or in teams) attempt to answer questions correctly. ... In some countries, a **quiz** is also a brief assessment used in education and similar fields to measure growth in knowledge, abilities, and/or skills.





Technical Quiz 2018-19 (Even)



Team Name	Rapid Time	Visual Board	Face to Face	Total
A	60	30	11:55	90
B	60	20	6:55 B.F. 10:00 1:00	100
C	10	40	5:55 10:50 1:00	115
D	20	10	1:55 10:55	60
E	20	-	5	1:5

HOD

Principal



Date of Activity held and Time:	25/03/2019 11.00 am
Name of Activity:	Circuit Debugging
Type of Activity: (cultural/curricular/co-curricular)	Curricular
Jury member:	1. Prof. D B Madihalli, 2. Prof. D M Kumbhar
Professional Details of coordinators:	1. & 2. Assi. Prof., Dept of ECE, HSIT, Nidasoshi
Year / Class:	Students of ECE Dept. of various colleges
No. of students:	30 (15 Teams)
No. of Staff:	2
Activity In charge:	Prof. S S Patil

Description of Activity: There was a event Circuit Debugging organized at ECE department. There were 30 students from different college participated. ECSA was sponsored the event. **Debugging** is the process of finding and resolving defects or problems within a computer program that prevent correct operation of computer software or a system.




ECSA Coordinator


HOD 25/03/19


Principal



Date of Activity held and Time:	29/03/2019 02.00 pm
Name of Activity:	Nail Art
Type of Activity: (cultural/curricular/co-curricular)	Co-curricular
Staff coordinators:	1. Prof. A A Daptardar 2. Prof. S S Malaj
Professional Details of coordinators:	Assistant Professor, Dept of 1.CSE 2.ECE, HSIT, Nidasoshi
Year / Class:	3 rd , 5 th & 7 th Sem Students of ECE Dept.
No. of students:	4
No. of Staff:	5
Activity In charge:	Prof. S S Patil

Description of Activity: Nail art is a creative way to paint, decorate, enhance, and embellish the nails. It is a type of artwork that can be done on fingernails and toenails, usually after manicures or pedicures. A manicure and a pedicure are beauty treatments that trim, shape, and polish the nail. Often these procedures remove the cuticles and soften the skin around the nails. Types of manicures can vary from polish on natural nails, dipping powder, and acrylic nails. There was a program NAIL ART at ECE department. There were 4 teams. The whole event is organized by ECSA. There were many Girls from different semester participated.




ECSA Coordinator


HOD


Principal