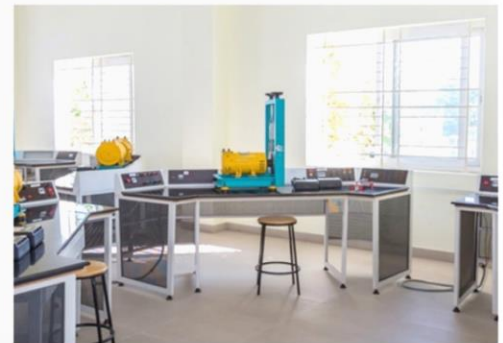


Volume-6 / Issue-1 / Feb 2021

INSPIRE

Electrical and Electronics Bi-Annual News Letter



"If four things are followed - having a great aim, acquiring knowledge, hard work, and perseverance - then anything can be achieved."- Dr. A. P. J. Abdul Kalam

CHIEF PATRONS



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EDITORIAL COMMITTEE CHIEF EDITOR

Dr . Parthasarathy L,
Prof & Head, Dept. of EEE ATMECE, Mysuru



EDITORIAL DESK

This newsletter provides a proper platform to students and faculty to exhibit their creative talents. It is becoming a need to motivate the students community in technical Institutions to be exposed to additional knowledge over and above those in prescribed curriculum in order to provide them an opportunity to professionally mature at faster rate. I congratulate all the students and faculty and who have contributed their valuable creations for publication in this issue. I also take this opportunity to appreciate the strenuous effort made by the editorial to bring out the newsletter. I convey my good wishes to all the readers and wish them a happy and enjoyable reading

CO-EDITOR & DESIGNER

Maria Sushma S,
Asst. Professor Dept. of EEE,
ATMECE Mysuru



Ms. Aishwarya M,
Student Editor, Dept. of
EEE, ATMECE Mysuru



Affiliation



Accreditation



Vision of the College

Development of academically excellent, culturally vibrant, socially responsible and globally competent human resources.

Mission of the College

- *To keep pace with advancements in knowledge and make the students competitive and capable at the global level.*
- *To create an environment for the students to acquire the right physical, intellectual, emotional and moral foundations and shine as torch-bearers of tomorrow's society.*
- *To strive to attain ever-higher benchmarks of educational excellence*

Vision of the Department

To create Electrical and Electronics Engineers who excel to be technically competent and fulfill the cultural and social aspirations of the society.

Mission of the Department

- *To provide knowledge to students that builds a strong foundation in the basic principles of electrical engineering, problem solving abilities, analytical skills, soft skills and communication skills for their overall development.*
- *To offer outcome based technical education.*
- *To encourage faculty in training & development and to offer consultancy through research & industry interaction.*

Program Educational Objectives (PEO's)

PEO1: To produce competent and ethical Electrical and Electronics Engineers who will exhibit the necessary technical and managerial skills to perform their duties in society.

PEO2: To make graduates continuously acquire and enhance their technical and socio-economic skills.

PEO3: To aspire graduates on R&D activities leading to offering solutions and excel in various career paths.

PEO4: To produce quality engineers who have the capability to work in teams and contribute to real time projects.

Program Specific Outcomes (PSO's)

PSO1: Apply the concepts of Electrical & Electronics Engineering to evaluate the performance of power systems and also to control industrial drives using power electronics.

PSO2: Demonstrate the concepts of process control for Industrial Automation, design models for environmental and social concerns and also exhibit continuous self- learning.

About the Department of EEE



The Department of Electrical and Electronics Engineering is started in the year 2010 with an intake of 60 students. Presently about 200 students are on rolls from second to fourth year. The department is recognised as a research centre by Visvesvaraya Technological University (VTU), Belagavi to offer PhD and M Sc (Engg.) programs. The department has well qualified and experienced faculty members with specialization in Power systems, Power Electronics, Energy Systems & Management, CAID, Bio-Medical Signal Processing & Instrumentation and VLSI Design & Embedded systems. All the laboratories relevant to the program are established as per VTU and department is highly committed to bring-in the state of art research laboratories to provide quality education for present challenging societal and industrial needs.

The faculties of the department are associated with professional bodies such as ISTE, IET and IAENG. The department is involved in the research activities in the areas of EMJ/EMC, Power systems. The department has spacious infrastructure with carpet area of 2025 Sq.m, providing sufficient space for lecture halls and laboratories

Short Term Goals:

- *Leveraging technology for Teaching & Learning Process: Video based Learning, NPTEL & MOOCS.*
- *Professional Body Activities- ISTE, IET, IEEE*
- *Endeavour to obtain sponsors for Workshops and FDPs.*
- *Encourage the Faculty members to publish papers in reputed International Journals and Conferences.*

Long Term Goals:

- *To achieve recognition of excellence in undergraduate education in the fields of Electrical & Electronics Engineering.*
- *To achieve distinguished academic results.*
- *To participate in the project sponsored by NGO's, State & Central government bodies.*
- *Work in close cooperation with industry and professional bodies.*

Contents

1. Editorial Desk
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8. Faculty achievements
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10. Training and Placement
11. Virtual Campus Tour links

COVID-19 Response

Since its outbreak in late December 2019, COVID-19 has wreaked havoc across the world and like any critical sector, education has been hit hard. Students, schools, colleges and universities have been deeply impacted.

In the department of EEE, during the pandemic, TLP continued to be effective through the following modes. The delivery of the sessions was conducted in blended mode for the benefits of the students. VTU examinations were conducted following safety precautions and SOP by Govt of Karnataka.

ICT Resources

Delivery	Assessment
1. MS Teams	1. Student Response System
2. PPT	2. MS Team Form Quiz
3. Google Classroom	3. Google Forms Quiz
4. YouTube	
5. Zoom	
6. Virtual Labs	
7. WACOM Writing Pad	

Additional Learning ICT Resources

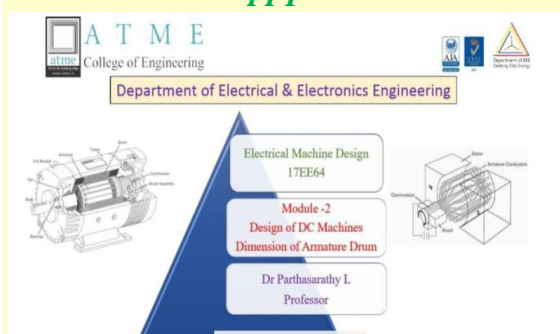
1. EDUSAT
2. Digital Library
3. Study Materials
4. CERP
5. Flipped Classroom

Session Delivery using ICT

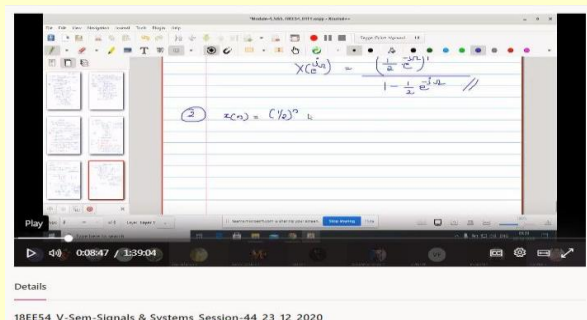
Microsoft Teams(Licensed)



PPT



WACOM Writing Pad



Session Delivery using ICT

Google Classroom

classroom.google.com/c/NTM1NzIwMTIxNDVa

Stream Classwork People Grades

EEE_IV_18EE46_2019-2020
A
Class code: rtzgqg

Upcoming
Due today
9:00 PM - MODULE 3: AS...

Share something with your class...

- SHREESHAYANA R posted a new material: MODULE 3B) COMPARATORS AND CONVERTERS 5:10 PM
- SHREESHAYANA R posted a new assignment: MODULE 3: ASSESSMENT QUIZ 5:05 PM
- SHREESHAYANA R posted a new material: MODULE 3 (b): COMPARATORS AND CONVERTERS Mar 19 (Edited Mar 19)

YouTube (Recorded Videos)

LCD Interface with a 8051 Microcontroller Development Board

Zoom

zoom SOLUTIONS PLANS & PRICING CONTACT SALES

SCHEDULE A MEETING JOIN A MEETING HOST A MEETING

Topic	ID	Start Time	Computer Name	Location
SHREESHAYANA R's Zoom Meeting	769 205 783	Apr 9, 2020 12:52 PM	ADMIN-HP	C:\Users\admin\Documents\Zoom\2020-04-09 12.52.57 SHREESHAYANA R's Zoom Meeting 769205783
SHREESHAYANA R's Zoom Meeting	699 304 475	Apr 9, 2020 12:16 PM	ADMIN-HP	C:\Users\admin\Documents\Zoom\2020-04-09 12.16.25 SHREESHAYANA R's Zoom Meeting 699304475
SHREESHAYANA R's Zoom Meeting	938 051 753	Apr 8, 2020 09:30 AM	ADMIN-HP	C:\Users\admin\Documents\Zoom\2020-04-08 09.30.56 SHREESHAYANA R's Zoom Meeting 938051753
SHREESHAYANA R's Zoom Meeting	157 674 729	Apr 6, 2020 09:47 AM	ADMIN-HP	C:\Users\admin\Documents\Zoom\2020-04-06 09.47.21 SHREESHAYANA R's Zoom Meeting 157674729
SHREESHAYANA R's Zoom Meeting 1 - 18FF46	967 173 469	Apr 1, 2020 09:19 AM	ADMIN-HP	C:\Users\admin\Documents\Zoom\2020-04-01 09.19.16

Virtual Labs

Virtual Labs

Impulse Voltage Generator

IMPULSE VOLTAGE GENERATOR

SIMULATOR INSTRUCTIONS EQUIVALENT CIRCUIT DIAGRAM




CONTROLLER

- CHARGING VOLTAGE: V_c in kV: 10
- CAPACITOR VALUES: C_2 in μ F: 0.6, C_1 in μ F: 0.005
- RESISTOR VALUES: R_c in Ω : 15, R_2 in Ω : 110
- Value of Internal inductance L_2 & L_1 are between 0.1 μ H to 1 μ H
- SPHERE GAP: Sphere gap: 7


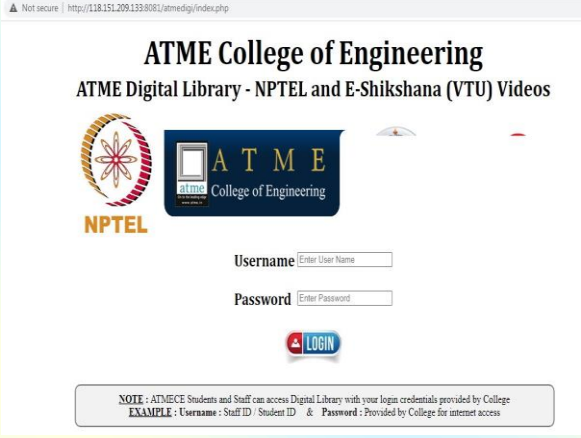
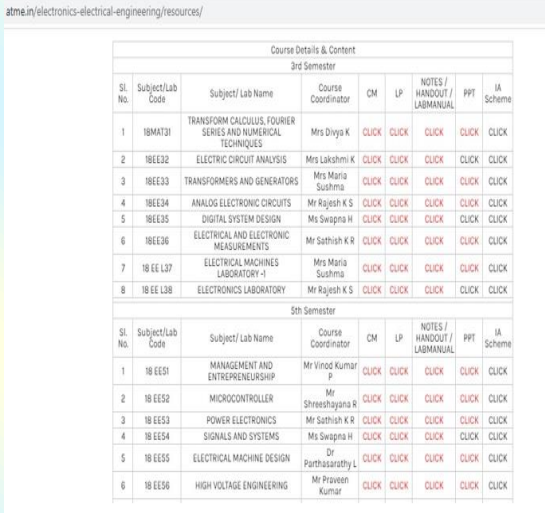
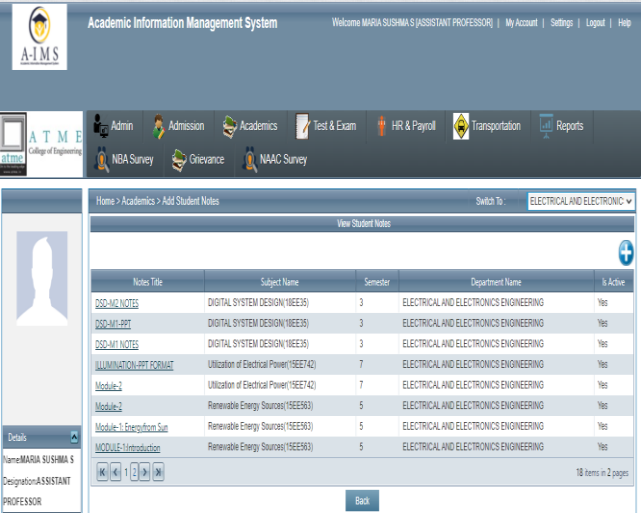
Start Experiment
Load Default Values
Change Capacitors
Trigger Generator

Copyright © 2011 Indian Institute of Technology Kharagpur, Licensor: Tattva

ICT Assessment

<i>Student Response System</i>	<i>MS Team Form Quiz</i>	<i>Google Forms Quiz</i>
		

Additional Learning ICT Resources

<i>VTU EDUSAT Classroom</i>	<i>Digital Library</i>
	
<i>Study Materials</i>	<i>CERP and Flipped Classroom</i>
	

Department Activities

Webinar Series under IEEE

The ATME IEEE Student Branch had organised “**Webinar series on 21st and 23rd October 2020.**” in online platform - MS Teams. The event was organized with objectives to explore recent trends and advantage of using electric vehicle in India Context and to promote ecological sustainable growth while addressing India’s energy Security Challenges. Students from all the branches participated in the event. Mr Ravikiran Annaswamy , CEO of Innohabit Technologies gave insights on the “**Role of Electric Vehicle in 21st century and relevance to India**” on 21st October, 6PM

Context: (F)Edge Computing @ SUNMOBILITY

Legend:

- Metrics, Telemetry Data
- Alerts, Audits
- Software (Features, Algorithms – DevOps)
- Diagnostics (Logs, Events)
- Configuration, Provisioning, Billing

- DevOps based Design with Agile Development
- Security, Scale, Availability and Performance is Implicit
- Intelligent Autonomous Stations and Smart Batteries

DRE - Solar Grids (Micro, Nano, Pico)

Year	1954	2012	2020
Area	100 sqm	1000 sqm	10000 sqm
Cost	1000000	100000	10000
Efficiency	10%	20%	30%

Key Considerations

- ❑ Battery Backup for 24x7 Always-On Power
- ❑ Battery Maintenance, Cleaning of Solar Panels
- ❑ Progressive scalability - cost of addition to capacity
- ❑ Picogrids/Nanogrids - local efficiency, minimize environmental impact
- ❑ Recycling panels, batteries - Safety, 2nd life capacity

National Cancer Awareness Day

The objective of the webinar was to generate awareness about early detection and avoid Cancer causing lifestyles. National Cancer Awareness Day is observed on 7th November on the birth anniversary of eminent scientist Madame Curie. Marie Curie is remembered for the discovery of radium and polonium and gets huge contribution to the fight against cancer. Her work led to the development of nuclear energy and radiotherapy for the treatment of cancer.

CANCER DETECTION AND DIAGNOSIS

Pathology - Type, grade
 Proteomic profile
 Genomic profile
 CML-ABL, BCL gene rearrangements

Tumor markers
 Ovarian cancer-CA-125
 Prostate cancer-PSA

Breast Cancer Survival at various stages

Cancer Stage	Percentage survival in 5 years	Percentage survival in 10 years
0	~95%	~85%
1	~85%	~75%
2,3	~65%	~55%
4	~35%	~25%

“Virtual Technical Fest: Avagamah” Hackathon and Innovative Idea Submission Challenge

The Department of Electrical & Electronics, ATMECE, Mysuru had organised a “State Level Virtual Technical Fest-AVAGAMAH” on 4th and 7th December, 2020 through online platform. To encourage students to apply technical and logical thinking skills through Experiential and participatory Learning, a Virtual Hackathon event was conducted on 4th December, 2020 as part of the fest. Mr. Nouman Ahmed of VVCE, Mysuru bagged 1st Place, Mr. Varun A of ATMECE, Mysuru bagged 2nd Place, Mr. Joshua H Rayapuri of ATMECE and Mr. Sumanth Rao C S of JSS Academy of Technical Education, Bengaluru received consolation Prize in the event Hackathon. To enhance the creative, societal, logical and technical thinking ability in students, Make in Bharat: Innovative Idea Submission Challenge (IIC) was organised on 7th December, 2020. Proposals were submitted by the teams which was initially screened and the best 8 Teams were invited for presentation.

PROBLEM DEFINITION

Alzheimer's Symptoms

- CONFUSION WITH TIME AND LOCATION
- WITHDRAWAL FROM SOCIAL ACTIVITIES
- DIFFICULTY COMPLETING FAMILIAR TASKS
- DIFFICULTY SOLVING PROBLEMS
- TROUBLE WITH IMAGES AND SPACES
- POOR JUDGEMENT
- TROUBLE WITH WORDS AND PHRASES
- UNFOUNDED EMOTIONS
- DIFFICULTY WITH WORDS
- DISPLACING ITEMS
- MEMORY LOSS

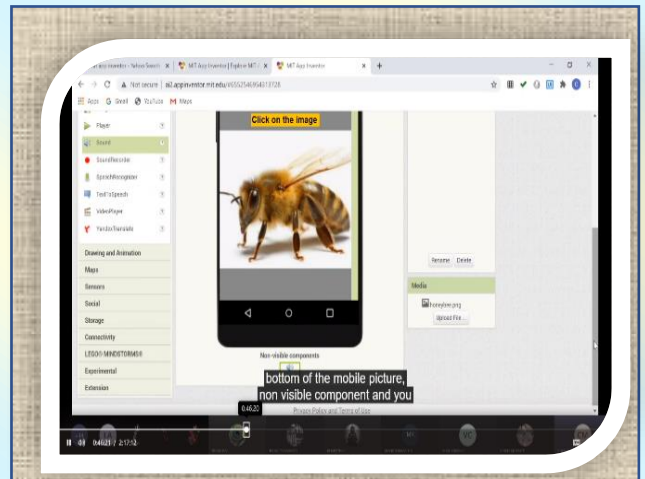
Fig 1: Alzheimer's and Dementia difference.

The proposal titled “**Adjustable Spoon for Parkinson’s Disorder**” presented by Mr. Joshua H Rayapuri and Ms. Dhanyatha M, Dept. of EEE, ATMECE bagged 1st Place and the proposal titled “**Assistive Tool Kit for Alzheimer’s Patient**” presented by Mr. Yaseen Ulla Khan and Mr. Mohammed Suhail, Dept. of EEE, ATMECE bagged 2nd Place. Both teams were mentored by Mr. Shreeshayana R, Assistant Professor.

“**Voting Management**”, presented by Ms. Pavithra K, Dept. of CSE, ATMECE mentored by Mr. Kiran B, Assistant Professor, “**Automatic Door Knob Sanitization**” presented by Ms. Arpitha R and Ms. Priyanka P D, Dept. of EEE, ATMECE mentored by Mr. Vinod Kumar P, Assistant Professor and “**IoT based Hydroponics Cultivation**” presented by Mr. Hemanth B S and Mr. Manjunath K B, Dept. of EEE, mentored by Mr. Shreeshayana R, Assistant Professor were awarded consolation prize.

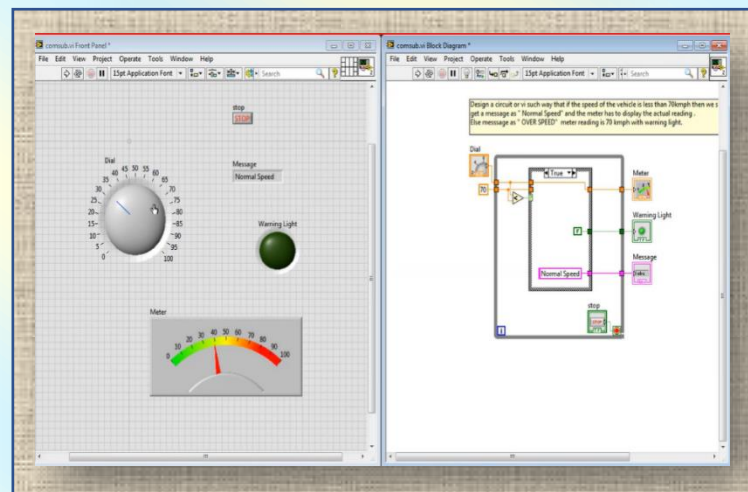
Workshop on App development

The objective of the workshop is to give students hands-on experience in developing Android applications. The online workshop is intended for students who are interested in computational thinking with App Inventor, and for anyone who would like to learn basic programming skills. It provides many interesting hands-on examples, including simple games and practical tools, to make programming fun and easy even for beginners without any prior programming experience.



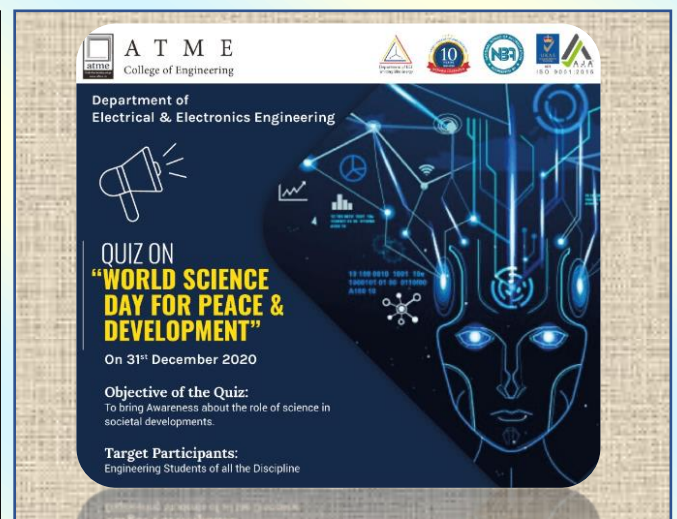
Workshop on Tool usage -LabView

The department of Electrical & Electronics Engineering, ATME College of Engineering, Mysuru had organized a Three day Workshop on “LabView” for the 2nd year of Electrical and Electronics Engineering on 21st December 2020 to 23rd December 2020 through Online Platform. The event was organized to make the students to learn the modern tool usage and to simulate the Electrical & Electronics Circuits by using the modern tool LabView.



Online Quiz Competition on “World Science Day for Peace and Development”

The Department of Electrical & Electronics, ATME College of Engineering, Mysuru had organised “E-Quiz Competition on World Science Day for Peace and Development” on 31st Dec 2020 through online platform. The event was organised with objectives to bring Awareness about the role of science in societal developments. The target participants were Engineering students of all the discipline. More than 150 students across various colleges have took part in the event. All the participants are provided with participation e-certificates and the Highest scorers are provided with Merit certificate.



Social Outreach Activities

COVID-19 Response Team

Faculty Representative



Mr Praveen Kumar M
Assistant Professor

Student Representative



Pavan M
4AD18EE405

The students of Department of Electrical and Electronics Engineering, has served as volunteers and instructed about COVID-19 protocol, during the pandemic in conducting SSLC Examination at Mahajana's High School, Jayalaxmipuram, Mysuru



Pavan Raj- 4AD19EE418



Srikanta Sharma M S- 4AD19EE424



Student Achievements:

Academic Toppers

III Semester



***Kavya G-4AD19EE007
SGPA-8.12***



***Usha C M-4AD19EE020
SGPA-7.60***

V Semester



***Aishwarya M-4AD18EE003
SGPA-9.04***



***Rajat P Karavate-4AD19EE421
SGPA-8.04***

VII Semester



***Arpitha R-4AD17EE002
SGPA-9.08***



***Pradeep K-4AD17EE025
SGPA-8.79***

Funding by Karnataka State Council for Science and Technology (KSCST)

KSCST-List of projects selected under 44th Series of Student Project Program for the year 2020-21

SL. No.	Ref Code	Title	Name of the Students	Project Guide(s)
1	44S_BE_2143	Smart Hydroponics Based Vegetable Cultivation	Mr. Kiran Kumar G Mr. Rohith D Mr. Rakshith K N	Mr. Vinod Kumar P Mr. Shreeshayana R
2	44S_BE_2158	Smart Robot for Library Management System (SRLMS)	Ms. Arpitha R Ms. Priyanka PD Mr. Manoj KN Mr. Mohammed Shah Faisal MP	Mr. Vinod Kumar P Dr. Parthasarathy L
3	44S_BE_3603	Smart Personal Protective Equipment for Healthcare Workers to Combat Covid-19	Ms. Simrah Fathima Mr. Haseebulla Baig Mr. Mohammed Huzaif Mr. Syed Rawoofur Rahman	Mr. Shreeshayana R

Faculty Publications and Achievements

Journals/ Conferences	International	National	Total
Journals	42	-	42
Conferences	29	10	39

- Mr Vinod Kumar P and Maria Sushma S, Assistant Professor, Department of Electrical and Electronics Engineering mentored in the proposal titled " Automatic Door" Knob Sanitization using UV-C Light" approved under Tycathon 2021.

Research and Consultancy

MOU with M/s. TPC Techno Power Corporation LLP

The Department of Electrical & Electronics Engineering, ATME College of Engineering, Mysuru and M/s. TPC Techno Power Corporation LLP, Bangalore, Karnataka, signed a Memorandum of Understanding (MOU) on 21st Feb-2018.

About TPC Techno Power Corporation LLP

M/s. TPC Techno Power Corporation LLP (TPCLLP) is established in the year 2003 and counted amongst the prominent manufacturers and suppliers of a wide assortment of Transformers. It is in approval with KPTCL & ESCOM's in Karnataka and Central Power Research Institute (CPRI). TPC offer, electrical transformers, electronic transformers, furnace transformers, power transformers, rectifier transformers, booster transformers, dry type transformers and distribution transformers

Skill Development Programs: TPC to train the students of ATMECE on the emerging technologies in order to bridge the skill gap and make them industry ready.

Industrial Internship & Visits: Industry and Institution interaction will give an insight in to the latest developments / requirements of the industries; the TPC to permit the Faculty and Students of the ATMECE to visit its group companies and also involve in Industrial Training & Internship Programs for the ATMECE. The industrial training and internships provided to students and faculty through this association will build confidence and prepare the students to have a smooth transition from academic to working career. The TPC will provide access to its Design Centres / Workshops / Testing facilities for the hands-on training of the learners enrolled with the ATMECE.

Consultancy Area	Consultancy Period	Name of the Expert
Transformer Design and Validation	3 Years	Dr. Parthasarathy L, Prof and Head, Dept of EEE, ATMECE

Patents from the department

Patent Application Publication, India				
Title	Date of filing of application	Publication Date	Name of the Applicant	Name of the Inventor
A Single Window Documentation Procedure for Multiple Assessment and Appraisal Requirements	14/07/2020	13/11/2020	Mr Raghavendra L <i>Associate Professor</i>	Mr Raghavendra L <i>Associate Professor</i>
			Mr Shreeshayana R <i>Assistant Professor</i>	Mr Shreeshayana R <i>Assistant Professor</i>

Training and Placement

Placement training plays a major role in shaping up the career goals of students. The Training Division of the ATMECE Placement Cell offers training with a vision to cater to the requirement of industries. Training etiquette like Business English, Personality Development, logical & verbal analysing ability, Group Discussion, Resume writing etc are expected from graduates. Keeping this key aspect into consideration, it is realized that training is important to create an exposure, enhance skillset, build confidence amongst engineering students to enhance their employability and achieve good placement in various Industries. Business English is currently covered in the Ist Year of the Program as part of the curriculum. Remaining etiquette are offered through Training vendors and In-House Trainers.

<p>Aptitude Verbal & Reasoning (AVR) Training 32 Hours Annually</p>	<p>In-House AVR Training is offered to address aptitude test failures and train students on analytical, logical, verbal, and critical reasoning</p>	<p>II and III Year</p>	<p>In House Faculty Members</p>
<p>Pre-Placement Training (GD, Aptitude revision, Soft skills, Resume writing, Personality skills, Mock Interview About 40 Hours</p>	<p>Pre-Placement Training is offered to students covering all etiquette before the students formally enter the placement recruitment process.</p>	<p>IV Year</p>	<p>Seventh Sense Talent Solutions</p>



AVR Overview

Sl.No.	Course	Course Code	Semester	Teaching Hours/Semester	Assessment Hours/Semester	Total Hours/Semester
1	Aptitude Verbal & Logical Reasoning-I	ATME_AVR_01	III	12	4	16
2	Aptitude Verbal & Logical Reasoning-II	ATME_AVR_02	IV	12	4	16
3	Aptitude Verbal & Logical Reasoning-III	ATME_AVR_03	V	12	4	16
4	Aptitude Verbal & Logical Reasoning-IV	ATME_AVR_04	VI	12	4	16

Link to Virtual Campus Tour : <http://surl.li/aowwi>

“Learn from yesterday, live for today, hope for tomorrow. The important thing is not to stop questioning”- Albert Einstein