



# MOUNT ZION

## COLLEGE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Affiliated to Anna University & Accredited by NAAC with A+ Grade)  
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### THE DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

# CIRCUIT CHRONICLE -II

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JUNE 2024



## Vision

**Department Vision and Mission** To be a centre of excellence in the field of Electronics and Communication Engineering by offering technical education of the highest quality, continuous professional development, research and commitment with social responsibility and ethical values.

## Mission

- To achieve excellence in Electronics and Communication Engineering by combining modern teaching methods with cutting-edge research.
- To equip students with adequate core and interdisciplinary knowledge, problem solving skills to satisfy the changing expectations of industry and society.
- To create a learning environment that fosters strong communication skills, teamwork, leadership, and entrepreneurial abilities.
- To facilitate collaboration and industry to enhance career opportunities through practical learning

## FOUNDER CHAIRMAN

**SRI JAYABARATHAN CHELLIAH, M.A. , (U.S.A), B.ED.,**



Sri Jayabarathan Chelliah was the FounderChairman of Mount Zion Christian Education Trust. Under his able leadership, the first school, which began in 1988, grew into many institutions. He held a Bachelor's Degree in Science from Alagappa University, Karaikudi, Tamil Nadu, and a Bachelor's Degree in Education from Calicut University, Kerala. He graduated with a Master's Degree in Educational Administration from the prestigious Loma Linda University, California, U.S.A., in June 1978. He was also an honored alumnus of Loma Linda University. Additionally, he received the Dr. Radhakrishnan (Nallasiriyar) Award from the Government of Tamil Nadu. The institutions he initiated will continue to strive to reach the lofty ideals he envisioned.

# CHAIRPERSON

**MRS. FLORENCE JAYABARATHAN, M.A., B.ED.,**



**Mrs. Florence Jayabarathan is the Chairperson of Mount Zion College of Engineering and Technology. Along with Sri. Jayabarathan Chelliah, she is one of the founders of the Mount Zion Institutions in Pudukkottai District. With over 50 years of dedicated teaching experience, she motivates both teachers and students to perform to their fullest potential.**

## MESSAGE FROM THE DIRECTOR



The dedication and creativity of the ECE Department truly shine through in this outstanding newsletter. It beautifully highlights the department's achievements, innovative projects, and academic milestones—perfectly reflecting our institution's vision of excellence, innovation, and societal contribution.

I wholeheartedly applaud the students and faculty for their commitment to addressing relevant issues and for creating a platform that both informs and inspires. This newsletter stands as a strong testament to your hard work, teamwork, and determination to make meaningful contributions to the academic community and beyond.

Congratulations to the entire ECE team on this remarkable publication. Wishing you continued success, and eagerly looking forward to witnessing more of your achievements in the future

**DR. JAYSON KEERTHY JAYABARATHAN,  
DIRECTOR, MZCET**

## MESSAGE FROM THE ACADEMIC COORDINATOR



It is with great pride and joy that I contribute to this edition of the ECE Department newsletter. This publication reflects the vibrant academic culture and innovative spirit fostered at Mount Zion College of Engineering and Technology.

The collective efforts of our students and faculty in shaping this magazine highlight their passion for learning, research, and community engagement. Each page showcases significant milestones, creative ideas, and a shared commitment to making a meaningful impact in the dynamic field of Electronics and Communication Engineering

I extend my heartfelt appreciation to the ECE team for their dedication and hard work in bringing this newsletter to fruition. May this initiative continue to inspire and serve as a platform for innovation, excellence, and continuous growth.

**PROF. VIVIAN RACHEL JAYSON,  
ACADEMIC CO-ORDINATOR,  
MZCET**

## MESSAGE FROM THE PRINCIPAL



It gives me immense pleasure to share my thoughts through this newsletter, a true reflection of the dedication and dynamism of the ECE Department. This publication embodies the spirit of innovation, academic excellence, and teamwork that we deeply cherish.

The accomplishments showcased within these pages speak volumes about the hard work, creativity, and passion of our students and faculty. It is truly inspiring to witness their commitment to addressing contemporary challenges and contributing meaningfully to the advancement of technology and society.

I wholeheartedly commend the entire ECE team for their effort in bringing out this wonderful newsletter. May it continue to inspire, motivate, and serve as a platform to highlight the remarkable talents and achievements of the department.

**DR. P. BALAMURUGAN**  
**PRINCIPAL, MZCET**

## MESSAGE FROM DEAN/ ICT



It is an honor to share my thoughts through this newsletter, which highlights the exceptional dedication and accomplishments of the ECE Department. This publication embodies the innovative mindset, teamwork, and pursuit of excellence that define our academic community.

The projects, research activities, and academic progress featured in this edition are truly inspiring. These contributions not only enrich the learning experience but also foster a culture of creativity, curiosity, and forward-thinking.

I extend my heartfelt congratulations to the students and faculty of the ECE Department for their outstanding efforts in bringing this newsletter to life. Wishing you continued success in all your future endeavors.

**DR. S. ROBINSON, DEAN/ICT  
MZCET**

## MESSAGE FROM HEAD OF THE DEPARTMENT



It gives me great pleasure to address you through this edition of the ECE Department newsletter. This publication reflects the dedication, innovation, and academic excellence consistently demonstrated by our students and faculty.

The initiatives and achievements highlighted in these pages underline the department's commitment to advancing knowledge, fostering creativity, and addressing real-world challenges. Such efforts not only enrich our academic environment but also inspire everyone to strive for greater accomplishments.

I extend my sincere appreciation to the ECE team for their hard work and dedication in producing this exceptional publication. May this newsletter continue to serve as a platform to celebrate achievements and inspire success in all future endeavors.

**DR. M. DHAMODARAN**  
**HOD/ECE, MZCET**

## DETAILS OF EVENTS ORGANISED (IV/CONFERENCE/WORKSHOP/ SEMINAR/SYMPOSIUM/OTHER EVENTS)

| S. No | Date of the Event              | Name of the Event                                                                       | Name of Internal Coordinator                                                                                                 | Name & Detail of the Resource Person                                                                                                                 |
|-------|--------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | 24.04.2024<br>to<br>25.04.2024 | 5 <sup>TH</sup> International Conference on Recent Trends in Engineering and Technology | Dr. V. Kavitha,<br>AP/ECE,<br>Mrs. A. Taksala<br>Devapriya, AP/ECE,<br>Mount Zion College<br>and Technology,<br>Pudukkottai  | Dr. C. Ramasamy<br>Sankar Ram,<br>Professor,<br>Anna University,<br>Trichy                                                                           |
| 2     | 10.04.2024<br>to<br>11.04.2024 | 24 Hours Workshop on "Internet of Things and its Applications"                          | Mr. R. Arunkumar,<br>AP/ECE and<br>Mr. C. Palaniappan,<br>AP/ ECE,<br>Mount Zion College<br>of Engineering and<br>Technology | --                                                                                                                                                   |
| 3     | 25.03.2024                     | One Day Workshop on "Design of Electronic Circuits and PCB Using Circuit Wizard"        | Mr. R. Arunkumar,<br>AP/ECE and Ms.<br>K.RamaPrabha,<br>AP/ECE<br>Mount Zion College<br>of Engineering and<br>Technology     | --                                                                                                                                                   |
| 4     | 17.10.2023                     | Value Added Course on "Java Programming"                                                | Mrs. G.<br>Senthamilselvi,<br>Assistant<br>Professor/ECE                                                                     | Dr. P. Thanapal,<br>Associate Professor<br>School of<br>Information<br>Technology and<br>Engineering, Vellore<br>Institute of<br>Technology, Vellore |

# DETAILS OF FACULTY PARTICIPATION

| FACULTY DEVELOPMENT PROGRAMME |                          |                                                                                  |
|-------------------------------|--------------------------|----------------------------------------------------------------------------------|
| Name of the Faculty           | Duration                 | Name of the Course                                                               |
| Mrs. S. Ammu                  | 22.03.2024               | FDP on Train the Trainers                                                        |
|                               | 25.04.2024               | Principles of Outcome Based Education                                            |
|                               | 25.04.2024 to 30.04.2024 | Empowering Educators: Nurturing Resilience and Well-being for Faculty Excellence |
|                               | Jan-Apr 2024             | English Language for Competitive Exam                                            |
| Mr. R. Arunkumar              | 13.01.2024               | AI and Computer Vision for Autonomous Vehicles                                   |
|                               | 16.02.2024 - 20.02.2024  | Research Trends in Optical Communication and Biophotonics                        |
|                               | 22.03.2024               | FDP on Train the Trainers                                                        |
|                               | 01.04.2024 - 05.04.2024  | Microwave Photonics Enabled Wireless Communication for Advanced Systems          |
|                               | Jan-Apr 2024             | Optical Wireless Communications for Beyond 5G Networks and IoT                   |
| Mrs. V. Bharathi              | 29.01.2024 - 03.02.2024  | Industrial Internet of Things & Industry 4.0                                     |
|                               | 22.03.2024               | FDP on Train the Trainers                                                        |
|                               | 23.05.2024               | Industrial IOT and Industry 4.0                                                  |
|                               | Jan-Apr 2024             | Optical Wireless Communications for Beyond 5G Networks and IoT                   |

# DETAILS OF FACULTY PARTICIPATION

| FACULTY DEVELOPMENT PROGRAMME |                          |                                                                                                                    |
|-------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------|
| Name of the Faculty           | Duration                 | Name of the Course                                                                                                 |
| Mrs. B. Gowsalya              | 22.03.2024               | FDP on Train the Trainers                                                                                          |
| Dr.V. Kavitha                 | Jan-Apr 2024             | Optical Wireless Communications for Beyond 5G Networks and IoT                                                     |
|                               | 22.03.2024               | FDP on Train the Trainers                                                                                          |
| Ms. M. Karthiha               | 07.03.2024 - 25.04.2024  | Short-Term Course 2 - "Ignite & Innovate: Equipping Staff with Skills for Educational Excellence" - MZCET          |
|                               | 16.02.2024               | New Employee Onboarding Workshop                                                                                   |
|                               | 07.03.2024               | Session On Setting Quality Question Paper                                                                          |
|                               | 22.03.2024               | FDP on Train the Trainers                                                                                          |
| Mrs. B. Atchaya               | 07.03.2024               | Session On Setting Quality Question Paper                                                                          |
|                               | 22.03.2024               | FDP on Train the Trainers                                                                                          |
| Mr. C. Palaniappan            | 22.03.2024               | FDP on Train the Trainers                                                                                          |
|                               | 29.05.2024 to 31.05.2024 | Enrich and Enhance Effective Leadership Skills, FDP, Mount Zion College of Engineering and Technology, Pudukkottai |
| Dr. K. Pandiarajan            | 29.05.2024 to 31.05.2024 | Enrich and Enhance Effective Leadership Skills, FDP, Mount Zion College of Engineering and Technology, Pudukkottai |
|                               | 22.03.2024               | FDP on Train the Trainers                                                                                          |

# DETAILS OF FACULTY PARTICIPATION

| FACULTY DEVELOPMENT PROGRAMME |                          |                                                                |
|-------------------------------|--------------------------|----------------------------------------------------------------|
| Name of the Faculty           | Duration                 | Name of the Course                                             |
| Ms. K. Rama Prabha            | 13.01.2024               | AI and Computer Vision for Autonomous Vehicles                 |
|                               | Jan-24                   | VIKSIT BHARAT @ 2047                                           |
|                               | Jan-Apr 2024             | Optical Wireless Communications for Beyond 5G Networks and IoT |
|                               | 22.03.2024               | FDP on Train the Trainers                                      |
|                               | Jan-Apr 2024             | Optical Fibre Sensors                                          |
| Mrs. G. Senthamilselvi        | 11.03.2024 - 16.03.2024  | Internet of Things                                             |
|                               | 08.04.2024 - 12.04.2024  | Recent Advancement on Microwave and mmWave Communication       |
|                               | 22.03.2024               | FDP on Train the Trainers                                      |
|                               | 04.03.2023 - 08.03.2023  | Future Challenges in 6G                                        |
| Mrs. A. Taksala<br>Devapriya  | 05-01-2024               | Innovation Ambassador course Foundation level, IIC             |
|                               | 04.03.2024 to 08.03.2024 | Future Challenges in 6G, SIMATS Engineering, Chennai           |
|                               | 29.05.2024 to 31.05.2024 | Enrich and Enhance Effective Leadership Skills, FDP            |
|                               | 22.03.2024               | FDP on Train the Trainers                                      |

## DETAILS OF FACULTY PARTICIPATION

| NPTEL COURSE |                           |                |                                                                |                       |
|--------------|---------------------------|----------------|----------------------------------------------------------------|-----------------------|
| S. No        | Name of the Faculty       | Date           | Name of the Course                                             | Status/Result         |
| 1            | Mr. R. Arunkumar          | Jan - Apr 2024 | Optical Wireless Communications for Beyond 5G Networks and IoT | Sucessfully Completed |
| 2            | Mrs. V. Bharathi          | Jan - Apr 2024 | Optical Wireless Communications for Beyond 5G Networks and IoT | Sucessfully Completed |
| 5            | Ms. M. Karthiha           | Jan - Apr 2024 | Advanced topics in Wireless Communication                      | Sucessfully Completed |
| 6            | Dr. V. Kavitha            | Jan - Apr 2024 | Optical Wireless Communications for Beyond 5G Networks and IoT | Sucessfully Completed |
|              |                           | Jan - Apr 2024 | Foundation of Cloud IoT Edge ML                                |                       |
| 7            | Mr. C. Palaniappan        | Jan - Apr 2024 | Optical Wireless Communications for Beyond 5G Networks and IoT | Sucessfully Completed |
| 6            | Dr. K. Pandiarajan        | Jan - Apr 2024 | Operation And Planning Of Power Distribution Systems           | Sucessfully Completed |
| 8            | Mrs. A. Taksala Devapriya | Jan - Apr 2024 | Optical Wireless Communications for Beyond 5G Networks and IoT | Sucessfully Completed |

## DETAILS OF STUDENT PARTICIPATION (INTERNSHIP/ CONFERENCE/WORKSHOP/ SEMINAR/SYMPOSIUM/OTHER EVENTS)

| Name of the Student | Name of the event                                                                                 | Title                   | Name of the Organizing / Published in Journal           | Date of Participation |
|---------------------|---------------------------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------|-----------------------|
| Jumana Hassin S     | National Conference on Applications of AI and IoT in Engineering and Technologies<br>NCAAIET-2024 | Sydro cognition         | Sri Bharathi Engineering College for Women, Pudukkottai | 10.02.2024            |
| Reena Vigneswari S  | National Conference on Applications of AI and IoT in Engineering and Technologies<br>NCAAIET-2024 | Sydro cognition         | Sri Bharathi Engineering College for Women, Pudukkottai | 10.02.2024            |
| Selvameenal R       | National Conference on Applications of AI and IoT in Engineering and Technologies<br>NCAAIET-2024 | Sydro cognition         | Sri Bharathi Engineering College for Women, Pudukkottai | 10.02.2024            |
| Anbalagan P         | National Conference on Applications of AI and IoT in Engineering and Technologies<br>NCAAIET-2024 | Smart attendance System | Sri Bharathi Engineering College for Women, Pudukkottai | 10.02.2024            |

## DETAILS OF STUDENT PARTICIPATION (INTERNSHIP/ CONFERENCE/WORKSHOP/ SEMINAR/SYMPOSIUM/OTHER EVENTS)

| Name of the Student | Name of the event                                                                              | Title                                 | Name of the Organizing / Published in Journal           | Date of Participation |
|---------------------|------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------|-----------------------|
| Vijayan S           | National Conference on Applications of AI and IoT in Engineering and Technologies NCAAIET-2024 | Electricity generation using footstep | Sri Bharathi Engineering College for Women, Pudukkottai | 10.02.2024            |
| Vikram R            | National Conference on Applications of AI and IoT in Engineering and Technologies NCAAIET-2024 | Electricity generation using footstep | Sri Bharathi Engineering College for Women, Pudukkottai | 10.02.2024            |
| Aravinth S          | National Conference on Applications of AI and IoT in Engineering and Technologies NCAAIET-2024 | Electricity generation using footstep | Sri Bharathi Engineering College for Women, Pudukkottai | 10.02.2024            |
| Abdul Haiyum S      | National Conference on Applications of AI and IoT in Engineering and Technologies NCAAIET-2024 | Smart attendance System               | Sri Bharathi Engineering College for Women, Pudukkottai | 10.02.2024            |

## DETAILS OF STUDENT PARTICIPATION (INTERNSHIP/ CONFERENCE/WORKSHOP/ SEMINAR/SYMPOSIUM/OTHER EVENTS)

| Sl. No. | Date                            | Event                                     | Name of the Student | Name of the Organization                                       |
|---------|---------------------------------|-------------------------------------------|---------------------|----------------------------------------------------------------|
| 1       | 28.02.2024<br>and<br>29.03.2024 | Anveshna- Project<br>CompetitionKarnataka | Abdul Haiyum S      | Anveshna- Project<br>Competition,<br>Karnataka                 |
| 2       | 22.03.2024                      | Business Quiz                             | Rajkumar R          | Karpaga Vinayaga<br>Institute of<br>Management,<br>Pudukkottai |
| 3       | 22.03.2024                      | Business Quiz                             | Ebi Saran D         | Karpaga Vinayaga<br>Institute of<br>Management,<br>Pudukkottai |
| 4       | 22.03.2024                      | Ad-Zap                                    | Guhan Raj R         | Karpaga Vinayaga<br>Institute of<br>Management,<br>Pudukkottai |
| 6       | 22.03.2024                      | Beat Manager & Quiz                       | Selvinraajkumar C   | Karpaga Vinayaga<br>Institute of<br>Management,<br>Pudukkottai |

## DETAILS OF STUDENT PARTICIPATION (INTERNSHIP/ CONFERENCE/WORKSHOP/ SEMINAR/SYMPOSIUM/OTHER EVENTS)

| Sl. No. | Date       | Event                           | Name of the Student | Name of the Organization                              |
|---------|------------|---------------------------------|---------------------|-------------------------------------------------------|
| 7       | 22.03.2024 | Quiz                            | Yashwanth K         | Karpaga Vinayaga Institute of Management, Pudukkottai |
| 8       | 22.03.2024 | Speech Competition              | Manikavelu          | Anna University, Trichy                               |
| 9       | 22.03.2024 | Beat Manager & Quiz             | Vartharajan         | Karpaga Vinayaga Institute of Management, Pudukkottai |
| 10      | 22.05.2024 | Tamil Nadu Karting Championship | Guhan Raj R         | Anna University, Coimbatore                           |
| 11      | 22.05.2024 | Speech Competition              | Prasanth M          | Anna University, Trichy                               |

# ICRTET 2024: INNOVATION IN FOCUS



The 5th International Conference on Recent Trends in Engineering and Technology (ICRTET 2024) was held on 24th and 25th April 2024, organized by Dr. V. Kavitha and Mrs. A. Taksala Devapriya of the ECE Department, Mount Zion College of Engineering and Technology. Dr. C. Ramasamy Sankar Ram, Professor at Anna University, Trichy, served as the resource person. The conference provided a meaningful platform for sharing innovative ideas and exploring emerging engineering trend

# INTENSIVE 24-HOUR TRAINING ON IOT AND ITS APPLICATIONS



## WORKSHOP HIGHLIGHTS

The 24 Hours Workshop on “Internet of Things and Its Applications” was conducted from 10.04.2024 to 11.04.2024, organized by Mr. R. Arunkumar, AP/ECE, and Mr. C. Palaniappan, AP/ECE, of Mount Zion College of Engineering and Technology. The workshop provided hands-on exposure to IoT concepts, devices, and real-time applications, enabling students to gain practical skills and a deeper understanding of emerging IoT technologies.

# ECE PHOTO GALLERY



# ECE PHOTO GALLERY



# ECE PHOTO GALLERY



# FINAL YEAR TOPPERS



**JUMANA HASSIN S**  
GPA - 9.00



**SELVAMEENAL R**  
GPA - 9.00



**IFNA**  
GPA - 9.00



**ABDUL BASITH A**  
GPA - 8.62



**EBI SARAN**  
GPA - 8.43



**LAVEENA VARSHINI S**  
GPA - 8.43

**Heartiest Congratulations to Our Final Year Toppers!**  
**Your hard work and dedication have truly paid off.**

# THIRD YEAR TOPPERS



**RAGUL PRASANTH A**  
**GPA - 8.09**



**SILAMBARASAN P**  
**GPA - 8.09**



**SIVAROSINI E**  
**GPA - 7.96**



**HARINI**  
**GPA - 7.86**

**Heartiest Congratulations to Our Third Year Toppers!**

**Your hard work and consistency shine through!**

# SECOND YEAR TOPPERS



**REEMA JASMINE R**  
**GPA - 9.16**



**SATHIYA PRIYA L**  
**GPA - 8.96**



**NIKITHA A**  
**GPA - 8.56**

**Warm Congratulations to the Second Year Academic Performers**  
**Your commitment has set a strong foundation for the years ahead.**

# FIRST YEAR TOPPERS



**MAHAMATHI T**  
**GPA - 8.77**



**SHALINI MK**  
**GPA - 8.55**



**SHIFA THAGASIN**  
**GPA - 8.50**

**Celebrating Our First-Year Academic Stars!**

**Your sincere efforts have set you on the right path. Shine brighter  
in the years to come!**

## DEPARTMENT FACULTY

| S. No | Name                   | Designation          |
|-------|------------------------|----------------------|
| 1     | Dr. S.Robinson         | Professor, Dean/ ICT |
| 2     | Dr. M..Dhamodaran      | Professor, HOD/ ECE  |
| 3     | Dr. K.Pandiarajan      | Professor            |
| 4     | Dr. V. Kavitha         | Associate Professor  |
| 5     | Mrs.A TaksalaDevaPriya | Assistant Professor  |
| 6     | Mrs. G.Senthamilselvi  | Assistant Professor  |
| 7     | Mr.C. Palaniappan      | Assistant Professor  |
| 8     | Mr. R.Arunkumar        | Assistant Professor  |
| 9     | Mrs. V.Bharathi        | Assistant Professor  |
| 10    | Ms.K. Rama Prabha      | Assistant Professor  |
| 11    | Mrs. K.Latha           | Assistant Professor  |
| 12    | Ms .M.Karthiha         | Assistant Professor  |
| 13    | Mr. S.Ganesan          | Assistant Professor  |
| 14    | Mrs. B. Gowsalya       | Assistant Professor  |
| 15    | Mrs. S. Ammu           | Assistant Professor  |

# THE EDITORIAL TEAM



CHIEF EDITOR

Dr. M. Dhamodaran, Professor,  
HOD/ ECE



EDITOR

Mr. R. Arunkumar  
Assistant Professor/ ECE

# THE EDITORIAL TEAM



S. Vijayan  
Final Year ECE



S. Jumana Hassin  
Final Year ECE



A. Ragul Prasanth  
Third Year ECE



# EMPOWERING CAREERS, SHAPING FUTURES MOUNT ZION LEADS THE WAY!

## Contact Us

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