ANNUAL REPORT FOR THE ACADEMIC YEAR 2015-16





Matrusri Engineering College

(Sponsored by Matrusri Education Society, Estd.1980)

(Approved by AICTE & Affiliated to Osmania University) # 16-1-486, Saidabad, Hyderabad-500059

www.matrusri.edu.in



MATRUSRI EDUCATION SOCIETY (Estd.1980)

3-6-653, Himayatnagar, Hyderabad – 500 029

Matrusri Education Society (MES) was formed in 1980 by a group of forward-looking and eminent engineers, doctors, lawyers and businessmen and administrators with an aim to harness technical excellence.

The prestigious society provides excellent infrastructure and institutional facilities and encourages its experienced and learned teachers to adopt innovative teaching techniques. Exceptionally well-framed curriculum with unique teaching methodologies supported by practical skills and job-ready skills has been the strengths of the institution and it is marching forward with the latest advancements in technical education.

EXECUTIVE COMMITTEE MEMBERS

| S.No. | Name | Designation |
|-------|------------------------------|--------------------|
| 1. | Dr. M. V. Sridhar | Chairman |
| 2. | Dr. K. P. Srinivasa Rao | Vice Chairman-I |
| 3. | Sri. M. Krishna Kumar | Vice Chairman-II |
| 4. | Sri. T. Jitendranath | Secretary |
| 5. | Sri. M. V. S Pavan Kumar | Joint Secretary-I |
| 6. | Smt. K. Uma Devi | Joint Secretary II |
| 7. | Sri. M. V. Vasudeva Rao | Treasurer |
| 8. | Sri. K. Venkata Ratnam | Member |
| 9. | Sri. M. B. S. Purushottam | Member |
| 10. | Sri. P. V. Rajeswara Rao | Member |
| 11. | Sri. J.Sudhakar | Member |
| 12. | Dr. K. Radha Kishan Rao | Member |
| 13. | Sri. A. Radha Krishna Murthy | Member |
| 14. | Sri. K. Kameswara Rao | Member |
| 15. | Sri. K. Seetharam Babu | Member |
| 16. | Sri. R. Partha Saradhi | Member |

Chairman's Message



Dr M V Sridhar Chairman Matrusri Education Society

I strongly believe that "The purpose of education is to turn mirrors into windows". Education is the seedbed of growth, progress and development in any part of the world. Its contribution has been immense to hoist the society technically and in shaping the moral fiber of the student community and contributing to the nation's well-being by producing the bright minds of tomorrow. Pursuing this belief, our institution provides the students every opportunity and facility to explore their talent.

Dr.M.V.Sridhar, Chairman, MES

Secretary's Message



Sri. T. Jitendranath Secretary Matrusri Education Society

Matrusri Engineering College, within a short span of its inception, has grown to be a premier engineering college of its kind and has won laurels from the industry. The faculty and staff are dedicated to providing value-based education that instills basic knowledge for sound practice in the field of science and technology for the well being of the society. The institution offers programs that nurture the creative thinking of the students and prepares them for a successful career as engineers.

Sri T.Jitendranath, Secretary, MES

MATRUSRI ENGINEERING COLLEGE Institute Vision and Mission

Vision

➤ To be a premier academic institution striving continuously for excellence in technical education, research and technological service to the nation.

Mission

- > To recognize and make quality Engineering education available to the society.
- To create a community of learning in which students acquire knowledge and apply them professionally with societal concern.
- ➤ To prepare for life-long learning to meet intellectual and career challenges.
- To promote professional ethics, leadership qualities and social responsibilities.
- To maintain research environment with an opportunity to create, apply and disseminate knowledge to the needs of society and the industry.

Quality Policy

We strive to be recognized as a centre of excellence and committed to continuously improve the quality of technical education by producing outstanding engineers willing to work to the spirit of challenge and innovation with high ethical and professional standards.

Administration

Principal

Dr. D. Hanumantha Rao HOD, Mechanical Engineering

Heads of the Departments

Civil Engineering - Dr.G.Manohar
Computer Science and Engineering - Prof.G.Veershalingam
Electrical and Electronics Engineering - Dr.G. Ravindranath
Electronics and Communication Engineering - Dr.P.Hara Gopal Mani
Sciences and Humanities - Dr. T.Shekharam

ANNUAL REPORT FOR THE ACADEMIC YEAR 2015-16

I welcome all of you to the Fifth Annual Day & Awards function of Matrusri Engineering College.

Matrusri, sponsored by Matrusri Education Society, being established as a sapling by a group of perceptive and distinguished engineers, doctors, lawyers, businessmen and administrators as its members in 2011 is now all grown into a huge tree Today's celebrations mark our college's continuous success in the area of education.

Matrusri, serving its farsighted vision and mission, has been imparting the ideals of academic excellence, sense of discipline and high moral and ethical values to its students shaping them into integrated personalities.

The academic year 2015-16 has articulated and widely demonstrated our relentless pursuit of achieving excellence, proving our commitment towards the institution. I deem it a privilege to present the annual report of the college for the academic year 2015-16.

Courses Offered:

• The college offers courses in Civil Engineering (intake of 60), Computer Science and Engineering (intake of 120), Electronics and Communication Engineering (intake of 120), Electrical and Electronics Engineering (intake of 60) and Mechanical Engineering (intake of 60).

Instructional facilities:

Being instituted in 2011, Matrusri Engineering College has successfully completed 5th Year of instruction and started using the classrooms and laboratories in the newly constructed building for Mechanical Engineering and Civil Engineering Departments. A new Computer Laboratory for Engineering Graphics was also established for the 1st year students.

MEC Achievements

Professional Memberships

We are also associated with CISCO Networking Academy and Oracle Academy for training and certification courses and Vivekananda Institute of Human Excellence, Domalguda, Hyderabad.

Leading the faculty members towards progression in their respective subjects, several FDPs have been conducted in association with external agencies like NITTTR, Kolkata, IIT, Bombay etc.

In addition to the above more than fifteen different workshops and training programs were organized by all the departments together.

Library

MEC is dedicated to the cause of education and research in Engineering and Technology. Students are provided with a well equipped library. The library is open from 9:30 a.m. to 6:00 p.m. and the issue section with open access is available for students. The reference section with 1350 titles and 9084 volumes, hand books, periodicals, back volumes of periodicals, stocks of CDs, audio-visual aids help the faculty and students to refer and collect the best of technical knowhow. The library subscribes 30 National Journals, 12 International Journals and Magazines. Twelve computers are loaded with E-Journals, E-Resources and provided with internet facility. Scholarly research documents are also provided to the students and the staff. Online journals are DELNET and J Gate, E-books are 136.

Faculty:

Our college has set its own standards in the field of teaching, learning and research which stimulates us in our relentless pursuit of excellence and perfection which in fact, has become a way of life for us.

We have 104 well experienced, ambitious and passionate teaching staff, all of them with postgraduate qualification, 19 faculty with PhD qualification and another 35 faculty are pursuing PhD from different universities. Every year our faculty upgrade themselves. As a part of this, five faculty members have been awarded PhDs.

- 1. The following faculty members have been awarded Ph.Ds:
 - i. Dr. G.Shyama Chandra Prasad, Assoc.Prof., CSE Dept.
 - ii. Dr.T.V.V.Satyanarayana, Assoc. Prof, ECE Dept.
 - iii. Dr.Pallavi Akhil Khare, Asst. Prof, ECE Dept.
 - iv. Dr.Gopal Venumadhav, EEE Dept.
 - v. Dr.T.Sekharam, Prof., S&H Dept.
- 2. Dr.G.Manohar, Professor, registered a Ph.D as external guide at Department of Civil Engineering, KL University, Vaddeswaram, Guntur, A.P. on "Mitigation of time period of collapse of RCC buildings for earthquake by using retrofitting techniques and materials" by a scholar Mr.V.S.R.Pavan Kumar Rayaprolu, Asst.Professor, V.R.Siddartha Engineering College, Vijayawada.A.P in the month of June, 2015.
- 3. The faculty members are always encouraged to update themselves. As a part of this, the following faculty members have presented papers in different journals:
- M.Saritha (International Journal of Scientific Engg. Technology, Vol-5,Issue-6,Mar'16, Pages:1191-1196)
- P.Anil Kumar, (International Journal of Applied Control, Electrical and Electronics Engineering (IJACEEE), Vol.1.)
- P.Anil Kumar, (International Journal on Recent and Innovation Trends in Computing and Communication, Volume: 2 Issue: 7.)
- M.V.Subramanyam, (The IUP Journal of EEE, Volume:VII, No. 4.)
- P.Kishor, (Natlional Conference at Malla Reddy Women's Engg College, Volume: 1.)
- G.Venumadhav, (International Conference on Paradigms in Engineering and Technology (ICPET) 2016, Hyd., Pages: 136 140, Print ISBN: 978-93-5258-110-8.)

In the last one year, a total number of 80 faculty members attended various workshops, seminars and published more than 06 technical papers in national journals and -- publications in international journals

Matrusri is keen on nurturing its faculty technically and always is a step ahead to encourage its faculty to enroll for different technical courses sponsored by prestigious bodies like IITs and IISc.

Paper Publications 2015-16:

| S. No. | Title of paper | Name of the author/s | Dept | Name of journal |
|-----------|--|------------------------------|-------|--|
| 1 | Variability In Physiological And Yield Performance Of Castor Genotypes Under Rainfed Condition Of Alfisols | G.Satyavathi | CIVIL | International journal of Plant Breeding and Genetics |
| 2 | Global Optimization For The Forward Neural Networks And Their Applications | Dr.K. Sunil Manohar Reddy | CSE | Journal on Computer Science |
| 3 | An Analysis Of Mutation And Crossover In Evolutionary Neural Networks, Volume 3 Issue 2 | Dr.K. Sunil Manohar Reddy | CSE | International Journal of Advanced Research in Science, Engineering and Technology |
| 4 | Inter Path Interference Minimized Multipath Routing In Wsn For Multiple Source And Destination Pairs | Mrs.K. Bhagya Laxmi | CSE | International Journal for Scientific Research & Development |
| 5 | Inter Path Interference Minimized Multipath Routing In Wsn For Multiple Source And Destination Pairs | Mrs.J Samatha | CSE | International Journal for Scientific Research & Development |
| 6 | Role Of Data Mining In Web Services Discovery And Monitoring | Mrs.G.Pratibha | CSE | International Journal of Research in Information Technology |
| 7 | Web Search Result Optimization Using Association Rule Mining | Mrs.G.Pratibha | CSE | International Journal of Innovative Science Engineering and Technology |

| 8 | Attack Resilientdynamic Key Management For Dynamic Wireless Sensor Networks | Mrs.G.Pratibha | CSE | International Journal of Computer Science and Mobile Computing |
|----|---|------------------------------|-----|---|
| 9 | Dynamic And Adaptive Routing Services For Data Integrity In Wireless Sensor Networks | Mrs.G.Pratibha | CSE | International Journal of Advanced Engineering Research and Technology |
| 10 | A Comparative Study On Relevance Measure With Compression Ratio For Telugu Text Summarization Using Maximal Marginal Relevance | Dr. P.Vijaya Pal Reddy | CSE | First International Conference on Advances in Soft Computing and Communication Technologies |
| 11 | Influence Of Lexical, Syntactic And Structural Features And Their Combination On Authorship Attribution For Telugu Text | Dr. P.Vijaya Pal Reddy | CSE | Elsevier - International Conference on Intelligent Computing, Communication & Convergence |
| 12 | Analysis Of Mutation And Crossover In Evolutionary Neural Networks | Dr.K. Sunil Manohar Reddy | CSE | 5th National Conference on Emerging & Innovative Trends in Computer Science |
| 13 | A Portable Wireless Pc Mouse Pointer Control Based On Head Movement | K.Vijetha | ECE | International Journal of Scientific Engineering and Technology Research |
| 14 | Realisation Of 4 To 16 Reversible Decoder Using Verilog | P Sravani | ECE | Internatiomal journal of latest technology in Engineering ,management and applied science |
| 15 | Verilog Implementation Of Reversible Logic Gates | P Sravani | ECE | International journal of engineering research in Electronic and communication engineering |
| 16 | Performance Analysis Of Different Multipliers For Embedded And Dsp Applications Dsp Applications | K.Vijetha | ECE | IOSR Journal of VLSI and Signal Processing |

| 17 | Protection Issues In Micro Grid | P.Anil Kumar | EEE | International Journal of Applied Control, Electrical and Electronics Engineering (IJACEEE) |
|----|--|---------------------------|------------|---|
| 18 | Performance And Analysis Of 3Ph Pwm Inverter With Fuzzy Interface Direct Current Controller | M.Saritha | EEE | International journal of scientific engg and technology |
| 19 | Optimization Of Edm Process Parameters And Graphite Powder Concentration On Electrical Discharge Machining Of Ti-6Ai-4V Alloy Using Taguchi Method | Dr.D.Hanumantha Rao | Mechanical | International Journal Of Advances In Production & Mechanical Engineering (IJAPME) |
| 20 | Experimental Study On The Effect Of Mechanical Stirring In Semisolid Processing Of Aluminum Alloys At Thixo- Temperatures | Dr.D.Hanumantha Rao | Mechanical | Material Science Forum |
| 21 | Experimental Study On The Effect Of Mechanical Stirring In Semisolid Processing Of Aluminum Alloys At Thixo- Temperatures | Dr.M.V.Kishore | Mechanical | Material Science Forum |
| 22 | A Study On Effect Of Filler (Sio2) On Mechanical Properties Of Glass /Epoxy (Ht) Cure Composites. | Mr.C.Venkatshwar Reddy | Mechanical | International journal of research in engineering technology (IJRET |
| 23 | Finishing Of Steels Through Hydraulics | Ms. V. Poojitha | Mechanical | International Journal of Engineering Sciences & Research Technology |
| 24 | Study On Vertical Machining Center | Ms. V. Poojitha | Mechanical | International Journal of Engineering Research, Sciences & Technology |
| 25 | Design Of Hvac For A Corporate Building Using Ahu | Ms. V. Poojitha | Mechanical | International Journal of Engineering Research, Sciences & Technology |
| 26 | Finishing Of Steels Through Hydraulics | Mr. A. Kalyan Charan | Mechanical | International Journal of Engineering Sciences & Research Technology |

| 27 | Study On Vertical Machining Center | Mr. A. Kalyan Charan | Mechanical | International Journal of Engineering Research, Sciences & Technology |
|----|--|-------------------------|------------|--|
| 28 | Design Of Hvac For A Corporate Building Using Ahu | Mr. A. Kalyan Charan | Mechanical | International Journal of Engineering Research, Sciences & Technology |
| 29 | Effect Of Cadmium On Structure And Optical Properties Of Zno Nanopowders By Sol-Gel Method | T Shekharam | S&H | Materials Today |
| 30 | Synthesis And Anti- Microbial Agents Of Novel (E)-N'-4,4'-Difluoro- Cyclohexane Carboxylic Acid (Substituted- Benzylidene)-Hydrazide Derivatives | Dr.Y.Aparna | S&H | World Journal of Pharmacy and Pharmaceutical Sciences |
| 31 | A Review On Reactions And Applications Of Oxazolones | Dr.Y.Aparna | S&H | International Journal of Scientific research and publications |
| 32 | Synthesis, Characterization And Molecular Docking Studies Of New Erlenmeyer Azlactones | Dr.Y.Aparna | S&H | International organization of Scientific Research |
| 33 | Optimum Allocation Of Computer Resoures Through Goal Programming | Dr.M.Yuvaraju | N&2 | International Journal of Innovative Technology and Research |
| 34 | Capital Budgeting Decision - A Fuzzy Goal Programming Approach | Ramesh Mannuru | S & H | IJITR |

Awards and Recognitions 2015-16

| S.No | Name of the activity | Name of the Award/ recognition | Name of the Awarding government/ government recognised bodies |
|------|--|--------------------------------------|--|
| 1 | Institute of Electrical and Electronics Engineers- MTT/EMC | Significant contributions | Institute of Electrical and Electronics Engineers MTT/APS/EMC Society 2014to2016 |

Books and Chapters 2015-16

| S1. No. | Name of the teacher | Title of the paper | Title of the proceedings of the conference |
|------------|----------------------------|---|--|
| 1 | Dr. Pallavi Khare | Image Segmentation: Fuzzy C-Mans Clustering with Kernel metric and Local Information | National conference on Advances in Information Technology NCAIT 2016 |
| 2 | Dr. P. Vijaya Pal Reddy | Emprical evaluations using character and word n-grams on authorship attribution for telugu text | Springer transactions on International Intelligent computing and applications |

Faculty attended FDPs

In the academic year 2015-16, a total of 32 faculty have undergone various Professional Development Programmes like UGC —AICTE sponsored 1 week / 2 week FDPs at IITs, NITs & reputed organisations / certification courses like NPTEL, COURSERA, SWAYAM, ARPIT / AICTE-ISTE sponsored STTPs & Refresher Course s etc.

Financial Assistance to Faculty

In the academic year 2015-16, Teachers are provided with financial support in 67 activities to attend Conferences/workshops and towards membership fee of professional bodies.

Professional Development Activities for Teaching/Non Teaching Staff

In the academic year 2015-16, a total of 13 professional development /administrative training programs were organized by the institution for teaching and non-teaching staff.

Academics

Students' Achievements

It gives me immense sense of pride to share with all of you the names of the students who have been the pride of MEC as they have secured top ranks in the OU final examinations in 2016.

| S.No. | ROLL NO | NAME & BRANCH | ACADEMIC YEAR | OU RANK |
|-------|-----------------|----------------------------------|------------------|------------|
| 1 | 1608-12-732-001 | PALAKURTHI AMULYA SREE, CIVIL | 2015-16 | 11 |

Students' Results for the Academic Year 2015-16:

| Dept | APPEAR ED | PASSED | DISTINCTI ON | I DIV | II DIV | PASS % |
|------|--------------|--------|-----------------|-------|--------|--------|
| CIV | 61 | 55 | 18 | 32 | 5 | 90 |
| CSE | 92 | 82 | 41 | 37 | 4 | 90 |
| EEE | 56 | 50 | 22 | 22 | 6 | 90 |
| ECE | 129 | 111 | 60 | 51 | 7 | 93 |
| Mech | 64 | 54 | 22 | 28 | 4 | 85 |

| OVERALL PERCENTAGE % | | | | | | |
|---|--|--|--|--|--|--|
| Passed Distinction First Class Second Class | | | | | | |
| 90% 41 42 6 | | | | | | |

Co-curricular Activities

Matrusri Engineering College strongly believes that students' comprehensive development is through the academic learning programs blended with various co-curricular activities. It further opines that these activities are a great way to demonstrate the self-interests and technical talents of the students.

Gold medals

Matrusri Educational Charitable Trust (MECT) encourages the students to develop a strong competitive spirit throughout the four years of study in

their respective courses. In this endeavour, it presents Gold Medals to the class toppers every year motivating them to give their best in their studies.

ED-Cell Activities

| SI.No | Name Of The Program | Date | No of Students Benefitted/ Participated. |
|-------|---|------------|--|
| 1 | One Day Workshop On Entrepreneurship Development By NSIC (National Small Industries Corporation Limited) By Mr.S.Srinivas | 28/08/2015 | 57 Students From Various Depts, 9 Faculty Members. |
| 2 | One Day Workshop On Entrepreneurship Development By NSIC (National Small Industries Corporation Limited) By Mr.S.Srinivas | 01/10/2016 | MECH – 30 CIVIL – 14 EEE – 7 Other Colleges – 6 |

Higher Studies

Our college students being inspired by the mission of the college, preparing its students for lifelong learning to meet intellectual and career challenges, around 80 of them have secured admissions in postgraduate programs like MS, M Tech, MBA, PGDCPM, etc

Training & Placements

Students are consistently prepared to meet the challenging technical demands for both employability and to create employability. Matrusri is committed to continue the legacy of training its students from the time of its inception by assimilating several Technical certification programs like IT Essentials, CCNA, and Oracle Certification.

I am highly elated to apprise you all that many of our students have been placed in Cognizant and TCS. Other top companies like Hitachi Consulting,

ValueLabs, Adobe Systems, Infosys, Wipro, DXC Technology, Hexaware Technologies, CtrlS, Amazon, Medhaservo, Veda IIT, TA Digital and OTSI etc have offered good placements to our students.

Extracurricular Activities

Games and Sports

MEC encourages and supports its students to participate in sports and games wholeheartedly and as a result of this endeavour, some of the achievements of its students are:

- College Cricket Team participated in "EENADU Cricket Championship" and "SAKSHI ARENA ONE".
- Ms. M.Harshitha from Civil and Ms.P.Samhitha participated in Table tennis team event organized by Anurag Group of Institutions, the event was named as "SPORTS BOUT 2K15".
- Mr.K.Nikhil Reddy from Civil and Mr.M.Shivaji from CSE, won First prize in Carroms event organized by SNIST which was an Inter College Tournament.
- Ms. M.Harshitha from Civil branch, won the Silver in All India Inter Universities Tournament.





Clubs

We have different clubs like Matrusri Campus Connect, Matrusri Dance Club, Music Club, Youth for Seva, Orator's Club and Photography Club.

Conclusion

Eventually, all our endeavours have been possible with the excellent support and persistent encouragement extended by the management committee. I admire the services offered by highly qualified heads of the departments and dedicated faculty members.

I would like to conclude by extending our sincere thanks to all the parents and our well wishers who have lent a supportive hand down through the years.

My best wishes to all the outgoing students of 2016.

Thank you.