Aurora’s Research & Technological Institute
(Formally known as RAMAPPA ENGINEERING COLLEGE)
(Affiliated to J.N.T.U. Hyderabad and Approved by AICTE., New Delhi)
HUNTER ROAD, WARANGAL

Date: 19-04-2015.

Aurora’s Research & Technological Institute - Hunter Road - Warangal - (A.P).

Annual Report (2014-15) By Principal Swapna T


I wish one and all a pleasant good evening.

Aurora’s Research & Technological Institute, Warangal formerly known as Ramappa Engineering college was established in the year 1999 at Mahabubabad and was shifted to the present campus in 2005. Now it has taken the stage of this gigantic shape in our own land of 15 acres. This well planned structure takes care of the entire accommodation requirement pertaining to our Academic activities. Being located centrally the College has earned a kind of reputation making it another cause for the pride of Warangal city.

The determination of the management with a vision to make this College a top class Institution in the region is possible by the guidance given by the Management and also with the combined efforts of all Heads of Departments, Teaching and Non-Teaching staff.

Irrespective of severe financial crises we had due to poor intake of students at Mahabubabad during the Academic year 2004-05 and many other internal, external and personal problems, the Management worked Vigoursly with constant efforts to give the present shape to the Institution.
I sincerely offer a word of thanks to our Hon. Chairman Sri N. Raja Babu Garu and Hon. Secretary Sri N. Ramesh Babu Garu for providing a platform to all of us with an opportunity to prove our talents and in creating future generation Engineers.

The College is offering the following courses:

I  
**U.G - Courses (B.Tech)**

<table>
<thead>
<tr>
<th>Branch</th>
<th>Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVIL ENGINEERING</td>
<td>120</td>
</tr>
<tr>
<td>ELECTRICAL AND ELECTRONICS ENGINEERING</td>
<td>120</td>
</tr>
<tr>
<td>MECHANICAL ENGINEERING</td>
<td>120</td>
</tr>
<tr>
<td>ELECTRONICS &amp; COMMUNICATION ENGINEERING</td>
<td>240</td>
</tr>
<tr>
<td>COMPUTER SCIENCE AND ENGINEERING</td>
<td>240</td>
</tr>
<tr>
<td>COMPUTER SCIENCE AND TECHNOLOGY</td>
<td>60</td>
</tr>
<tr>
<td>INFORMATION TECHNOLOGY</td>
<td>60</td>
</tr>
<tr>
<td>AUTO MOBILE ENGINEERING</td>
<td>60</td>
</tr>
<tr>
<td>AGRICULTURE ENGINEERING</td>
<td>60</td>
</tr>
<tr>
<td>MINING ENGINEERING</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1140</strong></td>
</tr>
</tbody>
</table>

II  
**P.G - Courses (M.Tech)**

<table>
<thead>
<tr>
<th>Branch</th>
<th>Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH VOLTAGE ENGINEERING</td>
<td>18</td>
</tr>
<tr>
<td>CONTROL SYSTEMS</td>
<td>18</td>
</tr>
<tr>
<td>DIGITAL SYSTEMS AND COMPUTER ELECTRONICS</td>
<td>18</td>
</tr>
<tr>
<td>EMBEDDED SYSTEMS</td>
<td>36</td>
</tr>
<tr>
<td>VLSI SYSTEM DESIGN</td>
<td>18</td>
</tr>
<tr>
<td>SOFTWARE ENGINEERING</td>
<td>18</td>
</tr>
<tr>
<td>COMPUTER SCIENCE &amp; ENGINEERING</td>
<td>72</td>
</tr>
<tr>
<td>CONSTRUCTION TECHNOLOGY</td>
<td>18</td>
</tr>
<tr>
<td>PARALLEL DISTRIBUTION</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>234</strong></td>
</tr>
</tbody>
</table>
III  MBA

<table>
<thead>
<tr>
<th>Branch</th>
<th>Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA</td>
<td>60</td>
</tr>
</tbody>
</table>

IV  Diploma

<table>
<thead>
<tr>
<th>Branch</th>
<th>Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCE</td>
<td>60</td>
</tr>
<tr>
<td>DME</td>
<td>60</td>
</tr>
<tr>
<td>DEC</td>
<td>60</td>
</tr>
<tr>
<td>DEE</td>
<td>60</td>
</tr>
</tbody>
</table>

Total strength of the College students is 1410. The strength of staff members

- Teaching staff: 46
- Non-Teaching staff: 32
- Sub Staff: 28
- Total: 106

**Department of Computer Science and Engineering (CSE)**

Department has conducted a 2 day National level Workshop entitled Advanced Technologies for Real Engineers was conducted from 03rd January to 4th January 2015. In which 50 students have participated and the coordinators were Mrs. S. Vijayalaxmi and Mr. J. Laxminarayana.

**Speakers**

1. Mr. Mahesh, CEO, Knowledge Advocates.
2. Mr. Sai Krishna - Java Expert, Knowledge Advocates.
Another 2 day National level Workshop entitled HAWS - Hadoop & Web Services 2015 was conducted from 06th April 2015 to 07th April 2015. In which 75 students have participated and the coordinators were Mr. Mohammed Ali Shaik and Mr. J. Laxminarayana.

Speakers
1. Mr. T. Rakesh CTO, Telikos.
2. Mr. T. Indradev Trainer, Telikos.

II Faculty Activities/ performance
Mr. Mohammed Ali Shaik (Asst. Prof. CCE Dept.) has presented a paper in IEEE International Conference on Soft-Computing and Network Security, in Association with Kyungpook National University, South Korea, titled Multi Agent Architecture for Unification of Association Rule Mining held on 25th to 27th February 2015.


III Student Activities

Under RACE-2k15 activities the events that were conducted under the coordination of Ms. Shazia Tazeen are:

1. Conducted General Quiz on 2nd February 2015 where 120 students of various branches where participated.
2. And Technical Quiz was conducted on 30th March where 50 students of CSE where participated.

IV Student qualified for GATE - 2014
Mr. Deepak Kanjarla of IVCSE- A
Department of ECE

Department has conducted a 2 day National level Faculty Development Program on lower power VLSI Design, Testing & Verification on 30th & 31st May 2014. In which 52 faculty of various engineering colleges have participated and the coordinator was Mrs. B. Prasanna Jyothi.

Speakers
1. Mr. Kartik - Meta graphics
2. Mr. Raju - UTS

Department of ECE Under MOSFET a student’s association, conducted “V logic (18th March 15), Battle of bread boards (25th March 15) and How do they work (31st March 15) “programs for 4th, 3rd, 2nd B.Tech ECE students respectively.

Faculty Activities/ performance
Mrs. B. Prasanna Jyothi (Assoc. Prof. ECE Dept.) has published 2 papers titled:

1) VHDL implementation of Neuron based Classification for future artificial intelligence applications in Oct’ 2014
2) Design and implementation of Sleep Transistor based low power CMOS Design for submicron VLSI Technologies at IJATES in September 2014)


Mrs. R. Sravanthi (Asst. Prof. ECE Dept.) has Presented a paper titled Robust object tracking based on local sparse Representation in International Conference on Emerging Trends in Engineering and Technology-ICETET-2014 in Warangal on Sept’ 2014.

Ms. K. Lavanya (Asst. Prof. ECE Dept.) has published two papers titled:
1) IEEE 754 Floating Point Multiplier using carry save adder & Modified Booth Multiplier in International Journal of Engineering Research and Technology in September 2014.
2) Hardware Implementation of Radix - 2 and Radix -4 Modified Booth Algorithm in 3rd International Conference on Communication and Signal Processing (ICCSP) at
QIS college of Engineering and Technology Ongole in April 2014.

Ms. Atiya Kousar (Asst. Prof. ECE Dept.) has published a paper titled Design of Hardware Testing using Two Pattern Test Cubes in International Journal of Advanced Technology and Innotative on August 2014.

III Higher Qualifications Achieved

Mrs. B. Prasanna Jyothi, Mrs. Shadida Begum, & Mr. Koteshwar rao are pursuing PHD from JNTUH University.

IV Student qualified for GATE - 2014

Miss P. Mounika of IV ECE.

V Student Achievements

Students from ECE Department ,Ms T. Deepika, II B.Tech ECE, D. Deepthi, II B.Tech ECE and D. Kavya have participated in paper presentation on “Micro electronic pill”. “Sixth Sense Technology” and “Solar car” conducted by the JNTUH, Nachupally, Kondagattu.

The students of ECE won the cricket champion ship for the year 2015 at the college level and made hat trick in college history.

Department of Electrical and Electronics Engineering (EEE)

Department has conducted a 2 day National level Workshop on Matlab/Simulink- A Software tool for Engineers in Association with Ampere on 07th and 08th November 2014. In which 129 students have participated and the coordinator was Mr. M. Raju.

Speakers
1. Ms. Hyndavi Polisetti, BHEL, Hyderabad
2. Mr. K. Ranjith, Professor, JNTUH.
3. Mr. B. Anil Kumar, Professor, NITW
Department of EEE has inaugurated R&D Cell by the ARTI College principal T. Swapna and Ch. Sampath kumar HOD of EEE department on 06th March 2015 that comprises of latest software’s such as Matlab 7.8 version, P-SPICE, used to design Electrical Circuits and also started a R&D Library that comprises of many related books under the coordination of Mr. M. Raju.

The EEE department came up with events like “Technical quiz and JAM session” on 20-03-2015 of these two events, around 100 students had participated with enthusiastically.

II Faculty Activities/ performance

Mr. Ch. Sampath Kumar (Assoc. Prof. & HOD EEE Dept.) has published 2 papers titled:
2) A Novel Control of Shunt Hybrid Active Filter Based on Lyapunov-Function in IOJETR Journal.

Mr. A. Rakesh (Asst. Professor in EEE Dept) has published a paper titled Grid Interactive PV system with compensation of Reactive Power and Harmonics by Fuzzy logic and PID Based MPPT in IJSETR Journal.

Mr. A. Kumaraswamy (Asst. Professor in EEE Dept) has published a paper titled An Advanced Single Phase enhanced PLL based control logarthim for 3-phase D-Statcom under linear and non-linear load in IOJTR Journal.

Mr. M. Raju (Asst. Professor in EEE Dept) has published a paper titled A Combined configuration of TCR and hybrid active power filter for power quality in Transaction on Electrical Drive in IOJTR Journal.

III Students Achievements and Activities

1. Shaik Shafitullah of II EEE, has participated in Project presentation, Quad Copter competitions in PRAGNYA 2015 conducted by JNTUH.
2. K Keerthana of III EEE, has participated in PPT Presentation conducted in Jayamukhi College of Engineering.
Department of Mechanical Engineering

Department has Inaugurated Makhane - the Students Association on 07th February 2015 by Dr. K. Guru Raj - Professor. Dept. of Mechanical Engineering, Kits Warangal. The staff advisor is Mr. K. Rajendar and Student President is Mr. K. Yamshi Krishna of IV EEE.

Under MAKHANE student association events were conducted on 09th February 2015 are Debate and Technical Quiz competitions, 110 students had participated and the coordinators were Mr. P. Shiva Krishna and Mr. P. Raju.

The Department of Mechanical Engineering has conducted a 2 day National level workshop on “Industrial applications of Manufacturing Technology” on 16th & 17th March 2015 for Diploma students. In which 110 students have participated and the coordinator was Mr. A. Chiranjeevi.

Speakers
1. Dr. K. Eshwaraya - Professor & HOD. Dept. of Mechanical Engineering, Kits Warangal.
2. K. Rangachary - Retired Professor Govt Polytechnic Warangal.
3. S. Vidya Sagar - Assistant Executive Engineer, I&CAD department, Govt of Telengana

Faculty Activities/ performance

Mr. M. Ramesh Babu and Mr. K. Rajender attended a 2 weeks AICTE Sponsored FDP Program on Finate Element Methods & Its Applications at JITS Narsampet from 22nd December 2014 to 5th January 2015.

Mr. K. Rajender has attended a 2 days International Conference held on vibration Problems conducted in kakatiya university, Warangal on 18th & 20th February 2015.

Mr. T Parshuram and Mr. Shiva Krishna has attended a 2 days national workshop on “Applications of Flexsim Software to Manufacture Systems” conducted in Kits Huzerabad, on 20th & 21st February 2015.

Higher Qualifications Achieved

Mr. M. Ramesh Babu, HOD, is pursuing PHD from JNTUH University.
Department of Civil Engineering

The Department has conducted Quiz competition “CIENCIA” for all the B.Tech students based on “SCIENCE AND TECHNOLOGY”, Ms. Tahniyat Mehnaz. and Ramya were the coordinators of this event. on 28th February 2015 on the eve of National Science Day. In which 57 students were participated.

The department of Civil has conducted Mathrubhasha devas on 21st February 2015. The Event was to promote the use of mother tongue. The participants were 20 and the Coordinator was Ms. G. Sahithi.

Red Cross at Aurora campus organized blood donation camp on 4th March 2015. All the students and college staff members participated voluntarily in the camp. In total, 207 units of blood were collected. Mr. S. Balachandar, Assoc. Prof. & HOD, Dept of Civil was coordinate of this event.

The department of Civil has Inaugurated Nirmaan – the Students CIVIL Association on 24th March 2015 by Prof. Ramaseshu- Professor. Dept. of Civil Engineering, NIT, Warangal. Ms. Mehanaz, Asst. Prof in Civil Department is the convener of this Association.

II Student qualified for GATE - 2014

Mr. B. Ramesh of IV Civil

Department of H&AS

The Department has conducted a guest lecture on Applications of Mathematics on Engineering on 02nd March 2015. Mr. G. Srinivas Rao HOD & Assoc. Prof. in H&AS Department was the convener of the event. Mrs. Kalyani, Asst. Prof. in mathematics was the coordinator of this event. And 150 students have participated.

Speaker

Prof. P. Malla Reddy, HOD, Mathematics Department, Kakatiya University.

III Higher Qualifications Achieved

Mr. G. Srinivas, HOD, is pursuing PHD from JNTUH University.
Training & Placement Cell

A full fledged Training & Placement Cell is established under the able guideline of Placement Director Sri B. Seetharamaiah garu at Consortium level.

In the College level the Placement Cell is organised under the In-chargeship of Mr. Mohammed Ali Shaik Training & Placement Officer. The College is registered under IEG/JKC sponsored programmes. Trained Faculty are conducting training in communication and soft skills, Aptitude, group discussion and H.R interviews.

82 students have attended on campus drive conducted by “Lifeplus” (LIC)” on 12th August 2014, through which 23 students were selected.

Placement assistance “(AMCAT)” programme was conducted on 23rd September 2014. In this programme 210 made the programme success.

115 students have attended on campus drive conducted by “MYHALOM PRO” on 15th November 2014, out of which 5 students were placed.

Apart from these Placement drives were conducted by 13 companies in the current academic year so far some of them are: Amazon, Virtusa, Value labs, IBM, TCS, USTech, DUPONT, Infobahn, etc,..

The Placement drives during 2014-15 have been so far good compared to previous years.

Central Library

Librarian - Mr. H. Ramakanth

The College is having full fledged Library and is added with a number of latest editions, Text Books, Journals and Magazines and a number of International Journals.

The Digital Library and Net working facility is also available along with NPTEL Video lectures.

- Number of Titles: 3013
- Total Number of Volumes: 23412
- Number of Volumes added in this Academic year: 350
- Journals available: 43
  (Includes National Journals, International Journals on Live Journals)

The College Library will be opened from 9a.m to 6p.m exclusively for the benefit of students.
Department of Physical Education

The Department is strengthened with Sports & Games equipment worth One Lakh. The Department is actively participating the various events organised by J.N.T.U and other Universities and also various other Colleges. Mr. K. Rajendar of Mechanical Department was the convenor for SPARDHA-2015.

SPARDHA-2015 has been conducted on 05\textsuperscript{th} and 06\textsuperscript{th} of February 2015 explicitly for B.Tech Students that includes events such as: Cricket, Volley ball, Kho-Kho, Khabaddi, Shuttle, Table Tennis, Tenne koit, Athletics, caroms, chess. 600 student have participated in this event.

SPARDHA-2015 a regional level sports meet has been conducted on 19\textsuperscript{th} and 20\textsuperscript{th} of February 2015 explicitly for Polytechnic Students that includes events such as: Cricket, Volley ball, Kho-Kho, Khabaddi, Shuttle, Table Tennis, Tenne koit, Athletics, caroms, chess. 800 students from different polytechnic colleges have been participated such as Govt polytechnic, VMR, TPEC, SBIT, PEC, VMR, AGPW, and our college.

College Level Activities

Our college has started WOW: World of Women, to empower girl students to enhance understanding of issues related to women and to make the college campus a safe place for women students and faculty members on 25\textsuperscript{th} February 2015. Chief Guest Dr. K. Anitha Reddy, chair person, CWC Warangal and guest of honor R. Padmasri and Mrs. T. Swapna, Principal of ARTI inaugurated the wow cell and released the logo of wow. The convener’s are: Mrs. D. Lavanya Redd of H&AS, Mrs. S. Vijayalaxmi of CSE departments.

The Main Objectives of WOW are:

- To promote a culture of respect and equality for female Gender.
- To Conduct Seminars, workshops to impart knowledge of opportunities and tools available and train the women.
- To create a conducive counselling environment for female gender to share their problems.
Cultural Fest-**SHRUTHI LAYA** was conducted on 21st and 22nd in which the events that were conducted are: Rangoli, Mahendi, Singing(solo & group), Dancing(solo & group), Antyakshari, Dumsharads, Painting, Tug Of War, Short Film, Short Play, Prove your Talent, Treasure Hunt, Brick Walking, Slow bike Race. The total number of student who participated in all the events were 131 and the convener of this event was Mrs. Shahida Begum, Asst. Prof. Of ECE department.

Our college has launched a print and online International Journal for the benefit of Research scholars of various branches with the title Aurora's International Journal of Computing whose first issue is available online at www.aurora-journal.com and print journal is about to be printed once we get RNI acceptance. We are happy that ISSN’s for both Online and Print have been assigned to our journal.

## About our College

Our college is a huge storied building with a carpet area of 1,40,000 Sft. has all the necessary accommodation and facilities for class rooms, Seminar Halls, Drawing Hall, Electrical Labs, Electronics Labs, Computer Labs, Central Library, Staff rooms, Administrative Blocks, Physical Education Department and all other amenities and wide corridors with great circulation area every thing as per norms of the AICTE and J.N.T.U.H.

From the academic year 2014-15 new B.Tech courses approved by JNTUH are- Agriculture Engineering and Mining Engineering with an Intake of 60 students each, and Diploma Courses are: DEC, DEE with an intake of 55 student each for whom classes have been conducted successfully.

The College is equipped with additional facilities like e-class rooms to view SONET TELECASTS, Satellite MANA TV Programmes. A number of O.H.P’s and LCD Projectors, DVD Players etc. are available to enhance the teaching learning process. The Interaction Teaching Learning process which includes regular student seminars, learning groups for various activities, discussion session mini Projects and industrial tours along with normal Lectures are being implemented successfully.
Coming to the important aspect of student results every outgoing batch of this College has recorded with a result of more than 80% pass by final year students. We are confident that with our present team dynamic and committed Faculty members at various levels we will be able to increase this with all sincere efforts. With all our collective and further more hard work we are confident that we will be able to increase the development on every aspect with the introduction of more enhanced learning mechanism.

A sincere word to parents who have gathered here today and also to the students we are very strict in student’s evaluation especially the promotion as per the attendance rules of the University and also in awarding marks. Every thing we do would be as per the work and performance of the student.

Therefore when you receive the monthly progress report regarding the attendance, marks conduct of your son or daughter, you are advised to immediately meet the concerned head of Department for suggestions and necessary guidance.

Finally I congratulate all the students and staff co-ordinators for making necessary arrangements for successful organisation of this function. Without making more time I hand over the mike to the invited guest to deliver their valuable speeches.

Thanking you, once again.

PRINCIPAL