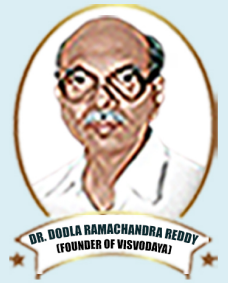




PBR VISVODAYA INSTITUTE OF TECHNOLOGY AND SCIENCE

KAVALI, NELLORE (Dist.)



ECLECTIC Newsletter

VOLUME 13

JUL - DEC 2019

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING Editorial Board Members

Editor-in-Chief

Dr.V Madhusudhan Reddy
Professor Head of Dept., EEE

Faculty Editors

Mr.Ch.Srinivasulu Reddy, Assoc. Professor
Mr.A.BhakthaVastala, Assoc. Professor

Student Editors

Sucharitha Tulluru (16731A0212)
Hareesh Kakarla (17735A0206)



Department of Electrical & Electronics Engineering

ECLECTIC

NEWSLETTER

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EDITORIAL BOARD

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INSTITUTE: VISION & MISSION

Vision of the Institute:

To be a premier center of learning in Engineering and Management education that evolves the youth into dynamic professionals with a social commitment

Mission of the Institute:

M1: To provide quality teaching- learning practices in engineering and management education by imparting core instruction and state-of-the-art infrastructure.

M2: To engage the faculty and students in acquiring competency in emerging technologies and research activities through Industry Institute Interaction.

M3: To foster social commitment in learners by incorporating leadership skills and ethical values through value-based education

EEE
PBRVITS

DEPARTMENT OF ELECTRICAL &
ELECTRONICS ENGINEERING

DEPARTMENT PROFILE

The Department of Electrical and Electronics Engineering was established in 1998 with the approval of the All-India Council for Technical Education (AICTE). The Department of Electrical and Electronics Engineering (EEE) is one of the oldest department in the institution, spanning 25 years of existence, and offers the undergraduate program B. Tech-EEE (and one post-graduate program, Power Electronics). The department has qualified and experienced faculty and excellent infrastructural facilities. It is well equipped with laboratories, audio-visual facilities, and software tools such as Multisim, MATLAB, and Pspice.

We also take up the social responsibility of inculcating awareness about energy conservation by promoting programmes about the same. Collaboration with industries for timely amendments of curriculum and laboratories is another credential of the department. The long-term goal of the department is to develop a centre for research and development activities in the thrust areas of solar and wind energy. The main objective of the department is to provide a better solution for industrial problems and to carry out academic and sponsored research projects.

The department is committed to providing students with exposure to state-of-the-art technologies by signing a Memorandum of Understanding (MoU) with reputed companies. The students exhibit their co-curricular and extra-curricular skills through the activities of the EEE student association and other student exhibition platforms. The Department of Electrical Engineering is committed to excelling in Electrical and Electronics Engineering through education and research with well-qualified and experienced faculty and technical staff members.

DEPARTMENT: VISION & MISSION

Vision:

“To be recognized for producing meritorious electrical engineers with research proficiency and Social commitment”.

Mission:

M1: Impart quality education with practice-based learning in producing electrical engineers with ethical values.

M2: Encourage the faculty and students to acquire mastery in cutting edge technologies.

M3: Implement research activities with social commitment.

PROGRAM EDUCATIONAL OBJECTIVES

PEO-I : Acquire a profound knowledge for a successful career in electrical engineering and allied fields.

PEO-II : Pursue higher education and involve in research activities of electrical and electronics engineering.

PEO-III: Exhibit intellectual skills ethically and pursue life-long learning with social Commitment.



PROGRAM OUTCOMES (POs)

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO-1 :Analyze industrial electrical challenges by applying knowledge fundamental electrical circuits, electronics and drives.

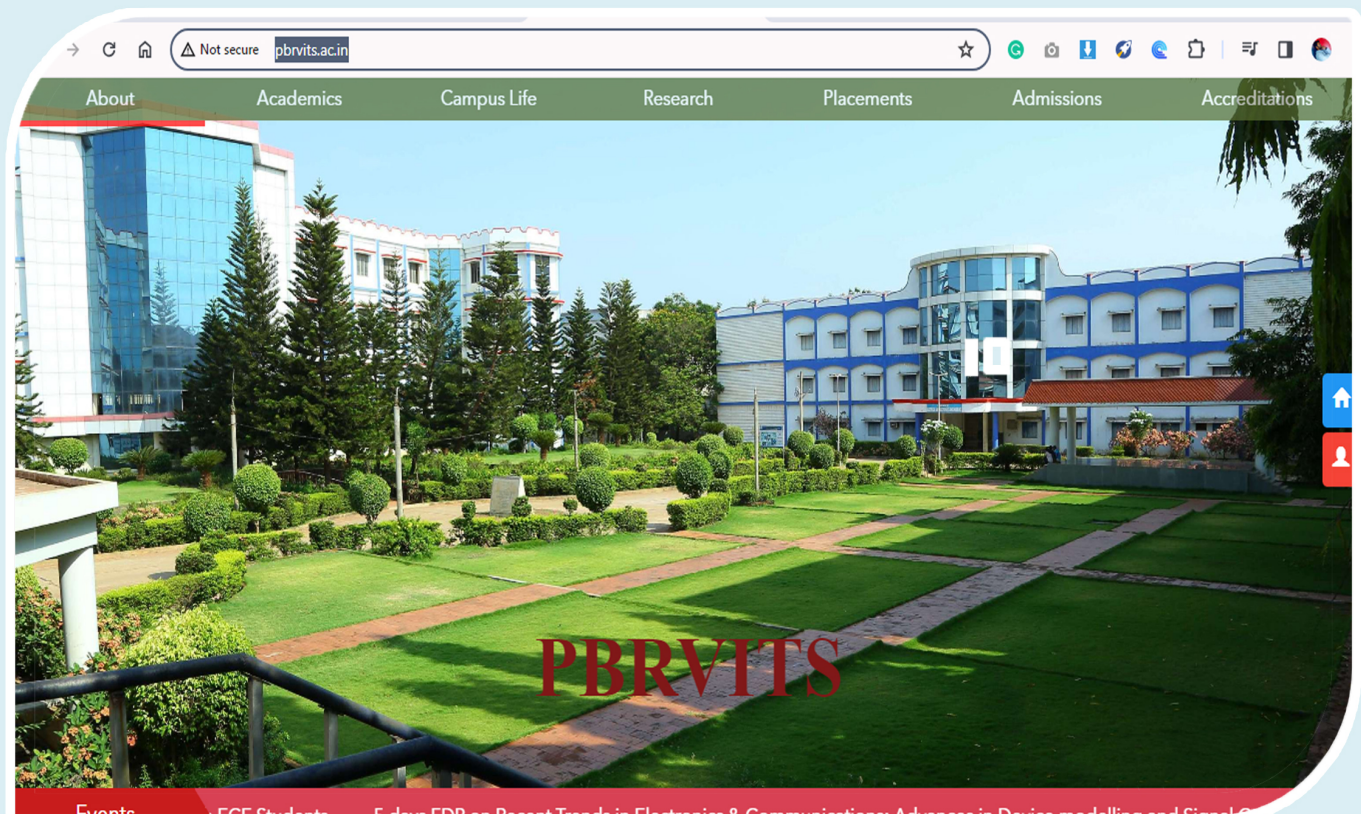
PSO-2 :Apply standard practices in electrical power and control systems with safety and societal considerations.

P.B.R. VISVODAYA INSTITUTE OF TECHNOLOGY & SCIENCE



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

College Website: www.pbrvits.ac.in



PROFESSOR DESK



Welcome to the Department of Electrical and Electronics Engineering, PBR VITS, Kavali, Andhra Pradesh. As a well-known fact, we cannot imagine the world without electricity. The Department of Electrical and Electronics Engineering is a center of pre-eminence where we nurture young talents by imparting technical training to them so that they can take up the challenges of real world. The Department of Electrical and Electronics Engineering was established in the year 1998 with an objective to develop professionals through quality education with an intake of 60 students.

The B. Tech and M. Tech programs are designed to achieve a balance between depth of knowledge acquired through specialization and breadth of knowledge gained through exploration. The courses offered by the department provide a comprehensive foundation in the core topics of EEE coupled with an area of specialization relevant to emerging engineering challenges.

The faculty in the department is a rich blend of personnel with industrial and professional experience. The dedicated staff members have sound knowledge in emerging areas like power systems, power electronics, and control engineering, etc. The breadth and depth of the research interests of the academic staff ensures a high standard of lecture courses and provides excellent opportunities for challenging and stimulating final year projects. All faculties supplement their delivery using videos, animations overhead projectors. The faculty keeps up with the latest technologies by publishing in reputed journals and presenting at various national and international conferences.

The department is active in organizing the various workshops and seminars for the growth and development of faculty and students' research knowledge further. Our department students are also highly encouraged to implement their innovative research ideas with the help of the expert faculty members and the available standard lab facilities in the department.

“Education can be a powerful weapon to change the world”

**Dr.V.Madhusudhan Reddy,
Professor & HOD, EEE.**

FACULTY DETAILS

S.No.	Name	Designation	Qualification
1	Dr V MADHU SUDANAREDDY	Professor	ME/M. Tech and PhD
2	Dr C. RAJASELVAM	Professor	ME/M. Tech and PhD
3	CH SRINIVASULU REDDY	Assoc.professor	ME/M. Tech and PhD
4	A BHAKTHAVACHALA	Assoc.professor	ME/M. Tech and PhD
5	M SREENU	Assistant Professor	M.E/M. Tech
6	Y DAVIDU	Assistant Professor	M.E/M. Tech
7	T HARI BABU	Assistant Professor	M.E/M. Tech
8	P RAJYALAKSHMI	Assistant Professor	M.E/M. Tech
9	V MASTHANIAH	Assistant Professor	M.E/M. Tech
10	S MUNIRAJA	Assistant Professor	M.E/M. Tech
11	G VENGALARAO	Assistant Professor	M.E/M. Tech
12	G SUMAN	Assistant Professor	M.E/M. Tech
13	M GIRIBABU	Assistant Professor	M.E/M. Tech
14	CH SWAPNA	Assistant Professor	M.E/M. Tech
15	P ANIL KUMAR REDDY	Assistant Professor	M.E/M. Tech
16	B MADHAVA	Assistant Professor	M.E/M. Tech
17	M VENKATESH	Assistant Professor	M.E/M. Tech
18	M BHASKAR BABU	Assistant Professor	M.E/M. Tech
19	V GOWRISPANDANA	Assistant Professor	M.E/M. Tech
20	I J ABHISHITHA	Assistant Professor	M.E/M. Tech
21	K HARSHAVARDHAN REDDY	Assistant Professor	M.E/M. Tech
22	P VENKATESWARLU	Assistant Professor	M.E/M. Tech
23	S. AMALA	Assistant Professor	M.E/M. Tech

FACULTY PUBLICATIONS

S. No.	Title of paper	Name of the author/s	Name of journal	ISSN number
1	Downlink beamforming in a two-tier macro femtocell network with decentralized spectrum allocation and partitioning	A. BHAKTHAVACHALA	IJASEM	ISSN:2454-9940
2	Diagnosing Faults in Photovoltaic Arrays through Smart Grid: A Novel Approach	Dr.V. Madhu SUDHAN REDDY	IJCNCW	ISSN:2250-3501
3	A Stage of the art Review of network and Mobile Communications Technologies	CH. SRINIVASULU REDDY	JCNWC.COM	ISSN:2250-3501
4	Information System Hosted in the Cloud to Promote Rural Tourism	T. HARI BABU	IJMECE	ISSN:2321-2152
5	Z-source inverter used in electric vehicle's permanent-magnet synchronous motor drive system	Dr.V.MADHU SUDHAN REDDY	IJCNCW	ISSN:2250-3501
6	A new series reversion-based Omega-K algorithm for SAR imaging with a circular trajectory scan	S.MUNIRAJA	IJASEM	ISSN:0364-4308
7	Eliminating the Effect of Load Variation on a Boost Converter's Predictive Current using an EKF	M.GIRI BABU	YIDDISH	ISSN:0364-4308
8	The Optimal Location and Sizing of a Distribution Static Compensator in a New Stochastic Framework	V.MASTHANIAH	AES	ISSN:2456-5083

ACADEMIC TOPPERS

Heartiest Congratulations to the Toppers the Management, Principal, Faculty & Students of EEE Dept., are happy to congratulate the students for proving their excellence in the University Examinations for the A.Y. 2018-2019, conducted by JNTUA, Ananthapur.

(II B. TECH, II-SEM, 2018 BATCH)

II B. Tech, II- Sem				
S. No	Roll Number	Name	Percentage	Rank
1	18731A0222	M.SWAPNA	88.6%	I
2	18731A0243	P. ANUHYA	87.8%	II
3.	18731A0216	K. VIJAYALAKSHMI	85.6%	III

(III B. TECH, II-SEM, 2018 BATCH)

III B. Tech, II-Sem				
S. No	Roll Number	Name	Percentage	Rank
1	18731A0245):	PALA ANUHYA	89.1%	I
2	18731A0222	MORUSU SWAPNA	87.6%	II
3.	19735A0213	CH. JASWANTHI	83.5%	III

(IV B. TECH, II-SEM, 2018 BATCH)

IV B. Tech, II-Sem				
S. No	Roll Number	Name	Percentage	Rank
1	18731A0245	PALA ANUHYA	95.1%	I
2	18731A0205	CH. NESHMA YADAV	94.8%	II
3	18731A0222	MORUSU SWAPNA	94.22%	III

GUEST LECTURES

Guest Lecture on “Electrical Energy Conservation”

REPORT:

Department of Electrical Engineering PBR VITS has organized a guest lecture on “Electrical Energy Conservation” on 10-02-2020. The resource person from Andhra Pradesh Transmission System, Chittore was invited as the speaker for the lecture on “Electrical Energy Conservation”. He possessed over 25 years of experience in AP-TRANSCO as Assistant Engineer and Additional Divisional Engineer in various power domains.

He shared his industry experience and explained in detail what are the latest technologies in Energy Conservation, Advances in Electrical Power Generation and Do’s and Don’ts in regular life for conserving the energy and How to use various load appliances in our house. Along with he also spoke on career perspective domains in electrical industries for the students.

HOD of EEE Mr. A. Bhakthavatsala introduced the speaker and Mr. P. Nanda Kumar, proposed the vote of thanks for the session. In all, 77 students and faculty of computer science attended the guest lecture.

OUTCOMES:

1. Students gained the Electrical Energy Conservation concepts.
2. Students felt that, the role of each and every person had a responsibility to conserve the electrical energy for future generation.
3. Faculty improved their teaching skills.

PHOTOGRAPHS

Guest lecture on “Electrical Energy Conservation”

By S. Mahesh Babu, ADE, APTRANSCO, Chittore on 10/02/2020





WORKSHOP

A two-day national level workshop on Hands on design and development of E-MAT-LAB for IV.B. Tech, EEE students was conducted on 10 & 11th January 2020. The total number of students attended for this workshop was around 80. The content of the workshop as follows

DAYS	COURSE CONTENT	DURATION
Day 1 Session 1	<ul style="list-style-type: none"> ✓ Introduction to MATLAB/Simulink <ul style="list-style-type: none"> ➤ What can you gain from the course? ➤ What is MATLAB/Simulink? ➤ how to start MATLAB/Simulink ➤ basics of MATLAB/Simulink ✓ How to open, quit and work on command window ✓ <ul style="list-style-type: none"> ➤ Command Window ➤ Work space ➤ Command history ✓ Introduction to SIMULINK <ul style="list-style-type: none"> ➤ Starting and Running Simulink ➤ Signals and Systems in Simulink ➤ Basic Simulink Example ✓ Introduction to SIMPOWER SYSTEMS <ul style="list-style-type: none"> ➤ Basic Blocks ➤ How to use ➤ Functions of Blocks. □ Further Queries 	3 HOURS
Day 1 Session 2	<ul style="list-style-type: none"> ✓ Introduction to the Six Phase Induction Motor. ✓ Mathematical modeling of Six Phase Induction Motor ✓ Introduction to the power electronics ✓ pulse width modulation techniques ✓ Design pulse width modulation techniques □ Getting Results □ Further Queries 	3 HOURS

<p>Day2</p> <p>Session 1</p>	<ul style="list-style-type: none"> ✓ Introduction to the solar PV system ✓ Series and parallel connection of solar PV module ✓ Introduction to MPPT algorithms ✓ Study of solar PV characteristics ✓ Design of power converters for solar PV system ☐ Further Queries 	<p>3 HOURS</p>
<p>Day 2</p> <p>Session 2</p>	<ul style="list-style-type: none"> ✓ Hands on Designing of solar PV system ✓ Debugging ✓ Getting Results ☐ Further Queries 	<p>1 HOURS</p>



STUDENT ACHIEVEMENTS

GOLD MEDAL IN EEE with (91.6%) JNTUA Anantapur for the academic year 2018-2019. NAGI SRAVANA SANDHYA bearing Roll number :154N1A0205 got GOLD MEDAL IN EEE with (91.6%) JNTUA Anantapur for the academic year 2018-2019



FDP ATTENDED



CERTIFICATE COURSES SUMMARY

AY:2019-20

EVENT REPORT

NAME OF THE EVENT: Certificate Course on “PLC Programming and Training”

DATE OF EVENT : 16-9-2019 To 19-9-2019

TIME : 10:30 PM

VENUE : C-118, COTTON Block, PBR VITS

PARTICIPANTS : 60(III & IV EEE)

EVENT CO-ORDINATOR : G.Suman, Asst.. Professor, EEE

RESOURCE PERSON : Mr P Sudeep Israel

ADE, APTRANSCO

Ongole .

REPORT:

A Certificate Course on the topic “PLC Programming and Training” was conducted by the department of EEE, PBR VITS, Kavali on 16-9-2019 To 19-9-2019. The resource person was Mr P Sudeep Israel, ADE, APTRANSCO, Ongole.

The programme started with an inaugural session at 10:00 AM in which the HoD of EEE Department Dr. V.Madhusudhan Reddy gave opening remarks about the event. Mr. V.Masthanaiah, Assistant Professor, Dept. of EEE introduced the Resource Person to the gathering, later the Resource person briefly presented the following deliberations.

Day-1(16.09.2019): Internal Architecture of PLC, Introduction to PLC, types of PLC programming languages, Normally open and normally close and Ladder logic.

Day-2(17.09.2019): Logic gates implementation using PLC, Latching conditions, blinking programs.

Day-3(18.09.2019): Looping concepts, Push button programming, Timer operations .

Day-4(19.09.2019) : Delay operations and counting operations- Incremental counting . Counting operations- Decremental counting, Incremental/ Decremental Counting.

OUTCOMES:

students can be able to

1. Learn the Circuits & Drawing Designing
2. Understand the modern industrial automation systems.
3. Demonstrate working of PLCs in the industry
4. succeed in a core interview & get a core job.

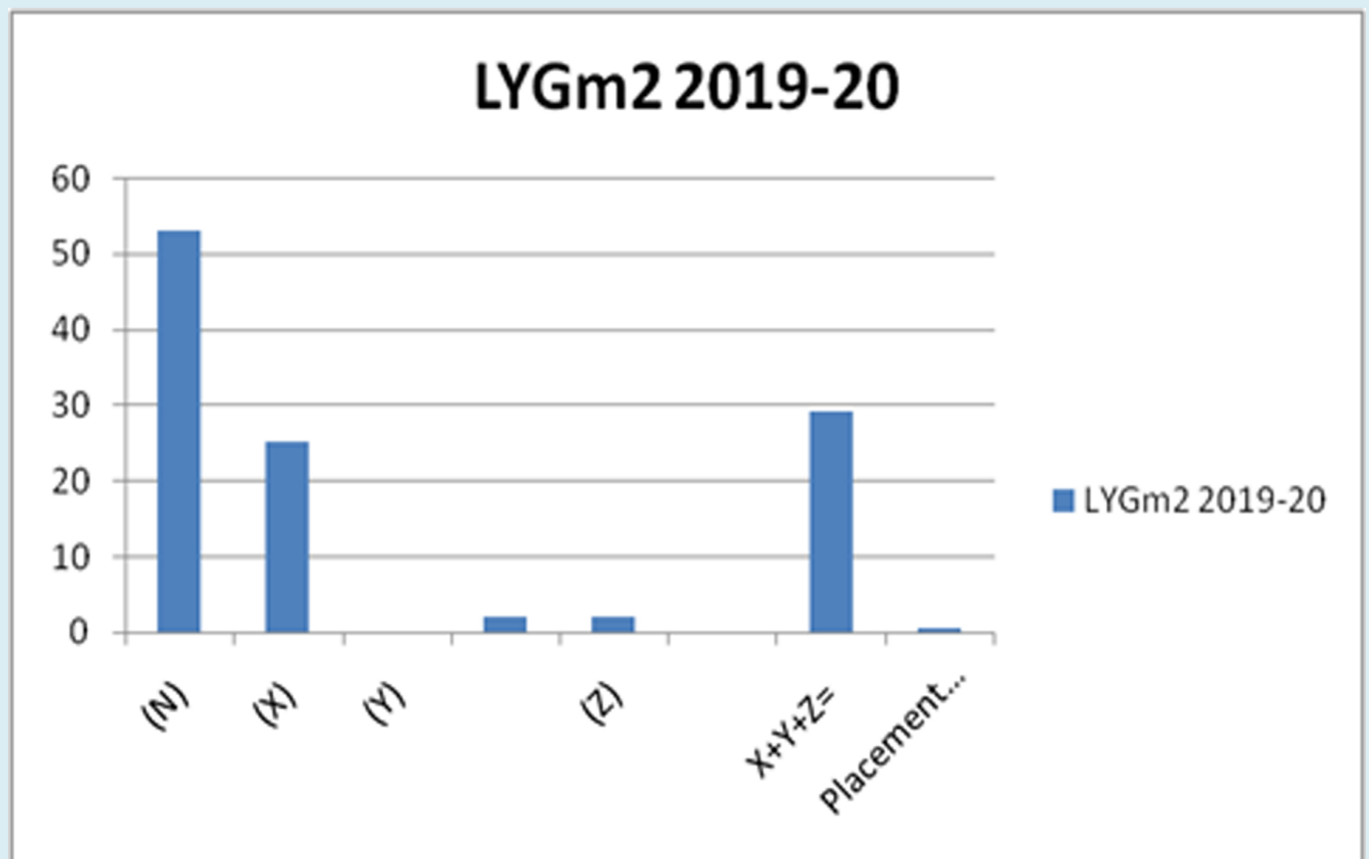
PHOTOS

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ADE,APTRANSCO, Ongole.



PLACEMENT, HIGHER STUDIES AND ENTREPRENEURSHIP

ITEM	LYGm2 2016-17
Total No. of final year students(N)	53
No. of students placed in companies or government sector(X)	25
No. of students admitted to higher studies with valid qualifying scores (GATE OR equivalent state or national level tests GRE, GMAT etc..)(Y)	2
No. of students turned entrepreneur in engineering/technology(Z)	2
$X+Y+Z=$	29
Placement Index: $(X+Y+Z)/N$	55%



PLACEMENT SUMMARY

S.No	Roll No	Name of the Student	Gender	Name of the Organization	Designation	Salary Package Per Annum
1	16731A0201	BODIMALLA NIKHITHA	F	Kodandaram	RF Engineer	1.8 Lks
2	16731A0202	CHEMURU ANUSHA	F	Kodandaram	RF Engineer	1.8 Lks
3	16731A0203	CHUNDI VISHNUPRIYA	F	AEGIS	Trainee	2.2 Lks
4	16731A0204	HARIKA DANDU	F	Miracle	Software Trainee	2.16 LKS
5	16731A0205	UMA DRONADULA	F	HEXAWARE	Associate - Band 1	2.81 Lks
6	16731A0206	G.MOUNIKA	F	AEGIS	Trainee	2.2 Lks
7	16731A0207	POTLURU VINEETHA	F	MPHASIS	Trainee Associate Software Eng	3.25 Lks
8	16731A0209	SHAIK SOFIYA	F	Kodandaram	RF Engineer	1.8 Lks
9	16731A0211	SREEHARI SUPRAJA	F	Kodandaram	RF Engineer	1.8 Lks
10	16731A0212	TULLURU SUCHARITHA	F	MPHASIS	Trainee Associate Software Eng	3.25 Lks
11	16731A0213	V.MAHIMA CHOWDARY	F	AEGIS	Trainee	2.2 Lks
12	16731A0218	VENKATESH GUDIPATI	M	Miracle	Software Trainee	2.16 LKS
13	16731A0223	SYAMSUNDAR PATTEM	M	HEXAWARE	Associate - Band 1	2.81 Lks
14	16731A0224	ARISH POKKINA	M	HEXAWARE	Associate - Band 1	2.81 Lks
15	16731A0225	DEVALLA SUMA	F	AEGIS	Trainee	2.2 Lks
16	16731A0226	GAMPA VINEETHA	F	Kodandaram	RF Engineer	1.8 Lks
17	17735A0202	BHUMIREDDY SUSHMARAM	F	HEXAWARE	Associate - Band 1	2.81 Lks
18	17735A0206	KAKARLA HAREESH	M	HEXAWARE	Associate - Band 1	2.81 Lks
19	17735A0208	KOTTAPALLI RAMU	M	HEXAWARE	Associate - Band 1	2.81 Lks
20	17735A0211	POGULA VENKATA SRI HARSHA	M	HEXAWARE	Associate - Band 1	2.81 Lks
21	17735A0212	POTLURI SAI TEJA		CTS	Programmer Analyst Trainee	4.0 Lks
22	17735A0214	YAMINI CHALLA	F	Miracle	Software Trainee	2.16 LKS
23	17735A0215	PYDI ARUNA	F	AEGIS	Trainee	2.2 Lks
24	17735A0216	KAMBHAM SWETHA	F	Kodandaram	RF Engineer	1.8 Lks
25	17735A0217	ASHOK KUMAR OMKARAM	M	Miracle	Software Trainee	2.16 LKS



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