



## Academic and Administrative Audit

### Objectives:

#### Major objectives of Academic and Administrative Audit:

1. To evaluate and understand the existing system and assess the strengths and challenges of the Departments and Administrative Units and to suggest the methods for improvement and for overcoming the challenges.
2. To identify the bottlenecks in the existing administrative mechanisms and to identify the opportunities for academic reforms, administrative reforms and examination reforms etc.
3. To evaluate the optimum utilization of financial and other resources.
4. To suggest the methods for continuous improvement of quality keeping in mind criteria and reports by NAAC, NBA and other bodies.

The review process is usually carried out by internal committee members and the external academicians. As a part of the audit process, the IQAC has structured a proforma for the evaluation based on the Criteria specified by NAAC. The criteria-wise evaluation of the department includes:

- A) Course content
- B) Teaching - Learning Process
- C) Examination and Evaluation system
- D) Results
- E) Research and consultancy activities
- F) Knowledge upgradation
- G) Infrastructure
- H) Department Administration

#### ❖ Approach towards AAA:

Institutions of eminence or University with national and international importance cannot be built without having a strong continuous academic and administrative audit system. Sambalpur University has adopted a two-tier academic and administrative audit systems; Internal Audit and External Audit.

- ❖ **Internal Audit:** The internal audit shall be done by the internal committee members. Auditors will review the AAA form submitted by the Heads of the respective departments, verify supporting documents, may ask for further documents and clarifications. After the verification of the documents, the internal auditors will prepare the AAA report for each department.
- ❖ **External Audit:** The external audit is to be done in the institution by external peers/ experts.
- ❖ **Periodicity:** Annual basis

❖ **Process:**

The main focuses of the defined processes are:

- a) Teaching-Learning and Evaluation Process
- b) Define quality in terms of learning outcomes
- c) Develop Research culture
- d) Continuity and consistency based on the vision and mission of the institution.
- e) Application of best practices suited to the institution and the departments.
- f) Student performance
- g) Student placement and progression
- h) Continuous improvement towards total quality development of the students, teachers and the institution.
- i) Good Governance.

❖ **Roles & Responsibilities of AAA committee:**

- Review and develop policies on assessment for learning, teaching and learning quality.
- Review and formulate policies to enhance students' learning motivation.
- Review and formulate policies to cater for student diversity.
- Monitoring and following up students learning outcomes.
- Introducing and promoting different teaching methods.
- Promoting academic activities and creating an atmosphere of learning.
- Enhancing teacher's development through holding different professional development activities and orientations. To enhance the teaching efficiency through perfecting the appraisal system.
- Make regulations regarding the admission of students to different programmes of study in the college keeping in view the policy of the Government.
- Make regulations for sports, extra-curricular activities, and proper maintenance and functioning of the playgrounds and hostels.
- Recommending the Governing Body institution of scholarships, studentships,
- Fellow ships, prizes and medals, and to frame regulations for the award of the same.
- Advise the Governing Body on suggestions(s) pertaining to academic affairs made by it.

  
Convener- AAA committee



  
PRINCIPAL

PRINCIPAL  
Aditya College of Engineering  
SURAMPALEM - 533 437

**AAA Reports for the  
academic year: 2021-22**



# ADITYA COLLEGE OF ENGINEERING

Approved by AICTE, Permanently Affiliated to JNTUK & Accredited by NAAC  
Recognized by UGC under Sections 2(f) and 12(B) of UGC Act, 1956

Aditya Nagar, ADB Road, Surampalem - 533 437, E.G.Dist., Ph: 99631 76662.

28-10-2022

## Academic and Administrative Audit of the Department Academic Year: 2021-22

1. Name of the Department: **Electrical and Electronics Engineering**

2. Year of establishment: 2008

3. Courses offered: UG & PG

Year	UG	PG
2021-22	B. Tech	M. Tech PE & D

4. Number of teaching posts sanctioned, filled and vacant.

Post	Sanctioned	Filled
Professor	3	3
Associate Professor	5	5
Assistant Professor	12	12
Total	20	20

5. Faculty profile with name, qualification, designation, experience, nature of appointment (confirmed/ probation/temporary):

S. No.	Name	Designation	Qualification	Teaching Experience	Nature of appointment
1	Mr.Karri Manoz Kumar Reddy	Associate professor	M.Tech (Ph.D)	18	Regular
2	Dr. Adireddy Ramesh	Professor	Ph.D	20	Regular
3	Dr.Y.Srinivasa Rao	Professor	Ph.D	19	Regular
4	Dr. Boddepalli. Rajini	Professor	Ph,D	16	Regular
5	Dr.Manam Ravindra	Associate professor	Ph.D	11	Regular
6	Dr.A.S.S.Veerendra Babu	Associate professor	Ph.D	14	Regular
7	Mr.Donepudi Tata Rao	Associate professor	M.Tech	19	Regular
8	Mr.Chaturvedula Uma Phanendra Kumar	Associate professor	M.Tech (Ph.D)	20	Regular
9	Mrs.Kambampati Lakshmi	Assistant professor	M.Tech	16	Regular

10	Mr.Majji Venkata Kumar Reddy	Assistant professor	M.Tech	5	Regular
11	Mr.Manthina Satyanarayana Raju	Assistant professor	M.Tech	5	Regular
12	Mr.Chithaluru Manoj	Assistant professor	M.Tech	5	Regular
13	Mrs.Himaja Tata	Assistant professor	M.Tech	7	Regular
14	Mr.T.Lakshminarayana	Assistant professor	M.Tech	10	Regular
15	Mrs.T.Padmajarani	Assistant professor	M.Tech	9	Regular
16	Mr.Y.Srinivas	Assistant professor	M.Tech	2	Regular
17	Mr.Nukala Jaswanth	Assistant professor	M.Tech	2	Regular
18	Mrs.Mathamsetti Mownika	Assistant professor	M.Tech	2	Regular
19	Mr.Daranikota Ravi Kiran	Assistant professor	M.Tech	4	Regular
20	Mrs.Chekuri Sravanthi	Assistant professor	M.Tech	1	Regular

**6. Programme-wise Student Teacher Ratio: (Average of 4 Years):**

**UG: 20:1 and PG: 12:1**

**7. Number of academic support staff (technical) and administrative staff sanctioned, filled and vacant:**

S. No.	Post	Sanctioned Posts	Filled	Actual
1	Laboratory Assistant	5	5	5
2	Clerk (office)	1	1	1
3	Laboratory Attendant	1	1	1
4	Peon	1	1	1
5	Other	-	-	-

**8. Thrust areas of research as identified by the department:**

1. Power Electronics
2. Artificial Intelligence Techniques
3. Power Systems

**9. Special research laboratories sponsored by / created by industry or corporate bodies:**

No

**10. Faculty Research Conference papers/Posters:**

S. No.	Name of the Faculty as Author (Main Author)	No of Authors	Title of the Paper	Name of the Conference	Date	Organized by with location	ISBN/ ISSN Number
1	Dr.A. Ramesh,	2	Study of different techniques to mitigate temporary overvoltage in photovoltaic system	First International Conference on Design and Materials (ICDM)-2021	26-27 Decem ber 2021	Aditya College of Engineering Surampalem	2214-7853

2	Dr.A. Ramesh,	2	Circuit analysis and modelling of dual active bridge bidirectional converter	First International Conference on Design and Materials (ICDM)-2021	26-27 December 2021	Aditya College of Engineering Surampalem	2214-7853
3	Dr.A. Ramesh,	2	Design of sliding mode controller for induction motor drive	First International Conference on Design and Materials (ICDM)-2021	26-27 December 2021	Aditya College of Engineering Surampalem	2214-7853
5	Dr.M.Ravindra	2	Study of different techniques to mitigate temporary overvoltage in photovoltaic system	First International Conference on Design and Materials (ICDM)-2021	26-27 December 2021	Aditya College of Engineering Surampalem	2214-7853
6	Dr.M.Ravindra	2	Design of sliding mode controller for induction motor drive	First International Conference on Design and Materials (ICDM)-2021	26-27 December 2021	Aditya College of Engineering Surampalem	2214-7853
7	Mrs.T. Himaja	3	Circuit analysis and modelling of dual active bridge bidirectional converter	First International Conference on Design and Materials (ICDM)-2021	26-27 December 2021	Aditya College of Engineering Surampalem	2214-7853
8	Mrs.T. Himaja	2	Study of soft-starter based Induction generator for Wind Energy Conversion system	2021 Asian Conference on Innovation in Technology (ASIANCON)	28th to 29th Aug 2021	Aditya College of Engineering Surampalem	978-1-7281-8402-9

### 11. Faculty Conferences/Seminars /Workshops Attended

S. No.	Name of the faculty	Name of the Event	Name of the organizer	Place/ Location	Date/Duration
1	Dr.A.Ramesh	A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology,	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Emerging Areas of Electrical Engineering	ADITYA COLLEGE OF ENGINEERING,	Surampalem, AP	16-05-2022 to 20-05-2022

		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
2	Dr.Y.Srinivasa Rao	A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology,	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
3	Mr. M. Manoz Kumar Reddy	A Five day FDP on Advances in Renewable Energy and Electric Vehicles	National Institute of Technology (NIT)	Silchar, Assam	26-03-2022 to 30-03-2022
		A Five day FDP on Emerging Areas of Electrical Engineering	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	16-05-2022 to 20-05-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
4	Dr.M.Ravindra	A Five day FDP on Advances in Renewable Energy and Electric Vehicles	National Institute of Technology (NIT)	Silchar, Assam	26-03-2022 to 30-03-2022
		A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
	Dr.A.S.S.Veerendra Babu	A Five day FDP on Advances in Renewable Energy and Electric Vehicles	National Institute of Technology (NIT)	Silchar, Assam	26-03-2022 to 30-03-2022
		A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
5	Mr.D.Tata Rao	A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
		A Two day National Level Workshop on Transformation Through NAAC Accreditation Process	College of Education & Technical Education Department	Hyderabad	21 <sup>st</sup> and 22 <sup>nd</sup> June 2021

		A Two-Day Online workshop on Recent Technologies in Power System	Department of EEE, JNTUK-University College of Engineering	Vizianagaram	30 <sup>th</sup> - 31 <sup>st</sup> August 2021
7	Mr.Ch.U.P.Kumar	One week FDP on Pedagogy Innovative methods of Teaching and Learning	Bharat Institute of Engineering and Tech.	Hyderabad	7-02-2022 to 12-02-2022
		A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology,	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
8	Mrs.K.Lakshmi	One week FDP on Pedagogy Innovative methods of Teaching and Learning		BIET, Hyderabad	7-02-2022 to 12-02-2022
		A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology,	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
		A two day workshop on Recent technologies in power systems	JNTU-University College of Engineering	Vizianagaram	30 <sup>th</sup> – 31 <sup>st</sup> August 2021
9	Mr.Satyanarayana Raju	One week FDP on Pedagogy Innovative methods of Teaching and Learning	Bharat Institute of Engineering and Tech.	Hyderabad	7-02-2022 to 12-02-2022
		A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology, Vijayawada	Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
		A Two day workshop on IQ-F-PLC	CVR College of Engineering	Hyderabad	28 <sup>th</sup> -29 <sup>th</sup> Oct 2021
		A Two day National workshop on “Managing Cyber Security in the New Normal:	Department of Computer Science and Engineering for IOT and Advanced Computing,	Bhopal	22 <sup>nd</sup> -23 <sup>rd</sup> Oct 2021:
10	Mr.T.Lakshminarayana	A Five day FDP on Paper and Thesis	CMRIT	Bangalore	14-02-2022 to 18-02-2022

		Drafting using Latex environment			
		A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology,	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
11	Mr.M.V.Kumar Reddy	One week FDP on Applications of Signal Processing	Dadi Institute of Engineering and Tech.	Visakhapatnam, AP	20-12-2021 to 25-12-2021
		A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
12	Mrs.T.Padmaja Rani	A Ten day FDP on Hybrid Vehicles and Battery Management Systems	NIT	Warangal	7-03-2022 to 16-03-2022
		One week workshop on Future challenges in renewable energy systems- a research perspective	Shri Vishnu Engineering College for Women	Bhimavaram, AP	13 <sup>th</sup> -19 <sup>th</sup> September, 2021
		A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology,	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
13	Mrs.T.Himaja	A Five day FDP on Advances in Renewable Energy and Electric Vehicles	National Institute of Technology (NIT)	Silchar, Assam	26-03-2022 to 30-03-2022
		A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology,	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
		A Two-Day Online workshop on Recent Technologies in Power System	Department of EEE, JNTUK-University College of Engineering	Vizianagaram	30 <sup>th</sup> - 31 <sup>st</sup> August 2021
14	Mr.N.Jeswanth	A Five day FDP on Research Opportunities	Prasad V. Potluri Siddhartha	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022

		in Electrical Power Engineering	Institute of Technology		
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
15	Y.Srinivas	One Week FDP on Applications of Signal Processing	Dadi Institute of Engineering and Tech.	Visakhapatnam, AP	20-12-2021 to 25-12-2021
		A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021
16	Mr.Ch.Manoj	A Five day FDP on Research Opportunities in Electrical Power Engineering	Prasad V. Potluri Siddhartha Institute of Technology	Vijayawada, Andhra Pradesh	23-03-2022 to 27-03-2022
		A Five day FDP on Recent Advancement in Smart Grids	ADITYA COLLEGE OF ENGINEERING	Surampalem, AP	13-09-2021 to 17-09-2021

## 12. Faculty Research Publications (Journals):

S. No.	Name of the Faculty Author	Title of the Paper	Name of the Journal	ISBN/ISSN Number	Vol/ Month	Index No UGC/ SCOPUS
1	Mr.K.Manoz Kumar reddy	Optimal Siting and sizing of unified power flow controller using sensitivity constrained differential evolution algorithm	International Journal of Electrical and Computer Engineering	2008-8708	Vol 12,no.5 2022	Scopus Indexed
2	Dr.A.S.S. Veerendra babu	Electric vehicles charging in India: Infrastructure planning and policy aspects	Energy Storage, Wiley Publications	2578-4862	e335	Web of Science ESCI Indexed
3	Dr.M.Ravindra	RA 123 s: Three metaphor less Algorithms for Economic Load Dispatch Solution	Journal of Electrical Engineering & Technology(Springer)	1975-0102	Oct 2021	Web of Science (SCIE)
4	Dr.A.Ramesh	Optimal Capacitor Placement - A Bibliometric Survey	Library Philosophy and Practice (e-journal)	1522-0222	June 2021	Scopus

5	Mrs.K.Lakshmi	Load Flow Solution of Distribution Systems - A Bibliometric Survey	Library Philosophy and Practice (e-journal)	1522-0222	July 2021	Scopus
6	Mr.D.Tata Rao	New Control Strategy Based Photovoltaic Water Pumping System Using BLDC Motor Drive	International Journal of Emerging Technologies and Innovative Research	2349-5162	Dec 2021	Peer reviewed
7	Mr. U.P.Kumar and Mr.K.Manoz Kumar Reddy	Energy management system for hybrid electrical vehicle using a bidirectional dc/dc converter using fuzzy logic controller	International Journal of Emerging Technologies and Innovative Research	2349-5162	Dec 2021	Peer reviewed
8	Mr. U.P.Kumar and Mr.K.Manoz Kumar Reddy	Improvement of power quality in residential home using FLC based multilevel inverter	International Journal of Emerging Technologies and Innovative Research	2349-5162	Dec 2021	Peer reviewed
9	Mr.M. Satyanarayana Raju	Power Factor Improvement in Rectifier Based Electric Vehicle Charger and Harmonic Reduction	The International journal of analytical and experimental modal analysis	0886-9367	Nov 2021	Peer reviewed
10	Dr.M.Ravindra and Mr.K.Manoz Kumar Reddy	Design and Performance Analysis of 3-Phase Solar PV Integrated UPQC	International Journal of Emerging Technologies and Innovative Research	2349-5162	Dec 2021	Peer reviewed
11	Mrs.K.Lakshmi and Mr.K.Manoz Kumar Reddy	Power Management and Control of Fuel Cell based Hybrid Microgrid with Interlinking Converter	Science, Technology and Development	0950-0707	Vol11. no6	Peer reviewed

### 13. Details of Faculty Patents:

S. No.	Name of the Faculty	Patent details	Area of the patents files/ obtained	Status	Filing agency
1	Dr. A Ramesh	Agri-Tech Farming Revolution For Using Plc Solar water, And Fertilizer's Pump With New Altered-Nozzle	Agriculture	Published	
2	Dr. A Ramesh	Method to Observe Fast Data Transmission Light Rays	Light	Published	

### 14. Faculty Book/ Chapter published:

S. No	Name of the Faculty Author	No of Authors	Title of the Book Chapter	Name of the Publisher	ISBN Number
1	Dr.M.Ravindra Mr.K.Manoz Kumar Reddy Mr.D.TataRao	3	Power Congestion Management in Transmission Network using FACTS device: A MATLAB/Simulation Study	Scholars' Press	978-6138969266
2	Dr.A.Ramesh Dr.M.Ravindra	2	Simplified Model of Micro Grid Connected with PV System: study for 24 hours of a typical day	Scholars' Press	978-6204740881

### 15. Workshops/ Seminars/ Guest Lectures Organized:

S. No.	Type of Event	Title of Event	Name of the Coordinator	Resource Person Details	Date/s of the event	No. of Participants
1	Seminar	Climate Change Energy Swaraj &I'	Dr.A.S.S.Veerendra Babu	Prof.Chetan S.Solanki Prof IIT Bombay	23 <sup>rd</sup> May,22	113
2	Workshop	Two day Workshop on MATLAB Programming /Simulation	Mr.M.Ravindra	Dr.G.Naresh Professor Pragati Engineering College	6 <sup>th</sup> -7 <sup>th</sup> May,22	56

3	FDP	A Six Day FDP on Recent Advancements in smart Grids	Y Srinivasarao	Dr.Sarat Kumar Sahu,Professor ,EEE Dept.MVGR College of Engineering .Vizianagaram Dr.D.Vijay Kumar,Professor,EEE Dept.,AITAM, Tekkali Dr.J.Sreedevi Associate Professor, EEE Dept.,GRIET, Hyderabad	13 <sup>th</sup> to 17 <sup>th</sup> Sep.2021	24
4	Workshop	Two day Workshop on Outcome Based Education	Mr.D.Tata Rao	Prof R.Mahadevan Chairman, Aasaan Educare Foundation	16 <sup>th</sup> - 17 <sup>th</sup> Feb, 22	65
5	Seminar	Role of Electric Vehicles in Smart Grid	Mr.Ch.U.P.Kumar	Dr.Mukesh Singh Associate Professor Thapar Institute of Technology	27 <sup>th</sup> Dec, 2021	42
6	FDP	Research Opportunities in the Areas of Electrical Engineering	D Tatarao	Dr.K.Ravindra, Associate Professor EEE, University College of Engineering, JNTUK	16 <sup>th</sup> to 20 <sup>th</sup> May-2022	23
7	Seminar	Entrepreneur Challenges and Opportunities	Mr.M.Ravindra	Mr.A.R.ArunKumar Entrepreneur, Business Trainer, President-Eminent Investment Services	21-10-2021	60

**16. Member of External Bodies/Agencies (Like member in ED (Journals) / BoS / GB/ EC of Prof. Society etc.)**

S. No.	Name of the Faculty	Name of the external body/ Agency	Position	Duration / Tenure
1	Dr.A.S.S.VeerendraBabu	Elsevier	Reviewer	Since 2019
		Taylor and Francis		
		Wiley		
		Hindawi		

		AITEES Springer Conference		2022
2	Dr.M.Ravindra	National Testing Agency	NTA-Observer	3 days 2021
		National Testing Agency	NTA-Observer	4 days 2022
		ASIONCON IEEE Conference	Session Chair	28 <sup>th</sup> 20 <sup>th</sup> August 2021
		AITEES Springer Conference	Reviewer	2022
		SMART GENCON IEEE Conference		2020
		IEEE Access Journal		2020
		Hindawi		2022
		Wiley, International Transactions on Electrical Energy Systems' Journal		2020
		WASET Scientific and Technical Committee & Editorial Review Board on Energy and Power Engineering	Committee member, Reviewer	since OCT 2018
3	Mr.Ch.UP.Kumar	WASET Scientific and Technical Committee & Editorial Review Board on Energy and Power Engineering	Committee member, Reviewer	since 2020

**17. Teachers provided with financial support to attend conferences/workshop and towards membership fee of professional bodies during the year:**

S. No.	Name of the Faculty	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support received (in INR)
1	Dr.A.Ramesh		IETE	7434
		Artificial Intelligence Techniques for Electrical Engineering Systems(AITEES-2022)		1000
		5th international conference on Communication, Devices & Networking(ICCDN 2021)		1000
2	Mr.K.Manoz Kumar Reddy		IETE	7434
		Artificial Intelligence Techniques for Electrical Engineering Systems(AITEES-2022)		1000
		5th international conference on Communication, Devices &		1000

		Networking(ICCDN 2021)		
		Online workshop on Budha Philosophy for Healthy Life		300
3	Dr .M.Ravindra		IETE	6903
		Artificial Intelligence Techniques for Electrical Engineering Systems(AITEES-2022)”,		7500
		5th international conference on Communication, Devices & Networking(ICCDN 2021)		7500
		Online workshop on Budha Philosophy for Healthy Life		300
4	Dr.A.S.S.Veerendra babu		IETE	6903
		Artificial Intelligence Techniques for Electrical Engineering Systems(AITEES-2022)		7500
		Online workshop on Budha Philosophy for Healthy Life		300
5	Mr.D.Tata Rao		IETE	6372
		Artificial Intelligence Techniques for Electrical Engineering Systems(AITEES-2022)		1000
		Online workshop on Budha Philosophy for Healthy Life		300
6	.Mrs.K.Lakshmi		IETE	6372
		National workshop on grid Power Electronics and Communication Engineering		300
7	Mr.Ch.U.P.Kumar		IETE	6372
		Artificial Intelligence Techniques for Electrical Engineering Systems(AITEES-2022)		1000
8	Mrs.T.Himaja		IETE	5841
		Workshop on Recent Trends in Radar Signal Processing		300
9	Mr.T.LakshmiNarayana		IETE	5841
		Online workshop on Budha Philosophy for Healthy Life		300
		National workshop on grid Power Electronics and Communication Engineering		300
10	Mr.M.Satyanarayana Raju		IETE	5841
		National workshop on grid Power Electronics and Communication Engineering		300
11	Mr.N.Jaswanth	Recent Trends in Radar Signal Processing		300

12	M.V.Kumar Reddy		IETE	5841
13	CH.Manoj		IETE	5841
14	T.Padmajarani		IETE	5841
15	Y.Srinivas		IETE	5841

### 18. List of Faculty NPTEL and Other Courses Certification:

S. No	Name of the Faculty	Name of the Course	Date/Duration	Remarks
1	Mr. Y. Srinivas	Online short term training Programme on “ Emerging Technologies in Electric Vehicles”	2 <sup>nd</sup> August 2021 to 14 <sup>th</sup> August 2021	Online Short term Course held in Bapatla Engineering College

### 19. Consultancy services provided, name of the teacher/s and income generated:

Aditya College of Engineering under Sarojini educational society is equipped with 500 KW solar power plant and following solar units are generated in the year and exported to APSEB

Project Title	Year	Funding agency	Amount
Solar Power Plant	2020	APSEB	41,03498

### 20. Details of Industrial/Academic Experts /Visiting / Adjunct Faculty etc

S. No.	Name of the Visiting Faculty	Designation/organization	Year & Semester	Subject Handled	No. of hours
1	Dr. J Ramarao	Professor, BVCEC, AP	III/I	Power Electronic controllers	6
2	K Durgendra	Assoc. Professor, AEC, AP	IV/I	HVE	6

### 21. Details of Industrial invited as resource persons for Refresher courses, Seminars, Workshops:

1. Dr. Durgesh Nandan, Account Manager, CL Educate
2. Sri Winny Patro Co-Founder & CEO of Recordent.

### 22. Details of student Awards and Prizes received by students at university, state, national and international level:

S. No	Name of the students	Name of the event	Topic/Theme	Venue	Date	Award/Reward
1	B. Sri Shanmuka Sai PavanAbhishaik	JNTUK Power lifting Inter collegiate tournament	Inter collegiate Tournament	GMRIT, Rajam	Dec-2021	Gold medal
2	P.Harsha Krishna Varaprasad	JNTUK Best Physique Intercollegiate	Inter collegiate Tournament	GMRIT, Rajam	20-12-2021 and 21-12-2021	First Prize

		Tournament				
3	Rangireddy Sai Durga Siva Satya Prasad	Intramurals, Aditya College of Engineering, Surampalem, AP, Dec. 2021	Volley Ball Tournament		Dec. 2021	Winners
4	Mummidi Muttayya					
5	Vakada Saran Kumar					
6	Sana Vijay Ramesh					
7	D.KameswaraRao	Digital VEDA2K21	Paper Presentation on “Iris Recognition”	Aditya College of Engineeri ng &Technol ogy, Surampal em	15-09-2021	First Prize
8	V.Anil Kumar					
9	M.Tarun	Digital VEDA2K21	Paper Presentation on “Medical Mirror”	Aditya College of Engineeri ng &Technol ogy, Surampal em	5-09-2021	First Prize
10	K.Haridatta					
11	N.Naveen	Digital VEDA2K21	Poster Presentation “Green Buildings”	Aditya College of Engineeri ng &Technol ogy, Surampal em	15-09-2021	Second Prize
12	P.Suresh					

### 23. Year-wise results of students at UG and PG:

UG/PG	Year	Appeared	Passed	Pass %
UG	II B. Tech I Sem.	25	9	36
	II B. Tech II Sem.	25	7	28
	III B. Tech I Sem.	67	29	43.28
	III B. Tech II Sem.	67	48	71.64
	IV B. Tech I Sem.	28	21	75
	IV B. Tech II Sem.	28	19	67.85
	I M. Tech I Sem.	4	3	75

PG	I M. Tech II Sem.	4	3	75
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**24. Number of students cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give Category wise data.**

Nil

**25. Student progression/ placement record: Number/ percentage of students proceeded for higher studies Number/percentage of students placed:**

Year	proceeded for higher studies	students placed
2020-21	UG to PG	44
	2	

**26. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. / D.Lit.: ---**

**27. Details of departmental infrastructural & other facilities with regard to**

- a) Departmental Library (books, journals etc.): 130 & 5
- b) Computers and Internet facilities for staff: 4
- c) Total number of class rooms: 7
- d) Class rooms with ICT facility: 6
- e) No. of laboratories:10
- f) Research laboratories: 1
- g) Seminar Hall: 1

**28. Curricular Aspects:**

a) Does the faculty take initiative in curriculum development process?

No

b) Is curriculum suitable to make students globally competitive in the subject?

Yes

c) Does the department offer program with sufficient no. of electives options?

Yes

d) While developing curriculum, is feed-back taken from stakeholders viz. Students/Alumni/Parents/Employers considered?

Yes

e) What is the frequency of curriculum revision? (3/4/5 years or more):

3 years

**29. Teaching-Learning, Evaluation.**

**1) Number of teachers preparing & following Academic Teaching plan: 20**

**2) How many teachers use the following teaching methods?**

Interactive lecture method using blackboard/ PPT/Group discussions/ICT tools/Quiz/NPEL Videos/ Problem solving/Seminars/ Guest lecturers etc.: 20

**3) Does the department have any mechanism to ensure that entire syllabus is completed:**

Yes

**4) Do you offer Bridge/Remedial courses? If yes, Give details.**

Yes, for students of II, III & IV year who lagging behind the classes we conduct as per the schedule provided.

Year-Sem	Date (from - to) & Time	Name of the Subject
II B.Tech - I Sem	1-02-2022 to 28-02-2022 Time: 4:20pm - 05.15pm.	Electrical Circuit Analysis - II
		DC machines and Transformers
		Electronic Devices and Circuits
		Electro Magnetic Fields
		Mathematics-IV
II B.Tech - II Sem	19-07-2021 to 21-08-2021 Time: 4:20pm - 05.15pm.	Digital Electronics
		Power System-I
		Induction and Synchronous Machines
		Python Programming
III B.Tech - I Sem	8-02-2022 to 6-03-2022 Time: 4:20pm - 05.15pm.	Power Systems-II
		Renewable Energy Sources
		Signals and Systems
		Pulse & Digital Circuits
		Power Electronics
III B.Tech - II Sem	19-07-2021 to 21-08-2021 Time: 4:20pm - 05.15pm.	Power Electronic Controllers & Drives
		Power System Analysis
		Micro Processors and Micro controllers
		Data Structures
		Energy Audit and Conservation & Management
IV B.Tech - I Sem	25-01-2022 to 28-01-2022 Time: 4:20pm - 05.15pm.	Utilization of Electrical Energy
		Linear IC Applications
		Power System Operation & Control
		Switchgear and Protection
		Instrumentation
		Special Electrical Machines
IV B.Tech - II Sem	01-06-2021 to 10-07-2021 Time: 4:20pm - 05.15pm.	Digital Control Systems
		HVDC Transmission
		Electrical Distribution Systems
		Flexible Alternating Current Transmission Systems

## 5) What is the method for conducting internal evaluation?

There is complete transparency in the internal assessment. The criterion adopted is as directed by the university.

- At the beginning of the semester, faculty members inform the students about the various components in the assessment process during the semester.
- The internal assessment test schedules are prepared as per the university and communicated to the students well in advance.
- To ensure proper conduct of formative tests, two invigilators are assigned to each hall. Evaluation is done by the course handling faculty members within three days from the date of examination.
- The corrected answer scripts at random are verified by HOD to ensure the standard evaluation process.
- The corrected answer papers of the students are distributed to them for the verification by the students and any grievance is redressed immediately. The marks obtained by the students in internal assessment tests are displayed on the department notice board.
- The marks obtained by the students in internal assessment tests are uploaded periodically on the university web portal along with their attendance.
- Noting the values in observation and validating the theoretical aspects student must submit lab record regularly.
- Day to day performance of the students is assessed for every experiment which includes regularity, performance, viva and the promptness in submitting the record.
- For lab courses, the marks/grade scored by the student for each experiment is indicated in the observation/record. The independent learning, practical approach to the real-time applications is tested by viva-voice for laboratory courses.
- For the quality of the projects, the evaluation is done by Project Review Committee along with the project guides.
- To ensure the transparency and curb the mal practices the university has introduced jumbling system and theory end examinations are conducted at a center other than the college.
- The end examination for the laboratory and projects shall be conducted with internal and external examiner appointed from the other colleges as decided by the University.

## 30. Teacher Performance:

1) Whether the performance of the teacher assessed by the students? If yes, are the feedback reports analyzed and suggestions communicated to teachers?

Yes

2) Number of teachers getting remarks from students: a) Very Good: 11 b) Good: 6 c) Average: 3

2) Whether any facility available in the department to get suggestions from students on infrastructural facilities available in the department?

Yes

4) Are the suggestions received from students used for improvement of facilities?

Yes

5) Do teachers submit Self-Appraisal Reports? Are these reports appraised by HOD and forwarded to the management with comments? :

Yes

**31. OBE/OBA practiced or not?**

Practiced

**32. List the distinguished alumni of the department (maximum 10)**

S.No	Name of the Alumni	Alumni details	Roll No
1.	Adapa Sandhya Rani	Software Engineer, WIPRO Technologies, Bangalore	15MH5A0201
2	Jyothula Sridhar	Trainee Software Engineer, NANDEE NETWORKS, Bangalore	14MH1A0211
3	Parimi Raghavendra Sai	Trainee Software Engineer, NANDEE NETWORKS, Bangalore	14MH1A0205
4	Varupula Anand Babu	Trainee Software Engineer, NANDEE NETWORKS, Bangalore	14MH1A0207
5	Bantu Mani Kanta	Engineer, SURYA TECH SOLUTIONS, HYD	15MH5A0203
6	Ulisetti Janardhan	Asst. Engineer, THASMAI AUTOMATION	15MH5A0247
7	Sandru Mahesh	Asst. Engineer, THASMAI AUTOMATION	15MH5A0237

**33. State the Innovative practices adopted in the department.**

1. Department event club activities.
2. Department news letter.
3. Innovative projects.

**34. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

**a. Strengths:**

1. The Department has qualified and dedicated faculty
2. Well established state-of-art laboratories and infrastructure
3. Memberships in Professional bodies like ISTE

**b. Weaknesses:**

1. Predominantly students come from guided education system hence resistance to adapt to out-come based education system
2. This branch is not among the top preferences of the Students because of their limited knowledge about the Industry.

**c. Opportunities:**

1. R & D activity and Institutional collaboration
2. Increasing scope for entrepreneurship development.
3. Funding from DST in the areas of Renewable Energy.
4. More number of opportunities can be foreseen as Kakinada is identified as one of the first 20 smart cities in the country.
5. Students can settle not only in core side industries but also in software.

**d. Challenges:**

1. Changing trends in recruitment patterns.

2. Poor language skills and other employability skills among the students.

**35. Future plans of the department:**

**a. Long term plans-**

1. To encourage innovation in the department.
2. To have a strong industrial interaction.
3. To encourage all faculties to get involved in research programs leading to acquire Doctoral degree, hence better expertise.

**b. Short term plans –**

1. To improve the student's academic performance towards better results and campus placements.
2. Awareness sessions to drive away the nescience of parents & students.

**AAA Committee:**

**Convener:**

Dr. Pullela S.V.V.S.R. Kumar, Dean (A & A)

*psvvs kumar*

*K.M.K. Reddy*  
Head of the Department

**Members:**

1. Dr. D.V.S.S.S.V. Prasad, Coordinator-IQAC

*D.V.S.S.S.V. Prasad*

2. Dr. G. Rama Krishna – HoD, ECE

*G. Rama Krishna*

3. Dr. Y.K.S. SubbaRao – HoD, Mech.

*Y.K.S. SubbaRao*



*M.D.S.*  
PRINCIPAL  
PRINCIPAL  
Aditya College of Engineering  
SURAMPALEM - 533 437



## Department of Electrical and Electronics Engineering Department Academic Audit Report Academic Year: 2021-22

### Internal Experts:

1. Dr. Pullela S.V.V.S.R. Kumar, Dean (A&A)
2. Dr. D.V.S.S.S.V. Prasad, Coordinator-IQAC
3. Dr. G. Rama Krishna – HoD, ECE
4. Dr. Y.K.S. Subba Rao – HoD, Mech.

### External Expert:

Dr. G Naresh, Professor, Dept. of EEE, Pragati Engineering College, AP.

### ACADEMIC AUDIT

I-Department Profile			
S. No	Description	Response	
1	Name of the Department	Electrical and Electronics Engineering	
2	No: of Full time Permanent Faculty	20	
3	No: of Academic Programmes	2	
4	No: of Core courses, Mandatory courses, Audit courses and Electives in each programme		
i	B. Tech	Core: 42, Mandatory courses:4 and Electives: 10	
ii	M. Tech	Core: 9, Audit courses:4 and Electives: 4	
II – Curricular Aspects:Teaching, Learning and Evaluation			
	Criteria	Observations of the Expert Committee	Suggestions for Improvement
5	Coverage of syllabus	Completed as per schedule	Need to conduct more Guest/Expert Lectures
6	Course Files well maintained by faculty for all courses?	Yes	Provide NPTEL Video link for Lectures
7	Lab manuals and Records issued for all labs?	Yes	--
8	Student Attendance registers maintained well	Yes	--

9	Innovations in Teaching introduced	Yes	--
10	Add on Courses/ Skill Development Courses conducted	Yes	Make it mandatory to complete certification
11	Use of Supplementary Teaching tools and Application of ICT	Yes	Attend workshops so as to teach the subjects
12	Remedial Classes Conducted	Yes	Need to increase more Lecture classes
13	Conduct of Internal Examinations	Yes	--
14	Quality of Internal Question Paper.	Good	Need to increase quality by appropriate BT level
15	Quality of Assignments	Yes	--
16	Result Analysis	Yes	Need to improve pass percentage
17	Student Feedback on Teaching & Learning obtained twice / semester	Yes	Maintain the impact analysis on the feedback
18	Course End Survey conducted for two semesters for all classes.	Yes	--
19	Classrooms – adequacy	Yes	--
20	Laboratories –Adequate number of labs and each equipped to perform experiments as prescribed?	Yes	--
21	Teachers concerned counselled for poor feedback	Yes	Faculty who got less feedback may be asked to attend FDP/ NPTEL/On-line courses
22	<b>Improvement in Attainment of COs and POs/PSOs</b>		
I	COs written well for each course & students are informed about the same	Yes	Some subjects need redefining Cos with higher BT levels
ii	CO targets attained in all courses	Maximum courses attained	Remedial action is proposed for non-attained courses
iii	PO/PSO targets attained for the program	Need to improve attainment	--
iv	Implemented Action plans proposed last year	1.HoD implemented fortnight verification. 2. HoD implemented to conduct extra classes to increase the pass percentage.	Suggested to enroll in the advanced courses like NPTEL and Certification like Microsoft/ CISCO/AWS etc.

<b>III - Research, Consultancy and Extension.</b>			
	<b>Criteria</b>	<b>Observations of the Expert Committee</b>	<b>Suggestions for Improvement</b>
23	No: of Research Guides in the Department	1	Need to improve
24	Research Papers published during the assessment period	11	Publications need to improve
25	Faculty Conferences attended/ published during the assessment period	8	Need to improve
26	Books/Book Chapters Published	2	Encourage the faculty to publish the Books/Book Chapters
27	Faculty NPTEL and Other On-line Courses Certification	1	Very less, Need to improve
28	Seminars/Workshops/Training Programmes Guest Lectures Conducted	7	Need to conduct more seminars/ workshops/ Guest Lectures
29	Expert lectures organised for students faculty	3	Need to conduct more Expert/Guest Lectures
30	Ongoing/ New MoU	3	----
31	Faculty patents - published	2	Need to improve
32	Awards/Achievements/Recognitions of students and Teachers	2	Need to apply number of research projects with DST/ AICTE and other sponsoring agencies
33	Ongoing and newly implemented research Projects	---	Need to initiate the research Projects
34	Consultancy Services	1	Apply for number of schemes offered by the AICTE with suitable quality proposals
<b>IV – Quality of Admitted Students. Placements &amp; Higher Education</b>			
35	Improvement in quality of admitted students	Yes	--
36	No. of Campus placements of last batch	Offers/ Placements : 48 Placed students: 44	Try to enhance average salary package
37	No. of Off-campus placements of last batch	3	Need to improve

38	No. of students who joined public services	Nil	Encourage the students to apply for Group/ Civil Services
39	Improvement over last year in total placement	Yes	--
40	No. of students who joined PG programs	4	Provide the awareness regarding PG courses and other Higher education courses and their importance.
41	Students who turned entrepreneurs from last 3 batches	---	Provide the awareness about Startups and their importance.
42	Strengths of the Department	1. Well established state-of-art laboratories and infrastructure. 2.Experienced and Dedicated faculty with excellent academic /industry knowledge 3. Memberships in Professional bodies like ISTE	Improve Case study oriented Lectures for Students
43	Weakness of the Department	1. Predominantly students come from non-guided education system hence resistance to adapt to outcome based education system 2. This branch is not among the top preferences of the Students because of their limited knowledge about the Industry.	Need to conduct special/orientation classes on English communication

**Convener:**

Dr. Pullela S.V.V.S.R. Kumar, Dean (A & A)

**Members:**

1. Dr. D.V.S.S.S.V. Prasad, Coordinator-IQAC

2. Dr. G. Rama Krishna – HoD, ECE

3. Dr. Y.K.S. SubbaRao – HoD, Mech.

**External Expert:**

Dr. G Naresh, Professor, Dept. of EEE  
Pragati Engineering College, AP.

**PRAGATI ENGINEERING**

# 1-378, ADB ROAD, SURAMPALEM  
Near Peddapuram, E.G.Dt. (AP)-533 437



03-11-22

## Department of Electrical and Electronics Engineering Department Academic Audit – Action Taken Report Academic Year: 2021-22

<b>Curricular Aspects: Teaching, Learning and Evaluation</b>				
S. No	Criteria	Observations of the Expert Committee	External Auditor Recommendations /Suggestions	Action Plan
1	Course Files well maintained by faculty for all courses?	Yes	Provide NPTEL Video link for Lectures	All the faculty members are instructed to update their course files year by year with all necessary documents.
2	Add on Courses/ Skill Development Courses conducted	Yes	Make it mandatory to complete certification	Conducting Certification course/Add on Course/ Skill Development Courses every semester.
3	Remedial Classes Conducted	Yes	Need to increase more Lecture classes	Conducting Remedial Classes for academically week students every semester.
4	Quality of Internal Question Paper.	Good	Need to increase quality by appropriate BT level	Maintaining quality in (MID) Internal Question Paper as per OBE/OBA
5	Result Analysis	Yes	Need to improve pass percentage	Trying to improve result of the students by conducting Tutorial and Remedial classes.
6	Student Feedback on Teaching & Learning obtained twice / semester	Yes	Maintain the impact analysis on the feedback	Feed collecting, analyzing and taking action
7	Teachers concerned counselled for poor feedback	Yes	Faculty who got less feedback may be asked to attend FDP/ NPTEL/On-line courses	Feedback collecting, analyzing and taking action
<b>Improvement in Attainment of COs and POs/PSOs</b>				

S. No	Criteria	Observations of the Expert Committee	External Auditor Recommendations /Suggestions	Action Plan
8	COs written well for each course & students are informed about the same	Yes	Some subjects need redefining COs with higher BT levels	All the faculty members are instructed to follow and update their course files year by year as per OBE/OBA
9	CO targets attained in all courses	Maximum courses attained	Remedial action is proposed for non-attained courses	Remedial action is proposed for non-attained courses
10	PO/PSO targets attained for the program	Yes	Need to improve attainment	All the faculty members are instructed to follow OBE/OBA

**Research, Consultancy and Extension.**

S. No	Criteria	Observations of the Expert Committee	Suggestions for Improvement	Action Plan
11	No. of Research Guides in the Department	1	Need to improve	This year Dr. M Ravindra has got Research Guide status  Trying to get approval from the university for more Doctorate faculty as Research Guide
12	Research Papers published during the assessment period	11	Publications need to improve	FDP will be conducted by inviting research experts to guide the faculty members to write quality research papers and publish in SCI/Scopus indexed papers  Institute has been initiated providing incentives for faculty members for their quality/indexed publications. Regarding the research seed money
13	Faculty Conferences attended/ published during the assessment period	8	Need to improve	Workshop will be conducted by inviting research experts to guide faculty members to do research and write quality publications.

				Institute has been initiated providing incentives for faculty members for their quality/indexed publications.
14	Books/Book Chapters Published	2	Encourage the faculty to publish the Books/Book Chapters	Institute has been initiated providing incentives for faculty members for their quality/indexed publications.
15	Seminars/Workshops/Training Programmes Guest Lectures Conducted	7	Need to conduct more seminars/workshops/ Guest Lectures	Trying to organize more no. of Seminars /Workshops /Training Programmes Guest Lectures
16	Faculty NPTEL and Other On-line Courses Certification	1	Very less, Need to improve	Department will encourage to faculty members to do more number of NPTEL and Other On-line Certification Courses
17	Expert lectures organised for students & faculty	3	Need to conduct more Expert/Guest Lectures	Trying to organize more no. of Guest/Expert Lectures
18	Ongoing/ New MoU	2	----	Trying to improve and Efforts are in progress.
19	Research Collaborations	---	Need to improve research collaborations with reputed industry/ academia	Department will encourage to faculty members to apply for research funding by exploring Govt./Private research funding opportunities. As per the norms , the department will apply when the university calls for applications for Research Centre
20	Ongoing and newly implemented research Projects	---	Need to initiate the research Projects	Faculty members will be encouraged to apply for research grants funded through State and Central bodies, and conduct research activities.

21	Consultancy Services	1	Apply for number of schemes offered by the AICTE with suitable quality proposals	Department will encourage to faculty members to apply for research funding by exploring Govt./Private research funding opportunities.
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**IV – Quality of Students. Placements & Higher Education**

S. No	Criteria	Observations of the Expert Committee	External Auditor Recommendations /Suggestions	Action Plan
22	No. of Campus placements of last batch	Offers/ Placements : 48 Placed students: 44	Try to enhance average salary package	Activities such as soft skill development, industry visits, industry internship, etc. will be conducted to increase placements. More core companies will be attracted to the department for placement by starting MoUs and collaboration with them.  This year total 11 students have been completed certification courses in various fields. Trying to increase this number in coming years.
23	No. of Off-campus placements of last batch	3	Need to improve	Students of final year will be encouraged to attend Off-campus placements. Students are encouraged to take placement related training, skill based training. Necessary workshop/lecturer session will be organized.
24	No. of students who joined public services	Nil	Encourage the students to apply for Group/ Civil Services	Suitable activities will be conducted to encourage in students to qualify in competitive examinations and also give motivation to take up competitive exams
25	No. of students who joined PG programs	4	Provide the awareness regarding PG courses and other Higher education courses and their importance.	Students of final year will be encouraged to apply for higher education like M.Tech & MBA

26	Students who turned entrepreneurs from last 3 batches	---	Provide the awareness about Startups and their importance.	Alumni association will be strengthened and collaborating with them, Workshop , internship , industry driven elective, expert lectures etc. will be conducted to mentor the students
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K.M.K. Reddy  
HoD

  
PRINCIPAL  
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Aditya College of Engineering  
SURAMPALEM - 533 437





# ADITYA COLLEGE OF ENGINEERING

Approved by AICTE, Permanently Affiliated to JNTUK & Accredited by NAAC  
Recognized by UGC under Sections 2(f) and 12(B) of UGC Act, 1956

Aditya Nagar, ADB Road, Surampalem - 533 437, E.G.Dist., Ph: 99631 76662.

28/10/2022

## INFORMATION FOR ACADEMIC AND ADMINISTRATIVE AUDIT OF THE DEPARTMENT Academic Year: 2021-22

1. Name of the Department: Mechanical Engineering

2. Year of establishment: 2012

3. Courses offered: UG

Year	UG	PG
2021-22	B. Tech	-

4. Courses introduced during last 4 years:

Year	PG	Specialization
-	-	-

5. Details of programs discontinued, if any, with reasons:

Year	PG	Specialization
-	-	-

6. Number of teaching posts sanctioned, filled and vacant.

	Sanctioned	Filled
Professor	2	2
Associate Professor	5	5
Assistant Professor	7	7
Total	14	14

**7. Faculty profile with name, qualification, designation, experience, nature of appointment (confirmed/ probation/temporary):**

S. No	Name	Designation	Qualifications	Teaching/Research Exp	Nature of appointment
1	Dr. Y.K.S.Subbarao	Professor	P.hD	17	Regular
2	Dr.D.V.S.S.S.V.Prasad	Professor	P.hD	32	Regular
3	Dr.M.Anjibabu	Associate Professor	P.hD	8	Regular
4	Dr.B.M.Rahula Bharathi	Associate Professor	P.hD	11	Regular
5	Mr.M.Naga Mahesh	Associate Professor	M.Tech	13	Regular
6	Mr.I.Manoj Krishna	Associate Professor	M.S	10	Regular
7	Mrs.S.Swetha Radha	Associate Professor	M.Tech	10	Regular
8	Dr.N.Bhanu Teja	Assistant Professor	P.hD	8	Regular
9	Mr.M.Prem Kumar Reddy	Assistant Professor	M.Tech	5.5	Regular
10	Mr.M.Sarat Chandra Prasad	Assistant Professor	M.Tech	7	Regular
11	Mr.P.Hari Chandra Prasad	Assistant Professor	M.Tech	6	Regular
12	Mr.N.Raveendra Reddy	Assistant Professor	M.Tech	4.9	Regular
13	Mr.R.Siva Prasad	Assistant Professor	M.Tech	5	Regular
14	Mr.K.Venkata Ramana	Assistant Professor	M.Tech	4	Regular

**8. Programme-wise Student Teacher Ratio: (Average of 4 Years):**

UG: 20:1

**9. Number of academic support staff (technical) and administrative staff sanctioned, filled and vacant:**

S. No.	Post	Sanctioned Posts	Filled	Actual
1	Laboratory Assistant	6	6	6
2	Clerk (office)	1	1	1
3	Laboratory Attendant	1	1	1
4	Peon	1	1	1
5	Other	-	-	-

**10. Thrust areas of research as identified by the department:**

1. Alternative Fuels
2. Metal Joining Techniques
3. Manufacturing Technology
4. Mechanical Vibrations

**11. Special research laboratories sponsored by / created by industry or corporate bodies:**

No

**12. Publications:**

S.NO	Title of paper	Name of the author/s	Name of journal	Year of publication	ISSN number
1	Optimization of transesterification production of biodiesel from Pithecellobium dulce seed oil	Yarrapragada K. S. S. Rao	Energy Reports	2021-2022	2352-4847
2	Parametric optimization in machining of GFRP composite by taguchi grey relational analysis	Yarrapragada K. S. S. Rao	Journal of Ceramic Processing Research	2021-2022	2672-152X
3	Wind turbine power prediction via deep neural network using hybrid approach	Yarrapragada K. S. S. Rao	Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy	2021-2022	0957-6509
4	Infrared Thermal Images of Solar PV Panels for Fault Identification Using Image Processing Technique	Yarrapragada K. S. S. Rao	International Journal of Photoenergy	2021-2022	1687-529X
5	Investigation on Forestry Wood Wastes: Pyrolysis and Thermal Characteristics of Ficus religiosa for Energy	Yarrapragada K. S. S. Rao	Advances in Materials Science and Engineering	2021-2022	1687-8442

	Recovery System				
6	Mechanical properties of Arecnut and GFR Hybrid polypropylene composites	Yarrapragada K. S. S. Rao	Advances in polymer technology	2021-2022	0730-6679
7	An Improved Metaheuristic Method-Based Neural Network for Predicting Wind Turbine Power	D. V. S. S. S. V. Prasad	Cybernetics and Systems	2021-2022	1087-6553
8	Effect of Dwell Time on Fracture Load of Friction Stir Spot Welded Dissimilar Metal Joints	D. V. S. S. S. V. Prasad	Advances in Materials Science and Engineering	2021-2022	1687-8442
9	Investigation on Physical and Mechanical Properties of Abaca Fiber Composites Using Filament Winding	D. V. S. S. S. V. Prasad	Advances in Polymer Technology	2021-2022	1098-2329
10	Machine Learning-Based Modelling and Predictive Maintenance of Turning Operation under Cooling/Lubrication for Manufacturing Systems	D. V. S. S. S. V. Prasad	Advances in Materials Science and Engineering	2021-2022	1687-8442
11	Experimental Studies on Fabrication and Thermal Characterization of Shape Memory Polymer Composites with Nanofillers	D. V. S. S. S. V. Prasad	Journal of Nanomaterials	2021-2022	1687-4129
12	Experimental Investigation on the Average Surface Roughness (Ra) of AlSi10Mg Alloy Manufactured by Laser Powder Bed Fusion Method	D. V. S. S. S. V. Prasad	Advances in Materials Science and Engineering	2021-2022	1687-8442

13	Assessment of Rotational Speed and Plunge Rate on Lap Shear Strength of FSSW Joints of AA7075/Mild Steel	D. V. S. S. S. V. Prasad	Advances in Materials Science and Engineering	2021-2022	1687-8442
14	Optimization of WEDM Process Parameters in Al2024-Li-Si3N4 MMC	D. V. S. S. S. V. Prasad	Journal of Nanomaterials	2021-2022	1687-4129
15	Mechanical Properties of Ramie/Hemp Hybrid Composites Influenced by Stacking Arrangement and NaOH Treatment	D. V. S. S. S. V. Prasad	Advances in Polymer Technology	2021-2022	1098-2329
16	Investigations of combustion, Performance, and emission Characteristics in a diesel engine fueled with Prunus domestica methyl ester and n-butanol blends	Bhanu Teja Nalla	Environmental Progress & Sustainable Energy	2021-2022	1944-7450
17	Performance and emission analysis of watermelon seed oil methyl ester and n-butanol blends fueled diesel engine	Bhanu Teja Nalla	Mathematical Problems in Engineering	2021-2022	1563-5147
18	Production of biodiesel from phoenix sylvestris oil: Process optimization technique	Bhanu Teja Nalla	Sustainable Chemistry and Pharmacy	2021-2022	2352-5541
19	Experimental analysis of Sterculia foetida biodiesel and butanol blends as a renewable and eco-friendly fuel	Bhanu Teja Nalla	Industrial Crops and Products	2021-2022	9266-690

### 13. Conferences:

Sl. No	Name of the teacher	Title of the paper	Title of the proceedings of the conference	Name of the conference	Year of publication	ISBN number of the proceeding	Name of the publisher
1	Dr. DVSSSV Prasad	Effect of parameters and surface analysis on eglin steel by shot blasting method	Materials Today: Proceedings	2nd International Conference on Sustainable Materials, Manufacturing and Renewable Technologies 2022	2021-2022	2214-7853	ELSEVIER
2	Dr.B. Marxim Rahula Bharathi	Analysis of wear behavior and shear properties of nano-ZnO <sub>2</sub> /jute fiber/epoxy composites by Hand layup technique	Materials Today: Proceedings	International Conference on Newer Engineering Concepts and Technology (ICONNECT 2022)	2021-2022	2214-7853	ELSEVIER

### 14. Incentives granted for publications/Conferences attended/memberships:

S. No	Name of the Publication/Conference/ Membership	Name of the teacher	Year	Amount Granted
1	Optimization of transesterification production of biodiesel from Pithecellobium dulce seed oil	Yarrapragada K. S. S. Rao	2021-2022	7500
2	Parametric optimization in machining of GFRP composite by taguchi grey relational analysis	Yarrapragada K. S. S. Rao	2021-2022	15000
3	Wind turbine power prediction via deep neural network using hybrid	Yarrapragada K. S. S. Rao	2021-2022	18000

	approach			
4	Infrared Thermal Images of Solar PV Panels for Fault Identification Using Image Processing Technique	Yarrapragada K. S. S. Rao	2021-2022	13000
5	Investigation on Forestry Wood Wastes: Pyrolysis and Thermal Characteristics of Ficus religiosa for Energy Recovery System	Yarrapragada K. S. S. Rao	2021-2022	15000
6	Mechanical properties of Arecnut and GFR Hybrid polypropylene composites	Yarrapragada K. S. S. Rao	2021-2022	10000
7	An Improved Metaheuristic Method-Based Neural Network for Predicting Wind Turbine Power	D. V. S. S. S. V. Prasad	2021-2022	12000
8	Effect of Dwell Time on Fracture Load of Friction Stir Spot Welded Dissimilar Metal Joints	D. V. S. S. S. V. Prasad	2021-2022	12000
9	Investigation on Physical and Mechanical Properties of Abaca Fiber Composites Using Filament Winding	D. V. S. S. S. V. Prasad	2021-2022	12000
10	Machine Learning-Based Modelling and Predictive Maintenance of Turning Operation under Cooling/Lubrication for Manufacturing Systems	D. V. S. S. S. V. Prasad	2021-2022	12000
11	Experimental Studies on Fabrication and Thermal Characterization of Shape Memory Polymer Composites with Nanofillers	D. V. S. S. S. V. Prasad	2021-2022	15000
12	Experimental Investigation on the Average Surface Roughness (Ra) of AlSi10Mg Alloy Manufactured by Laser Powder Bed Fusion Method	D. V. S. S. S. V. Prasad	2021-2022	10000
13	Assessment of Rotational Speed and Plunge Rate on Lap Shear Strength of FSSW Joints of AA7075/Mild Steel	D. V. S. S. S. V. Prasad	2021-2022	15000
14	Optimization of WEDM	D. V. S. S. S. V. Prasad	2021-2022	10000

	Process Parameters in Al <sub>2</sub> O <sub>3</sub> -Li-Si <sub>3</sub> N <sub>4</sub> MMC			
15	Mechanical Properties of Ramie/Hemp Hybrid Composites Influenced by Stacking Arrangement and NaOH Treatment	D. V. S. S. V. Prasad	2021-2022	14000
16	Investigations of combustion, Performance, and emission Characteristics in a diesel engine fueled with Prunus domestica methyl ester and n-butanol blends	Bhanu Teja Nalla	2021-2022	15000
17	Performance and emission analysis of watermelon seed oil methyl ester and n-butanol blends fueled diesel engine	Bhanu Teja Nalla	2021-2022	20000
18	Production of biodiesel from phoenix sylvestris oil: Process optimization technique	Bhanu Teja Nalla	2021-2022	15000
19	Experimental analysis of Sterculia foetida biodiesel and butanol blends as a renewable and eco-friendly fuel	Bhanu Teja Nalla	2021-2022	15000
20	Effect of parameters and surface analysis on eglin steel by shot blasting method	Dr. DVSSSV Prasad	2021-2022	15000
21	Analysis of wear behavior and shear properties of nano-ZnO <sub>2</sub> /jute fiber/epoxy composites by Hand layup technique	Dr.B. Marxim Rahula Bharathi	2021-2022	7500

**15. Consultancy services provided, name of the teacher/s and income generated:**

NIL

**16. Details of Industrial/Academic Experts invited as resource persons for Refresher courses, Seminars, Workshops:**

1. Guest lecture on IC Engines and Combustion technology by Dr. T Karthikeya Sharma, Assistant Professor, ME, NIT AP
2. Guest lecture on Modelling of simple truss and beam problems using ANSYS by Mr. Shiva Ramakrishna AGM Production. M&M Tambaram, Chennai.
3. One day Guest lecture on Bio-Heat equation by Dr. N Alagumurthi, Professor, ME, PTU,

Puducherry

4. One Day guest lecture on Transmission angle and toggle positions of single slider crank mechanisms by Mr. Veeresh Prasad Tiruvuri, Head-India services, Process Automation, Schneider Electric

**17. Details of teachers participated in Refresher courses, Orientation courses, Seminars, Workshops, Conferences at national and international levels.(participant, presented paper, chaired the session):**

S. No	Name of the Faculty	Name of the Programme
1	Dr. Y.K.S.Subbarao	International Conference on "Emerging Research and Advances in Mechanical Engineering"
2	Dr. Y.K.S.Subbarao	Workshop on Writing winning Research Projects for Funding
3	Dr.M.Anjibabu	Workshop on Writing winning Research Projects for Funding
4	Dr.M.Anjibabu	National Conference on Agni Energy Security for Atmanirbhar Bharat
5	Dr.B. Marxim Rahula Bharathi	National Intellectual Property Awareness Mission
6	Dr.B. Marxim Rahula Bharathi	Workshop on Writing winning Research Projects for Funding
7	Dr.D.V.S.S.S.V.Prasad	National Seminar on "Ensuring Quality of Education in HEIs concerning NEP 2020 of India - The Role Of IQAC"
8	Dr.D.V.S.S.S.V.Prasad	ICAMCMM-2022
9	Dr.D.V.S.S.S.V.Prasad	NPTEL - Software Project Management
10	Dr.N.Bhanu Teja	one day National Workshop on "Advanced trends in IC engines and combustion"
11	Dr.N.Bhanu Teja	two day workshop on, "Recent Development in Mechanical Engineering"
12	Mr.M.Prem Kumar Reddy	one day National Workshop on "Advanced trends in IC engines and combustion"
13	Mr.M.Prem Kumar Reddy	National Conference on Agni Energy Security for Atmanirbhar Bharat
14	Mr.M.Sarat Chandra Prasad	National Conference on "Recent Advances in Mechanical Engineering & Their Impact on Indian Industries"
15	Mr.M.Sarat Chandra Prasad	one day National Workshop on "Advanced trends in IC engines and combustion"
16	Mr.P.Hari Chandra Prasad	National Conference on "Recent Advances in Mechanical Engineering & Their Impact on Indian Industries"
17	Mr.N.Raveendra Reddy	two day workshop on, "Recent Development in Mechanical Engineering"
18	Mr.N.Raveendra Reddy	National Conference on Agni Energy Security for Atmanirbhar Bharat
19	Mr.R.Siva Prasad	two day workshop on, "Recent Development in Mechanical Engineering"
20	Mr.R.Siva Prasad	National Conference on Agni Energy Security for Atmanirbhar Bharat

**18. Awards and Prizes received by students at university, state, national and international level:**

S. No	Name of the Student	Achievement	Field/Area/Event
1	CH HARIKRISHNA	FIRST PRIZE-PAPER PRESENTATION	VEDA2K22
2	P DURGA SAMBA SIVA	SECOND PRIZE-PAPER PRESENTATION	VEDA2K22

**19. Year-wise results of students at UG and PG: 2021-2022**

UG/PG	Year	Appeared	Passed	Pass %
UG	II B. Tech I Sem.	113	38	33.63
	II B. Tech II Sem.	113	47	41.59
	IIIB. Tech I Sem.	54	25	46.30
	III B. Tech II Sem.	54	25	46.30
	IV B. Tech I Sem.	80	44	55
	IV B. Tech II Sem.	80	68	85.00

**20. Diversity of Students: (Year-wise)**

Name of the Programme	% of students within the State	% of students outside the State	% of students from other countries
UG (B. Tech)	97.22	1.58	1.19

**21. Number of students cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give Category wise data.  
Year NET/ SET GATE Other Exams (PGCET) Total**

Year	NET/ SET	GATE	Other Exams	Total
2021-22	NIL	NIL	6	6

**22. Student progression/ placement record: Number/ percentage of students proceeded**

**for higher studies Number/percentage of students placed:  
Year % proceeded for higher studies % of students placed**

Year	% proceeded for higher studies	% of students placed
	UG to PG	
2021-22	NIL	72.5

**23. Diversity of Faculty:**

Teaching faculty %

Teaching faculty	%
from the same university	78.58
from other universities within the State	7.14
from other States	7.14
from outside the country	7.14

**24. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. / D.Lit.: 02**

**25. Present details of departmental infrastructural & other facilities with regard to**

a) Central Library Books and Journals, etc, relevant to Department : Titles: 620

Volumes:4080

Journals: 8

b) Departmental Library (books, journals etc.) : 130 & 5

c) Computers and Internet facilities for staff : 4

d) Total number of class rooms : 7

e) Class rooms with ICT facility : 6

f) Students' laboratory : 12

g) Research laboratories : 1

h) Seminar Hall : 1

i) Smart class room : 6

j) Any other facility LCDs,

**Number of post graduate students getting financial assistance from the university/state / central government: NIL**

**26. Curricular Aspects:**

a) Does the faculty take initiative in curriculum development process:

NO We are affiliated to JNTUK, Kakinada. We follow the University Curriculum.

b) Is curriculum suitable to make students globally competitive in the subject? Yes

c) Does the department offer program with sufficient no. of electives options: YES

d) While developing curriculum, is feed-back taken from stakeholder's viz. Students/Alumni/Parents/Employers considered? YES

e) What is the frequency of curriculum revision? (3/4/5 years or more): 3 years

## 27. Teaching-Learning, Evaluation.

1) Number of teachers preparing & following Academic Teaching plan : 14

2) How many teachers use the following teaching methods:

a) Interactive lecture method using blackboard, Group discussions, Problem solving, Seminars: 14

b) Use ICT methods to support lectures: 14

3) Does the department have any mechanism to ensure that entire syllabus is

**Completed:** There is a review of syllabus for every fortnight. If any lagging is observed in the Syllabus, the respective faculty are instructed to complete the syllabus by taking the extra classes

4) Do you offer Bridge/Remedial courses? If yes, Give details.

Yes, We are offering remedial classes to the students who are having the backlogs in every semester and the details for the academic year 2021-22 are given below

S.NO	YEAR	SEMESTER	NO. OF STUDENTS ATTEMDED
1	II YEAR	II SEM	75
2	III YEAR	I SEM	66
3	III YEAR	II SEM	29
4	IV YEAR	I SEM	29
5	IV YEAR	II SEM	36
TOTAL			235

5) What is the method for conducting internal evaluation?

There is complete transparency in the internal assessment. The criterion adopted is as directed by the university.

- At the beginning of the semester, faculty members inform the students about the various components in the assessment process during the semester.
- The internal assessment test schedules are prepared as per the university and communicated to the students well in advance.
- To ensure proper conduct of formative tests, two invigilators are assigned to each hall.

Evaluation is done by the course handling faculty members within three days from the date of examination.

- The corrected answer scripts at random are verified by HOD to ensure the standard evaluation process.
- The corrected answer papers of the students are distributed to them for the verification by the students and any grievance is redressed immediately. The marks obtained by the students in internal assessment tests are displayed on the department notice board.
- The marks obtained by the students in internal assessment tests are uploaded periodically on the university web portal along with their attendance.
- Noting the values in observation and validating the theoretical aspects student must submit lab record regularly.
- Day to day performance of the students is assessed for every experiment which includes regularity, performance, viva and the promptness in submitting the record.
- For lab courses, the marks/grade scored by the student for each experiment is indicated in the observation/record. The independent learning, practical approach to the real-time applications is tested by viva-voice for laboratory courses.
- For the quality of the projects, the evaluation is done by Project Review Committee along with the project guides.
- To ensure the transparency and curb the mal practices the university has introduced jumbling system and theory end examinations are conducted at a center other than the college.
- The end examination for the laboratory and projects shall be conducted with internal and external examiner appointed from the other colleges as decided by the University.

**28. Teacher Performance:**

1) Whether the performance of the teacher assessed by the students? If yes, are the feedback reports analysed and suggestions communicated to teachers? :YES

2) Number of teachers getting a) Very Good \_\_\_19\_ b) Good \_\_\_10\_\_ c) Average \_\_\_3\_\_ remarks from students.

3) Whether any facility available in the department to get suggestions from students on infrastructural facilities available in the department?:YES

4) Are the suggestions received from students used for improvement of facilities? :YES

5) Do teachers submit Self-Appraisal Reports? Are these reports appraised by HOD and forwarded to the management with comments? :YES

**29. List the distinguished alumni of the department (maximum 10)**

S. No	Regd.No	Student Name	COMPANY NAME	Mobile No	Email Id
1	19MH5A0354	PENDYALA PRADEEP	Wipro Project Engineer	9849114316	<a href="mailto:pendvala.073@gmail.com">pendvala.073@gmail.com</a>

2	19MH5A0370	YALLA SATISH	Wipro Project Engineer	6300410389	<a href="mailto:sathish40963@gmail.com">sathish40963@gmail.com</a>
3	14MH1A0324	PRUDHVIMAHESH	NDTENGINEER,RELIANCE	9652376801	<a href="mailto:mpm941@gmail.com">mpm941@gmail.com</a>
4	15MH5A0303	JNANENDRA VENKATADURGAHARIPRASAD	Assistant GIS Engineer, RMS IPvt.Ltd.	9550106317	<a href="mailto:jnanendraballa@gmail.com">jnanendraballa@gmail.com</a>
5	14MH5A0306	GOPALAPURAPUKAVYA	DESIGNER, ANDHRATECHNOLOGIES	9618363748	<a href="mailto:kavvagopalapurapu@gmail.com">kavvagopalapurapu@gmail.com</a>
6	13MH1A0370	PENDYALAPAVANKALYAN	JOSHITHAINFRATECHPRIVATELIMITED	9676796439	<a href="mailto:pavanchowdarv.p@gmail.com">pavanchowdarv.p@gmail.com</a>
7	13MH1A0399	TULAGAPUPRADEEPSHARMA	CONCENTRIC SOLUTIONS, HYDERABAD	8500088686	<a href="mailto:pradeep85000@gmail.com">pradeep85000@gmail.com</a>
8	13MH1A03A0	UDATHAVENKATADURGAPRASAD	INTEXINTERIORANDEXTERIORSOLUTIONS, CHENNAI	9908940188	<a href="mailto:prasadmahee44@gmail.com">prasadmahee44@gmail.com</a>
9	17MH5A0353	ANAMALAMURIKALESHA	TCS	9705708147	<a href="mailto:kaleshaanamalamuri@gmail.com">kaleshaanamalamuri@gmail.com</a>
10	14MH1A0310	GADDAYVEERAVENKATARAVITEJA	UV Tester, Reliance	8008609774	<a href="mailto:raviteja6078@gmail.com">raviteja6078@gmail.com</a>

**30. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.**

Sl.No	Year	Date	Title of Programme and name of resource person
1	2022	22-04-2022	Guest lecture on IC Engines and Combustion technology & Dr. T Karthikeya Sharma, Assistant Professor, ME, NIT AP
2	2021	14-12-2021	Guest lecture on Modelling of simple truss and beam problems using ANSYS & Mr. Shiva Ramakrishna AGM Production, M&M Tambaram, Chennai.
3	2022	26-04-2022	One day Guest lecture on Bio-Heat equation & Dr. N Alagumurthi, Professor, ME, PTU, Puducherry
4	2022	08-01-2022	One Day guest lecture on Transmission angle and toggle positions of single slider crank mechanisms & Mr. Veeresh Prasad Tiruvuri, Head-India services, Process Automation, Schneider Electric

**31. State the Innovative practices adopted in the department.**

1. Department event club activities.

2. Department news letter.
3. Innovative projects.
4. Training programs during summer which enhance student technical skills

**32. Highlight the participation of students and faculty in extension activities.**

The faculty and students are always enthusiastic to participate in various extension activities organized at university level like NSS, university fest, Blood donation camps, Yoga, Swatch bhara, Election duties and Public survey which are relate to the state government.

Name of the activity	Organising unit/ agency/ collaborating agency	Name of the scheme	Numberofstudents/employeesparticipatedin suchactivities
Cleaning program at Pedabrahmadevam	NSS Unit of ACOE with Local village Authorities	Swachh Bharath	10
plantation of saplings at Pedabrahmadevam	NSS Unit of ACOE with Local village Authorities	Plantation Program	8
Health and sanitation Awareness rally at Pedabrahmadevam	ACOE with Local village Authorities	National Service Scheme	12
Covid Survey at Pedabrahmadevam	ACOE with Local village Authorities	National Service Scheme	8
Road Safety Awareness Program at ADB Road, Peddapuram	ACOE with AP Police	National Service Scheme	8
Blood donation camp at Community Hall, Suramaplem	ACOE with Indian Red cross Society	National Service Scheme	25
Medical Camp at Peddapuram	ACOE with Vijaya Nursing Home	National Service Scheme	6
Covid vaccination camp at Community Hall, Surampalem	ACOE with GGH Katravulapalli	National Service Scheme	7
Plastic Awareness program at Surampalem	ACOE with Local village Authorities	National Service Scheme	6
Arogya Rallye at Suramaplem Village	ACOE with Local village Authorities	National Service Scheme	9
Eye Check Up camp at Community Hall,	ACOE with Local village Authorities	National Service	15

Suramapalem		Scheme	
Clay Ganesh idol Distribution at Community Hall, Suramapalem	ACOE with Local village Authorities	National Service Scheme	5

**33. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

**a. Strengths:**

1. The Department has qualified and dedicated faculty
2. Well established state-of-art laboratories and infrastructure
3. Memberships in Professional bodies like ISTE
4. More focus on industry relations for interships.

**b. Weaknesses:**

1. Predominantly students come from guided education system hence resistance to Adapt to out-come based education system
2. Due to the lack of industrial exposure Mechanical Engineering is not among the top preferences of the Students.

**c. Opportunities:**

1. R & D activity and Institutional collaboration
2. Increasing scope for entrepreneurship development.
3. Great extent of opportunities as interns ensuring a job after studies
5. Students can settle not only in core side industries but also in software if interested

**d. Challenges:**

1. Changing trends in recruitment patterns.
2. Poor language skills and other employability skills among the students.

**34. Future plans of the department:**

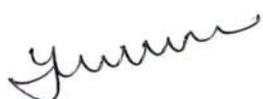
**a. Long term plans-**

1. To encourage innovative projects
2. To have an effective industry relations which aids in academics
3. To encourage all faculty to get involved in research programs leading to acquire P.hD

**b. Short term plans –**

1. To improve pass percentage and to increase eligible students count for placements.
2. Awareness sessions to drive away the nescience of parents & students.
3. To Host an InternationalConference.

- 4.To train the students to make them IndustryReady

  
 Head of Department  
 Head of the Department  
 Mechanical Engineering  
 Aditya College of Engineering  
 SURAMPALAM-533 437

**AAA Committee:**

**Convener:**

Dr. Pullela S.V.V.S.R. Kumar, Dean (A & A)

**Members:**

1. Dr. D.V.S.S.S.V. Prasad, Coordinator-IQAC

2. Dr. G. Rama Krishna – HoD, ECE

3. Dr. G.S.N Murthy – HoD, CSE.

4. K. Manoj Kumar Reddy – HoD, EEE

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**Principal**  
**PRINCIPAL**  
Aditya College of Engineering  
SURAMPALEM - 533 437



# ADITYA COLLEGE OF ENGINEERING

Approved by AICTE, Permanently Affiliated to JNTUK & Accredited by NAAC  
Recognized by UGC under Sections 2(f) and 12(B) of UGC Act, 1956

Aditya Nagar, ADB Road, Surampalem - 533 437, E.G.Dist., Ph: 99631 76662.

28/10/2022

## DEPARTMENT OF MECHANICAL ENGINEERING

### Department Academic Audit Reports

#### Academic Year 2021-22

#### External Experts:

1. Dr. G. Avinash, HOD ME, Pragati Engineering College, Surampalem.

#### Internal Experts:

1. Dr. Pullela S.V.V.S.R. Kumar, Dean (A & A)
2. Dr. D.V.S.S.S.V. Prasad, Coordinator-IQAC
3. Dr. G. Rama Krishna – HOD, ECE
4. Mr. K. Manoj Kumar Reddy – HOD, EEE

### ACADEMIC AUDIT REPORT

I-Department Profile		
S. No	Description	Response
1	Name of the Department	MECHANICAL ENGINEERING
2	No: of Full time Permanent Faculty	14
3	No: of Academic Programmes	1 (B.TECH)
4	No: of core courses and electives in each programme	
i	B. Tech	Core: 34 and Electives: 9
ii	M. Tech	-
5	Student Strength	
i	II Year (Sanctioned: 120 )	113
ii	III Year (Sanctioned: 180 )	54
iii	IV Year (Sanctioned: 180 )	82

## II – Curricular Aspects: Teaching, Learning and Evaluation

	Criteria	Observations of the Expert Committee	Suggestions for Improvement
6	Coverage of syllabus	Syllabus coverage is as per JNTUK Academic Calendar	--
7	Course Files well maintained by faculty for all courses?	Yes	--
8	Lab manuals and Records issued for all labs?	Yes	--
9	Student Attendance registers maintained well	Yes	--
10	Innovations in Teaching introduced	Yes	Apart from the use of Power Point, Quiz and NPTEL new ways of learning methods to be introduced
11	Add on Courses/ Skill Development Courses conducted	Yes	Make it mandatory to complete certification
12	Use of Supplementary Teaching tools and Application of ICT	Yes	Apart from the use of Power Point, no other ICT enabled methods are being practiced in the class room. May be focused on other modes.
13	Remedial classes Conducted	Yes	Track the weak learners performance in next academic year so that the improvement in their learning can be assessed
14	Conduct of Internal Examinations	Internal examinations are conducted based on pre-planned schedule given by JNTUK	--
15	Quality of Internal Question Paper.	Good	--

16	Quality of Assignments	Good	--
17	Result Analysis	Yes	Grade wise analysis need to be maintained for each course
18	Student Feedback on Teaching & Learning obtained twice / semester	Yes	Maintain the impact analysis on the feedback
19	Course End Survey conducted for two semesters for all classes.	Yes	--
20	Classrooms – adequacy	Yes	--
21	Laboratories –Adequate number of labs and each equipped to perform experiments as prescribed?	Yes	--
22	<b>Library-</b> procured as per norms last year	Yes	--
23	<b>Computer labs</b>		
i	Required number of computer labs available	Yes	--
ii	Computers in the labs have requisite configuration	Yes	--
24	Teachers concerned counselled for poor feedback	Yes	Faculty who got less feedback may be asked to attend FDP/ NPTEL courses
25	<b>Improvement in Attainment of COs and POs/PSOs</b>		
i	COs written well for each course & students are informed about the same	Yes	Some subjects need redefining Cos with higher BT levels
ii	CO targets attained in all courses	Maximum courses attained	Activity based assignments are required to improve the attainments.
iii	PO/PSO targets attained for the program	Attainment need to be improved.	Activity based assignments are required to improve the attainments.

iv	Implemented Action plans proposed last year	Yes	--
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<b>III - Research, Consultancy and Extension.</b>			
	<b>Criteria</b>	<b>Observations of the Expert Committee</b>	<b>Suggestions for Improvement</b>
26	No: of Research Guides in the Department	Nil	--
27	Research Papers published during the assessment period	19	Asked to improve student publications too.
28	Faculty Conferences attended	2	Encourage the faculty to attend National & International conferences
29	Books/Book Chapters Published	2	Encourage the faculty to publish the books
30	Seminars/Workshops/Training Programmes Conducted	1	Need to conduct more workshops
31	Expert lectures organised for students', faculty	4	--
32	Ongoing/ New MoU	13	Improve the Industry Interaction towards internships/ placements
33	Research Collaborations	Nil	--
34	Awards/Achievements/Recognitions of students and Teachers	Students : 2	Students need to be encouraged to participate in different curricular and co-curricular activities at state and national level events
35	Ongoing and newly implemented research Projects	Nil	Need to improve

36	Consultancy Services	Nil	Need to improve
37	Projects / schemes funded by AICTE – Applied/ progress / completed.	Applied: 3	Need to improve

<b>IV – Quality of Admitted Students. Placements &amp; Higher Education</b>			
38	I year - Last rank admitted in open category during this year Vs. last year	128283 Vs. 180996	--
39	Lateral Entry- Last rank admitted	9744 Vs 8795	--
40	Improvement in quality of admitted students	Yes	--
41	No. of Campus placements of last batch	Offers/ Placements : 90 Placed students: 59	Encourage the students to write recruitment tests like AMCAT, ELITMUS, COCUBES etc., by providing necessary training.
42	No. of Off-campus placements of last batch	10	--
43	No. of students who joined public services	Nil	Encourage the students to apply for Group/ Civil Services
44	Improvement over last year in total placement	Yes( 5% improvement)	Need to improve
45	No. of students who joined PG programs in India	-	--
46	Improvement in students who opted for higher education	-	--

47	Students who turned entrepreneurs from last 3 batches	Nil	Provide the awareness about Startups and their importance.
----	---	-----	--

48	Strengths of Department	<p>1. The department has qualified and dedicated faculty.</p> <p>2. Well established state of art laboratories and infrastructure</p> <p>3. Memberships in Professional bodies like ISTE, SAE-INDIA</p> <p>4. More focus on industry relations for internships.</p>	Encourage the student to involve in internships and skill oriented certification courses.
49	Weakness of the Department	<p>1. Predominantly students come from guided education system ,hence resistance to adapt to out-come based education system</p> <p>2. Due to the lack of industrial exposure Mechanical engineering is not among top preferences to the students.</p>	--

**Convener:**

Dr. Pullela S.V.V.S.R. Kumar, Dean (A & A)

*Dr. Pullela S.V.V.S.R. Kumar*

**Members:**

1. Dr. G. Avinash, HOD ME, Pragati Engineering College, Surampalem.

*Dr. G. Avinash*

2. Dr. D.V.S.S.S.V. Prasad, Coordinator-IQAC

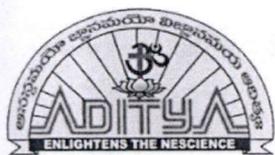
*Dr. D.V.S.S.S.V. Prasad*

3. Dr. G. Rama Krishna – HOD, ECE

*Dr. G. Rama Krishna*

4. Mr. K. Manoj Kumar Reddy – HOD, EEE

*KMK Reddy*



07/11/2022

## Department of Mechanical Engineering Department Academic Audit – Action Taken Report Academic Year: 2021-22

Curricular Aspects: Teaching, Learning and Evaluation				
S. No	Criteria	Observations of the Expert Committee	External Auditor Recommendations /Suggestions	Action Plan
1	Course Files well maintained by faculty for all courses?	Yes	--	All the faculty members are instructed to update their course files year by year with all necessary documents.
2	Add on Courses/ Skill Development Courses conducted	Yes	Make it mandatory to complete certification	Conducting Certification course/Add on Course/ Skill Development Courses every semester.
3	Remedial Classes Conducted	Yes	Track the weak learners performance in next academic year so that the improvement in their learning can be assessed	Conducting Remedial Classes and tests at regular intervals for slow learners.
4	Quality of Internal Question Paper.	Good	--	Maintaining quality in (MID) Internal Question Paper as per OBE/OBA
5	Result Analysis	Yes	Grade wise analysis need to be maintained for each course	Trying to improve result of the students by conducting Tutorial and Remedial classes.
6	Student Feedback on Teaching & Learning obtained twice / semester	Yes	Maintain the impact analysis on the feedback	Feedback is taken twice in a semester and necessary actions are initiated as per analysis.

7	Teachers concerned counselled for poor feedback	Yes	Faculty who got less feedback may be asked to attend FDP/ NPTEL courses	Faculty who got less feedback is asked to analyze feedback report and improve accordingly.
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**Improvement in Attainment of COs and POs/PSOs**

S. No	Criteria	Observations of the Expert Committee	External Auditor Recommendations /Suggestions	Action Plan
8	COs written well for each course & students are informed about the same	Yes	Some subjects need redefining COs with higher BT levels	All the faculty members are instructed to follow and update their course files year by year as per OBE.
9	CO targets attained in all courses	Maximum courses attained	Activity based assignments are required to improve the attainments.	Remedial action is proposed for non-attained courses
10	PO/PSO targets attained for the program	Attainment need to be improved.	Activity based assignments are required to improve the attainments.	All the faculty members are instructed to follow OBE.

**Research, Consultancy and Extension.**

S.No	Criteria	Observations of the Expert Committee	Suggestions for Improvement	
11	No. of Research Guides in the Department	0	Need to improve	
12	Research Papers published during the assessment period	19	Asked to improve student publications too.	FDP will be conducted by inviting research experts to guide the faculty members to write quality research papers and publish in SCI/Scopus indexed papers Institute has been initiated providing incentives for faculty members for their quality/indexed publications. Regarding the research seed money
13	Faculty Conferences attended/ published during the assessment period	2	Encourage the faculty to attend National &	Institute has been initiated providing incentives for faculty

			International conferences	members for their quality/indexed publications.
14	Books/Book Chapters Published	2	Encourage the faculty to publish chapters in books	Institute has been initiated providing incentives for faculty members for their quality/indexed publications.
15	Seminars/Workshops/Training Programmes Guest Lectures Conducted	1	Need to conduct more workshops using digital platforms.	Trying to organize more no. of Seminars/Workshops/Training Programmes Guest Lectures.
16	Expert lectures organised for students & faculty	4	--	Trying to organize more no. of Guest/Expert Lectures
17	Ongoing/ New MoU	13	Improve the Industry Interaction towards internships/ placements	Trying to improve and Efforts are in progress.
18	Research Collaborations	Nil	--	Department will encourage to faculty members to apply for research funding by exploring Govt./Private research funding opportunities. As per the norms , the department will apply when the university calls for applications for Research Centre
19	Ongoing and newly implemented research Projects	Nil	Need to improve	Faculty members will be encouraged to apply for research grants funded through State and Central bodies, and conduct research activities.
20	Consultancy Services	Nil	Need to improve	Department will encourage to faculty members to apply for research funding by exploring Govt./Private research funding opportunities.
<b>IV – Quality of Students. Placements &amp; Higher Education</b>				

S. No	Criteria	Observations of the Expert Committee	External Auditor Recommendations /Suggestions	Action Plan
21	No. of Campus placements of last batch	Offers/ Placements : 90 Placed students: 59	Encourage the students to write recruitment tests like AMCÁT, ELITMUS, COCUBES etc., by providing necessary training.	Regular training is provided to improve the employability skills of students.
22	No. of Off-campus placements of last batch	10	--	Students of final year will be encouraged to attend Off-campus placements. Students are encouraged to take placement related training, skill based training by giving valuable information.
23	No. of students who joined public services	Nil	Encourage the students to apply for Group/ Civil Services	Suitable activities will be conducted to encourage in students to qualify in competitive examinations and also give motivation to take up competitive exams
24	No. of students who joined PG programs	--	--	Students of final year will be encouraged to apply for higher education.
25	Students who turned entrepreneurs from last 3 batches	---	Provide the awareness about Startups and their importance.	Encouraging students with startup ideas by providing necessary support.

  
HoD

Head of the Department  
Mechanical Engineering  
Aditya College of Engineering  
SURAMPALEM-533 437

  
Principal

PRINCIPAL  
Aditya College of Engineering  
SURAMPALEM - 533 437



# ADITYA COLLEGE OF ENGINEERING

Approved by AICTE, Permanently Affiliated to JNTUK & Accredited by NAAC  
Recognized by UGC under Sections 2(f) and 12(B) of UGC Act, 1956

Aditya Nagar, ADB Road, Surampalem - 533 437, E.G.Dist., Ph: 99631 76662.

27/10/2022

## INFORMATION FOR ACADEMIC AND ADMINISTRATIVE AUDIT OF THE DEPARTMENT Academic Year: 2021-22

1. Name of the Department: Civil Engineering

2. Year of establishment: 2014

3. Courses offered: UG

Year	UG
2021-2022	B. Tech

4. Courses introduced during last 4 years:

Year	UG	Specialization
NIL	NIL	NIL

5. Details of programs discontinued, if any, with reasons:

Year	PG	Specialization
NIL	NIL	NIL

6. Number of teaching posts sanctioned, filled and vacant.

	Sanctioned	Filled
Professor	2	0
Associate Professor	3	1
Assistant Professor	7	8
Total	12	9

**7. Faculty profile with name, qualification, designation, experience, nature of appointment (confirmed/ probation/temporary):**

S. No	Name	Designation	Qualifications	Teaching/Research	Experience in
1	Mr.V.Tamilselvan	Associate Professor	ME	7.5	Teaching
2	Dr. Swamy nadh	Associate Professor	Ph.D	4.5	Teaching
3	B.Ragava maheedhar	Assistant professor	M.Tech	4.6	Teaching
4	Mr. Ch.Naresh	Assistant professor	M.Tech	2.4	Teaching
5	SD.Nizamuddin Khadri	Assistant professor	M.Tech	0.5	Teaching
6	U.Praveen kumar	Assistant professor	M.Tech	0.5	Teaching
7	Mr.Pothula Haranadh	Assistant professor	M.Tech	1.5	Teaching
8	Ms. Narapareddi Manasa	Assistant professor	M.Tech	0.6	Teaching

**8. Programme-wise Student Teacher Ratio: (Average of 4 Years):**

UG: 15:1

**9. Number of academic support staff (technical) and administrative staff sanctioned, filled and vacant:**

S. No.	post	Sanctioned Posts	Filled	Actual
1	Laboratory Assistant	4	4	4
2	Clerk (office)	1	1	1
3	Laboratory Attendant	1	1	1
4	Peon	1	1	1
5	Other			

**10. Thrust areas of research as identified by the department:**

1. Structural Engineering
2. Water Resource Engineering
3. Transportation Engineering
4. Geotechnical Engineering

**11. Special research laboratories sponsored by / created by industry or corporate bodies:**

No

## 12. Publications:

S.No	Authors	Title of The Paper	Journal Name with ISSN No.	Year of Publication
1	Dr.V.Swamy nadh	Nanosilica-Based Teff Straw as an Eco-Friendly Substitute for Special Concrete	Nanosilica-Based Teff Straw as an Eco-Friendly Substitute for Special Concrete	2022
2	Mr .B. Maheedar	Effect of Nano Ground Granulated Blast Furnace Slag (GGBS) Volume % on Mechanical Behaviour of High-Performance Sustainable Concrete	Effect of Nano Ground Granulated Blast Furnace Slag (GGBS) Volume % on Mechanical Behaviour of High-Performance Sustainable Concrete	2022
3	Mr.Nizamuddin Khadri	Structural Behavior of Nano-Coated Oil Palm Shell as Coarse Aggregate in Lightweight Concrete	Structural Behavior of Nano-Coated Oil Palm Shell as Coarse Aggregate in Lightweight Concrete	2021
4	Dr.V.Swamy nadh	Mechanical Behavior of Silica Fume Concrete Filled with Steel Tubular Composite Column	Mechanical Behavior of Silica Fume Concrete Filled with Steel Tubular Composite Column	2021

### 13. Conferences:

<b>1</b>	Dr V. Swamy Nadh	Analysis of RCC T-beam and prestressed concrete box girder	First International Conference on Design and Materials (ICDM)-2021	Materials Today: Proceedings	<b>2021</b>
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### 14. Incentives granted for publications/Conferences attended/memberships:

<b>S. No</b>	<b>Year</b>	<b>Name of the teacher</b>	<b>Name of the Publication/Conference/ Membership</b>	<b>Amount Granted</b>
<b>1</b>	<b>2021</b>	Dr V. Swamy Nadh	First International Conference on Design and Materials (ICDM)-2021 experimental mechanics	<b>7500</b>
<b>2</b>	<b>2021</b>	Dr.V.Swamy Nadh	Nanosilica-Based Teff Straw as an Eco-Friendly Substitute for Special Concrete	<b>20000</b>
<b>3</b>	2021	Dr.V.Swamy nadh	Journal of Nano materials	<b>20000</b>

### 15. Consultancy services provided, name of the teacher/s and income generated:

<b>S. No</b>	<b>Year</b>	<b>Name of the teacher</b>	<b>Nature of consultancy</b>	<b>Funds generated (In Lakh)</b>

### 16. Details of Industrial/Academic Experts invited as resource persons for Refresher courses, Seminars, Workshops:

Area of Interest-Geotechnical Earthquake Engineering: Design of Coastal Geotechnical structures, Soil dynamics, Ground improvement techniques, Foundation systems for High-Rise structures

#### POSITIONS HELD

Assistant Professor & Head (September, 2018- Present) Department of Civil Engineering, National Institute of Technology Andhra

(December, 2017- August, 2018) Department of Civil Engineering, Mahindra École Centrale, Hyderabad, India.

Research Associate (May, 2017- November, 2017)

Department of Civil Engineering, Indian Institute of Technology (IIT) Bombay, India

#### EDUCATION

Doctor of Philosophy (Civil Engineering, 2013-2017)

Indian Institute of Technology (IIT) Bombay, India

Thesis title: Seismic stability of seawalls considering wave forces

Major: Geotechnical Earthquake Engineering

Master of Technology (Civil Engineering, 2011-2013)

Indian Institute of Technology (IIT) Guwahati, India

Dissertation title: Embankments resting on PVD incorporated soft soil: Modeling issues, analysis and interpretation

Major: Geotechnical Engineering

Bachelor of Technology (Civil Engineering, 2007-2011)

Acharya Nagarjuna University, Bapatla Engineering College, Bapatla, Andhra Pradesh, India.

**17. Details of teachers participated in Refresher courses, Orientation courses, Seminars, Workshops, Conferences at national and international levels.(participant, presented paper, chaired the session):**

S. No	Name of the Faculty	Name of the Programme	Host Institution
1)	Mr.V.Tamilselvan	Three day workshop on Innovations in civil Engg	VBIT-Hyderabad
2)	Dr. Swamy nadh	Three day faculty development programme	VBIT-Hyderabad
3)	B.Ragava maheedhar	Workshop on Structural Analysis using E-TABS	RVRJC-Guntur
4)	Mr. Ch.Naresh	A Oneday Workshop on RCC Structuraling Detailing & Drafting	VBIT-Hyderabad
5)	SD.Nizamuddin Khadri	Workshop on Structural Anlysis using E-TABS	RVRJC-Guntur
6)	U.Praveen kumar	A Oneday Workshop on RCC Structuraling Detailing & Drafting	St. Martin's-Hyderabad
7)	Mr.Pothula Haranadh	A Oneday Workshop on RCC Structuraling Detailing & Drafting	St. Martin's-Hyderabad
8)	Ms. Narapareddi Manasa	A One-week Workshop on Recent Advances in Civil Engineering	NREC-Hyderabad

**18. Awards and Prizes received by students at university, state, national and international level:**

S. No	Name of the Student	Achievement	Field/Area/Event
1.	GORRELA SURYA	First Prize	Weight lifting, East Godavari

**19. Year-wise results of students at UG and PG:**

UG/PG	Year	Appeared	Passed	Pass %
UG	II B. Tech I Sem.	38	24	63.16
	II B. Tech II Sem.			
	IIIB. Tech I Sem.	47	35	74.47
	III B. Tech II Sem.			
	IV B. Tech I Sem.	57	34	59.65
	IV B. Tech II Sem.	57	56	94
PG	I M. Tech I Sem.	NIL	NIL	NIL
	I M. Tech II Sem.	NIL	NIL	NIL

**20. Diversity of Students: (Year-wise)**

Name of the Programme	% of students within the State	% of students outside the State	% of students from other countries
UG (B. Tech)	97.89	0	2.11
PG (M. Tech)	NIL	NIL	NIL

**21. Number of students cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give Category wise data.**

Year NET/ SET GATE Other Exams (PGCET) Total  
2020-2021 - 5

**22. Student progression/ placement record: Number/ percentage of students proceeded for higher studies Number/percentage of students placed: 73.6%**

Year % proceeded for higher studies % of students placed

**23. Diversity of Faculty:**

Teaching faculty %

From within the State 64.28

from other States 35.71

from outside the country -0

**24. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. / D.Lit.: 2****25. Present details of departmental infrastructural & other facilities with regard to**

a) Central Library Books and Journals, etc, relevant to Department : Titles:

Volumes:

Journals:

b) Departmental Library (books, journals etc.) :

c) Computers and Internet facilities for staff : 1

d) Total number of class rooms : 4

e) Class rooms with ICT facility : 4

f) Students' laboratory : 8

g) Research laboratories : 0

h) Seminar Hall : 1

i) Smart class room :

j) Any other facility LCDs, 0

**Number of post graduate students getting financial assistance from the university/state / central government: 0**

**26. Curricular Aspects:**

**a) Does the faculty take initiative in curriculum development process: YES**

**b) Is curriculum suitable to make students globally competitive in the subject? YES**

**c) Does the department offer program with sufficient no. of electives options: YES**

**d) While developing curriculum, is feed-back taken from stakeholder's viz.**

**Students/Alumni/Parents/Employers considered? YES**

**e) What is the frequency of curriculum revision? (3/4/5 years or more): 3 years**

**27. Teaching-Learning, Evaluation.**

**1) Number of teachers preparing & following Academic Teaching plan : 10**

**2) How many teachers use the following teaching methods:**

**a) Interactive lecture method using blackboard, Group discussions, Problem solving, Seminars: 10**

**b) Use ICT methods to support lectures: 10**

**3) Does the department have any mechanism to ensure that entire syllabus is Completed: YES**

**4) Do you offer Bridge/Remedial courses? If yes, Give details.**

Yes, for students lagging behind the classes we conduct as per the schedule Provided

All the III & IV B.Tech Civil Engineering students who have backlogs are informed that the schedules for II semester remedial classes are planned as follows. Students are advised to attend the remedial classes as per the time table without fail.

II YEAR II SEMESTER REMEDIAL CLASSES TIME TABLE		
W.E.F. 21/10/2021 to 02/11/2021		
DAY	FACULTY NAME	REMEDIAL CLASS 3:30 TO 4:30 PM
Monday	V.Tamil Selvan	
Tuesday	Ms.Sangita de	
Wednesday	Ch.Naresh	
Thursday	Dr.V.Swamynadh	
Friday	Sangita de	
Saturday	V.Tamil Selvan	

III YEAR II SEMESTER REMEDIAL CLASSES TIME TABLE		
W.E.F. 21/10/2021 to 02/11/2021		
DAY	FACULTY NAME	REMEDIAL CLASS 3:30 TO 4:30 PM
Monday	V.Tamil Selvan	
Tuesday	Ms.Sangita de	
Wednesday	Ch.Naresh	
Thursday	Dr.V.Swamynadh	
Friday	Sangita de	
Saturday	V.Tamil Selvan	

All the II, III & IV B.Tech Civil Engineering students who have backlogs are informed that the schedules for I semester remedial classes are planned as follows. Students are advised to attend the remedial classes as per the time table without fail.

II YEAR I SEMESTER REMEDIAL CLASSES TIME TABLE		
W.E.F. 14/09/2020 to 26/09/2020		
DAY	FACULTY NAME	REMEDIAL CLASS
		3:30 TO 4:30 PM
Monday	B.R.Maheedhar	
Tuesday	Sangita de	
Wednesday	Ch.Naresh	
Thursday	B.R.Maheedhar	
Friday	Sangita de	
Saturday	Ch.Naresh	

III YEAR I SEMESTER REMEDIAL CLASSES TIME TABLE		
W.E.F. 14/09/2020 to 26/09/2020		
DAY	FACULTY NAME	REMEDIAL CLASS
		3:30 TO 4:30 PM
Monday	Dr.V.Swamynadh	
Tuesday	Ms.Sangitha de	
Wednesday	Ch.Naresh	
Thursday	Dr.V.Swamynadh	
Friday	Ms.Sangitha de	
Saturday	V.Tamil Selvan	

IV YEAR I SEMESTER REMEDIAL CLASSES TIME TABLE		
W.E.F. 14/09/2020 to 26/09/2020		
DAY	FACULTY NAME	REMEDIAL CLASS
		3:30 TO 4:30 PM
Monday	Ch.Naresh	
Tuesday	B.R.Maheedhar	
Wednesday	B.R.Maheedhar	
Thursday	Ch.Naresh	
Friday	Ch.Naresh	
Saturday	B.R.Maheedhar	

### 5) What is the method for conducting internal evaluation?

There is complete transparency in the internal assessment. The criterion adopted is as directed by the university.

- At the beginning of the semester, faculty members inform the students about the various components in the assessment process during the semester.
- The internal assessment test schedules are prepared as per the university and communicated to the students well in advance.
- To ensure proper conduct of formative tests, two invigilators are assigned to each hall. Evaluation is done by the course handling faculty members within three days from the date of examination.
- The corrected answer scripts at random are verified by HOD to ensure the standard evaluation process.

- The corrected answer papers of the students are distributed to them for the verification by the students and any grievance is redressed immediately. The marks obtained by the students in internal assessment tests are displayed on the department notice board.
- The marks obtained by the students in internal assessment tests are uploaded periodically on the university web portal along with their attendance.
- Noting the values in observation and validating the theoretical aspects student must submit lab record regularly.
- Day to day performance of the students is assessed for every experiment which includes regularity, performance, viva and the promptness in submitting the record.
- For lab courses, the marks/grade scored by the student for each experiment is indicated in the observation/record. The independent learning, practical approach to the real-time applications is tested by viva-voice for laboratory courses.
- For the quality of the projects, the evaluation is done by Project Review Committee along with the project guides.
- To ensure the transparency and curb the mal practices the university has introduced jumbling system and theory end examinations are conducted at a center other than the college.
- The end examination for the laboratory and projects shall be conducted with internal and external examiner appointed from the other colleges as decided by the University.

## **28. Teacher Performance:**

**1) Whether the performance of the teacher assessed by the students? If yes, are the feedback reports analysed and suggestions communicated to teachers? : YES**

**2) Number of teachers getting a) Very Good \_\_\_17\_ b) Good \_\_\_9\_\_ c) Average \_\_\_1\_\_ remarks from students.**

**2) Whether any facility available in the department to get suggestions from students on infrastructural facilities available in the department?:YES**

**15**

**4) Are the suggestions received from students used for improvement of facilities? : YES**

**5) Do teachers submit Self-Appraisal Reports? Are these reports appraised by HOD and forwarded to the management with comments? : YES**

## **29. List the distinguished alumni of the department (maximum 10)**

<b>S. No</b>	<b>Roll Number</b>	<b>Name of the Student</b>
1	18MH5A0105	DOMALA SAI SUHAS
2	18MH5A0111	KAMIREDDY DURGA SUNIL
3	18MH5A0118	KOVVURI VENKATA SURENDRA REDDY
4	18MH5A0125	PENNAM MANIKANTA
5	18MH5A0129	SEERAM VENKATA SUDHA SAI

**30. Give details of student enrichment programmes (special lectures / workshops /seminar) involving external experts.**

**31. State the Innovative practices adopted in the department.**

1. Department event club activities.
2. Department news letter.
3. Innovative projects.

**32. Highlight the participation of students and faculty in extension activities.**

-----

**33. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

**a. Strengths:**

1. The Department has qualified and dedicated faculty
2. Well established state-of-art laboratories and infrastructure
3. Memberships in Professional bodies like ICI

**b. Weaknesses:**

1. Predominantly students come from guided education system hence resistance to adapt to out come based education system
2. This branch is not among the top preferences of the Students because of their limited knowledge about the Industry.

**c. Opportunities:**

1. R & D activity and Institutional collaboration
2. Increasing scope for entrepreneurship development.
4. More number of opportunities can be foreseen as Kakinada is identified as one of the first 20 smart cities in the country.
5. Students can settle not only in core side industries but also in software

**d. Challenges:**

1. Changing trends in recruitment patterns.
2. Poor language skills and other employability skills among the students.

**34. Future plans of the department:**

**a. Long term plans-**

1. To encourage innovation in the department.

2. To have a strong industrial interaction.
3. To encourage all faculties to get involved in research programs leading to acquire Doctoral degree, hence better expertise.

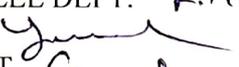
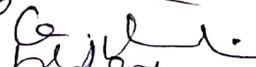
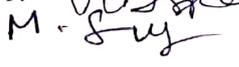
**b. Short term plans –**

1. To improve the student's academic performance towards better results and campus placements.
2. Awareness sessions to drive away the nescience of parents & students.

Head of Department

18

**AAA Committee Members**

1. Dr. V. Swamy nadh, Assistant Professor, CIVIL DEPT. 
2. K. MANOZ KUMAR REDDY, Assoc. Professor, EEE DEPT. 
3. Y.K.S. SUBBARAO, Professor, MECH DEPT. 
4. G. RAMAKRISHNA, Assoc. Professor, ECE DEPT. 
5. T. VEERRAJU, Assoc. Professor, CSE DEPT. 
6. M. SRINIVASU, Professor, H&BS DEPT. 

**External Expert:**

  
Dr.D. Venkateswarlu, Professor & HOD,

Godavari Institute of Engineering & Technology (A)

  
Principal  
PRINCIPAL  
Aditya College of Engineering  
SURAMPALEM - 533 437



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27/10/2022

## DEPARTMENT OF CIVIL ENGINEERING Department Academic Audit Reports 2021-2022

### Internal Experts:

1. Dr. Pullela S.V.V.S.R. Kumar, Dean (A & A)
2. Dr. D.V.S.S.S.V. Prasad, Coordinator-IQAC
3. Dr. G. Rama Krishna – HoD, ECE
4. Dr. Y.K.S. Subba Rao – HoD, Mech.
5. Mr. K. Manoj Kumar Reddy – HoD, EEE

### External Expert :

Dr.D. Venkateswarlu, Professor & HOD,  
Godavari Institute of Engineering & Technology (A)

### ACADEMIC AUDIT REPORT

I-Department Profile		
S. No	Description	Response
1	Name of the Department	<b>CIVIL ENNGINEERING</b>
2	No: of Full time Permanent Faculty	<b>9</b>
3	No: of Academic Programmes	<b>1</b>
4	No: of core courses and electives in each programme	
i	B. Tech	<b>Core: 38 and Electives: 6</b>
ii	M. Tech	<b>Nil</b>
5	Student Strength	
i	II Year (Sanctioned: 60 )	<b>53</b>

ii	III Year (Sanctioned: 60 )	25
iii	IV Year (Sanctioned: 60 )	38

<b>II – Curricular Aspects: Teaching, Learning and Evaluation</b>			
	<b>Criteria</b>	<b>Observations of the Expert Committee</b>	<b>Suggestions for Improvement</b>
6	Coverage of syllabus	Completed as per schedule	Need to conduct more Guest Lectures
7	Course Files well maintained by faculty for all courses?	Yes	Provide link for Video Lectures to promote fast learners
8	Lab manuals and Records issued for all labs?	Yes	--
9	Student Attendance registers maintained well	Yes	--
10	Innovations in Teaching introduced	Yes	--
11	Add on Courses/ Skill Development Courses conducted	Yes	Make it mandatory to complete certification
12	Use of Supplementary Teaching tools and Application of ICT	Yes	Attend workshops so as to teach the subjects
13	Remedial Courses Conducted	Yes	Needs enhancement so that the pass percentage of the students is improved
14	Conduct of Internal Examinations	Yes	--
15	Quality of Internal Question Paper.	Good	Usage of BTL can be improved
16	Quality of Assignments	Yes	--

17	Result Analysis	Yes	Need to improve pass percentage
18	Student Feedback on Teaching & Learning obtained twice / semester	Yes	Maintain the impact analysis on the feedback
19	Course End Survey conducted for two semesters for all classes.	Yes	--
20	Classrooms – adequacy	Yes	--
21	Laboratories –Adequate number of labs and each equipped to perform experiments as prescribed?	Yes	--
22	<b>Library</b> - procured as per norms last year	Yes	--
23	<b>Computer labs</b>		
i	Required number of computer labs available	Yes	--
ii	Computers in the labs have requisite configuration	Yes	--
24	Teachers concerned counselled for poor feedback	Yes	Faculty who got less feedback may be asked to attend FDP/ NPTEL courses
25	<b>Improvement in Attainment of COs and POs/PSOs</b>		
i	COs written well for each course & students are informed about the same	Yes	Some subjects need redefining Cos with higher BT levels
ii	CO targets attained in all courses	Maximum courses attained	Remedial action is proposed for non-attained courses
iii	PO/PSO targets attained for the program	Need to improve attainment	--

iv	Implemented Action plans proposed last year	1. HoD had implemented fortnight verification. 2. HoD implemented to conduct extra classes to increase the pass percentage.	Suggested to enroll in advanced courses thus NPTEL and Certification like Microsoft/ CISCO/AWS
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<b>III - Research, Consultancy and Extension.</b>			
	<b>Criteria</b>	<b>Observations of the Expert Committee</b>	<b>Suggestions for Improvement</b>
26	No: of Research Guides in the Department	2	--
27	Research Papers published during the assessment period	2	Publications need to improve
28	Books Published	No	Encourage the faculty to publish the books
29	Chapters in Books	0	Need to be improved
30	Seminars/Workshops/Training Programmes Conducted	1	Need to conduct more seminars/ workshops/ Guest Lectures
31	Expert lectures organised for students', faculty	2	--
32	Ongoing/ New MoU	1	Improve the Industry Interaction towards internship/ placements
33	Research Collaborations	No	Need to improve research collaborations with reputed industry/ academia
34	Awards/ Achievements / Recognitions of students and Teachers	Faculty : 2 Students : 2	--
35	Ongoing and newly implemented research Projects	Nil	Need to apply number of research projects with DST/ AICTE and other sponsoring agencies

36	Consultancy Services	NO	Need to improve the Consultancy service
37	Projects / schemes funded by AICTE – Applied/ progress / completed.	Applied	Apply for number of schemes offered by the AICTE with suitable quality proposals

#### IV – Quality of Admitted Students. Placements & Higher Education

38	I year - Last rank admitted in open category during this year Vs. last year	14822 Vs. 38391	--
39	Lateral Entry- Last rank admitted	4283	--
40	Improvement in quality of admitted students	Yes	--
41	No. of Campus placements of last batch	Offers/ Placements : 38 Placed students: 25	Try to enhance average salary package
42	No. of Off-campus placements of last batch	10	--
43	No. of students who joined public services	Nil	Encourage the students to apply for Group/ Civil Services
44	Improvement over last year in total placement	Yes	--
45	No. of students who joined PG programs in India	No	Provide awareness regarding PG courses and their importance
46	Improvement in students who opted for higher education	No	Give Knowledgeable Data regarding Higher educations and their importance
47	Students who turned entrepreneurs from last 3 batches	2	To be improved

47	Students who turned entrepreneurs from last 3 batches	2	To be improved
48	Strengths of Department	1. Well-equipped laboratory, Library and Classroom facilities. 2.Experienced and Dedicated faculty with excellent academic /industry knowledge	Improve Case study oriented Lectures for Students
49	Weakness of the Department	1. Few Students are facing problem in oral/ written English communication because of their previous rural academic background 2. Students enrolled come from guided type of education system.	Need to conduct special/orientation classes on English communication

**Convener:**

Dr. Pullela S.V.V.S.R. Kumar, Dean (A & A)

**Members:**

1. Dr. D.V.S.S.S.V. Prasad, Coordinator-IQAC

2. Dr. G. Rama Krishna – HoD, ECE

3. Dr. Y.K.S. Subba Rao – HoD, Mech.

4. K. Manoj Kumar Reddy – HoD, EEE

5. Ch. Naresh- HoD, CE

**External Expert:**

Dr.D. Venkateswarlu, Profes̄sor & HOD,

Godavari Institute of Engineering & Technology (A)



04/11/2022

## Department of Civil Engineering Department Academic Audit – Action Taken Report Academic Year: 2021-22

<b>Curricular Aspects: Teaching, Learning and Evaluation</b>				
S. No	Criteria	Observations of the Expert Committee	External Auditor Recommendations /Suggestions	Action Plan
1	Course Files well maintained by faculty for all courses?	Yes	Provide NPTEL Video link for Lectures	All the faculty members are instructed to update their course files year by year with all necessary documents.
2	Add on Courses/ Skill Development Courses conducted	Yes	Make it mandatory to complete certification	Conducting Certification course/Add on Course/ Skill Development Courses every semester.
3	Remedial Classes Conducted	Yes	Need to increase more Lecture classes	Conducting Remedial Classes for academically weak students every semester.
4	Quality of Internal Question Paper.	Good	Need to increase quality by appropriate BT level	Maintaining quality in (MID) Internal Question Paper as per OBE/OBA
5	Result Analysis	Yes	Need to improve pass percentage	Trying to improve result of the students by conducting Tutorial and Remedial classes.
6	Student Feedback on Teaching & Learning obtained twice / semester	Yes	Maintain the impact analysis on the feedback	Feed collecting, analyzing and taking action
7	Teachers concerned counselled for poor feedback	Yes	Faculty who got less feedback may be asked to attend FDP/ NPTEL/On-line courses	Feed collecting, analyzing and taking action
<b>Improvement in Attainment of COs and POs/PSOs</b>				

S. No	Criteria	Observations of the Expert Committee	External Auditor Recommendations /Suggestions	Action Plan
8	COs written well for each course & students are informed about the same	Yes	Some subjects need redefining COs with higher BT levels	All the faculty members are instructed to follow and update their course files year by year as per OBE/OBA
9	CO targets attained in all courses	Maximum courses attained	Remedial action is proposed for non-attained courses	Remedial action is proposed for non-attained courses
10	PO/PSO targets attained for the program	NO	Need to improve attainment	All the faculty members are instructed to follow OBE/OBA

**Research, Consultancy and Extension.**

S.No	Criteria	Observations of the Expert Committee	Suggestions for Improvement	
11	No. of Research Guides in the Department	2	Need to be improved	Need to be improved
12	Research Papers published during the assessment period	2	Publications need to improve	FDP will be conducted by inviting research experts to guide the faculty members to write quality research papers and publish in SCI/Scopus indexed papers Institute has been initiated providing incentives for faculty members for their quality/indexed publications. Regarding the research seed money
13	Faculty Conferences attended/ published during the assessment period	1	Need to improve	Workshop will be conducted by inviting research experts to guide faculty members to do research and write quality publications. Institute has been initiated providing incentives for faculty members for their quality/indexed

				publications.
14	Books/Book Chapters Published	0	Encourage the faculty to publish the Books/Book Chapters	Institute has been initiated providing incentives for faculty members for their quality/indexed publications.
15	Seminars/Workshops/Training Programmes Guest Lectures Conducted	1	Need to be improved	Trying to organize more no. of Seminars/Workshops/ Training Programmes Guest Lectures
16	Expert lectures organised for students & faculty	2	Need to be improved	Trying to organize more no. of Guest/Expert Lectures
17	Ongoing/ New MoU	1	Need to be improved	Trying to improve and Efforts are in progress.
18	Research Collaborations	0	Need to improve research collaborations with reputed industry/ academia	Department will encourage to faculty members to apply for research funding by exploring Govt./Private research funding opportunities. As per the norms , the department will apply when the university calls for applications for Research Centre
19	Ongoing and newly implemented research Projects	0	Need to initiate the research Projects	Faculty members will be encouraged to apply for research grants funded through State and Central bodies, and conduct research activities.
20	Consultancy Services	0	Apply for number of schemes offered by the AICTE with suitable quality proposals	Department will encourage to faculty members to apply for research funding by exploring Govt./Private research funding opportunities.

IV – Quality of Students. Placements & Higher Education				
S. No	Criteria	Observations of the Expert Committee	External Auditor Recommendations /Suggestions	Action Plan
21	No. of Campus placements of last batch	Offers: 38 Placed students: 25	Try to enhance average salary package	Activities such as soft skill development, industry visits, industry internship, etc. will be conducted to increase placements. More core companies will be attracted to the department for placement by starting MoUs and collaboration with them.
22	No. of Off-campus placements of last batch	10	Need to improve	Students of final year will be encouraged to attend Off-campus placements. Students are encouraged to take placement related training, skill based training. Necessary workshop/lecturer session will be organized.
23	No. of students who joined public services	Nil	Encourage the students to apply for Group/ Civil Services	Suitable activities will be conducted to encourage in students to qualify in competitive examinations and also give motivation to take up competitive exams
24	No. of students who joined PG programs	0	Provide the awareness regarding PG courses and other Higher education courses and their importance.	Students of final year will be encouraged to apply for higher education like M.Tech & MBA
25	Students who turned entrepreneurs from last 3 batches	2	Provide the awareness about Startups and their importance.	Alumni association will be strengthened and collaborating with them, Workshop, internship, industry driven elective, expert lectures etc. will be conducted to mentor the students

  
**HoD**  
 Head of the Department  
 Civil Engineering  
 Aditya College of Engineering  
 SURAMPALEM-533 437

  
**Principal**  
 Aditya College of Engineering  
 SURAMPALEM - 533 437

**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

Date:31/10/2022

**ACADEMIC AND ADMINISTRATIVE AUDIT OF THE DEPARTMENT  
Academic Year – 2021-22**

1. Name of the Department: Electronics and Communication Engineering
2. Year of establishment:2008
3. Courses offered: UG, PG

Year	UG	PG
2021-22	B.Tech	M.Tech (ES)

4. Courses introduced during last 4 years: ZERO
5. Details of programmes discontinued, if any, with reasons:
6. Number of teaching posts sanctioned, filled and vacant.

Designation	Sanctioned	Filled
Professor	03	03
Associate Professor	04	04
Assistant Professor	31	31
Total	38	38

7. Faculty profile with name, qualification, designation, experience, nature of appointment (confirmed/probation/temporary):

S.No.	Name	Qualification	Designation	Total Experience		Nature of appointment
				Academic	Industrial	
1	Dr.G Rama Krishna	Professor	Ph.D	17		Regular
2	Dr. G M Sundaram	Professor	Ph.D	16		Regular
3	Dr.U S B K Mahalaxmi	Professor	Ph.D	12		Regular
4	Dr. Raman R	Associate Professor	Ph.D	13		Regular
5	Dr. A Anil Jitendra Prasad	Associate Professor	Ph.D	17		Regular
6	Dr. G Jaffino	Associate Professor	Ph.D	9		Regular
7	Mr. G Veerapandu	Associate Professor	M.Tech	18	6	Regular
8	Dr. Inamul Hussian	Assistant Professor	Ph.D	1		Regular
9	Dr. K Kanthamma	Assistant Professor	Ph.D	11		Regular
10	Mr. M Venkateswarulu	Assistant Professor	M.Tech	14	1	Regular

11	Mr. P Ramesh	Assistant Professor	M.Tech	15		Regular
12	Mr. M Raghunadh	Assistant Professor	M.Tech	9		Regular
13	Mrs. Ch Janaki Devi	Assistant Professor	M.Tech	15		Regular
14	Mr. B Kalesh	Assistant Professor	M.Tech, NET	9		Regular
15	Mr. K Mahesh Babu	Assistant Professor	M.Tech	10		Regular
16	Mrs. Y Sugandhi Naidu	Assistant Professor	M.Tech	8		Regular
17	Mr. B Jagadeesh Babu	Assistant Professor	M.Tech	5		Regular
18	Mr. P V N D K Kishore	Assistant Professor	M.Tech	4		Regular
19	Mr. K V Bala Rama Krishna	Assistant Professor	M.Tech	9		Regular
20	Mr. K Chandra Sekhar	Assistant Professor	M.Tech, NET	5		Regular
21	Mr. Marukurthi Sai	Assistant Professor	M.Tech	3		Regular
22	Mrs. T Krishna Mohana	Assistant Professor	M.Tech	11		Regular
23	Mr. K Sangeet Kumar	Assistant Professor	M.Tech	8		Regular
24	Mr. P Bhupa Reddy	Assistant Professor	M.Tech	8		Regular
25	Mr. M Madhu Manikya Kumar	Assistant Professor	M.Tech	8		Regular
26	Mrs. K Suma	Assistant Professor	M.Tech	7		Regular
27	Mrs. K Vijaya Kumari	Assistant Professor	M.Tech	7.5		Regular
28	Mrs. T Phanimala	Assistant Professor	M.Tech	3		Regular
29	Mrs. P Mamathadevi	Assistant Professor	M.Tech	2		Regular
30	Mr. Y Ravindra Babu	Assistant Professor	M.Tech	4		Regular
31	Mr. Venneti Kiran	Assistant Professor	M.Tech	6		Regular
32	Mrs. Pandiri Jhansi	Assistant Professor	M.Tech	8		Regular
33	Mr. S Siva Prasad	Assistant Professor	M.Tech	2		Regular
34	Ms. K Hima Bindhu	Assistant Professor	M.Tech	1		Regular
35	Mr. M Sudheer Kumar Reddy	Assistant Professor	M.Tech	2		Regular
36	Mr. M. Kishore Kumar	Assistant Professor	M.Tech	19		Regular
37	Mrs. P Dedeepya	Assistant Professor	M.Tech	3		Regular
38	Ms. N Sravani	Assistant Professor	M.Tech	4		Regular

**8. Programme-wise Student Teacher Ratio: (Average of 4Years)**

UG. = 1:20, P.G. = 1:12

**9. Number of academic support staff (technical) and administrative staff sanctioned, filled and vacant:**

Sr. No	Posts	Sanctioned posts	Filled	Actual
1	Laboratory Assistant	11	11	11
2	Clerk (office)	01	01	1
3	Laboratory Attendant	01	01	1
4	Peon	01	01	1
5	Other	02	02	2

**10. Thrust areas of research as identified by the department:**

Digital Image Processing  
Wireless Communications  
Antennas

**11. Special research laboratories sponsored by / created by industry or corporate bodies.**

Texas Instruments –Innovation Laboratory

**12. Publications:**

S.No.	Name of the author/s	Title of paper	Name of journal	Year of publication	ISSN number
1	Dr. Inamul Hussain	Artificial Intelligence-Based Smart Comrade Robot for Elders Healthcare with Strait Rescue System	IEEE Transactions on Nanotechnology	2022	1536-125X
2.	Dr. G.Ramakrishna	Artificial Intelligence-Based Smart Comrade Robot for Elders Healthcare with Strait Rescue System	Journal of Healthcare Engineering	2022	9904870
3.	Dr. G.Meenakshi Sundaram	Analysis of performance, combustion, and emission parameters in a reactivity-controlled combustion ignition (RCCI) engine - an intensive review	International Journal of Ambient Energy	2022	ISSN: 2162-8246
4.	Dr. R.Raman	Evaluate and Design the Mini-Hexagon-Shaped Monopole Antenna Controller to Minimize Losses in the Unit	Journal of Nuclear Energy Science & Power Generation Technology	2022	ISSN NO:2325-9809

5.	Dr.U.S.B.K.Mahalakshmi	Hybrid Feature-Based Disease Detection in Plant Leaf Using Convolutional Neural Network, Bayesian Optimized SVM, and Random Forest Classifier	Journal of food quality	2022	ISSN : 0146-9428
6.	Dr.U.S.B.K.Mahalakshmi	Using Electro encephalogram Classification in a convolution network, infer privacy on health care internet of things 5.0	Expert Systems	2022	ISSN: 1468-0394
7.	Dr.G. Jaffino	Weighted 1D-local binary pattern features and Taylor-Henry gas solubility optimization based Deep Max out network for discovering epileptic seizure using EEG	DIGITAL SIGNAL PROCESSING	2022	2021.103349
8.	Dr. G.Ramakrishna	Design and Optimization of Micro strip patch Antenna via Improved Met heuristic Algorithm	Wireless Pers Communication	2021	1721–1739 (2021)
9.	Dr. Inamul Hussain	In-situ grafting of Au and Cu nano particles over graphitic carbon nitride sheets and unveiling its superior super capacitive performance as a hybrid composite electrode material	Journal of Energy Storage (IF: 6.583)	2021	2352-152X
10	M.Kishore Kumar	Facial Emotions recognition system for tested images by using navie bayes classification	Advances and Applications in Mathematical Sciences	2021	ISSN:0974-6803
11	M.Kishore Kumar	Wideband antenna array for C Band applications	Design Engineering	2021	ISBN : 0011-9342
12	Dr.G.Jaffino	Contor & Texture based analysis for Victim Identification in Forensic Deontology	Data Technologies and Applications	2021	2514-9288
13	G.Veerapandu	Low Power Health Monitoring with Active Personal Assistance Based Upon IOT	International Journal of Research in Engineering and Science	2021	2320-9356
14	Y.Sugandhi Naidu	MTCMOS Technique Based Low-Power Shift Registers	International Journal of Analytical and Experimental modal analysis	2021	0866-9367

### 13. Conferences :

Sl. No.	Name of the Teacher	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / International	Year of publication
1.	M.VENKATESWARLU	Iot based computerized voting system with finger prints	ICIRET-2022	ICIRET-2022	International	2021
2.	K.MAHESH BABU	Smart underground cable fault detection using iot	ICIRET-2022	ICIRET-2022	International	2021
3.	R.RAMAN	Blind aid stick:hurdle recognition,along with voice based coporation via gps&gsm &panic alert system	ICIRET-2022	ICIRET-2022	International	2021
4.	K.V.BALARAM	Pre, post and symmetric compensation techniques in optical communication systems at 5gbps, 10gbps and 15gbps	ICIRET-2022	ICIRET-2022	International	2021
5.	INAMUL HUSSAIN	Microcontrolled based digital door lock	ICIRET-2022	ICIRET-2022	International	2021
6.	CH.JANAKI DEVI	Deeplearning model for optical diagnosis of a retina	ICIRET-2022	ICIRET-2022	International	2021
7.	P.RAMESH	Raspberry pi based intruder alert system	ICIRET-2022	ICIRET-2022	International	2021
8.	G.VEERAPANDU	Automated fluid level sensing and controlling system using iot	ICIRET-2022	ICIRET-2022	International	2021
9.	K.VIJAYA KUMARI	Design of an intelligent management system for agricultural greenhouse based on iot	ICIRET-2022	ICIRET-2022	International	2021
10.	K.VIJAYA KUMARI	Smart electricity monitoring and control using iot	ICIRET-2022	ICIRET-2022	International	2021
11.	KALESH BUSA	Emergency rescue system using sensor fusion and machine learning algorithm	ICIRET-2022	ICIRET-2022	International	2021

12.	P.RAMESH	Ultrasonic blind stick using gps and gsm based tracking system	ICIRET-2022	ICIRET-2022	International	2021
13.	V.KIRAN	Design of iot development board using arduino and its applications	ICIRET-2022	ICIRET-2022	International	2021

### Book Chapters

Sl. No.	Name of the Teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	National / International	Year of publication	ISBN number of the proceeding
1	G. Veerapandu	Smart Innovation, Systems and Technologies	Forest fire detection using satellite images	Proceedings of Second International Conference in Mechanical and Energy Technology	International	2022	978-981-19-0108-9
2	Dr.G.Jaffino	Advances in communications, signal processing and vlsi	Contour and texture based approaches for dental radiographic and photographic images in forensic identification	Advances in communications, signal processing and vlsi	International	2022	978-981-33-4058-9

### 14. Incentives granted for publications/Conferences attended/memberships:

Sl. No.	Name of the Teacher	Title of the paper	Year of publication	Incentive Rs
1	Dr.G.Jaffino	Advances in communications, signal processing and vlsi	2022	12000
2	Dr. G.Ramakrishna	Artificial Intelligence-Based Smart Comrade Robot for Elders Healthcare with Strait Rescue System	2022	13500
3	Dr. G.Meenakshi Sundaram	Analysis of performance, combustion, and emission parameters in a reactivity-controlled combustion ignition (RCCI) engine - an intensive review	2022	12000
4	Dr.U.S.B.K.Mahalakshmi	Hybrid Feature-Based Disease Detection in Plant Leaf Using Convolutional Neural Network, Bayesian Optimized SVM, and Random Forest Classifier	2022	18000
5	Dr.U.S.B.K.Mahalakshmi	Using Electro encephalogram Classification in a convolution network, infer privacy on health care internet of things 5.0	2022	18000

6	Dr.G. Jaffino	Weighted 1D-local binary pattern features and Taylor-Henry gas solubility optimization based Deep Max out network for discovering epileptic seizure using EEG	2022	12000
7	Dr. G.Ramakrishna	Design and Optimization of Micro strip patch Antenna via Improved Met heuristic Algorithm	2021	16000
8	Dr. Inamul Hussain	In-situ grafting of Au and Cu nano particles over graphitic carbon nitride sheets and unveiling its superior super capacitive performance as a hybrid composite electrode material	2021	22000

**15. Consultancy services provided, name of the teacher/s and income generated:**

Nil

**16. Details of Industrial/Academic Experts invited as resource persons for Refresher courses, Seminars, Workshops.**

**Workshops**

S. No.	Title of the Workshop	Date	Resource Person with designation	No of Students attended
1	Workshop on FPGA Implementation fordigital cirucuits	12-11-2021 & 13-11-2021	Mr.P.Murali, ECIL Hyderabad	61
2	Workshop on applications of communication technologies	14-02-2022	Dr. K.Padma priya, Professor, JNTUK	60
3	Workshop on MATLAB for engineers	16-03-2022	Dr.B.T.Krishna, Professor, UCEV, JNTUK	62

**Seminars**

S.No.	Action taken	Date	Resource Person with designation	No students present
1	A Seminar on MEMS Switches	26-02-2022	Dr.N.V.Rao, Professor, JNTUK	65
2	Seminar on “Inculcating Human Values and Ethics in Technical Education	13-10-2021	Dr.M.Dhanalakshmi, Professor, JNTUH	60
3	Seminar on IOT	20-07-2021	Mr.Sudheer , Certified trainer T-Hub, Surampalem	65

17. Details of teachers participated in Refresher courses, Orientation courses, Seminars, Workshops, Conferences at national and international levels.(participant, presented paper, chaired the session)

Faculty Development Programme (FDP) – Attended Academic Year 2021-22

Name of the participant	Title of the FDP /MDP/ professional development / administrative training program	Dates (from-to) (DD-MM-YYYY)
Dr. G Rama Krishna	A Five FDP on IPR awareness & Patent Prosecution	13 -07-2021 to 17-07-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
Dr. G M Sundaram	A Five day FDP on Trends and Challenges in the Design & Implementation of Planar Antennas	01-09-2021 to 05-09-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
Dr. U S B K Mahalaxmi	A Five day FDP on Digital VLSI Design and Verification	23 -08-2021 to 27-08-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021
Dr.RVV Krishna	A Five day FDP on Advanced technologies in Wireless Communication Networks	2-08-2021 to-6-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
Dr. R.Raman	A Five dayFDP on Trends and Challenges in the Design & Implementation of Planar Antennas	1-09-2021 to 05-09-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
Mr. G.Veerapandu	A Five day FDP on Internet Of Things	23-08-2021 to 27-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
Dr. A Anil Jitendra Prasad	A Three week Training Programme on Embedded Systems	16-08-2021 to 4-09-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021
Dr.R Anil Kumar	A Five day FDP on Advanced technologies in Wireless Communication Networks	2-08-2021 to-6-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
P.Ramesh	A Five day FDP on Advanced Technologies in wireless Communication Networks	2-08-2021 to-6-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
M. Madhu Manikya Kumar	A Five day FDP on IPR awareness & Patent Prosecution	13-07-2021 to17-03-,2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021

Ch.Janaki Devi	A Five day FDP on RF Energy Harvesting Antenna Design for Wireless Body area	23-08-2021 to 27-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
Dr. Inamul Hussian	A Five day FDP on Advanced Technologies in wireless Communication Networks	2-08-2021 to-6-08-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021
M Venkates warulu	A Five day FDP on IPR awareness & Patent Prosecution	13 -07-2021 to 17-07-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021
M. Kishore Kumar	A Five dayFDP on Trends and Challenges in the Design & Implementation of Planar Antennas	01-09-2021 to 05-09-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021
Mr.M.Raghunadh	A Five day FDP on Digital VLSI Design and Verification	23 -08-2021 to 27-08-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021
B Kalesh	A Five day FDP on RF Energy Harvesting Antenna Design for Wireless Body area network, Design, Development and Challenges	23 -08-2021 to 27-08-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021
T.Krishna Mohana	A Five day FDP on Internet Of Things	23 -08-2021 to 27-08-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021
B Jagadeesh Babu	A Five day FDP on Advanced technologies in Wireless Communication Networks	2-08-2021 to-6-08-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021
K.V.Bala Rama Krishna	A Five day FDP on Trends and Challenges in the Design & Implementation of Planar Antennas	01-09-2021 to 05-09-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021
P Bhupa Reddy	A Five day FDP on Challenges in Adapting Machine Learning towards 5G/6G Communications	09-08-2021 to 13-08-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021
K Suma	A Five day FDP on RF Energy Harvesting Antenna Design for Wireless Body area network,Design,Development and Challenges	23 -08-2021 to 27-08-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021
K Chandra Sekhar	One week FDP on Role of Mathematics in Latest Engineering Trends	04-06-21 to 10-06-2021
	A Five day FDP on Wireless Communications	15-05-2021 to 19-05-2021

K.Sangeet Kumar	A Five day FDP on Advanced technologies in Wireless Communication Networks	2-08-2021 to-6-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
K Vijaya Kumari	A Five day FDP on Machine Learning applications in Micro, Nano,VLSI Technologies	21-06-2021 to 26-06-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
Pandiri Jhansi	A Five day FDP on IPR awareness & Patent Prosecution	13 -07-2021 to 17-07-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
K Hima Bindhu	A Five day FDP on Advanced technologies in Wireless Communication Networks	2-08-2021 to-6-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
Dr. K Kanthamma	A Five day FDP on Advanced technologies in Wireless Communication Networks	2-08-2021 to-6-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
Mrs. Y Sugandhi Naidu	A Five day FDP on Advanced technologies in Wireless Communication Networks	2-08-2021 to-6-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
Mrs. T Phanimala	A Five day FDP on Advanced technologies in Wireless Communication Networks	2-08-2021 to-6-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021
Mrs. P Mamathadevi	A Five day FDP on Advanced technologies in Wireless Communication Networks	2-08-2021 to-6-08-2021
	A Five day FDP on Image Processing and its applications	17-08-2021 to 21-08-2021

**18. Awards and Prizes received by students at university, state, national and international level:**

01	K DIVYA	JNTUK inter collegiate taekwondo tournament (under 67 kgs)	DVR & Dr. HS MIC COLLEGE KANCHIKACHERLA VIJAYAWADA	20.02.2022	GOLD MEDAL
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19. Year-wise results of students at UG and PG:

UG/PG	Year	Appeared	Passed	Pass %
UG	II-I	247	60	24.2
	II-II	247	124	50.2
	III-I	216	95	43.98
	III-II	214	90	42.06
	IV-I	226	137	60.62
	IV-II	224	152	67.86
PG (ES)	I	1	0	0
	II	1	0	0

20. Diversity of Students :(Year-wise)

Name of the Programme	% of students within the State	% of students outside the State	% of students from other countries
UG	99.6	0.2	0.2
PG	100	0	0

21. Number of students cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give Category wise data.

Year	NET/SET	GATE	Other Exams	Total
2021-22		01		

22. Student progression/ placement record: Number/ percentage of students proceeded for higher studies Number/percentage of students placed:

Year	% proceeded for higher studies	% of students placed
	UG to PG	
2021-22	22	64.9

### 23. Diversity of Faculty:

Teaching faculty	%
from the same university	75.9
from other universities within the State	11.1
from other States	13.0
from outside the country	-

### 24. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. /D.Lit.:

Ph.D :02

### 25. Present details of departmental infrastructural & other facilities with regard to

- a) Central Library Books and Journals, etc, relevant to Department :6770+6
- b) Departmental Library (books, journals etc.) : 558
- c) Computers and Internet facilities for staff : 03
- d) Total number of class rooms : 12
- e) Class rooms with ICT facility : 12
- f) Students' laboratory : 08
- g) Research laboratories : 01
- h) Seminar Hall : 01
- i) Smart class room : 01
- j) Any other facility LCDs, : 12

### 26. Number of post graduate students getting financial assistance from the university/state / central government :

GATE:00, Fee Reimbursement: M.Tech- 00

### 27. Curricular Aspects:

- a) Does the faculty take initiative in curriculum development process?

NO

- b) Is curriculum suitable to make students globally competitive in the subject? If yes, substantiate.

Yes, the subjects & labs what the students are studying and doing are much related to the global competitions.

- c) Does the department offer program with sufficient no. of electives options.

Yes, during the final year of the course work, students are welcome to prefer elective subjects of their area of interest as a choice.

Electives offered one in III-I semester Two in III-II semester , Two in IV B.Tech. I Semester and one in IV B.Tech. II Semester

d) Is feed-back taken from stakeholder's viz. Students/Alumni/Parents/Employers considered on curriculum aspects?

Yes

e) What is the frequency of curriculum revision? (3/4/5 years or more)

3 Years and prescribed by the University only as we are an affiliated institute to JNTUK.

## 28. Teaching-Learning, Evaluation.

1) Number of teachers preparing & following Academic Teaching plan

100%

2) How many teachers use the following teaching methods:

a. Interactive lecture method using blackboard, Group discussions, Problem solving, Seminars.

100%

b. Use ICT methods to support lectures.

100%

3) Does the department have any mechanism to ensure that entire syllabus is completed?

Yes

4) Do you offer Remedial courses? If yes, Give details.

Yes, We are offering remedial classes to the students who are having the backlogs in every semester and the details for the academic year 2021-22 are given below

S.No	Year	Semester	No. of Students attended
1	II year	II sem.	123
2	III Year	I Sem.	46
3	III Year	II Sem.	57
4	IV Year	I Sem.	116
5	IV Year	II Sem.	34
Total			376

5) **What is the method for conducting internal evaluation?**

The criterion adopted is as directed by the University. All the students are familiar about the transparency in internal assessment. The internal marks for the student is awarded by taking sum of best mid and the corresponding on-line. The internal assessment is made by the University. In spite of all the above aspects of the students, their behavioral aspects, independent learning and communication skill etc. are also taken into consideration during the assessment of a student during the lab marks evaluation.

**29. Teacher Performance:**

1) **Whether the performance of the teacher assessed by the students? If yes, are the feedback reports analyzed and suggestions communicated to teachers?**

Yes

2) Number of teachers getting a) Very Good 29 b) Good 8  
c) Average 01 remarks from students.

3) **Whether any facility available in the department to get suggestions from students on infrastructural facilities available in the department?**

Yes

4) **Are the suggestions received from students used for improvement of facilities?**

Yes

5) **Do teachers submit Self-Appraisal Reports? Are these reports appraised by HOD and forwarded to the management with comments?**

Yes, yearly Faculty appraisal forms are collected

**30. List the distinguished alumni of the department (maximum 10)**

S.NO	REG.NO	NAME OF THE STUDENT	DESIGNATION	COMPANY NAME	CTC
1	18MH1A04C9	MATUPARTHI MANOJ SAI	SOFTWARE ENGINEER	MAERSK	9.90 LPA
2	19MH5A0415	SIVA BHANUPRASAD AMJURI	ASSOCIATE ENGINEER	ALTIMETRIK	7.00 LPA
3	19MH5A0421	CHAPPAGADDA SRI LAKSHMI	PROJECT ENGINEER	WIPRO	6.50 LPA
4	18MH1A0413	DESINA LAVANYA	BUSINESSS DEVELOPMENT TRAINEE	ZELF STUDIE	6.00 LPA

5	18MH1A0421	GAYATHRI KANDALA	BUSINESSS DEVELOPMENT TRAINEE	ZELF STUDIE	6.00 LPA
6	18MH1A0437	PALAPARTHI RAVI KRISHNA	BUSINESSS DEVELOPMENT TRAINEE	ZELF STUDIE	6.00 LPA
7	18MH1A0477	KARTHIK MEDIBOINA	SOFTWARE ENGINEER	TECHIGAI	6.00 LPA
8	18MH1A0484	NANDIGAM KRANTHI KUMAR	BUSINESSS DEVELOPMENT TRAINEE	ZELF STUDIE	6.00 LPA
9	18MH1A0494	RASAMSETTI CHARAN	BUSINESSS DEVELOPMENT TRAINEE	ZELF STUDIE	6.00 LPA
10	18MH1A04A7	BALISETTI SRAVANI	BUSINESSS DEVELOPMENT TRAINEE	ZELF STUDIE	6.00 LPA

31. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

### Seminars

S. No.	Gap identified	Action taken	Date	Resource Person with designation	% of students present
1	MEMS switches are lagging	A seminar on MEM switches	26-02-2022	Dr.N.V.Rao, Professor, JNTUK	65
2	Awareness on Ethical values in Technical education	Seminar on "Inculcating Human Values and Ethics in Technical Education	13-10-2021	Dr.M.Dhanalakshmi, Professor, JNTUH	60
3	To learn latest protocols to implement various applications	Seminar on IOT	20-07-2021	Mr.Sudheer Certified trainer T- Hub, Surampalem	65

### Workshops

S. No.	Gap identified	Action taken	Date	Resource Person with designation	% of students present
1	FPGA Implementation for digital circuits are lagging	Workshop on Implementation for digital circuits	12-11-2021 & 13-11-2021	Mr.P.Murali, Hyderabad	60
2	Applications of communication technologies	Workshop on applications of communication technologies	14-02-2022	Dr. K.Padma priya, Professor, JNTUK	65
3	Usage of modern tools is lagging	Workshop on MATLAB for engineers	16-3-2022	Dr.B.T.Krishna, Professor, UCEV, JNTUK	60

**32.State the Innovative practices adopted in the department.**

- Remedial Classes & Makeup Classes for non-meritorious students.
- Proctor System for close monitoring of the student personal & academic activities.
- Sending monthly attendance, SMS, fee details, academic reports to the parents.
- Regular training on Soft skills, Reasoning, Aptitude.
- Series of workshops on latest technologies through Skyfi Labs, APSSDC, JKC, Campus Connect etc.

**33.Highlight the participation of students and faculty in extension activities.**

Students & Faculty are actively participated in Blood Donation, Swatch Barath, NSS.

**34.Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

**a. Strengths:**

- Most Preferred branch among students for good career pursuits.
- Good number of best rankers are opting the branch.
- Good track record of Student placements.
- Knowledgeed, Experienced and Qualified faculty.
- Good infrastructural facilities.
- Well established state of the art Laboratories with latest configuration and software.
- Established Texas Instruments & Intel Galileo Labs to conduct Lab experiments beyond the academic curriculum prescribed by university.
- Amicable Management ever ready to provide required infrastructural and any other required support to the department.

**b. Weaknesses:**

- R & D and Consultancy associated activities need to be improved.
- Collaborative programs and sponsored projects to be improved.

c. Opportunities:

- The graduates of ECE have multiple opportunities of placements both in hardware and software industry as well as in public sector.
- With focus on increasing indigenous production of IT hardware, the government of India has recently identified Kakinada as Smart city and also fab-city is proposed to be set up in Kakinada which will provide huge Job opportunities for the students of ECE.

d. Challenges:

- Heavy competition as more number of colleges are established in the state and in almost all colleges, ECE branch is offered huge intake.
- Career orientation towards high-end applications , such as NASA, SAC etc. is limited.

35. Future plans of the department:

a. Long term plans-

- To shape the department as a Centre-of-Excellence.
- To host international seminars and conferences.

b. Short term plans

- To strive and improve student pass percentage and placement.
- To groom students to become global leaders in Engineering & Technology.
- To motivate the students to do more of industry related projects and provide them necessary support.

AAA Committee :

Convener: Dr.P.S.V.S.Ravi Kumar *psvsk*

1. Dr.D.V.S.S.S Prasad *D.V.S.S.S*

2. K Manoj Kumar Reddy *K.M.K Reddy*

3. Dr. Y K S SubbaRao *Y.K.S*

4. Dr.G.S.N. Murthy *G.S.N*

Head of Department



Head of the Department  
Electronics & Communications Engineering  
Aditya College of Engineering  
SURAMPALEM-533 437

*ADK*  
PRINCIPAL

PRINCIPAL  
Aditya College of Engineering  
SURAMPALEM-533 437

**DEPARTMENT OF ELECTRONICS & COMMUNICATION  
ENGINEERING**

31/10/2022

**Department Academic Audit Report 2021-22****Internal Experts:**

1. Dr. G. Ramakrishna, Prof & HOD - ECE
2. Mr. G. Veerapandu, Assoc. Prof., ECE
3. Mr. T. Veerraju, Assoc Prof., CSE

**ACADEMIC AUDIT REPORT**

<b>I-Department Profile</b>		
<b>S. No</b>	<b>Description</b>	<b>Response</b>
1	Name of the Department	ELECTRONICS AND COMMUNICATION ENGINEERING
2	No: of Full time Permanent Faculty	38
3	No: of Adjunct Faculty	NIL
4	No: of Contract Faculty	NIL
5	No: of Guest Faculty	NIL
6	No: of Academic Programmes	02
7	No: of core courses and electives in each programme	
I	B. Tech	Core courses :30, Electives : 7
ii	M. Tech- ES	Core Courses :5, Electives: 6
8	Student Strength	
I	II Year (Sanctioned )	240
ii	III Year (Sanctioned )	240
iii	IV Year (Sanctioned )	240

**II – Curricular Aspects: Teaching, Learning and Evaluation**

	<b>Criteria</b>	<b>Observations of the Expert Committee</b>	<b>Suggestions for Improvement</b>
10	Coverage of syllabus	95%	Suggested to give as seminar topics for the students to complete the remaining 5%.
11	Course Files well maintained by faculty for all courses?	YES	Higher order POs are seemingly less mapped. Take some extra measures to map higher order POs
12	Lab manuals and Records issued for all labs?	YES	
13	Student Attendance registers maintained well	YES	
14	Innovations in Teaching Introduced	YES	Take more support of ICT facilities and critic reviews
15	Add on Courses/ Skill Development Courses Conducted	YES	
16	Use of Supplementary Teaching tools and Application of ICT	YES	
17	Remedial Courses Conducted	YES	
18	Conduct of Internal Examinations	YES	
19	Quality of Internal Question Paper.	GOOD	Still improvement in taxonomy level is suggested
20	Quality of Assignments	GOOD	

21	Result Analysis	152/224 = 67.86%	Result need to be improved
22	Student Feedback on Teaching & Learning obtained twice / semester	YES	
23	Course End Survey conducted for two semesters for all classes.	YES	
24	Classrooms – adequacy	YES	
25	Laboratories –Adequate number of labs and each equipped to perform experiments as prescribed?	YES	
26	<b>Library</b> - procured as per norms last year	YES	
27	<b>Computer labs</b>		
I	Required number of computer labs available	YES	
ii	Computers in the labs have requisite configuration	YES	
28	Teachers concerned counselled for poor feedback	YES	
29	<b>Improvement in Attainment of COs and POs/PSOs</b>		
I	COs written well for each course & students informed	YES	Taxonomy level of few COs may be improved.
II	CO targets attained in all courses	Partially attained	

III	PO/PSO targets attained for the program	YES	
IV	Implemented Action plans proposed last year	YES	

<b>III - Research, Consultancy and Extension.</b>			
	<b>Criteria</b>	<b>Observations of the Expert Committee</b>	<b>Suggestions for Improvement</b>
30	No: of Research Guides in the Department	NIL	As the department recently sanctioned research center , appeal for act as research guide under JNTUK.
31	Research Papers published during the assessment period	14	Need improvement
32	Books Published	NIL	
33	Chapters in Books	02	Need improvement
34	Seminars/Workshops/Training Programmes Conducted	Seminar 3, workshop 3	
35	Ongoing/ New MoU	21	
36	Research Collaborations	TEXAS INSTRUMENTS	
37	Awards/Achievements/Recognitions of students and Teachers	05	

38	Projects / schemes funded by AICTE – Applied/ progress / completed.	NIL	
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<b>IV – Quality of Admitted Students. Placements &amp; Higher Education</b>			
39	I year - Last rank admitted in open category during this year Vs. last year	65961/ 91172	
40	Lateral Entry- Last rank admitted	2325	
41	No. of Campus placements of last batch	146	
42	No. of Off-campus placements of last batch	78	
43	Improvement over last year in total placement	102 TO 146	
44	Improvement in students who opted for higher education	YES	
45	Students who turned entrepreneurs from last 3 batches	02	



**Dr. G. Ramakrishna,  
Prof & HOD – ECE**



**Mr. G. Veerapandu,  
Assoc. Prof., ECE**



**Mr. T. Veerraju,  
Assoc Prof., CSE**



**EXTERNAL MEMBER  
PROFESSOR OF ECE  
DEPARTMENT OF ECE  
UCEK JNTUK, KAKINADA.**

Head of the Department  
Electronics & Communications Engineering  
Aditya College of Engineering  
SURAMPET 523 437

**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING****Department Academic Audit – Action Taken Report****Academic Year: 2021-22**

09/11/2022

<b>I – Curricular Aspects: Teaching, Learning and Evaluation</b>				
<b>S. No</b>	<b>Criteria</b>	<b>Observations of the Expert Committee</b>	<b>External Auditor Recommendations /Suggestions</b>	<b>Action Plan</b>
1	Coverage of syllabus	95%	Suggested to give as seminar topics for the students to complete the remaining 5%.	Faculty are instructed to update their course files year wise with all necessary documents.
2	Course Files well maintained by faculty for all courses?	YES	Higher order POs are seemingly less mapped. Take some extra measures to map higher order POs	Faculty are instructed to update their course files year wise with all necessary documents.
3	Innovations in Teaching Introduced	YES	Take more support of ICT facilities and critic reviews	Faculty are instructed to take teach with innovative teaching methodologies
4	Add on Courses/ Skill Development Courses Conducted	YES	Mandatory to complete certifications	In every semester conducting Add on Courses/ Skill Development Courses
5	Remedial Courses Conducted	YES	Need to increase more Lecture classes	Conducting Remedial Classes for academically week students every semester.
6	Quality of Internal Question Paper.	GOOD	Still improvement in taxonomy level is suggested	Maintaining quality in (MID) Internal Question Paper as per OBE/OBA
7	Result Analysis	$152/224 = 67.86\%$	Result need to be improved	Trying to improve result of the students by conducting Tutorial and Remedial classes.
8	Student Feedback on Teaching & Learning obtained twice / semester	YES	Maintain the impact analysis on the feedback	Feedback collecting, analyzing and taking action
9	Course End Survey conducted for two semesters for all classes.	YES	Maintain the impact analysis on the Course end survey	Collecting course end survey, analyzing and taking action

<b>II Improvement in Attainment of COs and POs/PSOs</b>				
<b>S. No</b>	<b>Criteria</b>	<b>Observations of the Expert Committee</b>	<b>External Auditor Recommendations /Suggestions</b>	<b>Action Plan</b>
1	COs written well for each course & students informed	YES	Taxonomy level of few COs may be improved.	Faculty are instructed to follow and update their course files every year as per OBE/OBA
2	CO targets attained in all courses	Partially attained	Remedial action is proposed for non-attained courses	Remedial action is proposed for non-attained courses
3	PO/PSO targets attained for the program	YES	Need to improve attainment	Faculty are instructed to follow OBE/OBA

<b>III - Research, Consultancy and Extension.</b>				
<b>S. No</b>	<b>Criteria</b>	<b>Observations of the Expert Committee</b>	<b>External Auditor Recommendations /Suggestions</b>	<b>Action Plan</b>
1	Research Papers published during the assessment period	14	Publications need to improve	FDP will be conducted by inviting research experts to guide the faculty members to write quality research papers and publish in SCI/Scopus indexed papers Institute has been initiated providing incentives for faculty members for their quality/indexed publications. Regarding the research seed money
2	Books Published Chapters in Books	NIL	Encourage the faculty to publish the Books/Book Chapters	Institute has been initiated providing incentives for faculty members for their quality/indexed publications.

4	Seminars/Workshops/Training Programmes Conducted	Seminar 3, workshop 3	Need to conduct more seminars/workshops/ Guest Lectures	Trying to organize more no. of Seminars /Workshops /Training Programmes Guest Lectures
5	Ongoing/ New MoU	21	Need to improve and Efforts are in progress .	Trying to improve and Efforts are in progress .
6	Research Collaborations	TEXAS INSTRUMENTS	Need to improve research collaborations with reputed industry/ academia	Department will encourage to faculty members to apply for research funding by exploring Govt./Private research funding opportunities. As per the norms , the department will apply when the university calls for applications for Research Centre

<b>IV – Quality of Admitted Students. Placements &amp; Higher Education</b>				
<b>S. No</b>	<b>Criteria</b>	<b>Observations of the Expert Committee</b>	<b>External Auditor Recommendations /Suggestions</b>	<b>Action Plan</b>
1	No. of Campus placements of last batch	146	Try to enhance average salary package	Activities such as soft skill development, industry visits, industry internship, etc. will be conducted to increase placements. More core companies will be attracted to the department for placement by starting MoUs and collaboration with them.
2	No. of Off-campus placements of last batch	78	Need to improve	Students of final year will be encouraged to attend Off-campus placements. Students are encouraged to take placement related training, skill based training. Necessary workshop/lecturer session will be organized.
3	Improvement in students who opted for higher education	YES	Provide the awareness regarding PG courses and other Higher education courses and their	Students of final year will be encouraged to apply for higher education like M.Tech & MBA

			importance.	
4	Students who turned entrepreneurs from last 3 batches	02	Provide the awareness about Startups and their importance.	Alumni association will be strengthened and collaborating with them, Workshop, internship, industry driven elective, expert lectures etc. will be conducted to mentor the students



**HOD-ECE**

Head of the Department  
 Electronics & Communications Engineering  
 Aditya College of Engineering  
 SURAMPALEM-533 437



**PRINCIPAL**

PRINCIPAL  
 Aditya College of Engineering  
 SURAMPALEM-533 437



# ADITYA COLLEGE OF ENGINEERING

Approved by AICTE, Permanently Affiliated to JNTUK & Accredited by NAAC  
Recognized by UGC under section 2(f) of UGC Act 1956

Aditya Nagar, ADB Road, Surampalem - 533 437, E.G.Dist., Ph: 99631 76662.

## ACADEMIC AND ADMINISTRATIVE AUDIT OF THE DEPARTMENT

Academic Year: 2021-22

1. Name of the Department: Computer Science and Engineering

2. Year of establishment: 2008

3. Courses offered: UG, PG

Year	UG	PG
2021-22	B. Tech	M. Tech-CSE

4. Courses introduced during last 4 years: 2

5. Details of programs discontinued, if any, with reasons: -Nil-

6. Number of teaching posts sanctioned, filled and vacant.

	Sanctioned	Filled
Professor	4	4
Associate Professor	9	9
Assistant Professor	12	12
Total	25	25

7. Faculty profile with name, qualification, designation, experience, nature of appointment (confirmed/ probation/temporary):

S. No	Name	Designation	Qualifications	Teaching/Research Experience in years	Nature of appointment
1	Dr. Pullela S.V.V.S.R. Kumar	Professor	Ph.D	21	Regular
2	Dr. G.S.N.Murthy	Professor & HOD	Ph.D	23	Regular

3	Dr.B.Annapurna	Professor	Ph.D	23	Regular
4	M.Uma Devi	Associate Professor	Ph.D	19	Regular
5	Dr. B. Venkata Rama Krishna	Associate Professor	Ph.D	17	Regular
6	T.Veerraju	Professor	M.Tech (Ph.D)	21	Regular
7	V.Chandra Sekhara Rao	Associate Professor	M.Tech (Ph.D)	17	Regular
8	V.Anantha Lakshmi	Associate Professor	M.Tech (Ph.D)	13	Regular
9	U.N.P.G.Raju	Associate Professor	Ph.D	7	Regular
10	T.Satya Kumari	Assistant Professor	M.Tech	11	Regular
11	N.Praveen	Associate Professor	M.Tech	11	Regular
12	Y.Raviraju	Associate Professor	M.Tech	13	Regular
13	Yanamadala Durga Prasad	Associate Professor	M.Tech	10	Regular
14	P.N.S.Lakshmi	Assistant Professor	M.Tech	11	Regular
15	V.Veera Prasad	Assistant Professor	M.Tech	8	Regular
16	Gandikota V R Pavankumar	Assistant Professor	M.Tech	4	Regular
17	V.Neelima	Assistant Professor	M.Tech	5	Regular
18	M.V.B. Murali Krishna	Assistant Professor	M.Tech	11	Regular
19	Kota Kalyana Venkata Satyanarayana	Assistant Professor	M.Tech	1	Regular
20	Mr.Attru Hanumantha Rao	Assistant Professor	M.Tech	4	Regular
21	Mr.Koppiseti Giridha	Assistant Professor	M.Tech	11	Regular
22	Yadavalli Suresh Kumar	Assistant Professor	M.Tech	3	Regular
23	V Naga Raju	Assistant Professor	M.Tech	0	Regular
24	I Nakeeran	Assistant Professor	M.Tech	0	Regular

25	G Ponmalar	Assistant Professor	M.Tech	0	Regular
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**8. Programme-wise Student Teacher Ratio: (Average of 4 Years):**

**UG: 20:1**

**PG: 12:1**

**9. Number of academic support staff (technical) and administrative staff sanctioned, filled and vacant:**

S. No.	Post	Sanctioned Posts	Filled	Actual
1	Laboratory Assistant	10	10	
2	Clerk (office)	1	1	
3	Laboratory Attendant	-	-	
4	Peon	1	1	
5	Other	1	1	

**10. Thrust areas of research as identified by the department:**

Data Analytics, Cloud Computing, Image Processing and Security in Fog Computing, Internet of Things, Deep learning, Machine Learning.

**11. Special research laboratories sponsored by / created by industry or corporate bodies:**

-Nil-

**12. Publications:**

S.No	Authors	Title of The Paper	Journal Name with ISSN No.	Year of Publication
1	Dr. B. Annapurna	The Element of Emotional Intelligence and their Impact on Social Relation	The Element of Emotional Intelligence and their Impact on Social Relation 1308-5581	2021
2	Dr. B. Annapurna	Proposing a reliable method of securing and verifying the credentials of graduates through blockchain	EURASIP Journal on Information Security ISSN: 2510-523X	2021
3	Dr. B. Annapurna	Air Pollution: Effect on Human Health and Live Reporting Using IOT Technology	Turkish Journal of Physiotherapy and Rehabilitation 2651- 4451	2021

4	Dr. B. Annapurna	PeltierRadiator: TheSmart Heating/Cooling System for Vehicles with IOT Reporting	Turkish Journal of Physiotherapy and Rehabilitation 2651- 4451	2022
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### 13. Conferences:

S. No	Authors	Title of The Paper	ConferenceName	ISBN No.	Year
1	Dr. Pullela SVVSR Kumar	A Texture unit pattern approach for fabric classification	3 <sup>rd</sup> International Conference on Machine Intelligence & Signal Processing	978-981-19-0840-8	23-25, September 2021
2	Dr. G.S.N.Murthy	A Texture unit pattern approach for fabric classification	3 <sup>rd</sup> International Conference on Machine Intelligence & Signal Processing	978-981-19-0840-8	23-25, September 2021
3	Veduri Veera Prasad	Mosquito Type Identification using Convolution Neural Network	3rd International Conference on Smart Electronics and Communication	DOI: 10.1109/ICOSEC54921.2022.9951979.html	2022.

### 14. Incentives granted for publications/Conferences attended/memberships:

S. No	Name of the teacher	Name of the Publication/Conference/ Membership	Amount Granted
1	Dr. Pullela SVVSR Kumar	3rd International Conference on Machine Intelligence & Signal Processing	5000
2	Dr. G.S.N.Murthy	3rd International Conference on Machine Intelligence & Signal Processing	4500
		CSI Membership	11800
3	Dr. B. Annapurna	International Conference on Advances in Computer Engineering & Technology(ICACET-2021)	7500
		CSI Membership	11800
4	M. Uma Devi	CSI Membership	11800
5	V Chandra Sekhara Rao	CSI Membership	11800
6	A.Hanumantha Rao	CSI Membership	11800
7	Y Ravi Raju	CSI Membership	11800
8	Y. Durga Prasad	CSI Membership	11800
9	P N S Lakshmi	CSI Membership	11800

10	V Veera Prasad	CSI Membership	11800
11	V.Neelima	CSI Membership	11800
12	M. V Bala Murali Krishna	CSI Membership	11800
13	K.K.V. Satyanarayana	CSI Membership	11800
14	K. Giridhar	CSI Membership	11800

**15. Consultancy services provided, name of the teacher/s and income generated:** Yes Income generated: Rs. **1,93,967**

**16. Details of Industrial/Academic Experts invited as resource persons for Refresher courses, Seminars, Workshops:** Yes

1. M.M. Naidu, Retired Professor, S. V. University, Tirupati.
2. N. Prakash, Devops Engineer, OPTUM Global Solutions, Hyderabad.

**17. Details of teachers participated in Refresher courses, Orientation courses, Seminars, Workshops, Conferences at national and international levels. (Participant, presented paper, chaired the session):**

S. No	Name of the Faculty	Name of the Programme	Host Institution
1	Pullela SVVSR Kumar	3rd International Conference on Machine Intelligence & Signal Processing	NIT Arunachal pradesh
	Dr. G.S.N.Murthy		
2	Dr. B. Annapurna	International Conference on Advances in Computer Engineering & Technology(ICACET-2021)	Aditya College of Engineering & Technology
3	T.Veerraju	Workshop on Transformation Through NAAC Accreditation Process, A National Level Workshop for Higher Educational Institutions	IAE collegiate education & Technical education
4	T.Veerraju	Workshop on Research Using SCOUPUS/SCI Database	Oriental Institute of Technology
5	V Chandra Sekhara Rao	Workshop on React JS	Lakki reddy Bali reddy College of Engineering
	K.K.V. Satyanarayana		
6	T.Satya Kumari	Workshop on Fundamentals of Deep Learning	Vishnu Institute of Technology
7	T.Satya Kumari	Workshop on Microsoft Azure Fundamentals	JNTU Kakinada
	V Veera Prasad		
8	P N S Lakshmi	Workshop on Hands on Experience of Data Science using Python	Aditya College of Engineering
	V.Neelima		
9	Y.Suresh Kumar	Workshop on Python Programming	Brainovision solutions
10	T.Satya Kumari	Workshop on Citation Tools&	CVR Engineering college
	N.Praveen		
	P N S Lakshmi		

	V.Neelima	Techniques	
	A.Hanumantha Rao		
11	Dr. Pullela S V V S R Kumar	A Five day FDP on "Image and Speech processing"	Aditya College of Engineering
	Dr.G.S.N.Murthy		
	Dr. B. Annapurna		
	Dr. M.Uma Devi		
	T.Veerraju		
	V.Chandra Sekhararao		
	Dr.U.N.P.G.Raju		
	V.Anantha Lakshmi		
	Y.Ravi Raju		
	T.Satya Kumari		
	N Praveen		
	P.N.S.Lakshmi		
	V Veera Prasad		
	G V R Pavan Kumar		
	V.Neelima		
	M M V Bala Murali Krishna		
	K Kalyana Venkata Satyanarayana		
	K.Giridhar		
	A.Hanumantha Rao		
	Y. Suresh Kumar		
	V Naga Raju		
	I Nakeeran		
12	A.Hanumantha Rao	One week FDP On “Advancements in Data Analytics using Informatica”	Vignan Institute of Engineering for Women
13	K.Giridhar	A Five Days Virtual FDP on "Simulations & Emulations of self Organized Networks"	
14	M M V Bala Murali Krishna	FDP on “ Advanced Networking Concepts"	E&ICT Academy
15	N Praveen	Five Days FDP on “ IPR Awareness and Patent Prosecution “	Oriental Institute of Science & Technology
	V.Neelima		
16	P.N.S.Lakshmi	A Five day FDP on ”Role of Machine Intelligence for Information Retrieval”	GMR Institute of Technology
17	N Praveen	One Week National Level FDP on "Research Areas in Artificial Intelligence & Machine Learning With Case Studies	International School of Technology & Sciencesfor Women
18	Dr.U.N.P.G.Raju	A Five day FDP on “Research and Application Perspectivesin Artificial Intelligence and Machine Learning”	Sridevi Women’s Engineering College
	V.Anantha Lakshmi		
19	Dr. B. Annapurna	One Week FDP on "Advanced Data Science andits Applications"	Aditya College of Engineering

20	Dr. M.Uma Devi	A Five day FDP on “ Recent Trends & Advancements in Computer Science”	SS College of Engineering
	T.Satya Kumari		
21	Dr. Pullela S V V S R Kumar	One week national online FDP on “Multi Technologies	Aditya Engineering College
	Dr.G.S.N.Murthy		
	T.Veerraju		
	V.Chandra Sekhararao		
	Y.Ravi Raju		

**18. Awards and Prizes received by students at university, state, national and international level:**

S. No	Name of the Student	Achievement	Field/Area/Event
1	A.Sri sai varsha	2 <sup>nd</sup> prize in poster presentation	MEDHA 2021

**19. Year-wise results of students at UG and PG:**

UG/PG	Year	Appeared	Passed	Pass %
UG	II B. Tech I Sem.	114	36	25
	II B. Tech II Sem.	114	84	58.33
	IIIB. Tech I Sem.	126	83	65.87
	III B. Tech II Sem.	126	54	42.86
	IV B. Tech I Sem.	110	68	61.82
	IV B. Tech II Sem.	109	88	80.73
PG	I M. Tech I Sem.	6	2	33.33
	I M. Tech II Sem.	6	2	33.33

**20. Diversity of Students: (Year-wise)**

Name of the Programme	% of students within the State	% of students outside the State	% of students from other countries
UG (B. Tech)	95.70	2.58	1.72
PG (M. Tech)	100	-	-

**21. Number of students cleared Civil Services and Defense Services examinations, NET,SET, GATE and other competitive examinations? Give Category wise data.**

**Year NET/ SET GATE Other Exams (PGCET): Total - 9**

**22. Student progression/ placement record: Number/ percentage of students proceeded**

**for higher studies Number/percentage of students placed: Year %**

**proceeded for higher studies % of students placed**

Year	% proceeded for higher studies	% of students placed
2020-21	UG to PG	

**23. Diversity of Faculty:**

Teaching faculty	%
from the same university	86.97
from other universities within the State	10.91
from other States	--
from outside the country -	--

**24. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. / D.Lit.: NIL****25. Present details of departmental infrastructural & other facilities with regard to**

a) Central Library Books and Journals, etc, relevant to Department: Titles: 620

Volumes: 4080

Journals: 8

b) Departmental Library (books): 641

c) Computers and Internet facilities for staff: 4

d) Total number of class rooms: 6

e) Class rooms with ICT facility: 6

f) Students' laboratory: 6

g) Research laboratories: - 1

h) Seminar Hall: 1

i) Smart class room: 7

j) Any other facility LCDs: 13

**26. Curricular Aspects:****a) Does the faculty take initiative in curriculum development process?**

We are affiliated to JNTUK, Kakinada. We follow the University Curriculum.

**b) Is curriculum suitable to make students globally competitive in the subject?**

Yes, the theory subjects and laboratories those are included in the curriculum, which related to the industrial requirements globally.

**c) Does the department offer program with sufficient no. of electives options?** Yes, as per the curriculum prescribed by the university, students can choose four elective from a pool of subjects of their choice.

**d) While developing curriculum, is feed-back taken from stakeholders viz. Students/Alumni/Parents/Employers considered?**

Yes

**e) What is the frequency of curriculum revision? (3/4/5 years or more):** 3 years

**27. Teaching-Learning, Evaluation.**

1) Number of teachers preparing & following Academic Teaching plan : 100%

2) How many teachers use the following teaching methods?

**a) Interactive lecture method using blackboard, Group discussions, Problem solving, Seminars: 100%**

**b) Use ICT methods to support lectures: 100%**

**3) Does the department have any mechanism to ensure that entire syllabus is Completed?**

There is a review of syllabus for every fortnight. If there is any lagging in the Syllabus, the faculties are instructed to complete the syllabus by taking the extra classes.

**4) Do you offer Bridge/Remedial courses? If yes, Give details.**

Yes, we are offering Remedial classes for weak students.

**5) What is the method for conducting internal evaluation?**

There is complete transparency in the internal assessment. The criterion adopted is as directed by the university.

- At the beginning of the semester, faculty members inform the students about the various components in the assessment process during the semester.
- The internal assessment test schedules are prepared as per the university and communicated to the students well in advance.
- To ensure proper conduct of formative tests, two invigilators are assigned to each hall. Evaluation is done by the course handling faculty members within three days from the date of examination.
- The corrected answer scripts at random are verified by HOD to ensure the standard evaluation process.
- The corrected answer papers of the students are distributed to them for the verification by the students and any grievance is redressed immediately. The marks obtained by the students in internal assessment tests are displayed on the department notice board.
- The marks obtained by the students in internal assessment tests are uploaded periodically on the university web portal along with their attendance.
- Noting the values in observation and validating the theoretical aspects student must submit lab record regularly.
- Day to day performance of the students is assessed for every experiment which includes regularity, performance, viva and the promptness in submitting the record.
- For lab courses, the marks/grade scored by the student for each experiment is indicated in the observation/record. The independent learning, practical approach to the real-time applications is tested by viva-voice for laboratory courses.
- For the quality of the projects, the evaluation is done by Project Review Committee along with the project guides.
- To ensure the transparency and curb the malpractices the university has introduced a jumbling system and theory end examinations are conducted at a center other than the college.



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**30. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.**

S.No	DATE FROM – TO	NAME OF WORKSHOP/SEMINAR	RESOURCE PERSONS
1	8 <sup>th</sup> June to 11 <sup>th</sup> June 2021	A Four day Work shop on “ Scopus database”	Dr. Durgesh Nandan, CLEducate, Bengaluru
2	15 <sup>th</sup> September 2021	A seminar on” Machine Learning algorithms used in real applications”	Dr. V. Vijay Kumar, Professor of CSE, Anurag Group of Colleges
3	14 <sup>th</sup> April to 15 <sup>th</sup> April 2021	A Two workshop on” Enhancement of Coding Skills”	N.Babji, CEO, T-Hub
4	9 <sup>th</sup> February 2021	A seminar on “Cyber Security”	E. Chaitanya, Wells Fargo

**31. State the Innovative practices adopted in the department.**

1. Department event club activities.
2. Department newsletter.
3. Internships
4. Innovative projects.

**32. Highlight the participation of students and faculty in extension activities.**

The faculty and students participate in various extension activities organized at university level like NSS, university fest, Blood donation camps, Yoga, Swatch bhara and Public survey which are relate to the state government.

**33. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

**a. Strengths:**

- Well-equipped laboratory, library and class room facilities.
- Dynamic, dedicated and experienced (**Average 10+ years**) faculty with excellent academic /industry experience.

- Demonstrate a high level of interaction between faculty & students through counseling activities.
- Online access of course content through college knowledge portal to students.
- MIC facilitates the students update with recent trends prevailing in IT industry.
- Aptitude & Soft Skills training for students from their first year into the college.
- Co-Cubes & AMCAT assessment is done and students are motivated to acquire the required skills.

**b. Weaknesses:**

- The students are examination oriented while industry is stressing on knowledgebase.
- Students enrolled come from guided type of education system.
- Resistance from students to adapt to out-come based system.
- Very few students are innovating and research oriented.

**c. Opportunities:**

- Presently enjoying the “most preferred branch” status.
- State bifurcation, offers a big opportunity for growth in IT sectors especially in and around “Kakinada-Smart City”
- Increase in e-learning Practices, new trends in teaching methods and multi-disciplinary professional education.
- Provision to attend FDP/SDP’s, Seminars, Workshops to enhance Knowledge.

**d. Challenges:**

- Train the students according to industry needs as technology changes frequently.
- Transition of technical education from theory-base to application base.
- Non-availability of IT companies in and around, exposing students to the industry requirements is becoming difficult.

**34. Future plans of the department:**

**a. Long term plans-**

- More focus on tie-ups with Industry and eminent Universities to enhance quality in curricular standards.
- Planning for adapting Outcome based education

**b. Short term plans –**

- To establish university recognized research Centre.
- To Host an International Conference.
- Training the students to make them Industry Ready
- More focus on R & D Activities



**Head of Department**  
Computer Science & Engineering  
Aditya College of Engineering  
SURAMPAL\_M-533 437

**AAA Committee:**

**Convener:**

Dr. Pullela S.V.V.S.R. Kumar, Dean (A & A)

**Members:**

1. Dr. D.V.S.S.S.V. Prasad, Coordinator-IQAC

2. Dr. G. Rama Krishna – HoD, ECE

3. Dr. Y.K.S. Subba Rao – HoD, Mech.

4. K. Manoj Kumar Reddy – HoD, EEE

PRINCIPAL  
Aditya College of Engineering  
SURAMPALEM-533 437



# ADITYA COLLEGE OF ENGINEERING

Approved by AICTE, Permanently Affiliated to JNTUK & Accredited by NAAC  
Recognized by UGC under Sections 2(f) and 12(B) of UGC Act, 1956  
Aditya Nagar, ADB Road, Surampalem - 533 437, E.G.Dist., Ph: 99631 76662.

## Department of Computer Science & Engineering Department Academic Audit Report analysis Academic Year: 2021-22

### Internal Experts:

1. Dr. Pullela S.V.V.S.R. Kumar, Dean (A & A)
2. Dr. D.V.S.S.S.V. Prasad, Coordinator-IQAC
3. Dr. G. Rama Krishna – HoD, ECE
4. Dr. Y.K.S. Subba Rao – HoD, ME.

### External Expert:

Dr. Y Venkateswarlu, Professor, Dept. of CSE, BVC College of Engineering, AP.

## ACADEMIC AUDIT REPORT

I-Department Profile			
S. No	Description	Response	
1	Name of the Department	Electrical and Electronics Engineering	
2	No: of Full time Permanent Faculty	20	
3	No: of Academic Programmes	2	
4	No: of Core courses, Mandatory courses, Audit courses and Electives in each programme		
i	B. Tech	Core: 40, Mandatory courses:4 and Electives: 6	
ii	M. Tech	Core: 9, Audit courses:4 and Electives: 4	
II – Curricular Aspects:Teaching, Learning and Evaluation			
	Criteria	Observations of the Expert Committee	Suggestions for Improvement
5	Coverage of syllabus	Completed as per schedule	Need to conduct more Guest Lectures
6	Course Files well maintained by faculty for all courses?	Yes	Provide link for Video Lectures to promote fast learners

7	Lab manuals and Records issued for all labs?	Yes	--
8	Student Attendance registers maintained well	Yes	--
9	Innovations in Teaching introduced	Yes	--
10	Add on Courses/ Skill Development Courses conducted	Yes	Make it mandatory to complete certification
11	Use of Supplementary Teaching tools and Application of ICT	Yes	Attend workshops so as to teach the subjects
12	Remedial Classes Conducted	Yes	Needs enhancement so that the pass percentage of the students is improved
13	Conduct of Internal Examinations	Yes	--
14	Quality of Internal Question Paper.	Good	Usage of BTL can be improved
15	Quality of Assignments	Yes	--
16	Result Analysis	Yes	Need to improve pass percentage
17	Student Feedback on Teaching & Learning obtained twice / semester	Yes	Maintain the impact analysis on the feedback
18	Course End Survey conducted for two semesters for all classes.	Yes	--
19	Classrooms – adequacy	Yes	--
20	Laboratories –Adequate number of labs and each equipped to perform experiments as prescribed?	Yes	--
21	Library- procured as per norms last year	Yes	--
22	<b>Computer labs</b>		
23	Required number of computer labs available	Yes	--
i	Computers in the labs have requisite configuration	Yes	--

ii	Teachers concerned counselled for poor feedback	Yes	Faculty who got less feedback may be asked to attend FDP/ NPTEL courses
24	<b>Improvement in Attainment of COs and POs/PSOs</b>		
25	COs written well for each course & students are informed about the same	Yes	Some subjects need redefining Cos with higher BT levels
ii	CO targets attained in all courses	Maximum courses attained	Remedial action is proposed for non-attained courses
iii	PO/PSO targets attained for the program	Need to improve attainment	--
iv	Implemented Action plans proposed last year	1.HoD had implemented fortnight verification. 2. HoD implemented to conduct extra classes to increase the pass percentage.	Suggested to enroll in advanced courses thus NPTEL and Certification like Microsoft/ CISCO/AWS

### III - Research, Consultancy and Extension.

	<b>Criteria</b>	<b>Observations of the Expert Committee</b>	<b>Suggestions for Improvement</b>
26	No: of Research Guides in the Department	1	--
27	Research Papers(conferences and Journals) published during the assessment period	19	Publications need to improve
28	Books/Chapters Published	2	Encourage the faculty to publish the books
29	Seminars/Workshops/Training Programmes Conducted	7	Need to conduct more seminars/ workshops
30	Expert lectures organised for students', faculty	2	Need to conduct more Expert/Guest Lectures
31	Ongoing/ New MoU	2	----
32	Research Collaborations	---	Need to improve research collaborations with reputed industry/ academia

33	Awards/Achievements/Recognitions of students and Teachers	Nil	Need to apply number of research projects with DST/AICTE and other sponsoring agencies
34	Ongoing and newly implemented research Projects	Yes	Need to improve the Consultancy service
35	Consultancy Services	Applied	Apply for number of schemes offered by the AICTE with suitable quality proposals

#### **IV – Quality of Admitted Students. Placements & Higher Education**

36	I year - Last rank admitted in open category during this year Vs. last year	126277 Vs. 131803	--
37	Lateral Entry- Last rank admitted	7170	--
38	Improvement in quality of admitted students	Yes	--
39	No. of Campus placements of last batch	Offers/ Placements : 162 Placed students: 74	Try to enhance average salary package
40	No. of Off-campus placements of last batch	4	--
41	No. of students who joined public services	Nil	Encourage the students to apply for Group/ Civil Services
42	Improvement over last year in total placement	Yes	--
43	No. of students who joined PG programs in India	4	Provide awareness regarding PG courses and their importance
44	Improvement in students who opted for higher education	No	Give Knowledgeable Data regarding Higher education's and their importance
45	Students who turned entrepreneurs from last 3 batches	2	To be improved

46	Strengths of Department	1. Well established state-of-art laboratories and infrastructure. 2. Experienced and Dedicated faculty with excellent academic /industry knowledge 3. Memberships in Professional bodies like ISTE	Improve Case study oriented Lectures for Students
47	Weakness of the Department	1. Predominantly students come from guided education system hence resistance to adapt to outcome based education system 2. This branch is not among the top preferences of the Students because of their limited knowledge about the Industry.	Need to conduct special/orientation classes on English communication

**Convener:**

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4. K. Manoj Kumar Reddy – HoD, EEE

**External Expert:**

Dr. Y Venkateswarlu, Professor, Dept. of CSE, BVC College of Engineering



## Department of Computer Science & Engineering Department Academic Audit – Action Taken Report Academic Year: 2021-22

<b>Curricular Aspects: Teaching, Learning and Evaluation</b>				
S. NO	CRITERIA	OBSERVATIONS OF THE EXPERT COMMITTEE	EXTERNAL AUDITOR RECOMMENDATIONS /SUGGESTIONS	ACTION PLAN
1	Course Files well maintained by faculty for all courses?	Yes	Provide NPTEL Video link for Lectures	All the faculty members are instructed to update their course files year by year with all necessary documents.
2	Add on Courses/ Skill Development Courses conducted	Yes	Make it mandatory to complete certification	Conducting Certification course/Add on Course/ Skill Development Courses every semester.
3	Remedial Classes Conducted	Yes	Need to increase more Lecture classes	Conducting Remedial Classes for academically week students every semester.
4	Quality of Internal Question Paper.	Good	Need to increase quality by appropriate BT level	Maintaining quality in (MID) Internal Question Paper as per OBE/OBA
5	Result Analysis	Yes	Need to improve pass percentage	Trying to improve result of the students by conducting Tutorial and Remedial classes.
6	Student Feedback on Teaching & Learning obtained twice / semester	Yes	Maintain the impact analysis on the feedback	Feed collecting, analyzing and taking action
7	Teachers concerned counselled for poor feedback	Yes	Faculty who got less feedback may be asked to attend FDP/ NPTEL/On-line courses	Feed collecting, analyzing and taking action

<b>Research, Consultancy and Extension.</b>				
<b>S. NO</b>	<b>CRITERIA</b>	<b>OBSERVATIONS OF THE EXPERT COMMITTEE</b>	<b>SUGGESTIONS FOR IMPROVEMENT</b>	<b>ACTION PLAN</b>
8	No. of Research Guides in the Department	0	Need to improve	
9	Research Papers published during the assessment period	13	Publications need to improve	FDP will be conducted by inviting research experts to guide the faculty members to write quality research papers and publish in SCI/Scopus indexed papers  Institute has been initiated providing incentives for faculty members for their quality/indexed publications. Regarding the research seed money
10	Faculty Conferences attended/ published during the assessment period	5	Need to improve	Workshop will be conducted by inviting research experts to guide faculty members to do research and write quality publications.  Institute has been initiated providing incentives for faculty members for their quality/indexed publications.
11	Books/Book Chapters Published	1	Encourage the faculty to publish the Books/Book Chapters	Institute has been initiated providing incentives for faculty members for their quality/indexed publications.
12	Seminars/Workshops/Training Programmes Guest Lectures Conducted	4	Need to conduct more seminars/workshops/ Guest Lectures	Trying to organize more no. of Seminars /Workshops /Training Programmes Guest Lectures
13	Expert lectures organised for students & faculty	2	Need to conduct more Expert/Guest Lectures	Trying to organize more no. of Guest/Expert Lectures

14	Ongoing/ New MoU	3	----	Trying to improve and Efforts are in progress .
15	Research Collaborations	---	Need to improve research collaborations with reputed industry/ academia	Department will encourage to faculty members to apply for research funding by exploring Govt./Private research funding opportunities. As per the norms , the department will apply when the university calls for applications for Research Centre
16	Ongoing and newly implemented research Projects	---	Need to initiate the research Projects	Faculty members will be encouraged to apply for research grants funded through State and Central bodies, and conduct research activities.
17	Consultancy Services	Applied	Apply for number of schemes offered by the AICTE with suitable quality proposals	Department will encourage to faculty members to apply for research funding by exploring Govt./Private research funding opportunities.

#### IV – Quality of Students. Placements & Higher Education

S. NO	CRITERIA	OBSERVATIONS OF THE EXPERT COMMITTEE	EXTERNAL AUDITOR RECOMMENDATIONS /SUGGESTIONS	ACTION PLAN
18	No. of Campus placements of last batch	Offers/ Placements : 162 Placed students: 74	Try to enhance average salary package	Activities such as soft skill development, industry visits, industry internship, etc. will be conducted to increase placements. More core companies will be attracted to the department for placement by starting MoUs and collaboration with them.
19	No. of Off-campus placements of last batch	4	Need to improve	Students of final year will be encouraged to attend Off-campus placements. Students are encouraged to take placement related training, skill based training. Necessary

				workshop/lecturer session will be organized.
20	No. of students who joined public services	Nil	Encourage the students to apply for Group/ Civil Services	Suitable activities will be conducted to encourage in students to qualify in competitive examinations and also give motivation to take up competitive exams
21	No. of students who joined PG programs	5	Provide the awareness regarding PG courses and other Higher education courses and their importance.	Students of final year will be encouraged to apply for higher education like M.Tech & MBA
22	Students who turned entrepreneurs from last 3 batches	---	Provide the awareness about Startups and their importance.	Alumni association will be strengthened and collaborating with them, Workshop , internship , industry driven elective, expert lectures etc. will be conducted to mentor the students

*G.S. Murthy*

**HoD**

*[Handwritten Signature]*

**Principial**

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**Aditya College of Engineering**  
**SURAMPALEM-533 437**