

TEACHING PORTFOLIO



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Cover Letter

When I was interviewed for the teaching position as an Assistant Professor to the dept of ECE at SRITW, I was with a meager interest in teaching for engineering education. I downplayed my teaching skills. Later on, I wanted them to see me as good teacher and mentor. I enjoyed teaching and always wanted to be good. I realized myself as teaching is a continuous learning process and one of the noble ways to serve the country in a great way.

Why do I like to Teach? Since, I am a lifelong learner and addicted to learning. The college recognized my service and honored me for successfully completing my 8 years of teaching at SRITW. I was very happy for being receiving that honor. I get bored if I don't find a new way to teach and learn something new day by day. I teach because it gives me an excuse to learn. This same compulsion drives me to teach new subjects and to find new innovative ways to present the knowledge. This teaching portfolio allowed me to put my 8 years at SRITW in all the aspects about the staff, student relationships, my understanding of the student's concerns, how my use of technology in teaching has grown and evolved. I composed this teaching Portfolio in terms of my growth as a good teacher, from demanding excellence from students, collaborating with them, encouraging them and finally my approach of leading them to discover knowledge. Throughout my teaching career I adopted new teaching methods, technology to promote student-Centric learning. I concentrated more on what my students learned and what they shall able to do with the learning experience rather than just delivering my lecture.

I started my career with chalk and board. Later used colored chinks, white boards, OHP sheets and now power point presentations with useful animations. I have a personalized web page to provide various course materials and created video lectures in YOUTUBE. I am using the concepts of active learning and collaborative methods to cater the various types of students' need. My relationship with students is strongly bonded from peer-like relationship to parental relationship by not polluting the sanctity of teacher-student bonding.

I hope you find quite interesting in reading this portfolio as much I did putting it together.

I worked in TEAM of NBA and Handled criteria – 2 completely also P-files 9,24, and 25 of NBA.

Shyamsunder Merugu (Ph.D) Asst.Prof

Feb- 2020

Table of Contents

1. Teaching Philosophy Statement
2. Teaching Responsibilities
3. Teaching Methods and Strategies
4. Efforts to Improve Teaching
5. Evaluation of Teaching Effectiveness
6. Evaluation of student performance
7. Teaching CV
 - 7.1 Academic Education
 - 7.2 Teaching Employment History
 - 7.3 Courses Taught
 - 7.4 Educational Publications
 - 7.5 Guest Lectures
 - 7.6 Workshops/ Conferences/ FDPs
 - 7.7 Certification Courses
 - 7.8 Administrative Positions
8. Closing Statement

1. Teaching Philosophy Statement

'I believe students learn things by doing but not by reading'

The modern era engineering education is rapidly changing. The conventional teaching methods are almost obsolete for engineering education system. There is a great need to change the method of teaching for millennial engineering students. Every year, number of students graduating from various engineering colleges throughout India who are not industry ready. My vision is- study, gain knowledge, apply them to the engineering problems. This experience paves the path to enrich the students technically, logically and socially responsible. So, of these days Indian education system striving to produce skilled engineering graduates to meet industry requirements to make India economically and technologically super power nation.

I learn and use various technologies, techniques, methodologies in teaching to give better exposure to engineering problems to make students industry ready. To contribute more I will focus on Outcome Based Education, attend Faculty Development Programs, attend Industry Interaction Programs and mandate Internship programs for students.

I came to know the various learning methods of the students. To keep my lectures more effective I am using PPTs, animated videos to reach every student's need in getting the concepts. I have created a course website and providing them the video classes, materials of the course. I implemented FLIPPED CLASSROOM technique to benefit the students' maximum in getting exposure to learning the concepts better way in doing the exercises in the classroom. I created the GOOGLE CLASSROOM, EDPUZZLE, WHATSAPP group to be in touch with them 24x7 in all the aspects. I am using the various dynamic and collaborative activities in getting the maximum output from my students. I am also improving my communication skills by reading newspapers, magazines etc. and improving my subject knowledge by doing certification courses, listening to video lectures from NPTEL, MIT etc., publishing journal papers, attending conferences, referring various text books and attending FDPs.

I strongly believe that 'Teaching is a lifelong learning'. I, myself creating a room to cater the millennial engineering students' need in engineering education.

2 Teaching Responsibilities

I always strive to fulfill the basic responsibilities of a teacher. The responsibilities of a teacher fall in taking the class effectively, mentoring, guiding, being very punctual. I used an effective assessment for truly grading my students to know why they got less marks and how well did they perform. I templated the rubrics for grading the MID exams, Assignments. I had a close attachment with the students in every aspect and I came to know this when I counsel them individually and in a group like a friend. I taught various courses to the students in a 10 year of total experience.

S.No	Course Name	Student Strength
1.	Electromagnetic Theory and Transmission Lines	60
2.	Antennas and Wave Propagation	60
3.	Analog Electronics	60
4.	Electronic Circuit Analysis	60
5.	Signals and Systems	60
6.	Signals, Systems and Stochastic Processes	60
7.	Electronic Devices and Circuits	60
8.	Microprocessors and Microcontrollers	60
9.	Digital Image Processing	60
10.	Microwave Engineering	60
11	Radar Systems	60

I am really happy to handle new subjects which makes me to learn better and better.

3 Teaching Methods and Strategies

I am really transforming myself from conventional chalk-board teaching to use of new technology in engineering education. I start a class with enquiry arousal question by posting a real time example to keep the students to be well engaged with the content.

I conducted a test with various questions to know about the type of learning of the students. Based on that result I made my material to suite the learning style of the students so that the overall student performance will be greatly improved.

The various methods and strategies I followed are listed below.

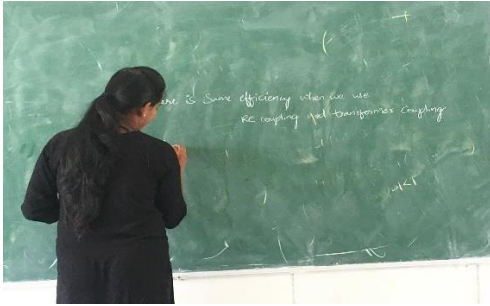
1. ARCS (Attentive, Relevance, Confidence and Satisfaction) model
2. Active Learning Activities
3. Collaborative Activities
4. Animations
5. Power Point Presentations
6. FLIPPED CLASSROOM
7. OBE-Outcome Based Education
8. GOOGLE CLASSROOM
9. EDPUZZLE
10. Discussion Forums like Padlet
11. GOOGLE FORMS
12. COURSE WEBSITE
13. VIRTUAL LAB LINKS etc



Pic.1. Teaching with ARCS model



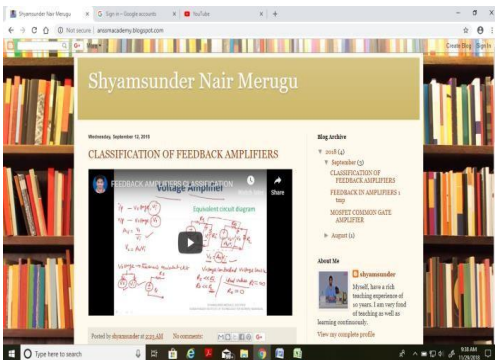
Pic.2. Student Sharing her Team Response



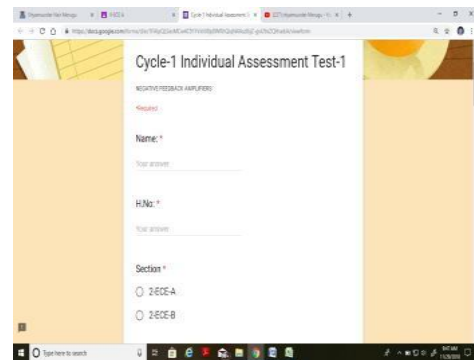
Pic.3. Student writing her question what she felt difficult in the topic as part of ONE MINUTE PAPER Activity



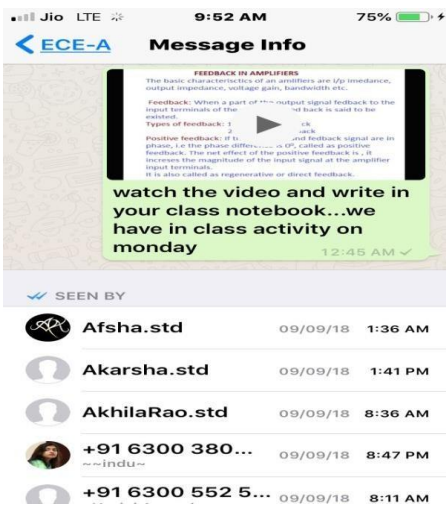
Pic.4. Students participating in active learning.



Pic.5. My course website



Pic.6. GOOGLE FORM



Pic.7. FLIPPED CLASSROOM Activity



Pic.8. Collaborative Learning- STAD

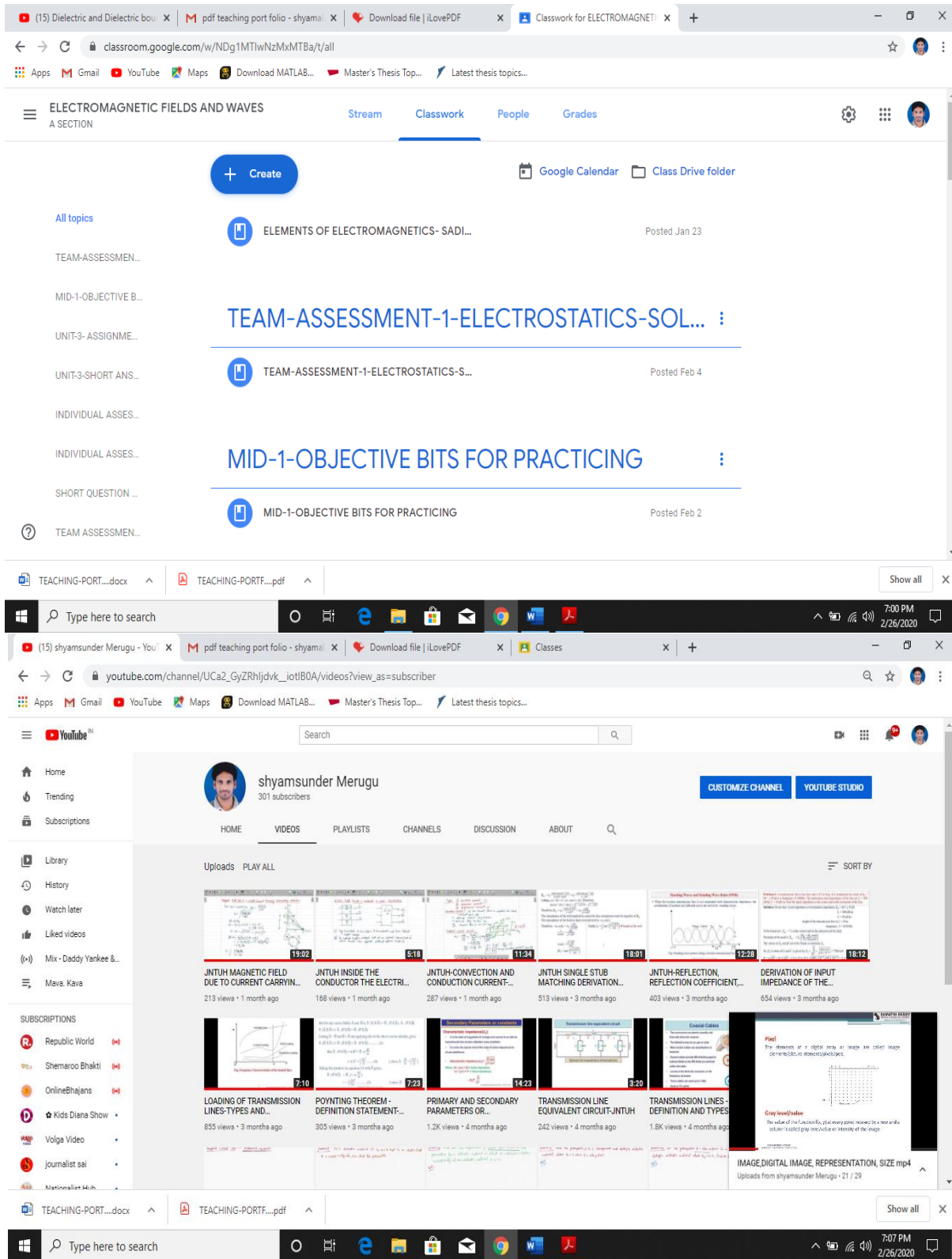


Fig. Virtual or Digital Classroom – GOOGLE CLASSROOM and YOUTUBE Lectures

4 Efforts to improve Teaching

I am trying my best hard to benefit my students with imparting my knowledge through teaching and various activities of learning. To improve my teaching, I did complete certain certification course in teaching the engineering students and will continue this in future too. I attended the FDPs, workshops and conferences. The list is given below related to I proving my teaching.

S. No	FDP/Workshop/Conference	Organization	Achievement	Status
1	Teaching and Learning in Engineering	NPTEL-IISc-Bangalore	Elite + Silver	Completed
2	Teaching and Learning in Engineering	NPTEL-IISc-Bangalore	FDP	Completed
3	Designing Learner Centric - MOOCS	NPTEL-IITM	Elite + Silver	Completed
4	Designing Learner Centric - MOOCS	NPTEL-IITM	FDP	Completed
5	Effective Engineering Teaching in Practice	NPTEL-IITM	Elite	Completed
6	Effective Engineering Teaching in Practice	NPTEL-IITM	FDP	Completed
7	Digital Image Processing	NPTEL-IIT-Kharagpur	Elite	Completed
8	Digital Image Processing	NPTEL-IIT-Kharagpur	FDP	Completed
9	Outcome Based Education-OBE	Udemy	Certified	Completed
10	IIEECP-IUCEE International Engineering Educator Certification Program	IUCEE	Distinction with 92%	Completed
11	Introduction to IoT	NPTEL-IITM	Elite	Completed
12	Introduction to IoT	NPTEL-IITM	FDP	Completed
13	Microwave Theory and Techniques	NPTEL-IITM	Elite	Completed
14	Microwave Theory and Techniques	NPTEL-IITM	Elite	Completed

Apart from the above list, I attended 20 programmes including workshops, conferences and FDPs.

5. Evaluation of Teaching Effectiveness

In my college every teachers' teaching effectiveness is scaled on 5-point system. I also took the feedback on my teaching techniques from the students on paper and summarized them in Excel. They were listed below respectively.

1. Student Feedback-III year-2019-20






**Sumathi Reddy Institute of Technology for Women,
Ananthasagar, Warangal**

Feed Back Report - October 2019

Print Date : 26-10-2019 15:40:37

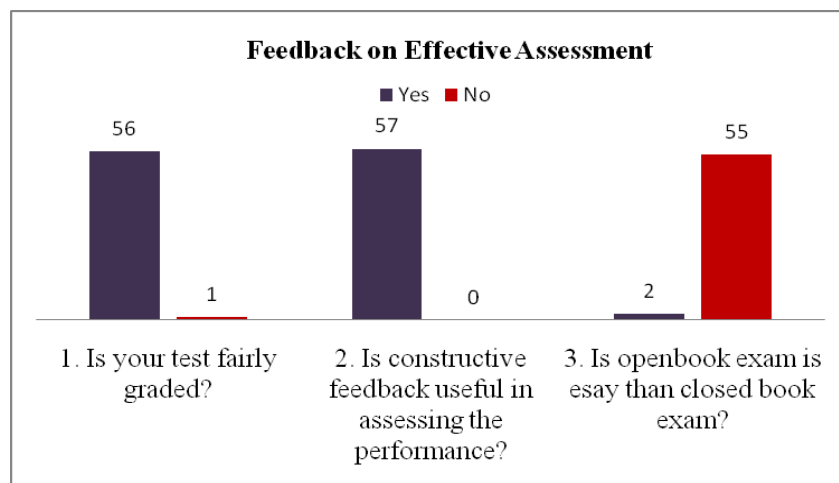
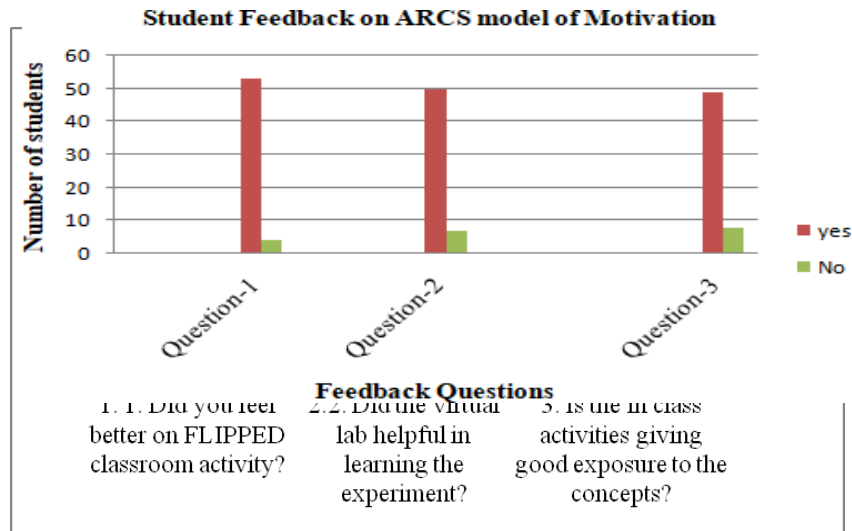
Branch Name = EC31A

Question	EC501PC / EMTL	EC502PC / LDICA	EC503PC / DC	CS512OE / DBMS	SM504MS / FM
Did the Teacher help in understanding the concepts and principles?	4.57	4.1	4.14	3.81	2.24
Teacher's command over the subject	4.69	3.93	3.98	4.14	2.38
Teacher's enthusiasm over Teaching	4.67	3.93	4.19	3.9	2.24
Interaction with the Students during the session	4.48	3.76	4.02	3.4	2.6
Accessibility of the Teacher outside the Class	4.14	3.57	4.26	3.76	2.33
Did the Teacher cover all the UNITS with required importance?	4.62	4.14	4.07	4.05	1.98
Did the Teacher give examples and illustrations?	4.57	3.76	3.67	4.07	2.33
Teacher's ability in controlling the Class	4.71	4	3.64	3.55	2.38
Punctuality of Teacher in engaging the Class	4.6	3.95	4.02	4.07	2.57
Standard of Assignment for learning Subject	4.52	3.98	4.02	3.9	2.5
Discussion of solution to question papers, assignments and typical questions	4.64	3.52	3.43	3.5	1.86
Teacher's Communication skills	4.52	3.76	3.81	3.67	2.38
Number of students participated	42	42	42	42	42
Over all Performance	4.56	3.87	3.94	3.82	2.32

Subject	Faculty Name	Feed Back	Subject	Faculty Name	Feed Back	Subject	Faculty Name	Feed Back
EC501PC / EMTL	 Mr. M. Shyam Sunder (4001)	4.56 Good	EC502PC / LDICA	 Mr. E. Kumara Swamy (4009)	3.87 Average	EC503PC / DC	 Ms. N. Swathi (4014)	3.94 Average
CS512OE / DBMS	 Mr. T. Ravikumar (5021)	3.82 Average	SM504MS / FM	 Mr. P. Subhash (8012)	2.32 Below Average			

The scale is on 1-5 i.e., Excellent-5, Good-4, Average-3, Below Average-2, Not Satisfactory-1

And the previous academic semesters that I got feedback as 4.47 and 4.51.



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FEEDBACK ON DYNAMIC CLASSROOM ACTIVITY

NAME OF THE STUDENT Maddala Deepika ROLL NO 17-455
BRANCH ECE YEAR II SUBJECT Analog Electronics

1. Did you enjoy the activity? (Yes/No) Yes No
2. Did the activity helped in learning concept? (Yes/No) Yes No
3. Any suggestion? 1. Little Confusion in activities
2. ~~Continue~~ Continue the activities for all topics.

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FEEDBACK ON COLLABORATIVE LEARNING ACTIVITY

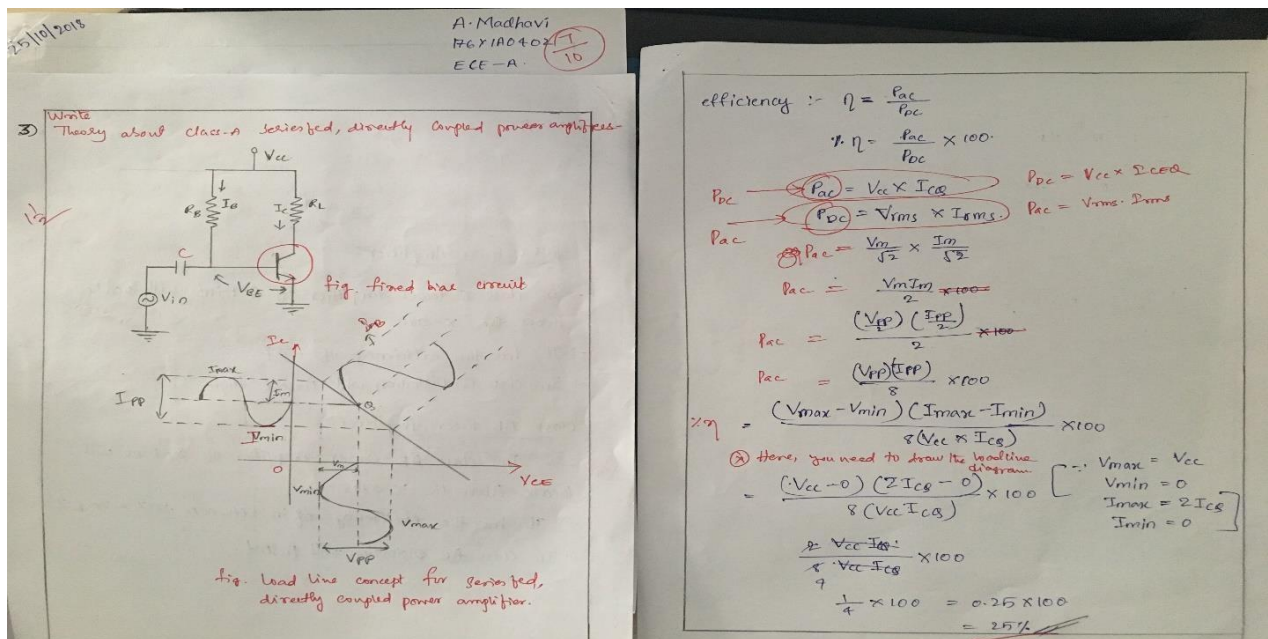
NAME OF THE STUDENT Y. Abhigna ROLL NO 16497
BRANCH ECE YEAR II SUBJECT Analog electronics

Feedback Question	Yes	No
1. Is collaborating learning helpful in achieving learning effectively?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Did you enjoy the activity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Did you feel difficulty during the collaborative learning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Any Suggestions? 1) collaborative activity is too long to learn the topic.
2) team formation has to be done properly.

6. Evaluation of students' Performance

I use to evaluate the students 'performance without showing any partiality on the students. I used to prepare the question paper based on BLOOM'S TAXONOMY. I provide the information to the students about the grading of their exam. A well structured RUBRICS will be given prior to the students about which content is carrying how many marks. After the conduction of the exam I provided them the effective and constructive feed back why do they got marks and why don't they. I shall provide some of the screen shots of the effective assessment of the students' performance.



At the end of the semesters, the students brought me very good result in JNTUH examinations because of the effective assessment..

M-IV - MATHEMATICS - IV
 AE - ANALOG ELECTRONICS
 ET - ELECTRICAL TECHNOLOGY
 SSP - SIGNALS AND STOCHASTIC PROCESS
 NA - NETWORK ANALYSIS

Subject	Name of the Faculty	Pass %	Distinctions
M-IV	K. Rajesh Chary	51	1
AE	Shyam Sunder Merugu	85	3
ET	M.S.Teja	64	0
SSP	N. Govardhan	45	0
NA	V. Kalyani	60	0

In-Charge Examinations 11/2/19
 Principal

M-IV - MATHEMATICS - IV
 AE - ANALOG ELECTRONICS
 ET - ELECTRICAL TECHNOLOGY
 SSP - SIGNALS AND STOCHASTIC PROCESS
 NA - NETWORK ANALYSIS

Subject	Name of the Faculty	Pass %	Distinctions
M-IV	K. Rajesh Chary	71.4	5
AE	Shyam Sunder Merugu	92.9	6
ET	M.S.Teja	75.0	4
SSP	Ch. Padmaja	71.4	14
NA	V. Kalyani	76.8	3

In-Charge Examinations 11/2/19
 Principal

7. Teaching CV

7.1 Academic Education

S.No	Degree	Board/University/Coll ege	Year of Passing	Percentage
1	Ph.D (Deep Learning)	KL University	-	-
2	M.Tech-ES	JNTUH	2012	84.88%
3	B.E-ECE	Anna University	2007	81.46%
4	Intermediate	Board of Secondary Education	2003	92.5%
5	SSC	APRS, Nagarjuna Sagar	2001	90%

7.2 Teaching Employment History

I started my teaching career in May-2008 at Ramappa Engineering College. I had worked for that college about 2.7 years. Later finished my M.Tech. I joined Sumathi Reddy Institute of Technology for Women in Dec-2012 and still have been working for SRITW. I have a **total experience of 10 Years.**

7.3 Courses Taught

I have taught various UG courses and the list is presented in section 2. The total course I have taught so far are 11 in count.

7.4 Educational Publications

S. No	Year	Journal publications		Conference proceedings	
		National (a)	International (b)	National (c)	International (d)
1	2019		2		2
2	2018		1		
3	2017			1	
4					
5					
6					
7					
		Total (a+b) : 3		Total (c+d): 3	

7.5 Guest Lectures

I have given guest lectures on EMTL at Supraja Institute of Technology, Station Ghanpur in 2010 and Kakinada Institute of Engineering and Technology, Kakinada in 2017.

7.6 Workshops/ Conferences/ FDPs

Workshops	08
FDPs	11
Conferences	05

7.7 Certification Courses

I have completed certain certified courses to improve my teaching skills as well as my subject knowledge. I have listed some of them. These were already listed at 4.

S. No	FDP/Workshop/Conference	Organization	Achievement	Status
1	Teaching and Learning in Engineering	NPTEL-IISc-Bangalore	Elite + Silver	Completed
2	Teaching and Learning in Engineering	NPTEL-IISc-Bangalore	AICTE-FDP	Completed
3	Designing Learner Centric - MOOCS	NPTEL-IITM	Elite + Silver	Completed
4	Designing Learner Centric - MOOCS	NPTEL-IITM	AICTE-FDP	Completed
5	Effective Engineering Teaching in Practice	NPTEL-IITM	Elite	Completed
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9	Outcome Based Education-OBE	Udemy	Certified	Completed
10	IIEECP-IUCEE International Engineering Educator Certification Program	IUCEE	Distinction with 92%	Completed

7.8 Administrative Positions

I worked as ED-Cell(Entrepreneur Development- Cell) In-Charge at SRITW for 1 years since Oct-2016 to Oct-2017. Later promoted as HoD-ECE from Oct-2017 to Feb-2020.

8. Closing Statement

Dear sir, I had worked truly wherever I worked. I have published research papers, attended conferences. I taught various courses, have new teaching methodologies and experienced teacher. I qualified UGC-NET and NTA-NET in Nov-2017, Dec-2018 and Dec-2019 respectively.

In this regard, my short-term and long-term goals are making myself updating for new teaching methodologies and rendering services to produce skilled engineering graduates continuously by improving knowledge, and getting my doctoral degree (Ph.D). My long-term goals also include to be a great teacher to all my students, finishing my research work and encouraging the students to be capable of establishing and running their startups. I should grow my teaching career and for organization by working well in the bounds of organization.

Every employee feels very happy when his/her hard-work and sincerity is recognized and encouraged. I have listed all my credentials in my teaching portfolio. As to grow in my teaching career I am looking for a great opportunity in your organization where I can work with an experienced teams, skilled staff and students. By looking at my teaching portfolio, I, would like to request you to give me a great opportunity to serve your organization.

Thank you.

Shyamsunder Merugu (Ph.D) Asst.Prof

Feb 2020