

# SYED AMMAL ENGINEERING COLLEGE



( Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai )  
An ISO 9001:2015 Certified Institution | ( NBA Accredited UG Courses : CSE, ECE, EEE & MECH )  
Dr. E.M. Abdullah Campus, Ramanathapuram - 623 502, Tamilnadu.



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## Department of Electrical and Electronics Engineering

### News Letter – 2019 - 20

The Department of Electrical and Electronics Engineering was established in the year 1998. The department offers 4 years UG programme in B.E Electrical and Electronics Engineering and 2 years PG programme in M.E Embedded System Technologies. It has sophisticated infrastructure, excellent Machines, Embedded and Electronics labs, and Highly Qualified, Motivated and Experienced Faculty members to enhance the student's knowledge in their respective field.

### Department Vision and Mission:

#### VISION

To be a centre of excellence in teaching and research in Electrical and Electronics Engineering, to produce highly skilled, excellent engineers who can serve the society.

#### MISSION

- Provide exemplary learning environment and quality professional education.
- Empower rural students with skills and knowledge for innovation through curricular, co-curricular and extracurricular activities.
- Providing ample opportunities to learn moral and ethical values to serve the society and nation.

#### Introduction:

Our departmental newsletter “News Letter of EEE ' 2019 -20” facilitates our students and faculty members to publish their achievements and efforts. It provides a motivation to the juniors and classmates to “see and follow” the steps on the success path taken by their seniors. This also gives a reason to be proud of their classmates, seniors and faculty members.

“News Letter of EEE' 2019 -20” reflects the success stories of our students and the faculty members. It is circulated to all students and faculty members containing information including placements, sport events, paper presentations, conferences etc.

## Department Activities:

1. The Departments of EEE organized two days workshop named as “**Modeling and Simulation of Electrical Systems using MATLAB**” on 5-07-2019 & 6-07-2019.
2. The Departments of EEE organized 12 days Faculty Development Programme named as “**Modeling, Simulation, Control and Stability Analysis of Power Electronic Converters**” on 17-06-2019 to 29-06-2019.
3. The Departments of EEE organized one day workshop named as “**One day Capacity Building Workshop for Professors on Personality, Profession & Passion**” on 25-06-2019.
4. The Departments of EEE organized a national level technical symposium named as “**SYMPULSE’19**” on 17-08-2019.

**SYED AMMAL ENGINEERING COLLEGE**  
Dr.E.M.Abdulrahman Campus, Rajamangalam - 623 502  
(An ISO 9001 certified institution)  
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**DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING**

**ON 17TH AUGUST 2019 SATURDAY**  
**DEADLINE 18TH AUGUST 2019 TUESDAY**

**Sympulse'19**  
National Level Students Technical Symposium

**NON-TECHNICAL**  
Treasure Hunt  
Multimedia Presentation  
Photography  
abzap

**TECHNICAL**  
Paper Presentation  
Poster Presentation  
Technical Connection  
Circuit Debugging

**Faculty Coordinator**  
M.Paul Jeyaraj ME, MBA,  
Assistant Prof. EEE,  
Ph: 9994819998

**Student Coordinators**  
K.Karthik, IV Year EEE, Ph: 7094633072  
D.Mohamed Riyasudeen, IV Year EEE,  
Ph: 7339197093

**For more information**  
scan this QR code or visit  
[www.sympulse19.blogspot.com](http://www.sympulse19.blogspot.com)



## Quality Improvement Cell

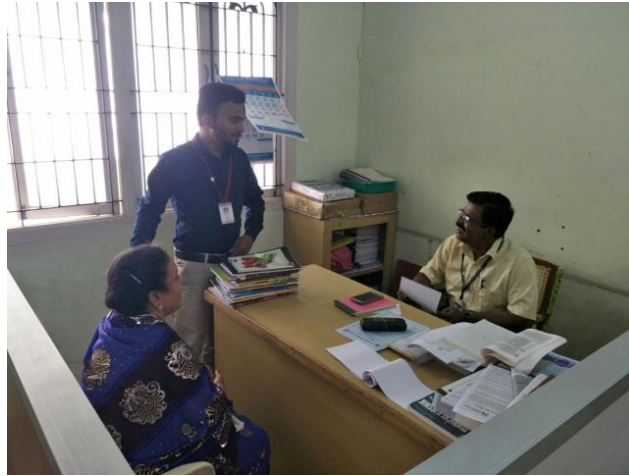
1. Through Quality Improvement Cell the following syllabus are prescribed for online certification course on “**Python**” by Spoken Tutorial Team, IIT Bombay in association with Anna University, Chennai.

Topics Covered:

- Getting started with ipython
  - Embellishing a plot
  - Saving plots
  - Getting started with sage notebook
  - Basic datatypes and operators
  - Testing and debugging
2. Through Quality Improvement Cell the following syllabus are prescribed for online certification course on “**Scilab**” by Spoken Tutorial Team, IIT Bombay in association with Anna University, Chennai.
    - Why Scilab
    - Vector operations
    - Conditional Branching
    - Plotting 2D Graphs
    - File handling
    - Solving Non linear Equations
    - Linear equations Gaussion and Iterative Methods
    - Optimization using karmarkar Functions
    - Calling User Defined Functions in XCOS.

## Parent Teachers Meeting

To redress the grievances of the parents and students, every year, we conduct parents and teachers Association Meeting. Large number of parents attended these meetings and expressed their views and suggestions. The suggestions and views expressed by the parents will be brought to the knowledge of Principal and Correspondent for immediate action. This will make the relationship between students, their parents and college becomes cordial and cooperative.



## **Renewable Energy Club**

Renewable Energy Club (REC) was formed on 20 August 2004 under the able guidance of Dr. Chinnadurai Abdullah (Correspondent) and Prof. Mohamed Sahabudeen (Principal) SAEC to celebrate Rajiv Gandhi renewable energy day and Tamil Nadu Energy Development Agency (TEDA) sponsored for programmes conducted under this club during the year 2004 to 2006.

The following activities are carrying out in each year on the eve of renewable energy day on 20<sup>th</sup> august every year.

- Seminars, workshops, lectures, quiz competitions, slogan competitions, poster and Essay competitions on Renewable Energy may being conducted for our students as well as for other college students also.
- With a view to encourage students to participate in these competitions etc. token cash prizes may also be given to winning students from within the total budget allocation of Rs. 15,000/-. fund is raised from renewable energy club members or state nodal agency for new and renewable energy(Tamil Nadu energy agency).

### In House training conducted for students:

Department and Year	Name of the course/training	Topics Covered	Duration of Training	Number of Students Attended	Vendor Details
I EEE	Language Skills	Linguistic intelligence	6 days	12	Fragrhen Academy
II EEE	Quantitative Ability	Mathematical skills	6 days	27	Fragrhen Academy
III EEE	Life skills	Soft skills	9 days	21	MYINCEPTION
IV EEE	Technical training	PLC/SCADA	10 days	28	MYINCEPTION

### Industrial Visit:

YEAR	DATE OF VISIT	COMPANY DETAILS	NO. OF STUDENTS	NO. OF STAFFS
2 <sup>nd</sup> , 3 <sup>rd</sup> and 4 <sup>th</sup> YEAR	08-08-2019	Keltron Equipment Complex, SRM Road, Ernakulam - 682018, Kerala, India.	70	5
	09-08-2019	Vikram Sarabhai Space Centre, Department of Space, Indian Space, Research Organization, Trivandrum – 695022, Kerala, India		



## Placement Report:

Department and Year	Name of the Company and Address	Salary per Annum	Number of Students Placed
IV EEE	Competition Team Technology	130000	12
	SYRMA Technology Pvt Ltd	140000	2
	WONJIN Auto Parts Pvt. Ltd.	175000	2
	Just Connect Electricals Pvt.Ltd,	108000	8

## Paper Presentation/ Workshop/ Seminar and Symposium attended by the Students:

S. No	Name of the student(s)	Date(s)	Name of the Event	Organized / Sponsored by	Prize / Participation
1.	Balaji.K.G	05.07.19	workshop	SAEC	participation
2.	Karthik.K	17.06.19	workshop	SAEC	Participation
3.	Karthik.K	22.05.19	Inplant training	Arkay energy limited	participation
4.	Karthik.K	05.07.19	workshop	SAEC	participation
5.	Karthik.K	08.09.19	workshop	Mepco schlenk engineering college	participation
6.	Parthiban vivek.M	18.06.19	Inplant training	BSNL	participation
7.	Mukila devi.l	05.07.19	workshop	SAEC	participation
8.	Malavika.k	05.07.19	workshop	SAEC	participation
9.	Malavika.k	17.08.19	Poster presentaion	SAEC	1 <sup>st</sup> prize
10.	Malavika.k	17.06.19	workshop	SAEC	participation
11.	Seshanthika.S	17.08.19	Poster presentaion	SAEC	1 <sup>st</sup> prize
12.	Seshanthika.S	05.07.19	workshop	SAEC	participation
13.	Anserdeen.S	05.07.19	workshop	SAEC	Participation

14.	Mohamed sahal.A	18.06.19	Inplant training	BSNL	
15.	Mohamed sahal.A	05.07.19	workshop	SAEC	Participation
16.	Mohammed syed anwar.J	05.07.19	workshop	SAEC	Participation
17.	Sameer mohammed.A	05.06.19	workshop	SAEC	participation
18.	Kavya.K	05.06.19	workshop	SAEC	participation
19.	Kavya.K	27.05.19	Inplant training	BSNL	participation
20.	Durai murali.R	17.06.19	workshop	SAEC	participation
21.	Salmiya.N	05.07.19	workshop	SAEC	participation
22.	Thejasvini.G	05.07.19	workshop	SAEC	participation
23.	Muhammed mahadhir	25.08.19	workshop	Top engineers	participation
24.	Pragadeeswari.M	27.05.19	Inplant training	BSNL	participation
25.	Durai murali.R	14.07.19	workshop	Top engineers	participation
26.	Ahamed sakeen.S	14.07.19	workshop	Top engineers	participation
27.	Durai murali.R	05.07.19	workshop	SAEC	participation
28.	Salmiya.N	05.07.19	workshop	SAEC	participation
29.	Ahamed sakeen.S	05.07.19	workshop	SAEC	participation
30.	Shanmuganathan.R	05.07.19	workshop	SAEC	participation
31.	Mohamed ismail.M	05.07.19	workshop	SAEC	participation
32.	Naga rajan.V.C	05.07.19	workshop	SAEC	participation
33.	Yogeswaran.T	05.07.19	workshop	SAEC	participation
34.	Thamarai chellam.P	05.07.19	workshop	SAEC	participation

35.	Sandhiya riyasen.G	05.07.19	workshop	SAEC	participation
36.	Mamtha priyatharsini.M	05.07.19	workshop	SAEC	participation
37.	Noor sapana.M	05.07.19	workshop	SAEC	participation
38.	Sangeetha.M	05.07.19	workshop	SAEC	participation
39.	Dhaya jothi.R	05.07.19	workshop	SAEC	participation
40.	Nasnir fathima.A	05.07.19	workshop	SAEC	participation
41.	Pragadeeswari.M	05.07.19	workshop	SAEC	participation
42.	Deepika.S	05.07.19	workshop	SAEC	participation
43.	Kavya.K	05.07.19	workshop	SAEC	participation
44.	Ruba devi.S	05.07.19	workshop	SAEC	participation
45.	Akbar jahan.j	05.07.19	workshop	SAEC	participation
46.	Prithika.S	05.07.19	workshop	SAEC	participation
47.	Hari haran.J.K	17.08.19	Paper presentation	SAEC	participation
48.	Sampath.M.S	17.08.19	Paper presentation	SAEC	participation
49.	Rajeswari.M	05.07.19	workshop	SAEC	participation
50.	Harini.M	05.09.19	workshop	SAEC	participation
51.	Anserdeen.S	30.08.19	Paper presentation	MSEC	participation
52.	Anserdeen.S	30.08.19	pubg	MSEC	participation
53.	Anserdeen.S	28.08.19	Pubg ,project showdown, I am smarticus, papyrus festino, survivor brain.	SSM institute of engineering and technology	participation
54.	Parthiban vivek	28.08.19	Pubg ,project showdown, I am	SSM institute of	participation



			smarticus, papyrus festino, survivor brain.	engineering and technology	
55.	Mohammed arshad.M	30.08.19	pubg	MSEC	participation
56.	Mohammed arshad.M	30.08.19	Paper presentation	MSEC	participation

## Faculty Activities:

### TRAINING CONDUCTED TO TEACHING STAFF:

Sl.No.	Duration of Program	Department	Name of the Program	Title of the Program	Sponsored Agency
1.	17-29, June 2019	EEE	FDP	Modeling, Simulation, Control and Stability Analysis of Power Electronic Converters	AICTE
2.	25, June 2019	All departments	Workshop	One day Capacity Building Workshop for Professors on Personality, Profession & Passion	Self Supporting
3.	09, Dec 2019	All departments	FDP	Faculty orientation programme on soft skills and understanding the psychology of current generation students	Self Supporting
4.	14, May 2020	EEE	Workshop	Webinar on Job Opportunities in Renewable Energy Technology	Self Supporting
5.	19, May 2020	All departments	FDP	Webinar on Confidence Building and Interpersonal Skills Required for Building Engineers	Self Supporting
6.	02, June 2020	EEE	Workshop	Webinar on Research Issues and Challenges in Resonant Converter	Self Supporting
7.	18, June 2020	All departments	Workshop	Webinar on Rituals for an Enlightened Living	Self Supporting

**TRAINING CONDUCTED TO NON-TEACHING STAFF:**

<b>S.No</b>	<b>Date</b>	<b>Name of the Participant</b>	<b>Title of the Program</b>	<b>Venue</b>
1	02, June 2020	Govindaraj C	IEEE Xplore Digital Library	Syed Ammal Engineering College ,Ramanathapuram
2	02, June 2020	Pandiselvi M	IEEE Xplore Digital Library	Syed Ammal Engineering College ,Ramanathapuram
3	03, June 2020	Govindaraj C	Research Issues and Challenges in Resonant Converter	Syed Ammal Engineering College ,Ramanathapuram
4	03, June 2020	Pandiselvi M	Research Issues and Challenges in Resonant Converter	Syed Ammal Engineering College ,Ramanathapuram
5	03, June 2020	Shankar N.L	Research Issues and Challenges in Resonant Converter	Syed Ammal Engineering College ,Ramanathapuram

**Patent Details:**

<b>S.No</b>	<b>Date</b>	<b>Applicant Name</b>	<b>CBR.No/ Application No.</b>	<b>Patent Status with Date</b>	<b>Title of Invention</b>
1	03.03.2017	1 .Dr.S.Selvaperumal 2 .M.S.SivagamaSundari	8317/201741007514	Published on 16/08/2019 Page No.37098	Harmonic Elimination In Cascaded H-Bridge Multilevel Inverter Using SHE PWM
2.	06.09.2019	1 .Dr. S. Selvaperumal 2 .Dr. S. Saravana Sundaram	28863/201941035891	Filed on 06.09.2019 Published on 18/10/2019 42/2019 Page No.48773	A Novel PSO based automated optimally controlled watering system for a Coriander plant field using Wireless Sensor Network
3.	06.09.2019	1 .Dr. S. Selvaperumal 2 .Dr. S. Saravana Sundaram	28863/201941035892	Filed on 06.09.2019 Published on 18/10/2019 42/2019 Page No.48774	Wireless sensor network based data logging and ANN based Maximum Power Point Tracking for a large Photo voltaic farm

4.	15.11.2019	1 .Dr. S. Selvaperumal 2 .Dr. M.S. Sivagama 3 .Dr. G. Prabhakar	37527/201941046537	Filed on 15.11.2019 Published on 6/12/2019 49/2019 Page No.57289	Performance Improvement of Induction Generator in Grid Integrated Wind Energy Conversion System
5.	15.11.2019	1 .Dr.G.Prabhakar 2 .Dr.S.Selvaperumal 3 .Dr.V.Nirmal Kannan	37530/201941046540	Filed on 15.11.2019 Published on 6/12/2019 49/2019 Page No.57291	G-Glass Smart Manufacturing Unit
6.	15.11.2019	1 .Dr. S. Selvaperumal 2 .Dr. M.S. Sivagama 3 .Dr. C. Christofer Asir Rajan	37528/201941046538	Filed on 15.11.2019 Published on 6/12/2019 49/2019 Page No.57290	Coal Flow Regulation Using Model Based Controllers in Thermal Power Plant
7.	15.11.2019	1 .Dr.G.Prabhakar 2 .Dr.S.Selvaperumal 3 .Dr.V.Nirmal Kannan	37535/201941046543	Filed on 15.11.2019 Published on 6/12/2019 49/2019 Page No.57293	G Glass for Electrical Power Generation and Electrical Energy Storage
8.	06/03/2020	1 .Dr.S.Selvaperumal 2 .Dr. B. Ramasubramanian	202041009634	Filed on 06/03/2020 Published on 24/04/2020 17/2020 Page No. 17528	Smart Approach For The Detection Of Diabetic Retinopathy And Retinopathy Of Prematurity Using The Retinal Images
9.	06/03/2020	1 .Dr.S.Ganesh 2 .Dr. R. Kanimozhi 3 .Dr.B.Ramasubramanian 4 . Ms. T. Mathumathi 5 .Dr.S.Selvaperumal	202041009636	Filed on 06/03/2020 Published on 24/04/2020 17/2020 Page No.17529	Power Scheduling Of Micro-Grid In Radial Distribution System
10.	06/03/2020	1 .Dr.S.Selvaperumal 2	202041009638	Filed on 06/03/2020	Steady State Performance

		.Dr.M.S.SivagamaSundari 3 .Dr.M.Germin Nisha		Published on 24/04/2020 17/2020 Page No. 17531	Analysis Of Self Excited Slip Ring Induction Generator
11.	06/03/2020	1 .Dr.S.Selvaperumal 2 .Dr.M.S.SivagamaSundari	202041009641	Filed on 06/03/2020 Published on 24/04/2020 17/2020 Page No. 17532	IT For Relay Protection (Internet Based)
12.	29/05/2020	1 .Dr.C.Christober Asir Rajan 2 .A.Manoranjan 3 .Dr.S.Selvaperumal	202041022679	Filed on 29/05/2020 Published on 12/06/2020 24/2020 Page No.21949	Thirty-One Levels Asymmetric Cascaded H- Bridge Multilevel Inverter With Reduced Number of Switches

### **Journals Published:**

1. Dr G S Naganathan, "ANN-based online voltage stability margin assessment in deregulated power system", Journal of Electrical engineering, ISSN: 1582-4594
2. Dr S Selvaperumal, "A fuzzy – elephant herding optimization technique for maximum power point tracking in the hybrid wind – solar system", International transactions on electrical energy systems, ISSN: 2050-7038.
3. Dr S Selvaperumal, "A fuzzy – elephant herding optimization technique for maximum power point tracking in the hybrid wind – solar system", Journal of medical imaging and health informatics, ISSN: 2156-7026.
4. Dr S Selvaperumal, "Privacy Protection of Patient Medical Images using Digital Watermarking Technique for E-healthcare System", Current Medical Imaging (Formerly: Current Medical Imaging Reviews), ISSN: 1875-6603.
5. Dr S Selvaperumal, "Experimental Analysis of Performance and Thermal Capability of Three Phase Squirrel Cage Induction Motor Using Plastered Composite Conductors", Journal of Current Nano materials, ISSN: 2405-4623.
6. Dr S Selvaperumal, G Prabhakar, "Anfis Classifier Based Moving Object Detection and Segmentation in Indoor and Outdoor Environments", Journal of Current Signal Transduction Therapy.
7. Dr S Selvaperumal, "Detection of Moving Object in Dynamic Visual Sequences Based on Partial Least Squares Classifier", Journal of Current Signal Transduction Therapy.

### **Book Chapter Published:**

1. Dr S Selvaperumal, “Real time Processing in Control, Computer Vision and Power Electronics”, Current Signal Transduction Therapy, ISSN: 1574-3624.
2. Dr R Dhanasekaran, “Data Security in WSN-Based Internet of Things Architecture Using LDS Algorithm: WSN Architecture With Energy-Efficient Communication”, Edge Computing and Computational Intelligence Paradigms for the IoT, ISBN13: 9781522585558.

### **Books Published:**

1. Dr R Nagarajan, Dr R Dhanasekaran, Dr S Selvaperumal, “Performance analysis of wireless industrial automation system: Introducing wireless based Industrial Automation Systems”, LAP LAMBERT, Academic Publishing, Germany, 978-6200532220.
2. Dr S Selvaperumal, “Principles of Sensors and Transducers”, LAP LAMBERT, Academic Publishing, Germany, LAP LAMBERT, Academic Publishing, Germany, 978-620-0-48552-6.
3. Dr S Selvaperumal, “Advancement in the Detection of Diabetic Retinopathy”, LAP LAMBERT, Academic Publishing, Germany, 978-6200503916.
4. Dr S Selvaperumal, “Cascaded H-bridge Inverter Control for Grid Connected DC Power Source”, LAP LAMBERT, Academic Publishing, Germany, 978-6200502735.
5. Dr M.Senthilkumar, “Certain Investigations of speed control of dc drive”, LAP LAMBERT, Academic Publishing, Germany, 978-6200246851.

### **Number of research projects per teacher funded by government and non-government agencies**

<b>Name of the Project/ Endowments, Chairs</b>	<b>Name of the Principal Investigator/Co-investigator</b>	<b>Amount Sanctioned(In Rupees)</b>	<b>Duration of the project</b>	<b>Name of the Funding Agency</b>	<b>Type (Government/non-Government)</b>
Faculty Development Programme	Dr S Selvaperumal	4,57,000	2 weeks	AICTE	Government
Tamil Technical Magazine	Dr S Selvaperumal	20,000	1 year	TNSCST	Government
Embedded Network Control Between Hetrogeneous	Dr S Selvaperumal	1451765	3 years	AICTE RPS	Government

Nonlinear Systems for Agricultural					
Cyper Security Analysis of Substation Automation System	Dr S Selvaperumal	7500	6 months	TNSCST	Government
Enhancing the Understanding Skills of Students in The Electrical Drives Arena Through Modernization of Electrical Machines Laboratory	Dr S Selvaperumal	1000000	2 years	AICTE MODROB	Government
Faculty Development Training Programme	Dr R Dhanasekaran	30,000	1 week	Anna University	Government
WORKSHOP	Dr R Dhanasekaran	10,000	1 day	IEEE	Non Government

### **Number of Teachers Recognized as Research Guides at Present**

<b>Sr. No</b>	<b>Number of Full time Teachers with PhD</b>	<b>Year of Obtaining PhD</b>	<b>Is the teacher still serving the institution / If not last year of the Faculty Service to the Institution</b>	<b>Whether Recognised as research Guide for PhD</b>	<b>Year of Recognition as research Guide</b>
1	Dr.R.Nagarajan	2016	YES	YES	2018
2	Dr.M.Senthil Kumar	2017	YES	YES	2017
3	Dr.S.Selvaperumal	2013	YES	YES	2013
4	Dr.R.Dhanasekaran	2007	YES	YES	2009

### **Minutes of the Advisory Committee Meeting with the HOD and Faculty Members and The Invited Experts**

The meeting of HOD, Faculty members of EEE Department, Academic Experts, alumni, Parents and invitees from industries was held on 22.06.2019 at 2.00 P.M to draft the forthcoming academic activities of the Department.

The following members were present.

**Chair: Dr. S. Selvaperumal, HOD/EEE, Syed Ammal Engineering College**

<b>S.No</b>	<b>Name of the Expert Member</b>	<b>Designation and Address</b>	<b>Role</b>
1.	Mr. M. John Prabu	Assistant Engineer, Municipal Administration, Udumalpet	Alumni
2.	Mr. V.R.M.Muthukumar	Vice President, VRM Energy Consultancy Service Pvt. Ltd. Chennai-600024.	Employer
3.	Mrs. G.Shantha Rani	M/o Ms.G.Thejasvini, IV EEE, Ramanathapuram.	Parent
4.	Dr. Raja	NIT, Tiruchirappalli	Senior Academician
5.	Dr. S. Muralidharan	Professor, Mepco schlenk engineering college, Sivakasi.	Senior Academician
6.	Dr. R. Dhanasekaran	Director-Research, Syed Ammal Engineering College	Research Oriented Person and Senior Faculty Member of the College