PULSE
SAKTHI POLYTECHNIC COLLEGE
(Govt. aided and ISO certified institution)
SAKTHI NAGAR – 638 315
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
NEWS LETTER 2020-2021

Volume : 2.0

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KOKILA .S
MANI .S

VISION OF THE INSTITUTE

To excel in imparting Value Based Technical Education to produce industry competent engineers and socially responsible citizens.

MISSION OF THE INSTITUTE

M1: To impart transformative technical education through innovative teaching and learning methodologies.
M2: To enhance academia-industry partnership through internships and by collaborative projects.
M3: To impart requisite skills to enhance employability and entrepreneurship.

VISION OF THE DEPARTMENT

To become a center of repute and to impart high-quality technical education in the field of Electronics and Communication Engineering to develop highly competent and ethical engineers.

MISSION OF THE DEPARTMENT

M1: To create a learning environment to the students for excellence in the field of Electronics & Communication engineering.
M2: To provide ethical and value-based education through various activities addressing the societal needs.
M3: To instill self & continuous learning attitude, professional ethics and entrepreneurial skills.
M4: To strengthen the industry-institute partnership through various interactions.

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

PEO1: To prepare the students to take up careers in Communication Networking, Embedded systems, VLSI Design and Electronic manufacturing industries.
PEO2: To prepare the students to Pursue higher education and adopt the emerging trends through continuous learning.
PEO3: To prepare the students to become a socially responsible and successful entrepreneur.

PROGRAM SPECIFIC OUTCOMES (PSOS)

PSO1: Apply the fundamental concepts of electronics and communication engineering in designing various systems and applications in domains like Communication, Networking, embedded systems, and VLSI.
PSO2: Simulate, verify, and test electronic circuits with the state-of-art software tools.

DEPARTMENT STUDENTS CHAPTER ACTIVITIES:

YEAR:2020-2021					
Sl. No	Roll No.	Name of Student	Event	Name of the Institute	Prize/ Participation
1.	18EC424	KOKILA S	Paper Presentation	PAC Ramasamy Raja Polytechnic College	I Prize
2.	20EC468	VIGNESH A	Poster Presentation	Excel Polytechnic College	Participation
3.	20EC463	LINGESWARAN A	Poster Presentation	Excel Polytechnic College	Participation

DEPARTMENT ASSOCIATION ACTIVITIES:

S NO	DATE & TIME	RESOURCE	PERSON TOPIC
1	24.07.2020 Friday 10 AM	Dr. Gunasekaran Thangavelu ECE'97 Higher College of Engg, Muscat	Communication Engg -NAP
2	31 .07.2020 Friday 10 AM	Er.Jayaprakash Narendran RAG Chordial, Erode	1 Audio Equipment and Systems
3	07.08.2020 Friday 10 AM	Dr. Gunasekaran Thangavelu ECE'97 Higher College of Engg, Muscat	Communication Engg-Modulation, Demodulation
4	14.08.2020 Friday 10 AM	Dr. GunaSekaran Thangavelu ECE'97 Higher College of Engg, Muscat	Communication Engg-Transmitters, Receivers
5	21.08.2020 Friday 10 AM	Er.Karuppasamy Pachiappan ECE'01 Nokia Poland	2G-5G Mobile Networks
6	29.08.2020 Saturday 5 PM	Er.Govindaraj Muthu Krishnan ECE'01, Cognizant, Bangalore	IOT and its Opportunities
7	05.09.2020 Saturday 5PM	Er.Senthilraja Ramasamy, Atlanta, USA	Cloud computing
8	12.09.2020 Saturday 5PM	Er. Satyaseelan Perumalsamy Bank of America, Bangalore	DNS Hacking & Mitigation Techniques
9	19.09.2020 Saturday 5PM	Er.P.Shankar PHILIPS India, Chennai	What's up Next?
10	26.09.2020 Saturday 5PM	Er.Raghothaman Hanumantharao, Titan, Chennai	Leveraging Industry 4.0
11	3.10.2020 Saturday 5PM	Er.Suresh Senniappan. Yaksha System, Gobi	CCTV -Security Systems & Job Opportunities
12	10.10.2020 Saturday 5PM	Er. Sasikmar Subramaniam AP, NANDHA ENGG COLLEGE	Programmable Logic Controllers
13	17.10.2020 Saturday 5PM	Er.Dhanabal BalaSundaram Application Er.Cognizant, Bangalore	Computer Virtualization
14	24.10.2020 Saturday 5PM	Er.Prassanna Venkatesh City Bank, Chennai	College to Corporate
15	31.10.2020 Saturday 5 PM	Dr. AnuragMishra Chandra Nath Mishra .BARC, Mumbai	RF & Micro Wave Frequencies
16	07.11.2020 Saturday 5PM	Dr.Sathyamoorthy Pattusamy Asst.Prof.Dr NMCET, Pollachi	Intellectual Property Rights
17	21.11.2020 Saturday 5PM	Er.Periyasamy Ulaganathan Head Buss.Dev & Marketing, LMW Cbe	Op0rtunities for EE,EC,IC,Comp Engineering
18	28.11.2020 Saturday 5PM	Er Miss Ancy Vargeese Design Engineer, IRRD Automations ,Erode	Machine Learning Implementation using Python
19	05.12.2020 Saturday 5PM	Er Ramesh Ramasamy Eastman spinners, Dindugal Jeyabal Venkidasamy, Fathima college, Madurai	Personal & Industial Fire safety
20	12.12.2020 Saturday 5PM	Er.Boopathy chinnappan SAP PM Consultant, Middle Ease Countries, Erode	Employment Opportunities in Middle East
21	19.12.2020 Saturday 5 PM	Er.Bharaneedharan Parmasivam IBM India, Bangalore	Cloud Computing-Private, Public, Hybrid
22	26.12.2020 Saturday 5 PM	Er.Devendran Munusamy Project Lead, L&T, Chennai	Renewabl Energy Sources Technology & Opportunities
23	02.01.2021 Saturday 5PM IST	Er.Venkittusamy Arukkutti Project Lead, L&T, Chennai	Global Oppertunities for Industrial Automation
24	09.01.2021 Saturday 5PM IST	Er.Balakrihnan Venkatesan, Embedded software Architect, Wipro, Bangalore	Robotics with Arduino and NodeMCU
25	23.01.2020 Saturday 5PM	Er.Nirmal Kumar Tiruannamai CAD/CAM Er.Saravanan Rajamanickam MIT Ptc	Opportunities in CNC
26	30.01.2020 Saturday 5PM	Er.Senreddy Duraisamy Amaravathy Irrigations, Darapuram Er. Natarajan Kaliannan Senthur Constuctio A.Pudupalayam	Statup and Sustaining an Agripreneurship
27	6.02.2021 Saturday 5PM	Commander Mr.Ravi Palaniappan Retired Naval Officer, Indian Navy Services	Opportunities in Navy
28	13.02.2021 Saturday 5PM	Er. Vinoth Kumar Mohan Asst.General Manager Hyndai Motors, Chennai	Changes and Challenges in BS6 Emission norms
29	20.02.2021 Saturday 5PM	Mr.JEEVANANTHAM PALANISAMY National appraiser, NSDC	Avenues in Tourism and Hospitality Sector
30	27.02.2021 Saturday 6 PM	Er. Mailvaganam Palaniapan Thirumla Electricals, Coimbatore	Good Electrical Termination Practices
31	06.03.2020 Saturday 6 PM	Er. Navaneethan Krishnan Sidhan, FESTO India Lt, Chennai	Pneumatic Automation
32	13.03.2021 Saturday 6 PM	Er.A.R.Sivanes Asst.Prof,SRIET, Coimbatore	Lean Manufacturing
33	20.03.2021 Saturday 6 PM	Er.Loganand Deiva sigamani Escalation Engineer, Cisco Voice, TTEC Hyderabad	Voice Networks
34	27.03.2020 Saturday 6 PM	Dr.Pushpavalli Maheleeswaran Associate Prof, BIT, Sathy	Microcontroller Projects
35	10.04.2021 Saturday 6 PM	Dr Ragavendran Subramaniam NCC Officer ASST. Prof, KEC	Make a career in Army - Serve the Nation with Pride
36	17.04.2021 Saturday 6 PM	Er.Joseph Mathew MD 3 D Technologies LLP, Coimbatore	3D Printing
37	24.04.2021 Saturday 6 PM	Er. Ganesh Jagathees CEO, Ganesh Audio System, Erode	Make your own Audio Systems - A Practical Approach
38	01.05.2021 Saturday 6 PM	Mrs Sathya Priya Karthik Dhruva Fitness Training, Salem	YOGA Immune Booster
39	08.05.2021 Saturday 6 PM	Er.Venkataraj Kanakaraj Deputy Director-General of SAEINDIA,USA	Career Guidance (awaiting tittle)

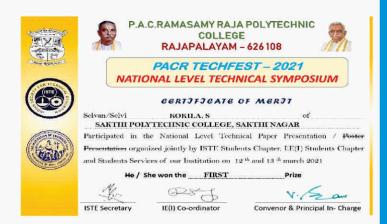| S NO	DATE & TIME	RESOURCE	PERSONTOPIC
40	15.05.2021 Saturday 6 PM	Mr Vijayakumar Minian Chief Designer Sakthi Computers, Bhavani	Opportunities in Video Editing
41	22.05.2021 Saturday 6 PM	Er.Bhelee Rajamony IV th Officer, Merrchant Navy Tuticorin	Opportunies for Marine Engineers
42	29.05.2021 Saturday 6 PM	Er. Murali Azhagarsamy Associate Projects, Coznizant Tech. Soluntion , Coimbatore	Career Growth in IT

SUMMER / WINTER COURSES CONDUCTED BY THE DEPARTMENT:

❯ Aws- Cloud Foundation
❯ Microchip – PCB design & Microcontrollers
❯ Paloalto- Networking & Cyber security
❯ Cisco – CCNA

CISCO. Academy Support Center **EduSkills**

Cisco Networking Academy

Sakthi Polytechnic College

is an official partner of Cisco
Cisco Academy ID : 53057

EduSkills
Nation Building Through Skills
An ISO 9001 : 2015 Certified Organisation

Certificate of Membership

This is to certify that

Sakthi Polytechnic College
Tamil Nadu

is an institutional member
of EduSkills Foundation

Director, EduSkills

Valid Till : JUNE 2024

Membership No :
052006210610824

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RED HAT ACADEMY | paloalto Cybersecurity Academy

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P.A.C.RAMASAMY RAJA POLYTECHNIC COLLEGE
RAJAPALAYAM – 626 108

PACR TECHFEST – 2021
NATIONAL LEVEL TECHNICAL SYMPOSIUM

CERTIFICATE OF MERIT

Selvan/Selvi KOKILA. S of
SAKTHI POLYTECHINIC COLLEGE, SAKTHI NAGAR
Participated in the National Level Technical Paper Presentation / Poster Presentation organized jointly by ISTE Students Chapter, I.E(I) Students Chapter and Students Services of our Institution on 12 th and 13 th march 2021

He / She won the FIRST Prize

ISTE Secretary | IE(I) Co-ordinator | Convenor & Principal In- Charge

TITLE: ROLE OF ROBOTICS IN AGRICULTURE
Submitted BY: KOKILA S &MAGESHWARI U
FINAL YEAR ECE

ABSTRACT

Farmers today spend a lot of money to decrease labour and to increase the yield of the crops but profit and efficiency are less. Agricultural automation using robots is the only way to overcome this problem. Applying automation to the agriculture has helped creative several advancements to the industry while helping farmers save money and time. The agricultural robots are the robots deployed for the agricultural purposes. In the agriculture, the opportunities for the robot enhanced productivity are immense and the robot are appearing on the farms in various forms and increasing numbers. The main aim of this paper is to understand what are the roles played by the robots in replacing the conventional methods to make the tasks easy and efficiency.

ALUMNI CORNER:

G. PRASHANNA VENKATESH

PRASANNA VENKATESH G

Designation: **VP, Technology Infrastructure, Citicorp.**

I'm a proud alumnus of SPC College, studied ECE during 1995-1998.

It's been more than 2 decades now but I still remember and cherish those golden days.

Though the campus is on rural side, it is on par (or above) in terms of Infrastructure or other facilities that a college campus within a City limits can have.

Truly grateful to SPC college and my ECE department HOD, Professors, Lab staff for theirextreme care towards the students beyond the syllabus & academic curriculum.

Industrial Visits, In plant trainings, Periodic sessions & seminars with Alumni's, Industrialists & Entrepreneurs, Soft skill trainings etc are few initiatives to mention

surely helping the students for a seamless switch-over from Campus to Corporate world when they are done with their academics.

P. BHARANITHARAN

Batch: **ECE 2004**

Company: **IBM**

Designation: **Technical Solution Architect**

I studied ECE in 2004 batch and my overall experience in Sakthi Polytechnic has been amazing, and the college is having an amazing infrastructure in Computer LB, Electronics & Communication LAB. S.P.C college has provided me with a number of opportunities to grow and

explore my skills like Cisco Networking course. The emphasis on additional skills along with education always helped me a lot. I have always found a positive and healthy environment and the teachers are highly supportive in all manners. Most of my doubts were cleared after the classes get over and supported in all project works.

I am highly thankful to Sakthi Polytechnic College for providing me with an opportunity to be a part of your college. It has added a number of values to my life.

PLACEMENT:

Our students are Placed in the following reputed companies:-

FACULTY DEVELOPMENT PROGRAM:

AICTE-ISTE Sponsored Faculty Development Program on "Industrial Automation Using PLC & SCADA" for the faculty members of Engineering Colleges/ Polytechnic Colleges & Research Scholars was in conducted in 3 Phases through virtual mode. More than 200 faculty members from pan India participated in the program.

❯ Phase 1:03.02.2021 to 09.02.2021 ❯ Phase 2:24.02.2021 to 02.03.2021 ❯ Phase 3:24.03.2021 to 30.03.2021

All India Council for Technical Education
&
Indian Society for Technical Education

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ONE WEEK-ONLINE INDUCTION/REFRESHER PROGRAMME ON

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using
PLC & SCADA

Phase 1: 03.02.2021 to 09.02.2021
Phase 2: 24.02.2021 to 02.03.2021
Phase 3: 24.03.2021 to 30.03.2021

Organized by

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGG.

Coordinator

Dr.S.SENTHIL ARASU

HOD In charge / ECE

SAKTHI POLYTECHNIC COLLEGE
SAKTHI NAGAR-638 315
Anthiyur Taluk, Erode District.
Govt. Aided & ISO 9001-2015 Certified Institution

About SPC

Sakthi Polytechnic College has been sponsored by the Sakthi foundation as one of its developmental programmes. The mission of this institution is to impart technical education to the rural students. PadhmaBhushan late Dr.N.Mahalingam, the famous industrialist, educationalist and philanthropist was the promoter of the foundation and the institution. The institution is managed by a Governing Council with Dr.M.Manickam,M.Sc.,M.B.A. Chairman, SakthiSugars Ltd as the Chairman of the council.

Sakthi Polytechnic college, started functioning in September 1981. We are offering 3 year Diploma courses in Civil Engineering, Mechanical Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering, Metallurgy, Agricultural Technology, Instrumentation and Control Engineering and Computer engineering.

The College is situated in a sprawling area of 31 acres Campus near Sakthi Sugars Ltd at Appakudal on Bhavani to Sathyamangalam main road(Via Athani),18 Km from Bhavani.

It is a matter of pride that Sakthi Polytechnic College was the first institution in this area to offer conventional diploma courses. The institution has been approved by the All India Council for Technical Education.

About the Dept of ECE.

The department has well established laboratories and computer centre to meet the needs of the industry. The faculty members are highly qualified and well experienced to educate the students with the support from able technicians.

About the course

Industrial automation is a set of technologies that uses control systems and devices, such as computer software and robotics, to enable automatic operation of industrial processes and machinery without the need for human operators. Industrial automation eliminates the possibility of human error, reduces cost, saves time, and achieves higher efficiency.

A PLC is a digital industrial computer control system that is preprogrammed to carry out automatic operations in industrial processes. The PLC continuously monitors and receives information from input devices or sensors, processes the information, and triggers the connected output devices, to complete the task in the industrial process or machinery.

SCADA systems control and monitor industrial processes. The system acquires and processes real-time data through direct interaction with devices, such as sensors and PLCs, and records events into a log file. SCADA is important for data analysis, and enables effective decision making for optimization in industrial processes.

Course Content
- PLC Architecture
- PLC Programming
- Instructions (Basic & Advanced)
- Interfacing PLC With Sensors- Demo
- Control Panel Designing
- DCS
- Working with SCADA
- Application Development Using SCADA
- Industrial Applications
- I-IoT
- Art of Living