# JAYA SAKTHI ENGINEERING COLLEGE

St.mary's nagar, Thiruninravur, CHENNAI-602024.

(APPROVED BY AICTE, NEW DELHI, AFFILIATED TO ANNA UNIVERSITY, CHENNAI)



# ANNUAL REPORT

# **ACADEMIC YEAR – 2021-2022**



#### About Jaya Sakthi Engineering College

Jaya Sakthi Engineering College is situated close to Chennai Metropolis; the College is one of the foremost centers of graduate and professional education in the state of Tamil Nadu. The range and depth of resources at the college have few peers. Within easy reach on the same campus and other sites, the college combines all the advantages of a comprehensive institution in the Arts and Science with a full complement of professional schools. Among these are business, dentistry and an unusually complete array of paramedical professions, including pharmacy and physiotherapy.

Clearly, the undergraduate programmes in Engineering at the College offer its students the optimum setting in tertiary education: specialized programmes with a contingent of accessible and dedicated faculty members, within a large, highly diverse college offerings nearly unlimited academic opportunities and resources. Lecture and Laboratory areas are modern and wellequipped; the college has extensive links with IT facilities for the benefit of students. The Engineering programs are as follows: BE. Computer Science and Engineering, BE. Mechanical Engineering, BE. Biomedical Engineering, B.Tech Artificial Intelligence and Data Science & B.Tech Pharmaceutical Technology.

The college ensures that all students have the opportunity to acquire and develop personal and transferable skills, such as technical communication and team-working skills, which are directly appropriate to their future courses. Top and Best Engineering College in Chennai.

#### Vision and Mission

#### Vision

• To achieve Excellence Technical Education through Innovative Teaching, Research and Entrepreneurship who create wealth for our nation and develop a fulfilling global society.

#### Mission

- To create a modern educational institution contributing to innovation entrepreneurship, engineering and technology for our country.
- To Provide Quality Education, Self discipline and Ethical values.
- To identify student's skills and encourage them through creative and enriching methodologies and share their knowledge to create new society.



Chairman's Message



Prof. A. Kanagaraj, M.A., M.Phil., Chairman, Jaya Educational Trust.

Delightful task! to rear the tender thought; To teach the young how to shoot; To pour the fresh, instruction over the mind ; To breathe the enlivening spirit, and To fix the generous purpose in the glowing heart.

-Thomson, Sp. 1149

Count your chick before it hatches" says an old Adage. Our JAYA SAKTHI ENGINEERING COLLEGE is gearing-up such skills to the budding Engineers. In this wide arena of competition, we would like to enable Engineering aspirants with more calibers and more innovation.

World Class Laboratories, Tireless Professors, High-Sounded Placement Cell, International Seminars, National Level Symposiums, Igniting Projects are the strong pillars of Jaya Sakthi Engineering College. Our qualified professors are remaining candle in educational service to lead them for a Bright Future. I assure that 45 years of educational service has its own Pensive Meditation and Epitomized Achievement in the Speculation of perfect Engineers.

# Patrons

Vice Chairman's Message



Er. K.Navaraj, M.Tech., (Ph.D.) Vice Chairman, Jaya Educational Trust.

Dear student,

"Mind has thousand eyes But the Heart with one yet the light of whole life done when the Education is in" by adhering these words our Jaya Sakthi Engineering College the Educational Tree has it's own branch and extending great shelter to Enthusiastic Engineering Candidates. It has great Milestone of Achievement in the ventures on various fields like Computer Science Engineering, Mechanical Engineering, Bio – Medical Engineering, Artificial Intelligence and Data Science & Pharmaceutical Technology. We are paying at most interest over the standard of Education by the overseas experiences. Thereby we are building the castle of career set-up to the upcoming Engineers.



Secretary's Message



Smt. K.Vijaya Kumari, M.A., B.Ed. Secretary, Jaya Educational Trust.

To strive; to seek and to achieve; this is the age.

We are launching in all hearts of forth-coming Engineering doers. The vision of worldwide corporate scope has been given and still continues in our reputed Jaya Sakthi Engineering College. We are giving helpingaid to various technical innovations and stimulating those projects for worldwide knowledge. Like a Mother assuaging the pain to success of child, we are indeed find immense pleasure in helping economically lagging but mentally capable students to obtain scholarships, sponsors, bank loans and other endowment prizes. Like a well known proverb, this is not an end; but a beginning. Our Jaya Sakthi Engineering College will do Educational Service in Eternal Manner.



Our students are well known for their discipline; best practices and moral standards which help them show good performance in academics and obtain the best placements. This has been made possible due to the excellent support from the management, the faculty members, the staff, the students and their parents.

The infrastructure of our college is in a continuous process of up gradation. Through periodic seminars, symposia, workshops and industry visits as an integral part of the course, the students are equipped with technical knowledge, critical thinking skills and creativity to be competent to face the global challenges in engineering and technology.

The college encourages the students to participate in cocurricular and extracurricular activities in a balanced manner to develop their personality. We have an Entrepreneurship Development Cell to inculcate research culture and enterprising skills among the students and faculty. We also have various professional bodies to work closely with the industrial leaders to get their expertise and professional values.

The faculty members are also encouraged to participate in specialized training programmes, conferences, pursue higher studies, etc. to upgrade their skill set in their domain. I am sure that our students will continue their stellar performance during the course, and also continue their good work in pursuing post graduate, research studies and in their profession work.

We have been making greater interaction with the Industry in providing student projects, workshops, seminars, in-plant-training and placement. We are also now focusing on building a strong Alumni Association who, we believe that, are the ambassadors of this Institute and could contribute significantly to its growth in all dimensions

I extend my best wishes to all my students, certainly that they will create their own path to success.

# **ORGANIZING COMMITTEE MEMBERS**

#### **CHIEF PATRONS**

**Prof.A. Kanagaraj M.A., M.Phil.** Chairman - Jaya Group of Institutions

Er. K.Navaraj, M.Tech., (Ph.D.) Vice – Chairman - Jaya Group of Institutions

Smt. K.Vijaya Kumari, M.A., B.Ed. Secretary - Jaya Group of Institutions

Dr.K.Dheena, MBBS.

Joint Secretary - Jaya Group of Institutions

#### **PATRON**

Dr. P. Marimuthu M.E, P.hD. Principal, Jaya Sakthi Engineering College

## ACADEMIC EXCELLENCE

The College is approved by All India Council for Technical Education (A.I.C.T.E) and Affiliated to the Anna University, Chennai. It can be proudly stated that many Engineers pass out every year from various branches from the college it is a self financing institution which brings out well qualified, talented Engineers. We impart skills in a harmonious, pluralistic environment preparing students to meet challenges and embrace opportunities of the increasingly global world.

Situated close to Chennai Metropolis, the College is one of the foremost centers of graduate and professional education in the state of Tamil Nadu. The range and depth of resources at the college have few peers. Within easy reach on the same campus and other sites, the college combines all the advantages of a comprehensive institution in the Arts and Science with a full complement of professional schools. Among these are business, dentistry and an unusually complete array of paramedical professions, including pharmacy and physiotherapy.

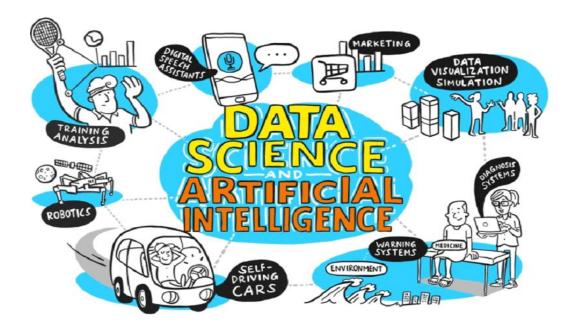


## **Department of Computer Science and Engineering (B.E. CSE)**

The Computer Science and Engineering department of this college understands the needs of the society and striver to produce excellent quality engineers and professionals in its mission to contribute to the industry to the future. The foremost objective of the Computer Science and Engineering programme is to hone technical skills demanded by today's engineering professionals by providing a sound technical platform and the required knowledge base. It prepares them to meet the challenges faced by today's IT professional by exposing them to a wide array of cutting-edge technologies.

The Department of Computer Science and Engineering at JSEC is renowned for cutting edge research and for imparting state of the art education. We attract some of the brightest students and faculty, and invite you to join us in the excitement.

**Department of Artificial Intelligence and Data Science (B.E. AIDS)** 



B.Tech in Artificial Intelligence and Data Science are one of the many branches of science, engineering, and technology. Engineering in Artificial Intelligence and Data Science is a four years undergraduate course that deals with core technologies like Machine learning, Artificial Intelligence, Data warehouse, Data mining, Scripting language, Product development, Mathematical modeling.This course also gives importance to areas like big data analytics, fuzzy technologies, artificial neural networks. It helps students in getting ready with skills to perform decisions that are based on data analysis.

Through AI and DS courses, students will gain skills in areas like statistics, data scientists, machine learning, computer science, and logic. Artificial Intelligence is a part of Data Science. For its operations in the field of Data Science, Artificial Intelligence is used. Data Science is connected with Artificial Intelligence through machine learning. The candidates who qualified class 12th exam in Science stream are eligible for admission in this course.

**Department of Mechanical Engineering (B.E. Mechanical)** 



The Mechanical Engineering department of this college understands the needs of the society and striver to produce excellent quality engineers and professionals in its mission to contribute to the industry to the future. Mechanical Engineering is one of the largest, broadest and oldest engineering disciplines. Mechanical Engineering applies the principles of physics, materials science and mathematics to the design, development, research, evaluation, manufacture, installation, testing, operation, maintenance and management of mechanical systems. They create the processes and systems that drive technology and industry.



# **Department of Biomedical Engineering (B.E. BME)**

The Department of Biomedical Engineering was established in the year 2020 with an intake of 60 students. The department has eminent faculties with

precise knowledge in the area of Biomedical Engineering. The objective of the department is to produce Biomedical Engineers as well-groomed, skilled professionals in various domains of Biomedical Engineering, ready to deploy in industrial projects upon graduation through outcome based education with activity-based learner-centric approaches blended with state-of-art technology tools which lead to innovation and entrepreneurship skills.



#### **Department of Pharmaceutical Technology (B.Tech. AIDS)**

B.Tech. Pharmaceutical Technology is an undergraduate Engineering course. Pharmacy is the study of the origin, preparation, properties, effects, dosage and dispensation of medicines. Pharmaceutical engineers are concerned with the transformation of raw materials into valuable products by chemical, biochemical or physical processes. They are involved in the conception, design, construction, and operation of industrial plants in which the above processes take place, increasingly with design at the molecular scale being more and more significant. The duration of the course is four years and it is career orienting in nature.

#### **Department of Science & Humanities**

The Science & Humanities department of this college understands the needs of the society and striver to produce excellent quality engineers and professionals in its mission to contribute to the industry to the future. The department has highly qualified, experienced and dedicated staff members. These motivating Professors cater to the needs of the students. The subjects are quite challenging and interesting. They make the staff to be creative in teaching and implementing their ideas effectively.



# **INTERNSHIP**

Department of Biomedical Engineering



Department of Biomedical Engineering had conducted the internship for students in **DEEPAM HOSPITAL**. Our students have completed training both

practical and theory in "**BIOMEDICAL INSTRUMENTATION**". The internships was for 5 days. Students attended 30 sessions. That was a wonderful experience for the students. Students learned how to plan and execute biomedical and research and production, communicate their visions effectively, and collaborate with a team on a shared goal.



# National Service Scheme (NSS)

National Service Scheme (NSS) is a Central Sector Scheme of Government of India, Ministry of Youth Affairs & Sports that aims to develop the personality of student volunteers through community services and to make them sensitive and responsible human beings who are aware of the socio-economic realities of India.

Our NSS is actively participating in various National & State level programs and got meritorious awards.

- Mr.V. Bhuvaneshwaran our student of third year Mechanical Engineering has got best NSS volunteer award. He got IGEN Gendistranscon Award of the year 2020 -2021.
- Mr.S.Gowtham, our student of third year Mechanical Engineering has got best NSS volunteer ward. He got IGEN Gendistranscon Award of the year 2020 -2021.

- **Mr.M. Rupesh** our student of third year Mechanical Engineering has received award for 4 th state level silambam championship award from TamilNadu silambam Committee (TSC) in 2022.
- Our NSS Programme Officer **Mr.P.Karthikeyan** has got Most Valuable Organizer Award from IGEN IN 2021.
- **Ms.M.Hemalatha**, our student of third year Bio Medical Engineering has got Third prize in TALENT STARS Dance Competition Conducted by BANNARI AMMAN INSTITUTE OF TECHNOLOGY Which was held in 2021.

#### IGEN GREEN DAY – 2022

We Jaya Sakthi Engineering college, Partnered with The Institution of green Engineers, (IGEN) and National Service Scheme, (NSS), Organised IGEN Green Day and its objective is to inspire people on being green and to carry out any one of the green actions on their own choice. It will be an opportunity for academic Institutions and NGOs to come together to advocate for green and act to support the United Nations Sustainable Development Goals UN SDGs. The Program was scheduled with two events:

- 1. Campus Tree Plantation
- 2. Solid Waste Management

# **Campus Tree Plantation**





Solid Waste Management Awareness and Campaign



A total of 25 members including our college students and staff members organised this program. The campaign started from our college by collection of plastic wastes with support of Corporation Muncipality officials, with proper safety precautions. Our students created awareness on the solid waste management and interacted with Garbage men and Public, enquired them about their daily challenges and difficulties. The Campaign extended from our College to Nemlicherry Railway Station.

## **Valedictory Session**

The Valedictory function was addressed by our Honourable Chairman Prof. Dr. A. Kanagaraj, Jaya Educational Trust. In his speech he congratulated and thanked all students and faculty members for having participated in IGEN GREEN DAY -2022 with full enthusiasm to create a Cleaner and greener.



# National Yoga day

The National Yoga Day was conducted in our college in June 21<sup>st</sup>. Our student has attended the program. Warm up exercises were taken and all the students practiced & performed sitting and standing asanas, importance of these were explained simultaneously. All the students were taught the importance of Yoga in their life & how to maintain the harmony between body and mind. The students discussed the importance of yoga and also exhibited yoga postures and promised to introduce this activity in their daily lives.





#### Workshop on "Dismantling and Assembling of Four stroke Petrol Engine"

#### **Organized by Department of Mechanical Engineering**

Department of Mechanical Engineering conducted a work shop by our student MuraliKrishnan. S on 29/10/2022. The workshop is about "Dismantling and Assembling of Four stroke Petrol Engine", the demo is of dismantling the working engine and assembling the engine as a result of it is it has its same efficiency in its condition. This demo session is very useful for students and they have learned a practical knowledge.

On the same day the Department of Mechanical Engineering has conducted a work shop on "Latest Trends in Electrical Vehicles". Our Student Vignesh P of Mechanical Department has conducted the workshop and given the clear explanation about the benefits of electrical vehicles. It is environment friendly, saving for our budget and the cost of vehicle is also less. It is very useful to the students and learnt a sound knowledge about the electrical vehicles.



#### Value added course on "DATA SCIENCE"

#### **Organized by Department of Computer Science and Engineering**

Value added course was conducted by the Computer Science Department in the year 2021(17/07/2021-04/08/21). The topic was "DATA SCIENCE" and it is very useful for students to develop their profession. The duration of the course is 30 hours. 15 students were enrolled the course and all 15 had completed it.

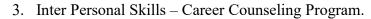


# **Career Guidance Programme**



A career guidance program was conducted by our college for the welfare of the students. The II/III/IV year students were participated in the event. The two competitive exam coaching was given in that 72 students were participated. The placement programme was conducted 142 students were benefited. The topics of the programme are

- 1. Career and Professional Development for Engineers.
- 2. Industry Expectation from your Engineers Career Guidance Programme.





# Students Benefited through Scholarship

Government of India, Government of Tamil Nadu (State) & Our College provides the various scholarships for the benefits of the students education. One hundred and sixty two students were benefited in the academic year (2021-2022) through various Government and non-Government scholarship schemes.

## **Placement Details**

It's our pleasure to say that in the year 2021-2022, Seventeen students were placed in various reputed organization with good salary package.

Year	Name of student who has been placed	Program graduated from	Year of graduation	Name of the employer with contact details	Pay package at appointment (In INR per annum)		
2021-2022							
2018- 2022	JAYASREE .V	CSE	2022	First Source -Associate Software Developer, Hr@Firstesource.Com	3,50,000		
2018- 2022	KARTHIKEYAN.S	CSE	2022	Data Mark Indian Bpo Llp, 044 4905 3626	3,00,000		

2018- 2022	KRISHNAMOORTHY. S	CSE	2022	Data Mark Indian Bpo Llp, 044 4905 3626	3,00,000
2018- 2022	NARESH . N	CSE	2022	Data Mark Indian Bpo Llp, 044 4905 3626	3,00,000
2018- 2022	OMEGA. S	CSE	2022	First Source -Associate Software Developer, Hr@Firstesource.Com	3,50,000
2018- 2022	PRABHAKARAN . D	CSE	2022	Ciar Software Solutions Pvt Ltd, 082200 99899	2,50,000
2018- 2022	PRITHIKA.N	CSE	2022	First Source -Associate Software Developer, Hr@Firstesource.Com	3,50,000
2018- 2022	SATHYADASS . S	CSE	2022	Why Global Service, 75488 10999, 86670 79822	2,00,000
2018- 2022	SINDHU. S	CSE	2022	Flada Tech Info	2,40,000
2018- 2022	SREEJITH .B	CSE	2022	Medi Inter Face –Trainee Programmer, 044 4505 0026	2,00,000
2018- 2022	YAMINI G.(L.E)	CSE	2022	Data Mark Indian Bpo Llp, 044 4905 3626	3,00,000
2018- 2022	KAMALESH.M	MECH	2022	Easun Mr Tap Changers, 0413 264 1837	1,70,000
2018- 2022	RABIN.P	MECH	2022	Gesso Medical Equipments, 9769037121	1,70,000
2018- 2022	SAM SOLOMON.J	MECH	2022	Krr Heavy Engineering, Contact@Krr.Co.In	1,50,000
2018- 2022	GUNASEKARAN. A.D	CIVIL	2022	L & T Pvt Ltd, 044-40706868	3,05,000
2018- 2022	AKSHEYA MURUGAN. K	ECE	2022	Onward Technologies, 2224926570	1,80,000
2018- 2022	HARI PRASATH. G	ECE	2022	Onward Technologies, 2224926570	1,80,000

# **Skill Enhancement Courses**

Various skill developed courses were conducted in our college as a part of some events are

- 1. Group Discussion.
- 2. Life Skills -Yoga and Meditation.
- 3. Soft Skills Campus Readiness Training Program (CRT -21).
- 4. ICT / Computing Skill & Basic of Computing.





Language And Communication Skills – Group Discussion



**<u>Skills - Yoga Medidation And Fitness</u>** 



# ICT / Computing Skills - Basics of Computing



Sports & Cultural

Our students were participated and achieved Awards in various sports and cultural activities in the Academic Year 2021-22.







**One Day National Level Seminar - "Outcome Based Education"** 

One day National Level Seminar in "Outcome Based Education (OBE)" conducted on 6/08/2022 in Jaya Sakthi Engineering College to create awareness about OBE among the faculty members. Programme started with the welcome address given by Principal. Prof. Dr. A. Kanagaraj, Chairman, Jaya Educational Trust felicitated the resource person **Prof. Dr. S. Baskar**. The Expert **Prof. Dr. S. Baskar**, gave presentation of OBE. He emphasized the different types of knowledge level and Bloom taxonomy. Finally the vote of thanks given by Mr. P. K. Santhosh / IQAC Co-coordinator of Jaya Sakthi Engineering College. 75 participants were benefitted by the programme in this event at our college.





#### Faculty Development Program (FDP)

Our college Faculty Development Program is aiming for India's higher education system is attaining sustainable development and achieving higher growth rates which could be enabled through creation, transmission and dissemination of knowledge. The Faculty Development Programme (FDP), Management Development Programme (MDP), Professional Development & Administrative Training programmes were conducted for both teaching and nonteaching staff, to improve their career. Totally thirty five faculties & non – teaching staffs were benefited. They have learned and earned a sound knowledge by attending the various FDP programmes.

#### Conclusion

To conclude Annual report by placing on record, respectful and sincere thanks to our Chairman, Vice – Chairman, Secretary and Join – Secretary for their support. Thanking to our management for their continuous encouragement to enable me to discharge our duties, our teaching faculty, administrative staff, non-teaching and technical staff for their untiring efforts in their work that makes this institution to develop in a faster rate in Global Level, wishing all the students a bright and a prosperous future.

