



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

1. Alternate sources of energy and energy conservation measures

A. SOLAR PANELS

India has a huge potential for solar energy. India's geographical surface receives around 5,000 trillion kWh of incident energy annually, with the majority of areas receiving 4–7 kWh per square metre each day. Solar photovoltaic energy may be effectively harnessed in India, offering enormous scalability. Moreover, solar energy offers the option of distributed power generation and permits quick capacity expansion with minimal lead periods. From the perspective of rural electrification and satisfying other energy needs for power, heating, and cooling in both rural and urban locations, off-grid decentralised and low-temperature applications will be desirable.



Solar Panel

Solar is the most secure source of energy from a security of supply standpoint because it is widely accessible. The complete amount of incident solar energy might theoretically be used to generate enough electricity to power the entire nation if it were to be captured efficiently. As a result, Jaya Sakthi Engineering College made a contribution to the economic and social growth of the nation by installing a solar panel on the roof of the main building.



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in

Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

The main block's rooftops have solar panels installed by Jaya Sakthi Engineering in order to meet the needs of the nation and promote sustainable development. The institute uses the generated electricity for its daily needs.

B. BIOGAS PLANT

Biogas is an environmentally-friendly, renewable energy source produced by the breakdown of organic matter such as food scraps and animal waste. The biological matter that's used to produce biogas will naturally decay anyway, so capturing the gases produced by this decay, and using them as an energy source, causes less harm to the environment than allowing them to escape into the atmosphere. The chemistry lab near main block's biogas plant have installed by Jaya Sakthi Engineering in order to meet the energy needs of the college.



Biogas Plant



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in

Email : info@sakthiec.edu.in

Phone : 044 2634 0250

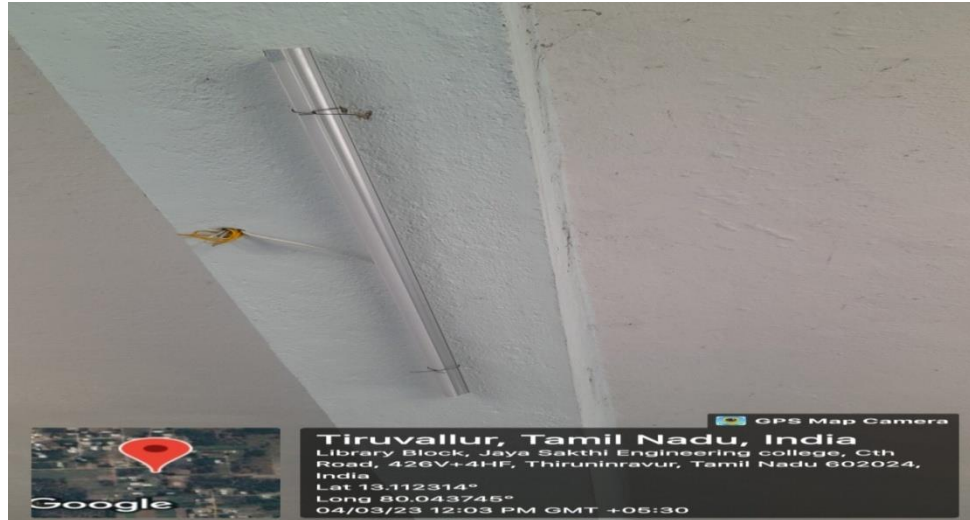
044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

C. USE OF LED bulbs/Power Efficient Equipments



LED Lamp for Power Saving



Uninterrupted Power Supply (UPS)



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

2. Management of the various types of degradable and Non degradable waste

A. Solid waste management

Solid waste can be categorized into three types: biodegradable, non-biodegradable and hazardous waste. Bio-degradable wastes include food waste, canteen waste, wastes from toilets, etc. Non-biodegradable wastes include plastic, tin and glass bottles, etc. Waste is generated by each department and administrative office at Jaya sakthi engineering college and is disposed of in little dustbins located within the departmental and office cabins.



Solid Waste

Each building has several garbage bins scattered around it, including the corridor, washrooms, common rooms, and every corner of the campus. The garbage is collected by the housekeeping staff. Housekeeping staff members regularly dump dust from the little container into the big dustbins. At JSEC, dust pins are placed in various locations to collect litter. Appropriate sweepers and scavengers have been appointed to keep the campus clean.



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

Every weekend, faculty and students are urged to take part in the "Swacha Bharath Abhiyan" initiative to maintain the cleanliness of the campus and the adjacent villages.



Biodegradable Waste

To dispose of rubbish, there are different types of dustbins on our campus. The first dustbins are for moist and biodegradable garbage. Plastic wrappers and other non-biodegradable debris are intended for disposal in other trash cans. Glass bottles and papers are to be disposed of in trash cans.



Compostable Waste



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

The dustbins are frequently cleaned or emptied each day. A composting pit on the college's property effectively converts biodegradable waste into fertilizer. This fertilizer is applied to the campus's trees to encourage their development. The college's cleaning staff and gardener handle the waste fertilizer. The composting unit on the college campus is where the biodegradable garbage from canteens and hostels is collected and disposed.



Dustbin

The college canteen actively works to limit the usage of plastic by providing food with steel utensils instead. The use of plastic has been forbidden by the Tamil Nadu state government. But this rule is pointless unless everyone abides by it, especially college students who are the future. By teaching them to utilize paper bags rather than plastic ones, students will be inspired to adopt environmentally friendly habits.

Jaya Sakthi Engineering College discourages the usage of plastic in this regard. Vendors handle the disposal of paper trash from Main block, libraries, administrative offices, and hostels. For appropriate waste management, the wastes are properly placed in the prescribed location and then disposed of by vendors. In order to decrease the use of paper for communication and document exchange, colleges encourage digital platforms.



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in

Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

B. Liquid waste management

Liquid waste is generated from science laboratories, Hostels, Residential quarters, and canteen. Liquid wastes generated by the college of different types such as Sewage waste, Laboratory, residential washing, and canteen effluent. The liquid wastes are mainly dumped into the sump to improve the ground level of water.



Liquid Waste



Sewage waste



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

C. E-WASTE Management

The e-waste includes a wide range of electronic and electrical items such as computers, printers, keyboards etc. Electronic equipments and goods are put to optimum use. The institute takes efforts to minimize e-waste by repairing the computer peripheral and electronic components.



E-Waste

E-waste generated from various departments which cannot be reused or recycled is being disposed off centrally through certified eco-friendly vendors. Any damages or reductions in capacity are set right by repairs. In addition, the college has emphasis on minimum paper usage to save carbon emission in printers. The non-working computer spare parts and other non-working equipment are safely disposed outside. The cartridge of laser/ Inkjet printers is refilled outside the college campus for our regular use. UPS Batteries are recharged / repaired / exchanged by the suppliers.



Phone : 044 2634 0250
044 2634 4282
Fax : 2634 3770

Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in Email : info@sakthiec.edu.in

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

D. Ban on use of Plastic

On 5th June, the college celebrates World Environment Day. The college has proclaimed plastic-free zones on its whole campus. Disposable cutlery, plastic bottles, and polythene are not recommended. Faculty members and students take an oath to only use paper and cloth bags. Students and NSS volunteers promise to maintain the campus free of plastic. Laboratory, residential washing, and canteen effluent. The liquid wastes are mainly dumped into the sump to improve the ground level of water.



The use of plastics is banned on our college campus



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in

Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

3. WATER CONSERVATION

A. Rainwater collection

Rain Water Harvesting is the most economical and smart way to tap water resources. It keeps the campus free from water scarcity. The Jaya Sakthi Engineering College has significant provisions for rainwater harvesting. Rainwater harvesting is a way to capture the rainwater at the time of downpour, store that water above the ground or charge the underground water and use it later.



Rain Water Harvesting



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in

Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

Rain Water is harvested in all the blocks inside the campus. An adequate arrangement to collect the roof water during rain is in place. Extensive rainwater-harvesting facilities have been installed in all the buildings on the campus to replenish the underground water table.



Rain Water Harvesting in Library Block



Rain water harvesting pit



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in

Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

B. Maintenance of Water Bodies

The ground water is taken from open well and Bore well and pumped into storage tanks located at different places in the campus. There are nine numbers of overhead storage tanks places and one underground water storage tank in the campus. The water is distributed through well laid pipe network. Drinking water is supplied through a separate set of distribution pipes and water for all other purpose is supplied through another set of distribution pipes.



Maintenance of Water Bodies



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in

Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary



Maintenance of Water Bodies



RO Plant



Phone : 044 2634 0250
044 2634 4282
Fax : 2634 3770

Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in Email : info@sakthiec.edu.in

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

4. Green Campus Initiatives

In the center of the Thiruvallur district, the college connects the city and the village. Therefore, it leads four-way connection road. Our college lay is a beautiful, green campus with towering, mostly old-growth trees that provide shade all around the campus and around the perimeter. Staff members and students plant a significant number of trees each year.



Green Campus



Phone : 044 2634 0250
044 2634 4282
Fax : 2634 3770

Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in Email : info@sakthiec.edu.in

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary



Green Campus

A. Restricted entry of Automobiles

To support the college's environmental initiatives, students, faculty, and sub-staff are encouraged to use public transportation. For staff and students, we have separate parking places. Vehicle entry is not permitted inside the campus. Four-wheelers are prohibited inside the campus by students. Few students and staff ride bicycles on our campus.

JSEC decided reduces the CO₂ emission and “**Green House Effect**” inside the campus and use the **Battery-powered vehicles** and **Bicycle** for transportation purpose for students and Faculty members.



Battery Operated Vehicle



Phone : 044 2634 0250
044 2634 4282
Fax : 2634 3770

Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)
St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.
www.sakthiec.edu.in Email : info@sakthiec.edu.in

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

B. Pedestrian Friendly Pathways

Jaya Sakthi Engineering College has good access to several locations. Pathways have been covered by the college for the benefit of both students and faculty.



Pedestrian Path

C. Landscaping with Trees and plants

Jaya Sakthi Engineering College has a beautiful landscape with mix of very old trees, middle aged trees, young trees, saplings and herbs and shrubs. The college gardens are well maintained through skilled and experienced persons.



Landscape with Plants



Phone : 044 2634 0250
044 2634 4282
Fax : 2634 3770

Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in Email : info@sakthiec.edu.in

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary



Landscape with trees



Landscape with trees



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in

Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

D. Plantations planting campaign

In addition to the teacher's day which is celebrated annually, to plant saplings of many different species. Students and NSS volunteers take an active part. For the purpose of establishing new plantations or enhancing existing green areas in various locations throughout the campus, medicinal plants, and ornamental plants are arranged from nurseries to plant in our college.



Plantation Campaign



Jaya Sakthi Engineering College

(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)

St. Mary's Nagar, Thiruninravur, (Near Avadi), Chennai - 602 024.

www.sakthiec.edu.in

Email : info@sakthiec.edu.in

Phone : 044 2634 0250

044 2634 4282

Fax : 2634 3770

Prof. Dr. A. Kanagaraj, M.A., M.Phil., Ph.D.,
Chairman

Mrs. K. Vijayakumari, M.A., B.Ed.,
Secretary

5. DIFFERNTLY ABLED-FRIENDLY, BARRIER-FREE ENVIRONMENT

The JSEC shall provide barrier free environment in important building for differently-able students, Ramp/Wheel Chair shall be sited at the main entrance and exit of the building, where any disabled student can easily identify and access it. The ramp shall be wide enough that a wheel chair user can use without any problem. Separate toilets are available for people with disabilities. They are clearly identifiable and accessible. The doors are wide enough and lockable from inside and releasable from outside. There is enough maneuvering space inside.



Wheelchair for Differently-abled Student



Toilet for Differently-abled Student