# St. JOSEPH'S COLLEGE OF ENGINEERING

St. Joseph's Group of Institutions, OMR, Chennai—119

26 Years of Excellence · Since 1994
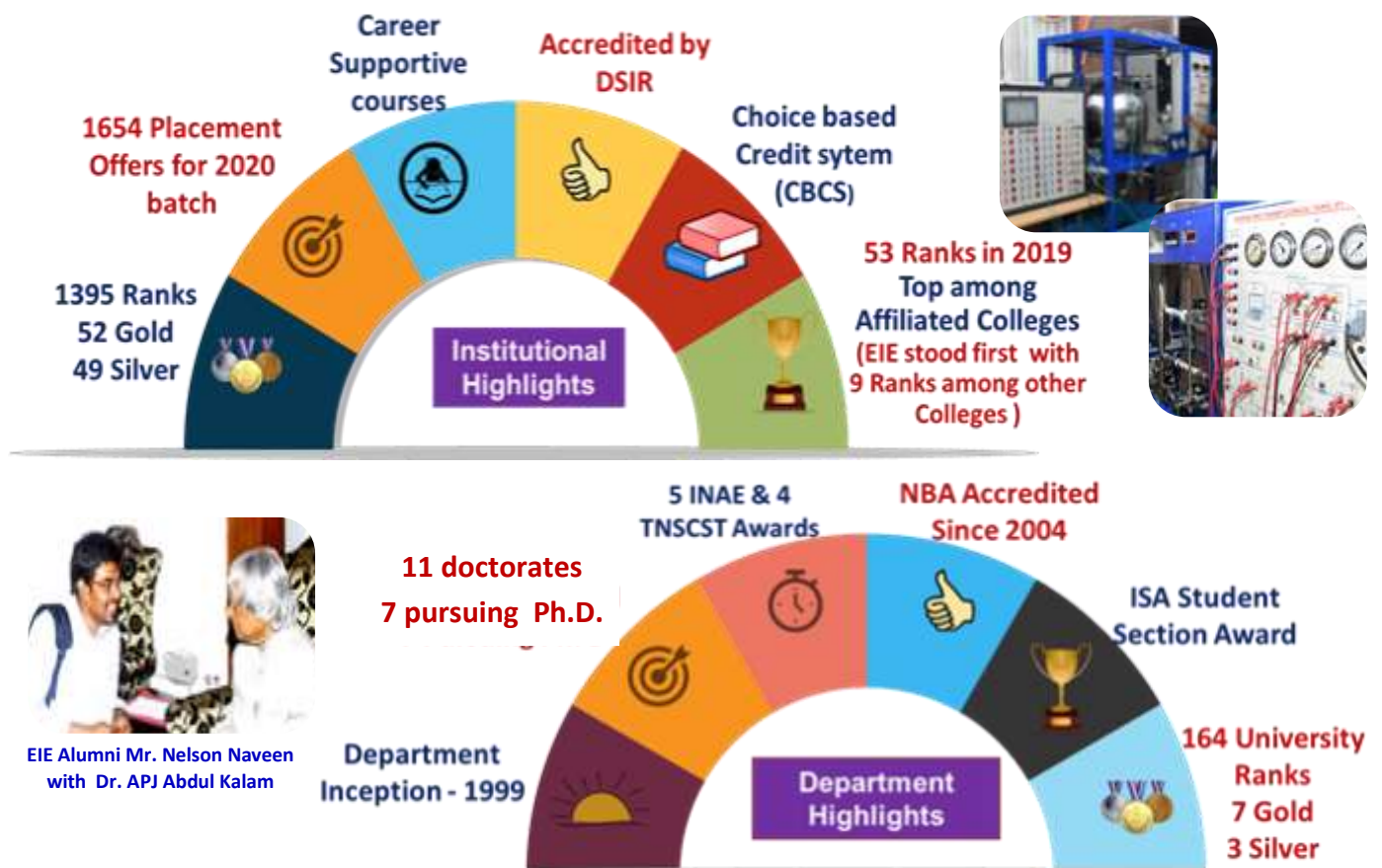
**nirf** · **NBA** · 9 UG COURSES ACCREDITED SINCE 2003

We prepare for **Cambridge** English Qualifications

**A+ NAAC** · Highest score of 3.46

**DSIR RECOGNIZED** SIRO

## Department of Electronics and Instrumentation Engineering

### Institutional Highlights

- 1654 Placement Offers for 2020 batch
- 1395 Ranks · 52 Gold · 49 Silver
- Career Supportive courses
- Accredited by DSIR
- Choice based Credit sytem (CBCS)
- 53 Ranks in 2019 Top among Affiliated Colleges (EIE stood first with 9 Ranks among other Colleges )

**EIE Alumni Mr. Nelson Naveen with Dr. APJ Abdul Kalam**

### Department Highlights

- 11 doctorates · 7 pursuing Ph.D.
- 5 INAE & 4 TNSCST Awards
- NBA Accredited Since 2004
- ISA Student Section Award
- Department Inception - 1999
- 164 University Ranks · 7 Gold · 3 Silver

## Students Achievements

| Batch | Success Rate | Placements | | | Higher Studies | | University Ranks |
|-------|--------------|------------|---|---|----------------|---|------------------|
| | % of Pass | Campus Placed | Off Campus | Self | Abroad | India | Total Ranks |
| 2019 | 81.7 | 91 | 40 | 23 | 5 | 17 | 9 |
| 2018 | 83.4 | 97 | 24 | 51 | 11 | 15 | 15 (1 Gold) |
| 2017 | 81.2 | 124 | 25 | 49 | 6 | 7 | 20 (1 Gold) |

## Autonomous Benefits

"Autonomous status" is a reflection of consistent Academic Excellence.

- Provides more academic freedom in terms of:
- Introduction of new courses of study to cater the needs of industry
- Inclusion of special training and internship programmes for better employability with flexibility in academic schedule
- We will continue to be affiliated to **Anna University** even after becoming Autonomous.
- Degree will be awarded by Anna University.

**Scan QR code to reach our Department website**

# Placement Achievements and Scope

**1666\* students recruited through the campus placements by 205 companies in the academic year 2019 - 20 with an average pay band of 3.5 lakhs—10 lakhs CTC.**

**Total Offers : 1666\* (Current Final Years)**      **EIE— 93\***

## Our Major Recruiters

Cognizant, Soliton, freshworks, DELL, Mphasis, TATA, SoFRUGAL, TCS, Mu Sigma, UO, AJIRA, 6thMATRIX, odessa, ZOHO, Odessy, virtusa, wipro, Infosys, CoCubes.com, DXC.technology, Kaar, aspire, HCL, L&T Infotech, ThoughtWorks, SYNTEL, e-con Systems, Hi HEXAWARE, ZIFO, Mindtree, spookfish, GAMMON, SIEMENS, verizon, MCDERMOTT, EMERSON, KEYENCE, BOSCH

### Renowned Alumni

| Year | Name | |
|------|------|---|
| 2004-08 | Mr. Anil Philp Sebastain | Microsoft |
| 2008-12 | Ms. Keertana Deepthi | HARVARD MEDICAL SCHOOL |
| 2009-13 | Ms. Lakshmi Saraswathi | intel |
| 2009-13 | Ms. Ashwini Mohan | amazon |
| 2011-13 | Ms. Athira Ajaykumar | XILINX |
| 2011-15 | Mr. Pravin Kumaravel | Qualcomm |
| 2011-15 | Mr. Gautham | ZOHO |
| 2007-11 | Mr. Nelson Navin | CEO @ NELSONIN RESEARCH |
| 2007-11 | Mr. Kunal Bajaj | VERKADA |

| Year | 16-20 | 15-19 | 14-18 | 13-17 | 12-16 |
|------|-------|-------|-------|-------|-------|
| No. of Placements | 93\* | 91 | 97 | 124 | 96 |
| Dream Companies | Soliton | Freshworks | Keyence | BARC | ZOHO |

### Salary Band: 5.5 to 10 Lakhs

## Semester Wise Placement Oriented Training

- Semester I - Communication skill Enhancement
- Semester II - Aptitude Crash Course
- Semester III - Cambridge- Business English Certificate Training and Exam
- Semester IV - C Programming Training
- Semester V - Department Specific value Added Courses
- Semester VI - AMCAT assessment I, Advanced C Programming & Data Structures (For Selected Students), AMCAT Assessment II
- Semester VII - Placement Orientation Program, Data Structures & Algorithm, CODE Fit Training, Department Specific training, Co-Cubes Online Assessment I, AMCAT Assessment III, Mock Interview, Interview Skills Training, Co-Cubes Online Assessment II, Company Specific Training Program

### Scope for Placement
- Petrochemical
- Biomedical
- Semiconductor industries
- Process industries
- Pharmaceuticals
- Power plants
- Electric and automotive Industry
- Robotics
- Industrial automation
- IT Industries
- ISRO

### Scope for Higher Studies
- Control Systems Engineering and Instrumentation
- Power Engineering and Sustainable Energy
- Applied Instrumentation & Control
- Biomedical Engineering
- Imaging and Instrumentation
- Process data analytics
- Robotics and Control
- Nano Technology
- IOT, IIOT
- Data Science

**1666\* Placements 2019-20 Batch**

## Advisory Bureau for Higher Studies - ABHS

Guidance provided for GRE, TOEFL, GMAT, IELTS, GATE, CAT through ABHS Cell.

NHU, UNIVERSITY OF NEW HAVEN, NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE, RUTGERS

## Business English Certificate – BEC Training

- Certification from Cambridge University.
- Second year students are in Preliminary/Vantage/ Higher.
- Institution awarded as **"South Asia's best 25 preparation center"** by the Cambridge.

## Faculty

| 3 | 6 | 18 |
|---|---|---|
| Professors | Associate Professors | Assistant Professors |

**\*Faculty Retention is high**

## Infrastructure

- 83 computers
- Wi-Fi Enabled Classrooms
- Smart Lecture Halls
- Contiki, Tiny, Python, Cent, Wireshark
- Open source Softwares, labView, DCS Software

**R & D Facilities** → PLC- Siemens, ABB, GE Fanuc, HMI, DCS- Modicon → Spherical Tank System → Systems with PLC, Conical Tank with LabView → HMI for Four Tank System
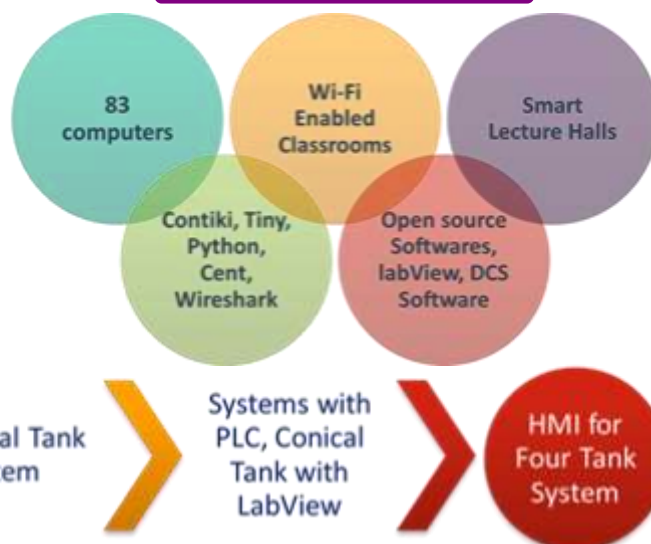
## Faculty Publications

High impact factor journals of reputed publishers such as **IEEE, Elsevier, Springer, IOS Press, American Scientific Publishers, Hindawi, MDPI, Inderscience**

Future Generation Computer Systems
IF: 5.768
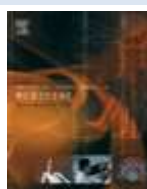
Artificial Intelligence in Medicine I
IF: 3.574

Applied Soft Computing
IF: 4.873

ISA Transactions
IF: 4.343

IEEE Consumer Electronics Magazine.
IF: 3.273
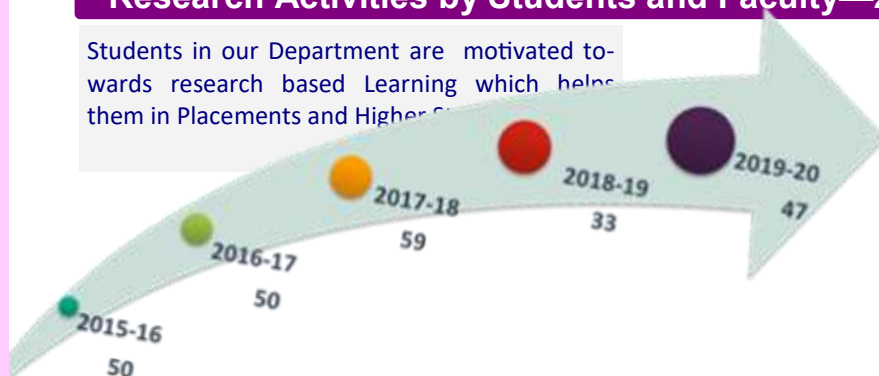
| National /International Conference Participation |
|---|
| IIT Roorkee, NIT Kurukshektra, KIIT University, Odisha NIT Surathkal, SSN College of Engineering, SRIHER. |
| International Conference Participation in countries such as: <br> • USA <br> • Malaysia <br> • Singapore |

## Research Activities by Students and Faculty—239*

Students in our Department are motivated towards research based Learning which helps them in Placements and Higher S

- 2015-16 — 50
- 2016-17 — 50
- 2017-18 — 59
- 2018-19 — 33
- 2019-20 — 47

## Patents - 5

- A Method for Stress Identification
- Indicative Phonological and Visual Recognition System
- Disease Diagnosis system Based on Electromyography
- Automated Vehicle For Visually Impaired
- Galvanic Skin Response signal

## Certifications and Industry Connect Programs (VAC)- 11

- Embedded real time Instrumentation system
- Robotics based on IoT
- PLC and DCS
- Wireless Sensor Networks and Internet of Things
- E-BOX Training in C Programming
- Career Guidance Program (Pragmatic Engineer Level 2.0)
- E-BOX Training in C Programming
- Factory Automation
- Virtual Instrumentation
- Internet of Things (IoT) - Raspberry with Python
- Intelligent Instrumentation

## MoUs - 10

- Yokogawa
- NSIC
- BSNL
- CDCE Equinox Automation
- Gemicates Labs
- IELEKTRON Technologies
- Vipra Engineers
- Starcom Information Technology
- Real Time Techno soft Consulting
- Lema Labs

## Professional Bodies Student Members

### ISA Student Chapter

- 7 Technical Activities
- Best Student Chapter Award
- ISA Leadership Meet in 2018 &19
- Rs.75,000 support - Past 3 Years

### IEEE Student Society

**Activities**
- Raspberry Pi
- Introduction to Arduino ATmega 328
- Seminar on "Robotics in Biomedical engineering"
- Lecture on Machine Learning and Regression Analytics

**Awards**
- In the academic year 2018-19, IEEE Madras Section grated an amount of Rs. 7,000 for conducting Robotics activity.

**Webinars**

10 webinars on recent trends of Electronics and Instrumentation

"My College My Junior" program to connect Alumni and aspiring students.

Various Competitions, Events and webinars were conducted for school students to relate their interest to Engineering.
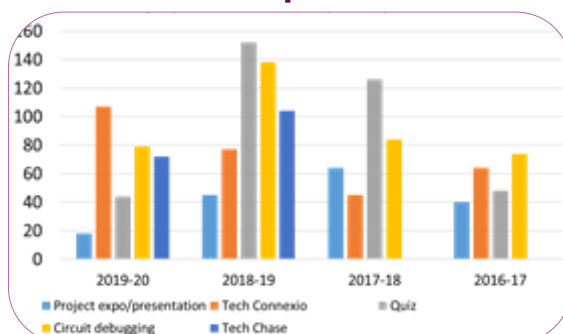
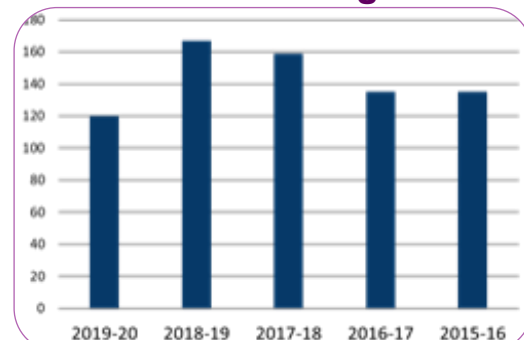**Student Members - past 5 Years (Average)**
- ISA 75
- IEEE 20

## Participation in Project Expo, Symposium, Curricular & Co-curricular Activities

### Intradepartmental



Legend: Project expo/presentation, Tech Connexio, Quiz, Circuit debugging, Tech Chase

### Intercollege



No. of student in Participated

## Monetary Support

- Winners of Technical and Non-Technical events are supported with registration fees, TA and DA.
- Student avail registration/TA/DA for presentations in Conferences/Publications.
- Provided OD for participating in curricular and Non – Curricular Activities

## Cash Awards

- **Every year cash awards are provided**
- **Rs. 50,000** for Gold Medalist, **Rs. 25,000** for other rank holders.
- In the past five Years, a Cumulative amount of **Rs. 15 Lakhs** has been distributed to University rank holders.

## Club Activities

- Mathematics Club, Tamil Club, Quiz Club, Science Club, Robotics Club are active in the institution
- Every Month various Competitions are conducted
- Cash Awards and Merit Certificates are issued
- EICON— The exclusive club of the department conducts various competitions for the students.

## Industrial Visits

Students visit industries every Semester and all arrangements taken care by the institution



## Inplant Training & Internship

Students undergo inplant and internships to bridge the gap between industry and requirements Institute to become readily employable.



No. of students visited

- 2019-2020
- 2018-2019
- 2017-2018
- 2016-2017
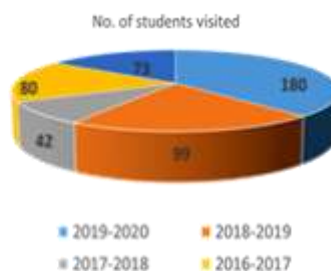
## Smart India Hackathon Participation



Participation in Final rounds of Hardware and Software Hackathon in **2017, 2018, 2019 Editions**

### NPTEL

- CAD for VLSI
- Process Control - Design ,Analysis & Assessment
- Control Engineering
- Industrial Automation
- Process Control
- Embedded Systems

Courses/Lectures by Professors from IIT Delhi, Bombay, Kharagpur, Madras, IISC,NITs through National Programme on Technology Enhanced Learning

### Guest Lecture

- Instrumentation in Nuclear Power Plants, Instrumentation in Petrochemical Industries
- Automation in Cement Industry, PLC & SCADA, Chromatographic Techniques
- Process Automation, Nano Electronics, Thin Films in Nanotechnology, Liquid and Mass Chromatography
- Eminent resource persons from IGCAR, Kalpakkam, Indian Oil Corporation, Ramco Cements, Indian Institute of Madras, MIT, CEG are invited to deliver lectures.

### Defense Academy

3 Students from EIE are in St. Joseph's Defence Academy Under the guidance of **Lt. Eesan**

### Civil Service Academy

- 25 students from our Department are trained in St. Joseph's Civil Service Academy.
- Under the guidance of **Manidhaneyam IAS Academy** & **Officers Academy.**

### Student Counselors and Mentoring

- All students are attached to student counselors.
- 20 students are attached to a counselor who takes care of the students throughout their stay in the College.
- Additional academic support are based on the requirement of the students through mentoring system

## TNSCST Student Funding - 4

**Sewage Block detection**
Rithesh S, Richerd Sebasteen S - (2013-2017)
**Controller Design for TITO Process using Optimization**
**Algorithm**, Aashika Suresh - (M.E 2016 -2018)
**Design of controllers for interacting spherical tank system**
Ashwini Suresh - (M.E 2016-2018)
Effluent Treatment
Tharanitharan, Varun Kumar, (2015-2019)

## INAE Awards - 5

Computer Aided Instrumentation For Respiration Monitoring Using Pressure And Optoelectronic Sensors
R. Aravind & Mr. E. Eben Raja

Remote Control Of Bottle Field Artillery Units Using Optical MMI
Mr. Kevin Thomas, S. Raghuveer &, V. Venkatesh

Advance Control And Automation Of Wheel Chair

Cassandra – IOT in Women Safety
Mr.Karthic RajaV.M & Mr.Krishna Prasad V.L

Real Time GPS based Maritime border indicator for Fishermen

## Entrepreneurship Development Cell

ED cell promotes the budding ideas of our students and assist them in materializing/ participate in competitions

- Anto Irudayaraj - **Hydrophonics** - exhibited in "**The Promise of Agri Tech**" in a National event Bangalore 30th August, 2018.
- S.Arulraj Ravindran, Thamizhiniyan. A.T and Sachin. S. G - **Second Prize in Evantra Entrepreneurship Quiz** in Anna University.
- Motivation to apply for MSME project Proposals

**63 Students participated in EDP activities in past 5 years**

## E- IIT Spoken Tutorial

- An Initiative of National Mission on Education through ICT, MHRD, Govt. India to Promote IT literacy through Open Source Software. (Online Certification Programme)

- The entire 2nd and 3rd year students are trained (C,C++) and (Scilab/Python) re-

| C/C++ | 927 |
|---|---|
| Scilab | 440 |
| Python | 290 |

## Sports Achievements



**2018-19**
- Kabbadi - Immanuel M- II, Allirani -II
- Basketball - Teena.R – II
- Weightlifting – Kavya. S - I

**2017-18**
- Volleyball - S. Subramani-Runner
- Weightlifting - R.Guhesh - Silver (105Kg), M.H.Sidiq - Bronze(94 Kg)

**2016-17**
- Weightlifting – D. Agalya- Gold
- Volleyball- S. Palani, K. Praveen Kumar, P. Tamilarasan -II place

Our Department students (Silambam - Men team)participated in the world record 2020 "**Non—Stop 1 Hour Silambam Alagara Veechu**" held at South Indian Silambam Academy Madurai on 2nd Feb , 2020.

## NGO VISITS

- Once in a semester, on a working Saturdays, each class visits various NGOs in around Chennai (Orphanages/Old age homes).
- Apart from Food they conduct various Programmes to entertain them
- Students Gain Insight about their life style and understand to help the under privileged
- Since 2015, our department students has visited almost **100 NGOs**.

Wish your ward a Happy Education and life learning experience at **EIE** of St. Joseph's College of Engineering
email: hodeiestaffaffairs@stjosephs.ac.in/ Contact number: 9840004970