

# **Sri Sivasubramaniya Nadar College of Engineering**

(An Autonomous Institution - Affiliated to Anna University)

#### NIRF 2020 RANKING - 44<sup>TH</sup> IN ENGINEERING STREAM





The SSN Trust was founded in 1994 by Dr. Shiv Nadar and (Late) Justice Pratap Singh, a judge of the Madras High Court. Justice Pratap Singh, a legal luminary, dedicated his life to a number of social causes that served the greater good of society.

The Trust has established the SSN College of Engineering (SSNCE) and the SSN School of Management (SSN SoM). The institutions are run on a not-for-profit basis, and aim to provide the highest quality educational and research facilities for meritorious students from all economic strata.

The SSN Institutions are ideally located on a sprawling 250 acre campus along the Old Mahabalipuram Road - known as the 'Cyber Corridor' of Chennai. The campus comprises aesthetically designed buildings amidst a scenic setting. The campus is fully wi-fi (wireless fidelity) enabled and has excellent infrastructure for learning - computer centres, modern workshops & labs, seminar halls and well-equipped libraries.

For admissions, contact www.ssn.edu.in

#### **Campus**

SSN Institutions
Rajiv Gandhi Salai, Kalavakkam –
603110, Tamil Nadu, India,
info@ssn.edu.in
Phone: 044 - 27469700

Administrative Office
SSN Trust
New No. 19, Old No. 8,
3<sup>rd</sup> Main Road, Kasthuribai Nagar,
Adyar, Chennai – 600020.
Phone: 044 – 2441 1656 / 2441 6474

Career Development
Centre (CDC)

Phone: 044 - 27469700 Extn: 259 cdc@ssn.edu.in



# **Department of Mechanical Engineering**





The department of Mechanical Engineering was established in the year 2007. The department offers B.E (Mechanical Engineering) from the academic year 2007 - 2008, M.E (Manufacturing Engineering) from the academic year 2012-2013 and M.E (Energy Engineering) from the academic year 2013 - 2014. The department became an approved research center of Anna University in the year 2012.

#### Our alumnus are associated with the following MNCs and Universities.



OTVS TYRES

























Our MoU Partners: The Department has signed MoU with several industries to conduct industry relevant R&D and internships for students.



**Barola Aero Sports** 



**Ecologikol Advisors** India Pvt. Ltd.



**Barola Technologies** 



Thejomaya Educational Services, pvt. ltd., Chennai



International



Preethi Kitchen **Appliances** 



**Mas Robotics & Automation** 



# Department of Mechanical Engineering Admissions Open

M.E. - Manufacturing Engineering

M.E. in Manufacturing Engineering is an advanced level course that aims to bridge the knowledge gap between the manufacturing industry and the academia through need of the hour courses such as Additive Manufacturing and Robot design and Programming with hands on experience on state of the art 3D printers and Robots, while also catering to the growing demands in MEMS, Nanotechnology and Composites.

The Program seeks to establish a balance between Industry readiness and Research progress by encouraging the students to indulge in academic research in cutting edge areas of Welding, Composite material processing and Numerical modelling through hand held pedagogy, whose outcomes can be envisaged from their impactful journal publications and their passion to pursue a PhD.

#### **Laboratory Facilities**

- Computer Integrated Manufacturing Laboratory
- Automation Laboratory
- CAD / CAM Laboratory
- Computer Aided Simulation and Analysis Laboratory
- Metrology Laboratory
- Workshop with CNC facilities
- Robotics Laboratory



#### Major Sophisticated Facilities/Equipments: M.E. - Manufacturing Engineering



**3D Printing machine** 



CNC Milling Machine



**CNC Turning Machine** 



**CAD/CAM lab** 



Electro Pneumatic
Trainer



Pneumatic trainer kit



Hydraulic Press (20T)



**Sheet Rolling Machine** 



#### **Broad Areas of Research**

- Friction Stir welding
- Composite Materials
- Finite Element Method
- Impact dynamics
- Unconventional Machining
- Additive Manufacturing
- Tribology



FSW Machine

#### **Curriculum**

The curriculum for Manufacturing Engineering comprises of the following core subjects:

- Advances in Manufacturing Technology
- Computer Integrated Manufacturing Systems
- Advances in Casting and Welding
- Robot Design and Programming
- Optimization Techniques in Manufacturing
- Advances in Metrology and Inspection
- Theory of Metal Forming
- Additive Manufacturing

#### **Electives: The following are some of the electives offered**

- Design for Manufacture and Assembly
- Micro Manufacturing
- Metal Cutting Theory and Practice
- Machine Tool Control & Condition Monitoring
- Green manufacturing Practices
- Non-Destructive Evaluation
- Polymers and Composite Materials
- Lean Manufacturing
- MEMS and Nanotechnology
- Computer Aided Product Design
- Machine Vision
- Materials Testing and Characterization Techniques
- Fuzzy Logic and Neural Networks
- Smart materials and structures

Two projects, Phase 1 and Phase 2 are done in the final two semesters.





# **Prominent Alumni : M.E. - Manufacturing Engg.**



Saranarayanan R
Postdoc fellow
University of Manchester



M. SibiVarshan
Business Process Expert
Wavin Group,
Central Region, Denmark



Naadesh
Post Graduate Engg
Trainee
YSI Automotive Pvt Ltd



Earnest Beni
Buisness development
Associate at BYJU'S
(Think & Learn Pvt. Ltd.)



Dr. Santosh Sampath Completed Ph. D. IIT Madras



Sathish Kumar P
Honeywell Technology
Solutions lab



Hima Bindhu M Ford, Chennai



Jobin Babu Senior Analyst at FLEXKollam, Kerela



Mathesh K S
Process Engineer in
Natronix at Chennai



### **PLACEMENTS & INTERNSHIPS**

(Manf. Engg.)

## **Short List of Companies Visited for Campus Placements/Internships**

- Ford
- Danfoss
- Hyundai
- ESAB
- Lucas TVS
- TVS Tyres
- SVP Lasers
- Turboenergy (TVS)
- Brakes India (Sholingur)
- Preethi Kitchen Appliances (Philips India) Ltd.
- Vestas
- Zoho
- Thorogood
- CTS
- Infosys
- TCS

