



# SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

VOLUME: 02, ISSUE:01, JAN 2019

(Approved by AICTE, New Delhi / Affiliated to Anna University, Chennai /  
Accredited by NAAC)

**NEWS LETTER** (July 2018 To DECEMBER 2018)

## Department of Mechanical Engineering



### About the Department

The Department of Mechanical Engineering was established in the year 2011 with an intake of 60 undergraduate students. Since then, the department has come a long way and is now regarded as one of the premiere departments of the institution with an intake of 120 undergraduate students and 18 post graduate students per year.

It is equipped with outstanding infrastructure and boasts of a unit of 17 learned and dedicated faculty members and sincere staff who work with zeal and enthusiasm to provide a vibrant and optimum learning environment to the students and help them acquire the skills which are required to excel in today's competitive environment.

The Department has three recognized research guides under Anna University, Chennai. At present six internal research candidates and five external research candidates are pursuing their PhD program under the Department of Mechanical Engineering. The department believes in serious academic pursuit and encourages radical and original thinking which paves the way for creativity and innovative ideas. The qualities inculcated into the students make them not only good engineers but good human beings also. The excellent placement record which has been consistently above 70 % for the past several years, alone of our students is ample testimony to the emphasis that has been placed on the industrial needs of our country.

### EXECUTIVE COMMITTEE

**CONVENORS :** Dr.M.SARAVANAN  
Principal

Dr.G.SANKARANARAYANAN  
Professor & Head.

**EDITORIAL BOARD :** Dr. R.SUBHAA, ASP | Dr. M.SABAREESWARAN, ASP

**STUDENT MEMBERS :** NISHANTH N, IV Mech | SRI VATHSAN V, IV Mech | AJAY RATHINAM K, III Mech  
KARTHIKEYAN S, III Mech | ADITHYAN B, II Mech | NAGA SARAVAN B, II Mech

Department of Mechanical Engineering  
SSM Institute of Engineering & Technology, Sindalagundu Post, Dindigul- 624002. Tamilnadu | hodmechssmiet@gmail.com

**VISION :** Imparting a high-quality engineering education and research leading to well-qualified engineers with innovative entrepreneurial mindset along with social concerns and constant contribution to industry and economy.

**MISSION :** To train and mentor students to acquire expertise in engineering and compete effectively in the competitive environment.

## ACADEMIC TOPPERS LIST (Nov/Dec 2018 Exam)

### I Year I Semester

**I PLACE**  
GPA : 8.08



**NAGENTHIRAN**  
Reg. No. : 922118114038

**II PLACE**  
GPA : 7.96



**ABESHEIK MAJESTY L**  
Reg. No. : 922118114003

**III PLACE**  
GPA : 7.64



**NITHIYA KUMAR N G**  
Reg. No. : 922118114042

### II Year III Semester

**I PLACE**  
GPA : 8.36



**THANGAMANI S**  
Reg. No. : 922117114110

**II PLACE**  
GPA : 8.08



**ARUN KUMAR M**  
Reg. No. : 922118114008

**III PLACE**  
GPA : 8



**MANIKANDAN P**  
Reg. No. : 922117114054

### III Year V Semester

**I PLACE**  
GPA : 8.625



**AJAY RATHINAM K**  
Reg. No. : 922116114002

**II PLACE**  
GPA : 8.25



**KARTHICKEYAN A P**  
Reg. No. : 922116114032

**III PLACE**  
GPA : 7.917



**LOGESHWARAN C**  
Reg. No. : 922116114038

### IV Year VIII Semester

**I PLACE**  
GPA : 8.826



**NAGENDRAPANDI J**  
Reg. No. : 922115114052

**II PLACE**  
GPA : 8.826



**VISWANATH S**  
Reg. No. : 922115114117

**III PLACE**  
GPA : 8.826



**KARANSINGH**  
Reg. No. : 922115114033

## Events Organized



Guest Lecture on Environmental Science for Engineers, was held in our department on 27th July 2018 (Friday). Dr. K. Jayakrishna, VIT, Vellore discussed about the importance of environmental conservation and the ways that can be imparted in automobiles to reduce pollution and conserve the surrounding.

A one day workshop on "Composite Materials" was held in our department on 23rd August 2018 (Thursday). Dr. K. Jayakrishna, VIT, Vellore spoke about the objectives of the workshop was to impart basic knowledge and skills about the various avenues for active research in composite materials.



Guest Lecture on Reverse Engineering was held in our department on 22nd August 2018 (Wednesday). Dr. K. Jayakrishna, VIT, Vellore spoke about the importance of software reverse engineering can help to improve the understanding of the underlying source code for the maintenance and improvement of the software, relevant information can be extracted to make a decision for software development.

One day workshop on CAD Modelling was held in our department on 11th September 2018 (Wednesday). Mr. M. Sabareeswaran, ASP/Mech, SSMIET has concluded that students get more benefits about the software proficiency. In market scenario the extra skills are required for getting good jobs so that software knowledge is the most important factor of industry.



A one day workshop on "Robotics" was held in our department on 5th September 2018 (Wednesday). Mr. M. Sabareeswaran spoke about the importance of the term Robot, how to identify whether a machine is a Robot or an autonomous bot, robotics, aspects of robotics, philosophy of AI.

## Placement Details



Campus placement drive was held in our institution from July 2019 to December 2019. 28 students were placed in three companies during this period.

## Ph.D., awarded

1. M.Sabareeswaran completed his Ph.D. public viva-voce oral examination on 24th September 2018. Research topic: "Design, Analysis and optimization of Machining fixture layout under dynamic conditions". Research supervisor: Dr. K. P. Padmanaban. Director, RVS School of Engineering, Dindigul.
2. S.Paulsingarayar completed his Ph.D. public viva-voce oral examination on 7th December 2018. Research topic: "Scheduling of various manufacturing systems using metaheuristic approaches". Research supervisor: Dr.M. Saravanan. Principal, SSMIET, Dindigul.



## Journal Publications

- Srinivasan.S "Heat Exchanger Design Modification for Performance Optimization Using CFD Tools" International Journal of Applied Engineering Research.
- G.Vinothkumar, C.Vinothkumar, V.Ramasamy "Experimental investigation of unidirectional natural fiber composites for ceiling fan blade application" Journal of Engineering Technologies and Innovative Research.
- M.Saravanan "Optimized sequencing of CNC milling toolpath segments using metaheuristic algorithms" Journal of Mechanical Science and Technology.
- M.Saravanan "Review-Methods and Measurements of Springback Evaluation" International Journal of Mechanical Engineering and Technology.
- M.Saravanan "Study on Effects of Springback on Sheet Metal Bending Using Simulation Methods" International Journal of Mechanical and Production Engineering Research and Development.
- M.Saravanan "Improving automatic detection of defects in castings by applying damage estimation technique for die-casting analysis" Taga Journal.
- M.Saravanan "Experimental investigation of friction stir blind riveting process for similar and dissimilar alloy sheets" Journal of Advanced Mechanical Design, Systems, and Manufacturing.
- M.Saravanan "Tool Path optimization by Genetic algorithm for Energy Efficient Machining" Taga journal.
- M.Saravanan "MOGWO Metaheuristic Method Used to Solve by Identical Parallel Machine Scheduling Problem with Different Objectives Compared with GA and VNS" Taga Journal.
- M.Saravanan "Comparative study on spring back effect of sheet metal materials and minimizing the effect by optimizing the loading condition" Taga Journal.

## Seminars/Workshops/FDP attended by Faculty

1. T.Muniappan attended the FDP "Refresher Programme on "Energy Conservation & Energy Audit"" by M.Kumarasamy College of Engineering, Karur on 26-11-18 to 01-12-18.
2. I.VimalKannan attended the Workshop "Multi Physics through Comsol and writing a research paper" by IIT, Bombay on 28.11.18 to 30.11.18.
3. S.Srinivasan attended the FDP "Energy Management System" by St.Joseph's Institute of Technology, Chennai on 29-11-18 to 29-11-18.

## Seminars/Workshops/FDP attended by Faculty

1. T.Muniappan attended the FDP "Refresher Programme on "Energy Conservation & Energy Audit"" by M.Kumarasamy College of Engineering, Karur on 26-11-18 to 01-12-18.
2. I.VimalKannan attended the Workshop "Multi Physics through Comsol and writing a research paper" by IIT, Bombay on 28.11.18 to 30.11.18.
3. S.Srinivasan attended the FDP "Energy Management System" by St.Joseph's Institute of Technology, Chennai on 29-11-18 to 29-11-18.



# SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

VOLUME: 02, ISSUE:02, AUG 2019

(Approved by AICTE, New Delhi / Affiliated to Anna University, Chennai /  
Accredited by NAAC)

[www.ssmiet.ac.in](http://www.ssmiet.ac.in)

**NEWSLETTER** (January 2019 To June 2019)

## Department of Mechanical Engineering



### About the Department

The Department of Mechanical Engineering was established in the year 2011 with an intake of 60 undergraduate students. Since then, the department has come a long way and is now regarded as one of the premiere departments of the institution with an intake of 120 undergraduate students and 18 post graduate students per year.

It is equipped with outstanding infrastructure and boasts of a unit of 17 learned and dedicated faculty members and sincere staff who work with zeal and enthusiasm to provide a vibrant and optimum learning environment to the students and help them acquire the skills which are required to excel in today's competitive environment.

The Department has three recognized research guides under Anna University, Chennai. At present six internal research candidates and five external research candidates are pursuing their PhD program under the Department of Mechanical Engineering. The department believes in serious academic pursuit and encourages radical and original thinking which paves the way for creativity and innovative ideas. The qualities inculcated into the students make them not only good engineers but good human beings also. The excellent placement record which has been consistently above 70 % for the past several years, alone of our students is ample testimony to the emphasis that has been placed on the industrial needs of our country.

### EXECUTIVE COMMITTEE

**CONVENORS :** Dr.M.SARAVANAN  
Principal

Dr.G.SANKARANARAYANAN  
Professor & Head.

**EDITORIAL BOARD :** Dr. R.SUBHAA, ASP | Dr. M.SABAREESWARAN, ASP

**STUDENT MEMBERS :** NISHANTH N, IV Mech | SRI VATHSAN, V IV Mech | AJAY RATHINAM K, III Mech  
KARTHIKEYAN S, III Mech | ADITHYAN B, II Mech | NAGA SARAVAN B, II Mech

Department of Mechanical Engineering  
SSM Institute of Engineering & Technology, Sindalagundu Post, Dindigul- 624002. Tamilnadu | [hodmechssmiet@gmail.com](mailto:hodmechssmiet@gmail.com)

**VISION :** Imparting a high-quality engineering education and research leading to well-qualified engineers with innovative entrepreneurial mindset along with social concerns and constant contribution to industry and economy.

**MISSION :** To train and mentor students to acquire expertise in engineering and compete effectively in the competitive environment.

## ACADEMIC TOPPERS LIST (Apr/May 2019 Exam)

### I Year II Semester

**I PLACE**  
GPA : 8.28



**NAGENTHIRAN**  
Reg. No. : 922118114038

**II PLACE**  
GPA : 8.091



**SRINITHISH V**  
Reg. No. : 922118114071

**III PLACE**  
GPA : 7.96



**SUBASH R**  
Reg. No. : 922118114073

### II Year IV Semester

**I PLACE**  
GPA : 8



**ARUN KUMAR M**  
Reg. No. : 922117114008

**II PLACE**  
GPA : 7.96



**PANDIYA RAJ B**  
Reg. No. : 922117114078

**III PLACE**  
GPA : 7.92



**MANIKANDAN P**  
Reg. No. : 922117114054

### III Year VI Semester

**I PLACE**  
GPA : 8.17



**AJAY RATHINAM K**  
Reg. No. : 922116114002

**II PLACE**  
GPA : 7.95



**KARTHIKEYAN**  
Reg. No. : 922116114033

**III PLACE**  
GPA : 7.917



**KARTHICKEYAN A P**  
Reg. No. : 922116114032

### IV Year VIII Semester

**I PLACE**  
GPA : 9.4



**NAGENDRAPANDI J**  
Reg. No. : 922115114052

**II PLACE**  
GPA : 9.2



**VENKATESH S**  
Reg. No. : 922115114108

**III PLACE**  
GPA : 9.2



**SUNDARAPANDI G**  
Reg. No. : 922115114099

## Events Organized



A **“Technical Quiz” Competition** was held in our department on 23rd January 2019 (Wednesday). Students actively participated and benefitted from the event.

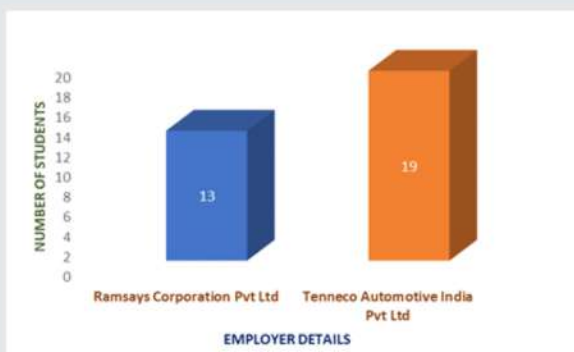


**One day workshop on “Coordinate Measuring Machines”** was held in our department on 14th February 2019 (Thursday). **Dr.V.Kandavel, ASP/Mech., SSMIET** explained about the working principle of Coordinate Measuring Machine (CMM) and its applications in product quality assurance and quality control to the Student Participants.

A **one day workshop on “Energy Conservation and Safety”** was held in our department, on 2nd March 2019 (Saturday). **Er.F.Sathyaraj, Deputy Director, PCRA, Coimbatore** addressed about energy conservation by reducing wastage and losses, improving efficiency through technological upgrades, and improved operation and maintenance Final Year and Third Year students got benefitted.



## Placement Details



Campus placement drives was held in our institution from January 2019 to June 2019. 32 students were placed in two companies during this period.

## Journal Publications

- M.Saravanan "Optimization of identical parallel machine scheduling problem" International Journal of Rapid Manufacturing (Jan-2019).
- I.Vimal Kannan "Deformation and energy absorption analysis of simple and multi cell thin walled tubes under quasi static axial crushing" International Journal of crashworthiness (Feb-2019).
- M.Saravanan "Optimized sequencing of CNC milling toolpath segments using metaheuristic algorithms" Journal of Mechanical Science and Technology (Feb-2019).
- Srinivasan.S "Optimization of tool life for closed type forging tool" Journal of engineering technologies and innovative research (June-2019).
- R.Subhaa "An improved design for cellular manufacturing system associating scheduling decisions" Indian academy of sciences, Sadhana (June-2019).

## Conference Publications

- C.Vinothkumar "Experimental Investigations of hardness and mechanical behaviour for brake lining application", International Conference on "Recent Trends in Engineering, Science and Technology, SBM college of Engineering, Dindigul, 3rd February 2019.
- I.Vimal Kannan "Crushing analysis of polygonal thin walled structures experiments and FE modeling", International Conference on "Recent Trends in Engineering, Science and Technology, SBM college of Engineering, Dindigul, 3rd February 2019.
- R.Dhileepan Kumarasamy "Optimisation and modeling of dynamic facility location for complexities and simple problems", International Conference on "SSM Institute of Engineering and Technology, Dindigul and Seventh sense research group, 20th March 2019.
- Dr.K.A.Sundaraman "Optimisation and modeling of dynamic facility location for complexities and simple problems", International Conference on "SSM Institute of Engineering and Technology, Dindigul and Seventh sense research group, 20th March 2019.
- S.Srinivasan "Spring Back And Bend Force Analysis Of Galvanized Iron Sheet In V Die Bending Process", Recent Trends In Science, Engineering And Management, Karpaga Vinayaga College of Engineering and Technology on March 22-23, 2019.

## Seminars/Workshops/FDP attended by Faculty

- Dr.S.Joseph Dominic Vijayakumar attended the FDP "Recent Trends & Future Development In Cloud Manufacturing " at Coimbatore Institute of Engineering and Technology, Coimbatore on 25-1-2019.
- Dr. R.Subhaa attended the FDP "Design of Renewable Energy Systems" at College of Engineering, Guindy on 22-03-19.
- Dr.S.Joseph Dominic Vijayakumar attended the FDP "Composite Manufacturing Processes , Analysis, Modeling and Simulation" at Coimbatore Institute of Engineering and Technology, Coimbatore on 01-04-2019.
- Dr. V.Kandavel attended the FDP "STP on ICT mode on NBA accreditation" conducted by National Institute of Technical teachers training and research, Kolkata on 22-04-19 to 26-04-19.

## Industry-Academia Collaboration

- A MoU is signed between SSMIET and Fabulous Cement Techno Consultancy Pvt Ltd, Vijayawada., on 28th January 2019. Purpose: Project collaboration, Internship, Industrial visit and Training.
- A MoU is signed between SSMIET and AmhoghaBuildpro Limited, Chennai, on 28th January 2019. Purpose: Project collaboration, Internship, Industrial visit and Training.

