

S.V. COLLEGE OF ENGINEERING TIRUPATI

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Mechanical Engineering

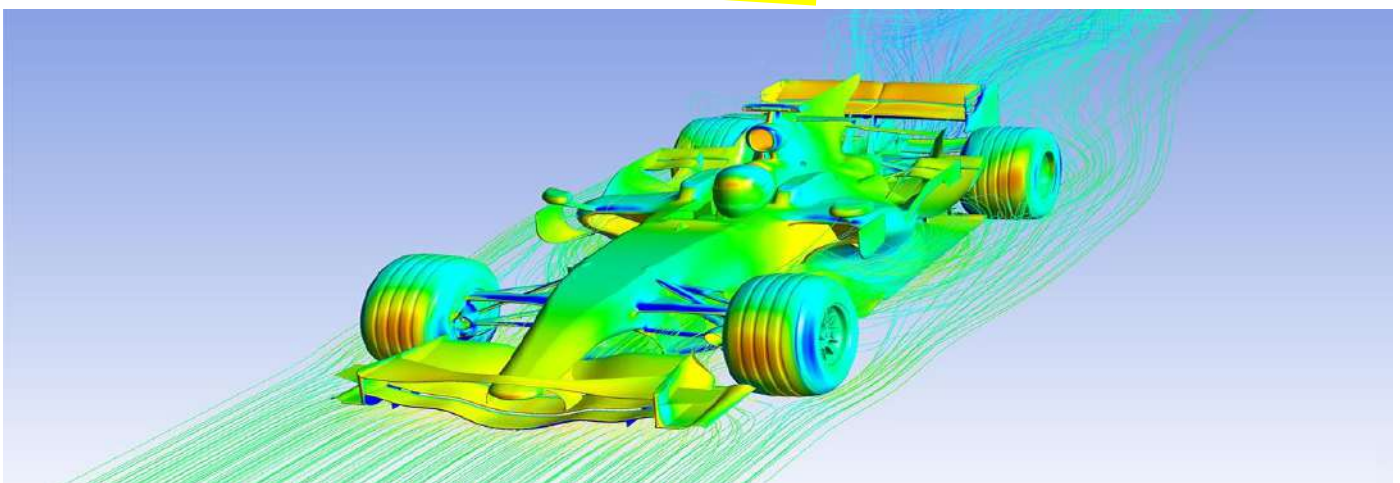
MECHANIX

2019-20 Even Semester News Letter

January-June 2020



*Talk to yourself once in a day...
Otherwise you may miss meeting an
EXCELLENT
person in this World
— Swami Vivekananda*



Mechanical Engineering

Vision of the Department

To impart knowledge with global perspectives in pursuit of excellence in Mechanical Engineering Education, Entrepreneurship and Innovation.

Mission of the Department

M1: To inculcate students with leadership skills with high level of integrity & ethical values for team building and team Work.

M2: To mold the young dynamic potential minds into full-fledged future professionals through effective teaching-learning Techniques & industry – institute collaboration.

M3: To serve the society through innovation and excellence in teaching and research.

Program Educational Objectives

PEO1: Graduates can demonstrate technical competence in Mechanical Engineering domain as they apply problem solving skills to conceive, analyze, design and develop products, processes and systems.

PEO2: Graduates can actively embrace leadership roles and strive hard to achieve professional and organizational goals with adherence to professional and ethical values, team expectations and sensitivities of cultural diversity.

PEO3: Graduates are committed to practice engineering strategies in industry and government organizations to meet the growing expectations of the Stakeholders and also contribute to the societal development.

About the Department

Mechanical Engineering, one of the oldest branches of Engineering, is a professional discipline that applies engineering, physics, mathematics, and materials science principles to design, analyze, manufacture, and maintain mechanical systems. As one of the oldest branches of engineering, Mechanical Engineering as a field of study is broad and diverse. With the need for skilled Mechanical graduates intensifying with every passing year, The Department has highly qualified and rich experienced faculty with an aim of providing quality educational service. The Department has good infrastructural facilities and is equipped with full-fledged laboratories and audio-visual systems. The department focuses research on Heat Transfer Enhancement, Alternative Fuels, Composite Materials and Advanced Machining Process etc.,

The Department of Mechanical Engineering has formulated the following objectives:

- To facilitate students with real-time scenarios and hands-on training sessions through field trips.
- To equip students with practical knowledge to formulate and solve challenging problems.
- To enhance critical thinking and analytical skills of the students.
- To provide equal opportunities to all the students to learn and grow as well-rounded individuals.
- To facilitate the betterment of the students through state-of-the-art laboratories and qualified faculty.

Principal's Message



I have great pleasure in conveying my best wishes to the Department of Mechanical Engineering for releasing the technical magazine "Mechanix" which brings the students and teachers of various disciplines on a common platform to share and display their ideas and creative talents. I wish all the students who have involved in bringing out the magazine for their greater success and career ahead.

Dr. N.SUDHAKAR REDDY, ME, Ph.D, FIE, MISTE.

PRINCIPAL

HOD's Message



Mechanical Engineering is a versatile and evergreen branch of engineering. Mechanical engineer can work in various fields like automotive system, aerospace engineering, design engineering, dynamic system and control, power plant engineering, etc. and most importantly in software field also. Department has well qualified and dedicated faculty with well-developed laboratories. We impart quality engineering education through sound theoretical knowledge, hands on laboratory as well as computational skill and exposure to recent technologies by visiting industries & expert talk. We provide opportunities for students to participate in various technical and sports events /competitions. This newsletter is an attempt to highlight the achievements of the department, in spite of the space constrain we have showcased the best and look forward to have more in the future on a quarterly editions. I wish good luck to the entire team of editors and look forward for your kind patronage to our newsletter.

Dr. M.CHANDRA SEKHARA REDDY, M.Tech, Ph.D, FIE, MISTE.

Head of the Department M.E,

S.V.C.E, Tirupati

Faculty Corner



Paper Publications:

- T.Pratheep Reddy, S.Jaya Kishore, P.Charan Theja, P.Punna Rao Development and wear behavior investigation on aluminum-7075/B₄C/fly ash metal matrix composites. *Adv Compos Hybrid Mater* **3**, 255–265 (2020). <https://doi.org/10.1007/s42114-020-00145-5>.
- Rajesh, N. Metallurgical and formability investigations on Al 8011 alloy upon form drilling. *SN Appl. Sci.* **2**, 361 (2020). <https://doi.org/10.1007/s42452-020-2152-2>.
- N.Rajesh,P.Charan Theja,P.Punna rao,T.Pratheep Reddy published paper on “Design and Analysis of 3D Printed Gear for Automobile wind wiper” in International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-4, November 2019 PP: 9302-9306.
- Vamsi Krishna Mamidi, R. Pugazhenth, G. Manikandan, M. Vinoth Kumar, Mechanical and microscopic study on Tinospora cordifolia and Tectona grandis composites, *Materials Today: Proceedings*, Volume 22, Part 3, 2020, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2019.10.135>.

Conference:

- Eswaraiah Billu presented a paper on “Performance Evaluation of Electric Bike” in National Conference on Recent Trends in Mechanical Engineering (NCRTIME-2k20) organized by Geethanjali Institute of Science & Technology , Nellore on June 30th, 2020.

Book Chapter:

- Jaya Kishore S. (2020) Evaluating Mechanical Properties of Egg Shell, and Coco Peat Reinforced Epoxy Composite. In: Reddy A., Marla D., Simic M., Favorskaya M., Satapathy S. (eds) *Intelligent Manufacturing and Energy Sustainability. Smart Innovation, Systems and Technologies*, vol 169. Springer, Singapore. https://doi.org/10.1007/978-981-15-1616-0_57.

FDP'S:

- Dr.M.Vamsi Krishna, Associate Professor participated in Faculty Development Programme on “Partical Aspects of Finite Element Analysis using ABAQUS” held from 18-04-2020 to 24-04-2020 organized by Andhrapradesh State Skill Developmnet Center-APSSDC.
- N.Rajesh, Sr.Assistant Professor participated in Faculty Development Programme on “Partical Aspects of Finite Element Analysis using ABAQUS” held from 18-04-2020 to 24-04-2020 organized by Andhrapradesh State Skill Developmnet Center-APSSDC.
- Dr.M.Vamsi Krishna, Associate Professor participated in Faculty Development Programme on “Emerging Technologies in Mechanical Engineering” held from 26-05-2020 to 30-05-2020 organized by VEMU Institute of Technology,Chittoor.
- Dr.M.Vamsi Krishna, Associate Professor participated in Faculty Development Programme on “Online Teaching Equiette and Best Practices” held from 10-05-2020 to 15-05-2020 organized by Santhiram Engineering College,Nandyal.
- Dr.K.Madhivanan, Associate Professor participated in Faculty Development Programme on “Artificial Intelligence and Machine Learning” held from 25-05-2020 to 29-05-2020 organized by VEMU Institute of Technology,Chittoor.
- N.Rajesh, Sr.Assistant Professor participated in Faculty Development Programme on “Novel Materials and Its Industrial Applications” held from 13-05-2020 to 15-05-2020 organized by Karpagam College of Engineering, Coimbatore.

Faculty Corner



- N.Rajesh, Sr.Assistant Professor participated in Faculty Development Programme on “CATIA” held from 18-05-2020 to 30-05-2020 organized by Andhra Pradesh State Skill Development Center-APSSDC.
- N.Rajesh, Sr.Assistant Professor participated in Faculty Development Programme on “Industrial Revolution Post COVID 19” held from 22-05-2020 to 27-05-2020 organized by Audhishankara College of Engineering, Gudur.
- N.Rajesh, Sr.Assistant Professor participated in Faculty Development Programme on “Emerging Technologies in Robotics” held from 26-05-2020 to 30-05-2020 organized by MLRIT, Hyderabad.
- N.Rajesh, Sr.Assistant Professor participated in Faculty Development Programme on “Recent Advances in Material Characterization” held from 23-05-2020 to 28-05-2020 organized by National Institute of Technical Teachers Training and Research-NITTTR, Chandigarh.
- M.Gopala Krishna, Assistant Professor participated in Faculty Development Programme on “Emerging Technologies in Robotics” held from 26-05-2020 to 30-05-2020 organized by MLRIT, Hyderabad.
- T.Pratheep Reddy, Assistant Professor participated in Faculty Development Programme on “Faculty Awareness Programme on NAAC Accreditation” held from 10-05-2020 to 15-05-2020 organized by Shri Chhatrapati Shivaji raje College of Engineering , Maharashtra.
- T.Pratheep Reddy, Assistant Professor participated in Faculty Development Programme on “Emerging Technologies in Robotics” held from 26-05-2020 to 30-05-2020 organized by MLRIT, Hyderabad.
- T.Pratheep Reddy, Assistant Professor participated in Faculty Development Programme on “Emerging Technologies in Mechanical Engineering” held from 26-05-2020 to 30-05-2020 organized by VEMU Institute of Technology,Chittoor.
- K.Arun, Assistant Professor participated in Faculty Development Programme on “Computer Integrated Manufacturing & CNC (CIM/CNC) ” held from 25-05-2020 to 29-05-2020 organized by National Institute of Technical Teachers Training and Research-NITTTR, Chandigarh.
- K.Arun, Assistant Professor participated in Faculty Development Programme on “Emerging Technologies in Mechanical Engineering” held from 26-05-2020 to 30-05-2020 organized by VEMU Institute of Technology,Chittoor.
- K.Arun, Assistant Professor participated in Faculty Development Programme on “Online Teaching Etiquette and Best Practices” held from 10-05-2020 to 15-05-2020 organized by Santhiram Engineering College,Nandyal.
- K.Arun, Assistant Professor participated in Faculty Development Programme on “CATIA” held from 18-05-2020 to 30-05-2020 organized by Andhra Pradesh State Skill Development Center-APSSDC.
- K.Arun, Assistant Professor participated in Faculty Development Programme on “Faculty Awareness Programme on NAAC Accreditation” held from 10-05-2020 to 15-05-2020 organized by Shri Chhatrapati Shivaji raje College of Engineering , Maharashtra.
- K.Arun, Assistant Professor participated in Faculty Development Programme on “Novel Materials and Its Industrial Applications” held from 13-05-2020 to 15-05-2020 organized by Karpagam College of Engineering, Coimbatore.
- K.Arun, Assistant Professor participated in Faculty Development Programme on “ ATAL- Academy Online FDP on "Internet of Things-IOT” held from 10-05-2020 to 15-05-2020 organized by University Institute of Engineering and Technology,Kurukshetra University, Kurukshetra.

Faculty Corner



- P.Charan Theja, Assistant Professor participated in Faculty Development Programme on “Recent Advances in Material Characterization” held from 25-05-2020 to 28-05-2020 organized by National Institute of Technical Teachers Training and Research-NITTTR, Chandigarh.
- P.Charan Theja, Assistant Professor participated in Faculty Development Programme on “Emerging Technologies in Mechanical Engineering” held from 26-05-2020 to 30-05-2020 organized by VEMU Institute of Technology,Chittoor.
- P.Charan Theja, Assistant Professor participated in Faculty Development Programme on “Industrial Revolution Post COVID 19” held from 22-05-2020 to 27-05-2020 organized by Audhishankara College of Engineering, Gudur.
- P.Charan Theja, Assistant Professor participated in Faculty Development Programme on “Novel Materials and Its Industrial Applications” held from 13-05-2020 to 15-05-2020 organized by Karpagam College of Engineering, Coimbatore.
- P.Punna Rao, Assistant Professor participated in Faculty Development Programme on “Automotive Structure Design using CATIA” held from 30-04-2020 to 02-05-2020 organized by Andhrapradesh State Skill Developmnet Center-APSSDC.
- P.Punna Rao, Assistant Professor participated in Faculty Development Programme on “Emerging Technologies in Robotics” held from 26-05-2020 to 30-05-2020 organized by MLRIT, Hyderabad.
- P.Punna Rao, Assistant Professor participated in Faculty Development Programme on “Artificial Intelligence and Machine Learning” held from 25-05-2020 to 29-05-2020 organized by VEMU Institute of Technology,Chittoor.
- P.Punna Rao, Assistant Professor participated in Faculty Development Programme on “Emerging Technologies in Mechanical Engineering” held from 26-05-2020 to 30-05-2020 organized by VEMU Institute of Technology,Chittoor.
- P.Punna Rao, Assistant Professor participated in Faculty Development Programme on “Faculty Awareness Programme on NAAC Accreditation” held from 10-05-2020 to 15-05-2020 organized by Shri Chhatrapati Shivaji raje College of Engineering , Maharashtra.
- G.Guru Sai Prasad,Assistant Professor participated in Faculty Development Programme on “CATIA” held from 18-05-2020 to 30-05-2020 organized by Andhra Pradesh State Skill Developmnet Center-APSSDC.
- G. Guru Sai Prasad, Assistant Professor participated in Faculty Development Programme on “Simulation and Using MAT Lab” held from 25-05-2020 to 29-05-2020 organized by National Institute of Technical Teachers Training and Research-NITTTR, Chandigarh.
- G. Guru Sai Prasad, Assistant Professor participated in Faculty Development Programme on “Online Teaching Equiette and Best Practices” held from 10-05-2020 to 15-05-2020 organized by Santhiram Engineering College,Nandyal.
- D.Raju, Assistant Professor participated in Faculty Development Programme on “Computer Integrated Manufacturing & CNC (CIM/CNC) ” held from 25-05-2020 to 21-05-2020 organized by AS-MA, Chandigarh.
- D.Raju, Assistant Professor participated in Faculty Development Programme on “Learning, Pedagogy and Effective Use of Case Technology” held from 17-05-2020 to 29-05-2020 organized by AS-MA Group of Institutions, Pune.
- D.Raju, Assistant Professor participated in Faculty Development Programme on “Green Manufacturing:The Present and Future Needs” held from 15-05-2020 to 20-05-2020 organized by Santhiram Engineering College, Nandyal.

Faculty Corner



- D.Raju , Assistant Professor participated in Faculty Development Programme on “Online Teaching Etiquette and Best Practices” held from 10-05-2020 to 15-05-2020 organized by Santhiram Engineering College,Nandyal.
- S.Jaya Kishore, Assistant Professor participated in Faculty Development Programme on “Online Teaching Etiquette and Best Practices” held from 10-05-2020 to 15-05-2020 organized by Santhiram Engineering College,Nandyal.
- S.Jaya Kishore, Assistant Professor participated in Faculty Development Programme on “CATIA” held from 18-05-2020 to 30-05-2020 organized by Andhra Pradesh State Skill Development Center-APSSDC.
- D.Anjan Kumar, Assistant Professor participated in Faculty Development Programme on “Additive Manufacturing & Research Scopes Future Trends ” held from 22-05-2020 to 28-05-2020 organized by Santhiram Engineering College,Nandyal.
- D.Anjan Kumar, Assistant Professor participated in Faculty Development Programme on “Online Teaching Etiquette and Best Practices” held from 10-05-2020 to 15-05-2020 organized by Santhiram Engineering College,Nandyal.
- V.Ajay, Assistant Professor participated in Faculty Development Programme on “Research Challenges and Innovations in Renewable Energy Systems ” held from 10-05-2020 to 15-05-2020 organized by Santhiram Engineering College,Nandyal.
- G.Nomu Kumar, Assistant Professor participated in Faculty Development Programme on “Industrial Revolution Post COVID 19” held from 22-05-2020 to 27-05-2020 organized by Audhishankara College of Engineering, Gudur.
- G.Nomu Kumar, Assistant Professor participated in Faculty Development Programme on “Green Manufacturing: The Present and Future” held from 15-05-2020 to 20-05-2020 organized by Audhishankara College of Engineering, Gudur.
- G.Nomu Kumar, Assistant Professor participated in Faculty Development Programme on “Online Teaching Etiquette and Best Practices” held from 10-05-2020 to 15-05-2020 organized by Santhiram Engineering College,Nandyal.

PATENTS:

- G.Guru Mahesh and V.Ajay, Assistant Professor filled a Patent entitled as “Vha-Sanitizer System: Vehicle Hand Automatic Sanitizer” Application Number:202041024567.

Ph.D Registration:

- M.Gopala Krishna, Assistant Professor Registered Ph.D. Degree Programme in Mechanical Engineering under Part Time-External in Annamalai University in February 2020.
- P.Charan Theja , Assistant Professor Registered Ph.D. Degree Programme in Mechanical Engineering under Part Time-External in Annamalai University in February 2020.

NPTEL CERTIFICATION:

- G.Guru Mahesh, Assistant Professor Completed Online Course One Week Faculty Development Program on “**Manufacturing Process Technology I & II**” held on NPTEL Online Course, Jan – Apr 2020.
- K.Arun , Assistant Professor Completed Online Course One Week Faculty Development Program on “**Operations Management**” held on NPTEL Online Course, Jan – Apr 2020.

Student Corner



Results and Toppers

I B. Tech I Semester

Total students registered	: 93
Total students passed	: 30
Pass Percentage	: 32.25%

List of Toppers

S.No.	Roll Number	Name of the Student	CGPA
1	19BF1A0323	K.M.Pavan Sai	9.11
2	19BF1A0318	G.Monish	8.72
3	19BF1A0343	N.Sai Lohith Radhakrishna	8.72
4	19BF1A0302	A.Gurappa	8.61
5	19BF1A0355	A.Surya Teja	8.56

II B. Tech I Semester

Total students registered	: 126
Total students passed	: 60
Pass Percentage	: 53.17%

List of Toppers

S.No.	Roll Number	Name of the Student	%
1	19BF5A0314	P.T.Tharun	88.88
2	18BF1A0385	P.Rupesh	86.88
3	18BF1A0386	P.V.N.S. Hari Priya	85.50
4	19BF5A0313	P.Manoj Kumar Reddy	84.38
5	18BF1A0335	B.Janaki Baskar Sai	82.75

III B. Tech I Semester

Total students registered	: 136
Total students passed	: 42
Pass Percentage	: 30.8

List of Toppers

S.No.	Roll Number	Name of the Student	%
1	17BF1A0357	M.Hari Sainadh Reddy	85.06
2	17BF1A0380	P.M.Pavan Kumar	81.69
3	17BF1A0361	V.Subramanyam	81.33
4	17BF1A0315	C.Ganesh	81.20
5	17BF1A0312	C.V.Sai Neeraj Kumar	79.64

IV B. Tech I Semester

Total students registered	: 125
Total students passed	: 79
Pass Percentage	: 63.20

List of Toppers

S.No.	Roll Number	Name of the Student	%
1	16BF1A0358	M.Yasmeen	86.63
2	17BF5A0323	K. Vasu	84.50
3	17BF5A0331	Shaik Thameem Ansari	84.38
4	16BF1A0332	G.Vamsi Krishna	84.25
5	17BF5A0333	V.Balaji	84.13



Placed Students

2016-20 Batch

TCS

M.v.Naga Sairam
Vemireddy Solomon Abhitej Reddy
Bandi Vamsi Krishna Reddy
Ranga Nayuni Uma Mahesh Naidu

Cognizant

Akkala Ajay Kumar
Atturu Vivek Rohith
Bandi Avinash
Bandi Vamsi Krishna Reddy
Bodapati Poojitha
Chitta Madhu Raj Kumar
Mallela Sunil
N Nagalakshmi
Paramjyothi Sai Deepthi
Peramsetti Chandragupta
R Purushotham
Vemireddy Solomon Abhitej Reddy
Alli Naga Naveen
Aturi Jayaprakashreddy
Lakka Ashok Kumar

Woksbot Applications

C Swetha
P Sai Deepthi
R Purushotham
BSS Rahul Priyatham

Eavetop Softtech

Cherukula Ramya
Karunakar Chindu Prasath
Mekala Geethanjali
N Nagalakshmi
Srinivas Bhargav
Syed Tahil Mohammed

DXC Technology

Ainneri Chandrakamal

Amararaja

P.Sai Deepthi
K.Jayaprakash

Face Academy

B Poojitha
K Sainadh



*Thanks to Placement Team
and the Supporting Faculty*

Dr. M.Chandra Sekhara Reddy

Mr. T.Pratheep Reddy

Mr. K.Harshavardhan Reddy

Mr. M.Gopala Krishna

Mr. G.Nomu Kumar

Mr. G.GuruSai Prasad

Mr. B.Eswaraiah



STUDENT PARTICIPATIONS

- PVNS Hari Priya bagged **Second prize** in Nerdebate on “Tirutsava” organized by Indian Institute of Technology, Tirupati held on 2ND February 2020.
- A Reddappa bagged **Third prize** in National Level Quiz on “Analog Electronics AND VLSI Design” organized by Sreenidhi Institute of Science and Technology, Hyderabad in Association with IEEE ON 3RD January 2020
- K.Vishnuvardhan and A.Arunachalam attended “3D Printing Technologies:Challenges” online Webinar conducted by Sreenidhi Institute of Science and Technology, Hyderabad on 20.05.2020.
- K.Vishnuvardhan attended “3D Printing for Medical Applications” online Webinar conducted by RAMCO Instititue of Technology, Chennai on 20.05.2020.
- A.Arunachalam attended “Automobile Diesel Technology-Challenges and Oppurtunites” online Webinar conducted by Sreenidhi Institute of Science and Technology, Hyderabad on 20.05.2020.
- A.Arunachalam attended “Numerical Methods and Optimization(NMO) Quizzes” online Quiz conducted by Jaihind College of Engineering, Pune on 22.05.2020.
- K.Vishnuvardhan attended “Industry 4.0 [IOT and 3D Printing]” online Webinar conducted by RAMCO Instititue of Technology, Chennai on 26.05.2020.
- C.V.S. Neeraj Kumar attended “Python Basics” online Training Program conducted by University of Michigun, United States on 17.05.2020.
- S.GuruKrishna attended “Solid Works” online Training Program conducted by INTERNSHALA from 15.04.2020 to 27-05-2020.

INDUSTRIAL VISIT



A One day industrial visit Programme conducted on 27-02-2020 by II ME students to “SIBAR AUTOPART LTD.,” Renigunta.

EVENTS ORGANIZED



A Seminar on “**Electric Vehicles**”
by **Mr. Vimal Ojha** , Manager, *Soha Technologies* on June 19, 2020 for II & III ME



A Workshop on “**Finite Element Analysis using ANSYS**”
By **G.Guru Mahesh, S.Jaya Kishore, G.Guru Sai Prasad**, Assistant Professor, S.V.C.E, on February 18th To 19th 2020, for II & III M.E Students.



A Seminar on “**Virtual Reality (VR) and 3D Scanner**”
by **Mr. Srujan**, Resource Person, *Dassault Systems* on January 9th 2020 for II M.E Students

EVENTS ORGANIZED



A. Automatic sprayer



B. Mono Wheel



C. Solar cooking utensil



D. Tri wheel Grass cutter

Department of Mechanical Engineering conducted Project Expo on 19-02-2020 in connection with AMPLE 2020.



A. CAD Modeling



B. Poster Presentation



C. Tug of war



D. Line Follower

Department of Mechanical Engineering conducted CAD Modeling, Poster Presentation, Tug of war and Line follower as part of AMPLE-2020 on 20-02-2020

Editorial Board

Head of the Department : Dr. M.Chandra Sekhara Reddy, Professor & Head/M.E

Staff Advisory Committee : Mr. S.Jaya Kishore, Assistant Professor, Dept. of M.E

Editors : A. Ram Dinesh, III M.E

: K. Sankar Srinivas, III M.E

Sri Venkateswara College of Engineering Campus

