



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambara Nadar - C.Nagammal Campus

S.P.G.C.Nagar, K.Vellakulam - 625 701, (Near Virudhunagar), Madurai District.

DEPARTMENT OF MECHANICAL ENGINEERING

ACCREDITED BY NBA, NEW DELHI

Mech'Časopis

Edition 6
October 2020

Mech'Časopis

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About the Department

- The Department of Mechanical Engineering was started in the year 2005 offering the Bachelor's Degree under Anna University and Post Graduate Degree of Master of Engineering in Manufacturing Engineering in the year 2012.
- The Department has 22 faculty members, who are highly qualified in different areas of specialization and dedicated their profession for the students. Amongst that, 4 faculty members hold the Doctorate Degree and 3 also recognized as supervisors for guiding Ph.D.
- The Department is nourished with the modern equipment and computing facilities with the latest version of software viz., ANSYS, SOLIDWORKS, Femap Nastran, NX CAD CAM CAE, MASTERCAM and AutoDesk Inventor. Value added courses are provided for the students. Our department is an Anna University recognized Research Centre.

About Mech'Časopis

The name Mech'Časopis is taken from the Croatian language; Časopis (Pronounced as Chasopis) means Newsletter. This newsletter brings the outline of the students and faculty achievements with the activities of the department.

Mechanical Engineering

Vision

To make Department of Mechanical Engineering the unique of its kind in the field of Research and Development activities in the prominent field of Mechanical Engineering in this part of the world

Mission

To impart highly Innovative and Technical Knowledge in the field of Mechanical Engineering to the urban and unreachable rural student folks, through "Total Quality Education".

Mechanical Engineering

Program Educational Objectives

PEO1 - Graduates of the Programme will excel in Technical Knowledge and Apply Innovative Skills in the field of Mechanical Engineering.

PEO2 - Graduates will contribute to Technological Development and Research Activities through "Total Quality Education".

PEO3 - Graduate of the Programme will accomplish Leadership Qualities and Social Responsibilities through "Life Long Learning".

Program Specific Outcomes

PSO1 - Graduates will be able to create and analyse the Research and Development activities related to design and manufacturing.

PSO2 - Graduates will be able to design, develop need based products in Mechanical Engineering and allied Industries.

Student's Corner – Technical Article

DESIGN AND FABRICATION OF SLUDGE CLEANING ROBOT

S. NO.	ROLL NO.	TEAM MEMBERS
1.	17UMEC008	ABINESH A
2.	17UMEC011	ANANDKUMAR V
3.	17UMEC026	ARUNRAMSUNDAR R

PROJECT SUPERVISOR:

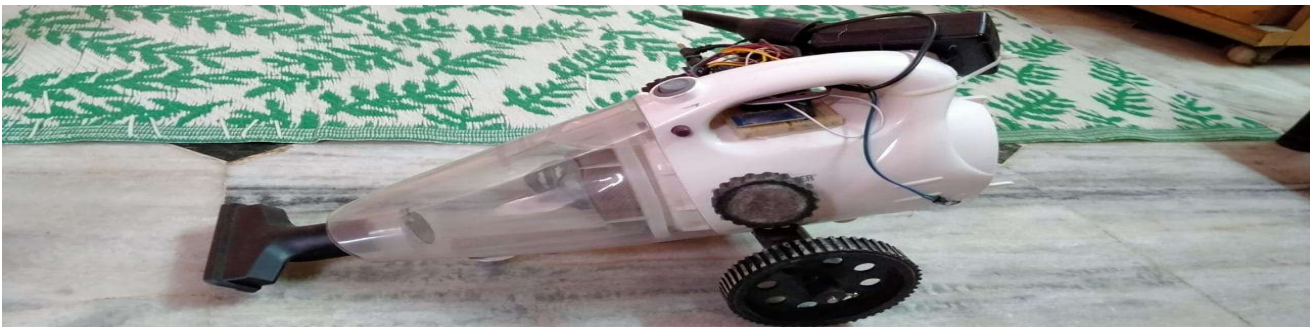
Mr. B.K. PARRTHIPAN, M.E., M.B.A., (Ph.D).,

ABSTRACT

➤ In this modern world robot plays a vital role in industrial automation, where application of any things that can be cleaning the place without using human power. The aim of our project is to design and fabricate a sludge cleaning robot. The function of the robot is to clean sludge's in tanks.

Student's Corner – Technical Article

- The design of mechanical structure of robot has been developed by using Autodesk Inventor software. In our prototype model acrylic sheet material has been used. Arduino UNO controller is used for controlling motors that are used to control the robot.
- In addition to this motors are used to control base. The major components used in our project are of less cost and readily available. The advantage of our robot is to clean the sludge's in tanks easily adoptable in small scale industries.



Events Organized



Guest Lecture on Opportunities in Indian Navy

On

08/01/20

By

Lieutenant. Er.P.U.Prabhu,

Indian Navy, Madurai

Events Organized



CHISEL 2020 - one day Technical Contest for Polytechnic

Students

On

10/01/20

Events Organized



Guest Lecture on Solar Energy in Industry 4.0

On

11/01/20

By

Dr.Ravisankar Sathiya Moorthy,

Professor,

Hindustan Institute of Technology and Science, Chennai

Events Organized



Alumni Meeting

On

17/01/20

Events Organized



Guest Lecture on Mechanical, Electrical and Plumbing

On

25/01/20

By

Mr.Sherif Kaizer,

M/S Reeds Engineering LLP, Madurai

Events Organized



Guest Lecture on Opportunities in Marine Engineering

On

29/01/20

By

Mr.Meenatchi Sundaram,

RL Institute of Natural Science, Madurai

Events Organized



IEI sponsored

Two days All India seminar on "Revolutions in Eco – Friendly
Vehicles"

On

03/02/20 &

04/02/20

Chief Guest

Er.S.Selvakumar,

Head – Engineering and Design, M/s, Power Projects, Chennai.

Events Organized



Guest Lecture on Electric Vehicle in India

On

08/02/20

By

Er.Gunabalan,

Centre Head,

CADD Centre, Madurai

Events Organized



Guest Lecture on Career Juncture in Indian Airforce

On

12/02/20

By

Group Captain

Mr. Nataraj

Indian Airforce

Tanjore.

Events Organized



SAE sponsored Student convention Tier – II events

On

25/02/20

By

Mr.K.Sivakumar,

General Manager- Materials,

Tractors and Farm Equipment Ltd (TAFE), Madurai.

Events Organized



Guest Lecture on Human Response in Vibration

On

09/03/20

By

Dr. K.Supradeepan,

Department of Mechanical Engineering,

BITS, Hyderabad

Events Organized



Guest Lecture on Opportunities in CAD for Mechanical
Engineers

On

11/03/20

By

Mr.J. Harish,

Managing Director Flash Group,

Chennai

Events Organized



**YOU CONNECT ALUMNUS NETWORK –
LEARNING SERIES
LIVE SESSION BY ALUMNUS
6 DAYS, 6 EXPERTS, 6 SESSIONS**



04/05/20
Mr. D.MITHUN SINGH (2012)
Resource Modelling Engineer, Vestas Technology R&D, Chennai.
Research - Venturing from the known to the unknowns



05/05/20
Mr.T. SHRIRAMAN (2015)
Project Manager, Agnice Fire Protection Pvt. Ltd, Chennai.
Are we Engineers or Engineering Graduates ?



06/05/20
Mr. J. INDRAJITH (2014)
Chief Marketing Strategist, Shiya Marketing, Madurai.
Industry 4.0 Readiness



07/05/20
Mr. B. AADITHYA SRINIVAS (2019)
Production Planning Engineer, Alstom transport India Limited, Kolkata
How to gear up GATE Exams



08/05/20
Mr. J. NIRUPAN KUMAR (2010)
Senior Mech.Engr, White young engineering consultants, Qatar.
Perks of being a Mechanical Engineer in construction industry



09/05/20
M .R. VIGNESH (2015)
Product Design Engineer, Mercedes Benz Bangalore.
Aspects of Design Thinking in Industries

Online Webinar on "YOU CONNECT ALUMNUS NETWORK –
LEARNING SERIES"

From 04/05/20 to 09/05/20

Events Organized



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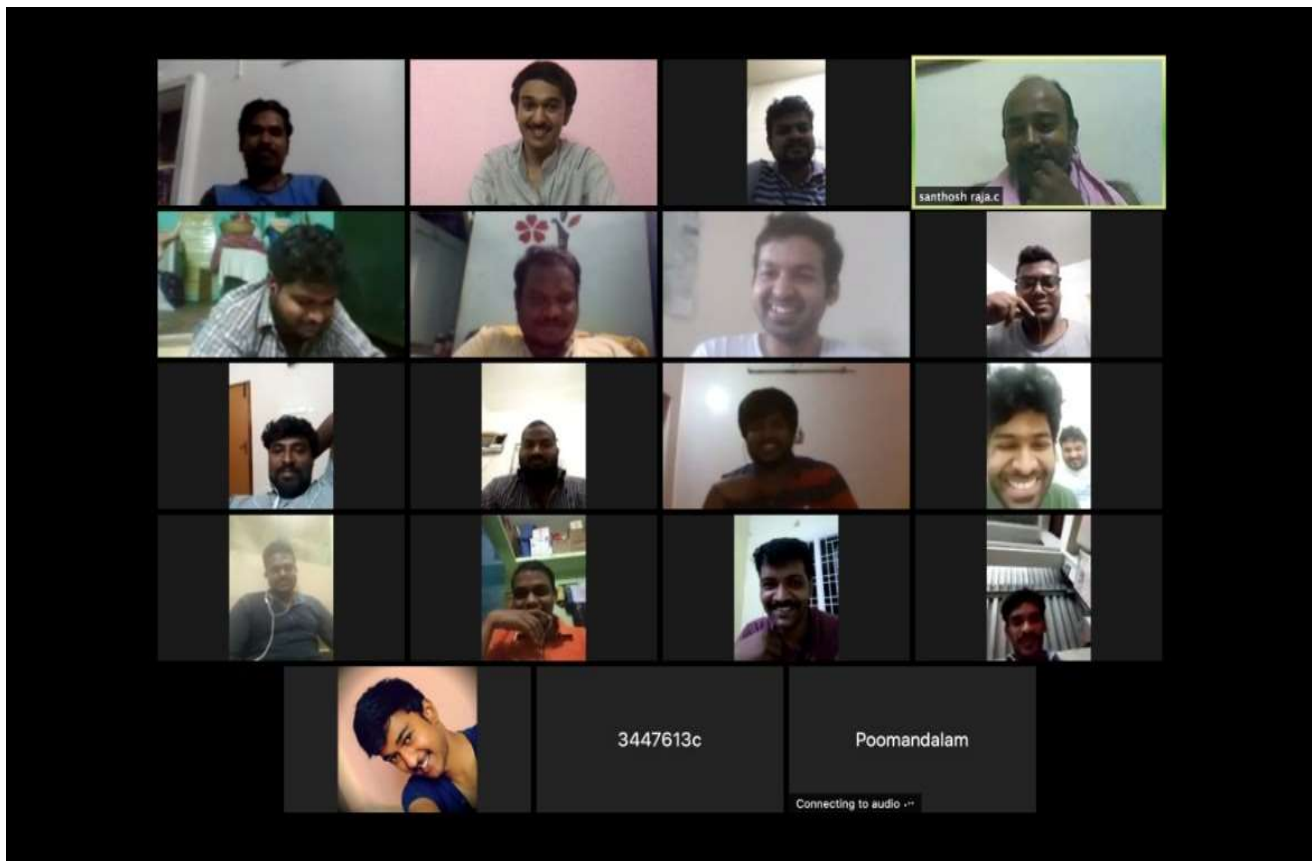
Organise
ONLINE FACULTY DEVELOPMENT PROGRAM
GEAR UP
RESEARCH ATTRIBUTES
(FOR POLYTECHNIC AND ENGINEERING COLLEGE FACULTY MEMBERS)
13th to 16th May, 2020

			
<p>Day 1 (13-05-2020)</p> <p>SUSTAINABLE MATERIALS AND MANUFACTURING</p> <p>Dr. Elammaran Jayamani, Senior lecturer, Mechanical Engineering, Swinburne University of Technology, Sarawak campus, Malaysia.</p>	<p>Day 2 (14-05-2020)</p> <p>INTRODUCTION TO INTELLECTUAL PROPERTY RIGHTS AND PATENT FILING PROCEDURE IN INDIA</p> <p>Dr. A. Saravanan, Assistant Professor, Department of Humanities and Social Sciences, Indian Institute of Management, Indore.</p>	<p>Day 3 (15-05-2020)</p> <p>RESEARCH COLLABORATION AND FUNDING OPPORTUNITIES IN INDIA</p> <p>Dr. Sanjeev Kumar Singh Yadav, Assistant Professor, Mechanical Engineering Harcourt Butler Technological Institute, Kanpur.</p>	<p>Day 4 (16-05-2020)</p> <p>ART OF WRITING RESEARCH ARTICLES</p> <p>Dr. S.S. Saravanakumar, Associate Professor, Mechanical Engineering, Kamaraj College of Engineering and Technology, Madurai.</p>

Online FDP “GEAR UP – Research Attributes”

From 13/05/20 to 16/05/20

Events Organized



“MECH GEARS 09-13”

Virtual Alumni Meet for 2013 passes out Mechanical
Engineering students

On

23/05/20

Events Organized



Online Seminar on “How to handle online classes”

On

15/06/20 to 16/06/20

By

Mr.B.K.Parrthipan &
Mr.S.Thanga Kasi Rajan,

Assistant Professor,
Mechanical Engineering,

Kamaraj College of Engineering and Technology

Chief Guest

Mrs.M.K.C.Subashini,

Chief Educational Officer, Virudhunagar Region.

Events Organized



Online Teaching made easy webinar series,

“Exploring Google Forms, an online assessment tool”

On

25/06/20

By

Mr.S.Chidambara Kumaran, Assistant Professor,
Mechanical Engineering,
Kamaraj College of Engineering and Technology

Events Organized



“Online Summer Camp” for 11th & 12th students of 2019-2020 Batch

From 29/06/20 to 01/07/20

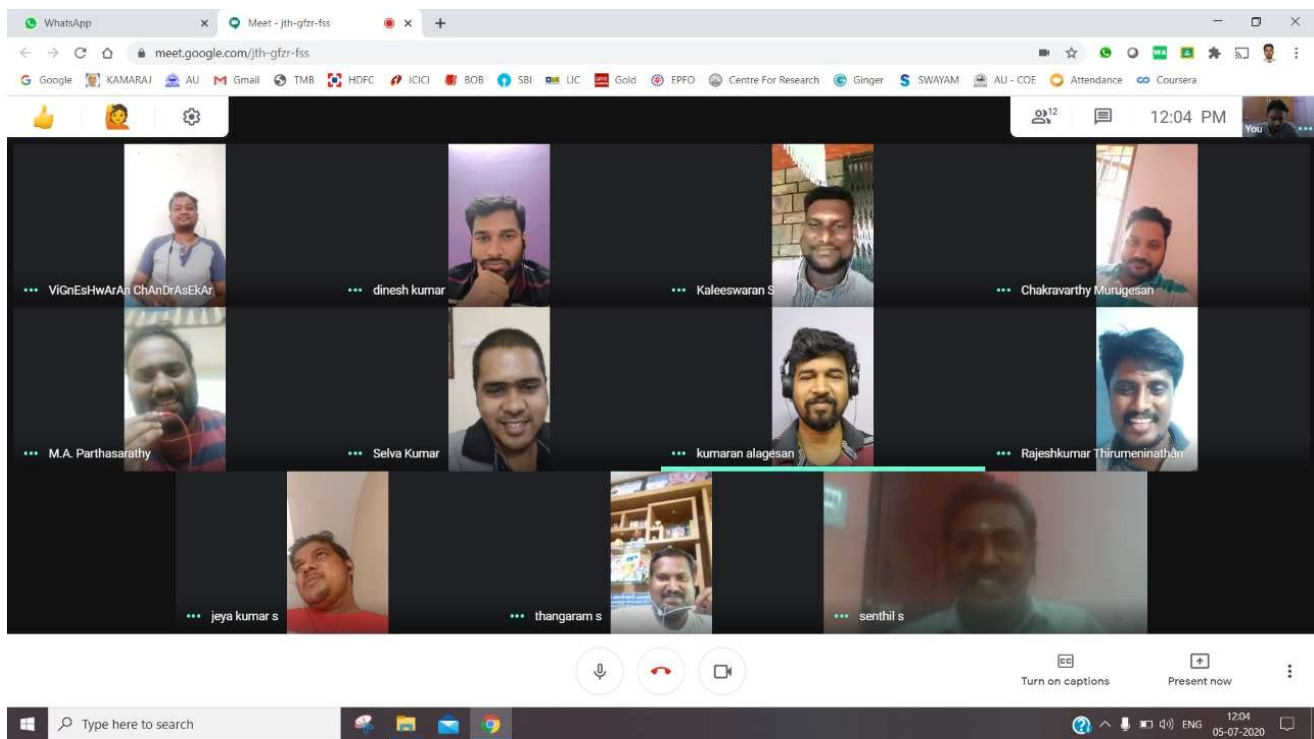
By

Mr.M.S.Paulpandi,
Founder,
Insculpt the impossible,
Sivakasi.

Mr.T.Palaniappan,
Senior Software Engineer,
Sri Mookambika Infosolution

Dr.S.Senthil,
Dr.S.S.Saravanakumar,
Mr.P.Sivasubramaniyan,
Mr.R.Sakthivel Murugan,
Mr.M.Prithivraj,
Mr.S.Muthu Natrajan

Events Organized



Virtual Alumni meeting

“MECH GEARS 2009 & 2010”

On

05/07/20

Events Organized



Online Teaching made easy webinar series,

“Google Jamboard”

On

15/07/20

By

Mr. B. K. Parthipan,
Assistant Professor,
Mechanical Engineering,
Kamaraj College of Engineering and Technology

Events Organized



Online Teaching made easy webinar series,

“Educational Video Creation (Using Mobile Apps)”

On

23/07/20

By

Mr.R.Sakthivel Murugan,
Assistant Professor,
Mechanical Engineering,
Kamaraj College of Engineering and Technology

Events Organized



Online Seminar on “Online Teaching Made Easy” (For Polytechnic Faculty Members)

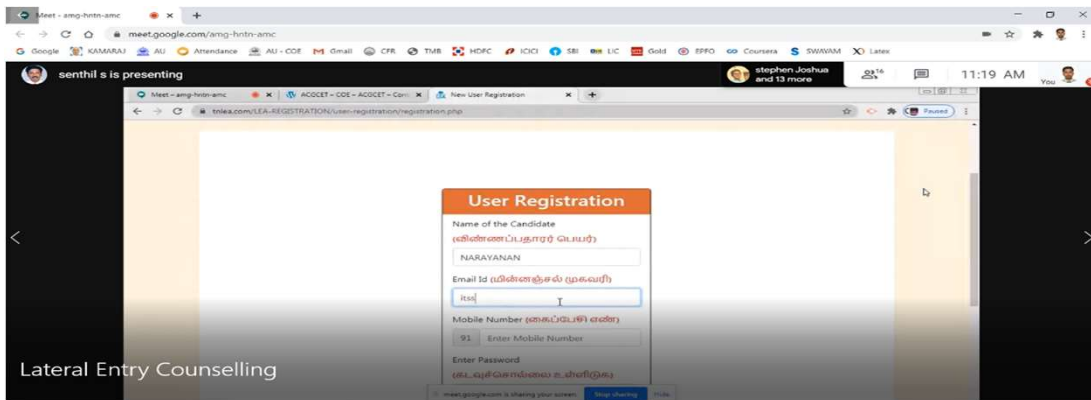
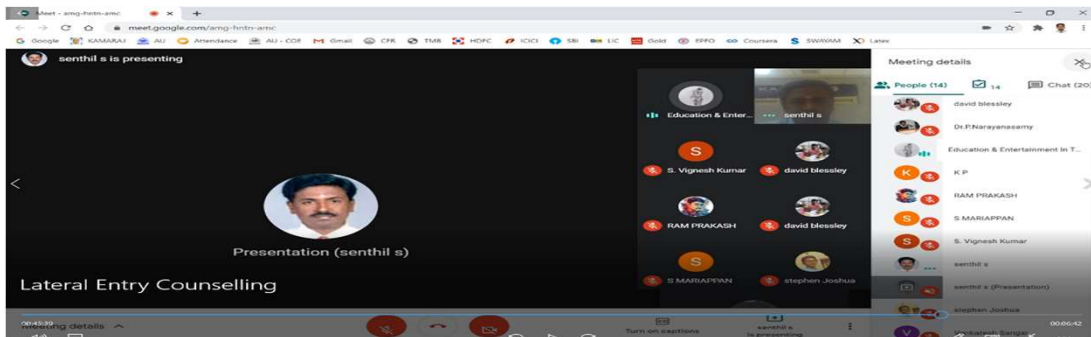
From 30/07/20 to 31/07/20

By

Mr.B.K.Parrthipan &
Mr.S.Thanga Kasi Rajan,
Assistant Professor,
Mechanical Engineering,

Kamaraj College of Engineering and Technology

Events Organized



Online Seminar on “How to apply online for Lateral Entry
Counselling”

On

11/08/20

By

Dr.S.Senthil,
Professor & HoD,
Mechanical Engineering,
Kamaraj College of Engineering and Technology

Events Organized



Art of Parenting

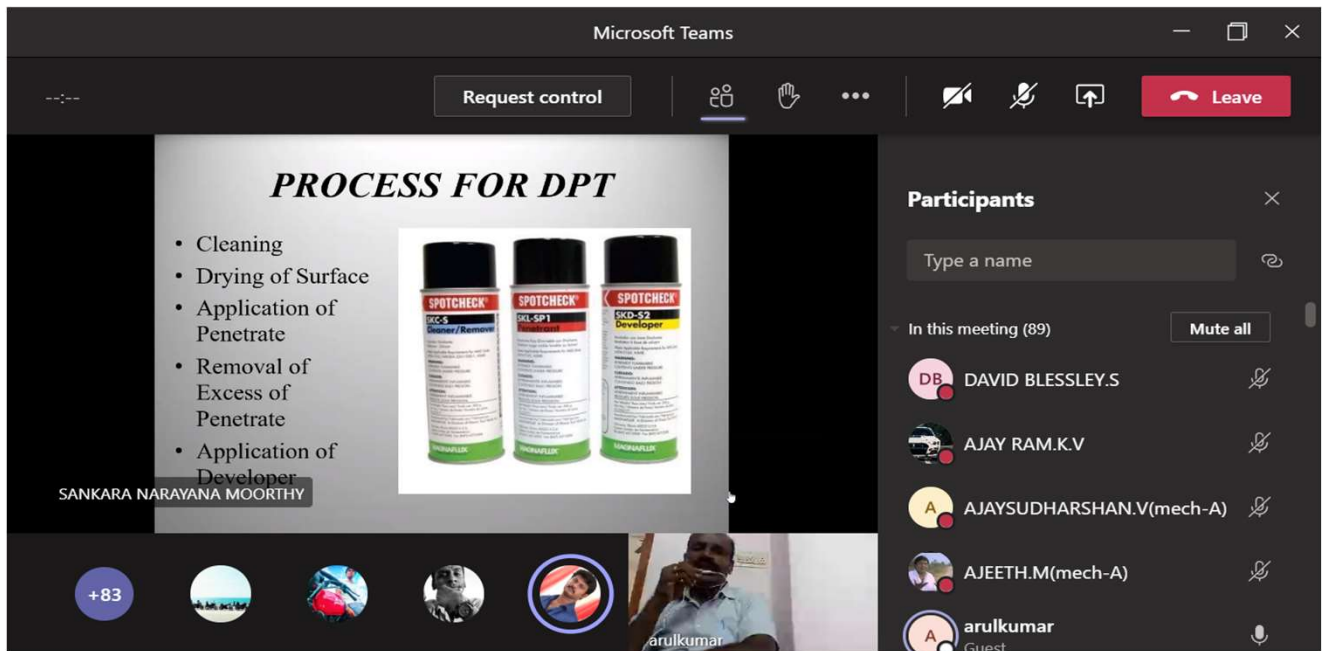
On

15/08/20

By

Ms.Dhivya Kannan,
Life Coach,
Founder in Nurturing Institute

Events Organized



Online webinar on “Non-Destructive Testing-Methods and Applications”

On

08/10/20

By

Dr. Arul Kumar,
Centre Head,
Mathira NDT Training Institute,
Poovarchatram.

Achievements

The Department of Mechanical Engineering has been Re – Accreditation by National Board of Accreditation for 3 years up to 2023.



Scholar of Eminence



Dr.S.Thanga Kasi Rajan,
Assistant Professor,
Mechanical Engineering,
Kamaraj College of Engineering and Technology



ALUMNI Corner

Technical Article

COVID-19: PRIORITIES FOR MECHANICAL ENGINEERS

The pandemic, Covid-19 crisis is a new of its kind in the current century. This pandemic impacts mechanical engineering companies with unprecedented challenges, from halts in production to the postponement or even cancellation of the activities and made shortages in the supply chain. While creating such impacts on the industry, the Covid- crisis paves the way for a new normal. People need to act swiftly to contain the risks that are forecasted. The mechanical and production industry has already been in the declining state since 2018. The financial performance of the industries also seen declines during 2018 and 2019, which has been continued and will no doubt reduce further than expected. On top of all of this, the industry is facing one of the greatest challenges it has ever seen in the century due to the Covid-19 crisis. The worst impact of the Covid-19 crisis is that it is impossible to estimate the amount of damage which the pandemic has been causing.

ALUMNI Corner

Technical Article

COVID-19: PRIORITIES FOR MECHANICAL ENGINEERS

There is no doubt that, the mechanical and production engineering companies must act fast. There are top priorities for firms which can provide right solutions.

First, businesses must take necessary actions to protect the health of their employees and by following the SOPs provided by the state and central government time to time; most companies are doing this. Second, the companies should consider adjusting their capacity by reducing down their least priority operations and also should shut them down completely if no major activities are happening.

Third, the companies need to ensure the outflow, making necessary reserves for sustaining next few months. The payment can be prioritised based on the current need.

The fourth priority is to prepare them for an efficient restart when the critical phase of the crisis is over. Creating positive communication across the stakeholders will enable them to emerge stronger and better prepared for the future.

ALUMNI Corner

Technical Article

COVID-19: PRIORITIES FOR MECHANICAL ENGINEERS

While the businesses are trying to emerge during this crisis, the workforce development and growth also important. The students in final days of the engineering college must consider this time to improvise or acquire the necessary job skills. Industries should conduct the virtual events or workshops for the students to keep them aligned for post Covid era and also for the future technical awareness. The engineering students as well as the working professionals must invest on their time to gain the industry oriented skills which will make them ready for the new normal.

Surviving in the daily struggle is essential and becomes first priority. But companies should make sure that they do not focus on current problems at the expense of preparing for the future. Planning long term and having a clear vision for the future will ensure that companies lay the strategic foundations for life after the virus. This too will pass!



Er. Shahjahan A
Centre Head
CADD Centre Training Services
Pvt Ltd.,
Thirunagar,
Madurai.

Editorial Team

Team members

Roll No.	Name	Year
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18UMEC082	RAMANA.S	II-MECH-A
18UMEC064	ARUNPRAKASH.P	III-MECH-B
18UMEC065	RAM PRASATH.S	III-MECH-B
17UMEC009	HARISH KUMAR.M	IV-MECH-A
17UMEC030	VISHWAK.S	IV-MECH-A
17UMEC059	VIGNESH.B	IV-MECH-A
17UMEC048	Balaganesh K B	IV-MECH-B
17UMEC110	Balaji Kumaradhan Singh B	IV-MECH-B
17UMEC131	VIGNESH.B	IV-MECH-B

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17UMEC013 – III Year MECH B



Editor – Mr.B.K.Parrthipan
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