



**FRANCIS XAVIER**<sup>™</sup>  
**ENGINEERING COLLEGE**  
**AN AUTONOMOUS INSTITUTION**

Accredited BY NBA | AICTE Sponsored Margdarshan Mentor Institution  
DST-FIST Supported Institution | ISO 9001:2015 Certified  
Recognized under Section 2(f) & 12(B) of the UGC Act, 1950

[f /fxengg](#) [t /fxengg](#) [i /fx\\_ec](#) [in /fxengg](#)  
[y /francisxavierengineeringcollege](#)

## DEPARTMENT OF MECHANICAL ENGINEERING

### MONTHLY NEWS - JANUARY 2022

#### **About Department of Mechanical Engineering**

The department offers UG program in B.E Mechanical engineering from the year 2005. The department started a PG program M.E Industrial Safety Engineering from this academic year 2018-2019. This course has wide range of job opportunity in the Industrial and Academic sector of India as well as abroad. The Department aims at providing the students with a perfect blend of intellectual and practical experiences with the support state-of-the-art laboratories and well defined academic structure. The UG program is accredited by National Board of Accreditation (NBA). The special feature of the Department has established three applied laboratories, in addition to the regular labs to support students to master skills to make each one industry-ready, with a solid grounding in the principles and practice of Mechanical Engineering. We also have a strong academy for training students to appear for GATE exam.

#### **Vision of the Department**

To produce competent Mechanical Engineers of excellent technical and managerial skills with profound morality for global, national and confront societal development.

#### **Mission of the Department**

1. To provide quality education in Mechanical Engineering with an interdisciplinary approach, encouraging innovation, research, and Entrepreneurship through world-class infrastructure and proficient teachers.
2. To make the department self-reliant through multiple programs with excellent curriculum, best practices, and industry exposure.
3. To inculcate technical, professional, leadership skills, moral ethics, and lifelong learning.

## Programme Educational Outcomes

Bachelor of Mechanical Engineering curriculum is designed to impart Knowledge, Skill, and Attitude on the graduates to

PEO 1: Have a successful professional career in Mechanical Engineering and allied industries, either by employment or through entrepreneurship.

PEO 2: Establish competency in Design, Thermal, Materials, and Manufacturing system with ethics and social responsibility.

PEO 3: Have a continual receptiveness for leadership and social challenges.

## Message from the Head of the Department

**Dear Colleagues,  
Greetings!**

I have great pleasure and pride to announce that the Department of Mechanical Engineering is publishing the newsletter for the month of January 2022. Amidst the Covid Pandemic situation, we strived hard to keep the students engaged, and utilize the time not only for quality education and also for self-development. We are steadfast in our progress as it involved various activities that enabled the hidden talents of the department students and faculty members to be brought into light. Besides the lockdown, our faculty members are continuously attending various training programs, publishing research papers, book chapters and are also working on getting patents.

This newsletter is the reflection of department activities which showcases all the events held in the department, contribution of faculty members, students and the best practices adopted. I would like to congratulate all the members of the editorial board for their sincere effort to realize this venture.



**Dr. I. Neethi Manickam, M.E., Ph.D.**  
Professor & Head  
[neethimanickam@francisxavier.ac.in](mailto:neethimanickam@francisxavier.ac.in)

## EDITORIAL BOARD

Dr. I. Neethi Manickam, Professor & Head of Department, Editor – in – Chief.

Dr. S. Balakrishnan, Assistant Professor, Mechanical Department, Faculty In charge.

# FACULTY DEVELOPMENT PROGRAM (03.01.2022 to 8.01.2022)

The Mechanical Engineering Department has organized an AICTE-sponsored six-day online faculty development programme on "Outcome-based education (OBE) and NBA Accreditation" from January 3 to 8, 2022. The FDP held two sessions: FN from 10 a.m. to 11.30 a.m. and AN from 2 p.m. to 3 p.m. The inaugural session began at 9.30 a.m. on 3.1.2022 with a prayer by Mr. R. Rahesh, followed by a welcome address by Dr. K. Senthilkumar, ASP/Mech. Following the welcome address, our department HOD Dr. I. Neethi Manickam delivered the FDP's introductory remarks, in which he explained the purpose of the AICTE-sponsored FDP under the Margdarshan scheme. The address was then facilitated by our principal, Dr. V. Velmurugan, who also emphasized the expected outcome of Margdarshan initiatives. He also discussed the NBA's significance for educational institutions. Mr. Subash then proposed the vote of thanks. The programme was coordinated by Dr. K. Senthilkumar and Mr. M. Subash. Around 80 faculty members working in engineering colleges throughout the state have participated in this FDP including 16 internal participants.



**FRANCIS XAVIER ENGINEERING COLLEGE**  
AN AUTONOMOUS INSTITUTION  
Accredited by NBA  
Vandarpattai, Tirunelveli - 627 003

**SIX DAY ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON OUTCOME BASED EDUCATION (OBE) AND NBA ACCREDITATION**  
SPONSORED BY AICTE  
(Margdarshan Scheme for Share & Mentor Institutions)

Organised by  
**Department of Mechanical Engineering**

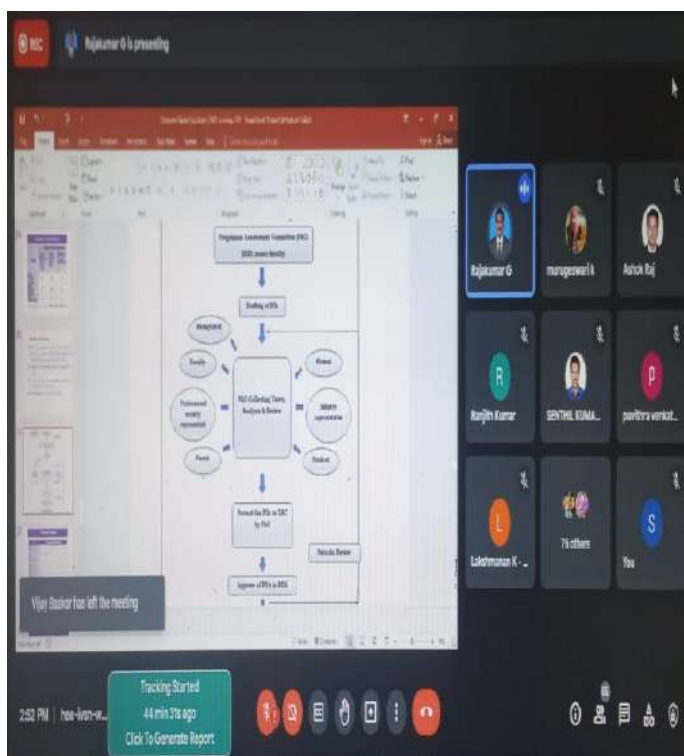
Date  
**January 3 - 8, 2022**

<b>Dr. G. Rajakumar</b> CoE, FXEC OBE an overview	<b>3-1-2022</b> Monday 10 am - 11 am	<b>Dr. K. Jeyakumar</b> General Manager Development NBA-Framing of Vision, Mission, PO and PSO	<b>3-1-2022</b> Monday 2 pm - 3 pm
<b>Dr. M. Caroline Viola Stella Mary</b> Head / ERP Division CO and PO Mapping	<b>4-1-2022</b> Tuesday 10 am - 11 am	<b>Mr. J. Daniel Sathiyaraj</b> Associate Professor (EEE), NBA SAR Filling (Criterion 1)	<b>4-1-2022</b> Tuesday 2 pm - 3 pm
<b>Mr. J. Daniel Sathiyaraj</b> Associate Professor (EEE), NBA SAR Filling (Criterion 2 and 3)	<b>5-1-2022</b> Wednesday 10 am - 11 am	<b>Dr. G. Rajakumar</b> CoE, FXEC NBA SAR Filling (Criterion 4)	<b>5-1-2022</b> Wednesday 2 pm - 3 pm
<b>Mrs. M. Navaneetha Velammal</b> Associate Professor NBA SAR Filling (Criterion 5)	<b>6-1-2022</b> Thursday 10 am - 11 am	<b>Mr. K. Ariyanayagam</b> Associate Professor (MECH), NBA SAR Filling (Criterion 6)	<b>6-1-2022</b> Thursday 2 pm - 3 pm
<b>Mr. K. Ariyanayagam</b> Associate Professor (MECH), NBA SAR Filling (Criterion 7)	<b>7-1-2022</b> Friday 10 am - 11 am	<b>Mrs. M. Navaneetha Velammal</b> Associate Professor NBA SAR Filling (Criterion 8)	<b>7-1-2022</b> Friday 2 pm - 3 pm
<b>Dr. G. Rajakumar</b> CoE, FXEC Examination reforms	<b>8-1-2022</b> Saturday 10 am - 11 am	<b>Dr. M. Caroline Viola Stella Mary</b> Head / ERP Division, CO and PO assessment	<b>8-1-2022</b> Saturday 2 pm - 3 pm

Registration link: <https://forms.gle/6uKdRxx2o6eKu5Se0>  
Google Meet Link for All Sessions: <https://meet.google.com/hee-ivsn-wxr>

**Organizing Committee**  
Dr. V. Velmurugan, Principal / FXEC  
Dr. G. Rajakumar, CoE / FXEC  
Dr. I. Neethimanickam, HOD / Mechanical

**Organizing Secretaries**  
Dr. K. Senthilkumar, Associate Professor / Mechanical  
Mr. M. Subash Narendran, Assistant Professor / Mechanical



The screenshot shows a Google Meet session in progress. The main window displays a presentation slide with a flowchart titled "Programme Investment Committee (PIC) 2022-2024". The flowchart includes steps like "Identify", "Review", "Finalize", "Approval", and "Implementation". On the right side, there is a grid of participants, including Dr. G. Rajakumar, murganewal, Anick Raj, and others. The bottom of the screen shows the Google Meet interface with a "Tracking Started" notification and a "Click To Generate Report" button.

# ANNA UNIVERSITY SIX DAY ONLINE FACULTY DEVELOPMENT PROGRAMME

The department of Mechanical Engineering was offered the privilege of conducting a Sponsored Six-Day Online Faculty Development Programme for Thermal Engineering–I, a course on-demand from January 03rd to 8th, 2022. The coordinators of this FDP are Dr. Zeenathul Farida Abdul Gani and Mr. J. Jeremy Jeba Samuel. Around 50 faculty members working in engineering colleges throughout the state and affiliated with Anna University have participated in this FDP including 5 internal participants. The sessions were handled by 9 eminent academicians from premier institutions like IIT, NITs, Anna University TVL campus and Government Engineering College, Tirunelveli. There were 4 sessions per day each for 90 minutes. The speakers for various sessions are Dr. V. Raghavan, professor, Indian Institute of Technology Madras (IITM), Chennai, Dr. V. Sajith, Professor, National Institute of Technology Calicut (NITC), Dr. Shijo Thomas, Professor, National Institute of Technology Calicut (NITC), Dr. Ajay Kumar Yadav, Professor, National Institute of Technology Surathkal Karnataka (NITK), Dr. K. Karuppasamy, Professor, Anna University Tirunelveli campus (AUT), Dr. Aldrin Raj, Professor, Government College of Engineering, Tirunelveli (GCE-TLY), Dr. D. Jebakani, Professor, Government College of Engineering GCE-TLY), Tirunelveli, Prof. Somesh Subramanian, Professor, Government College of Engineering (GCE-TLY), Tirunelveli. Dr. Neethimanickam, Head of the Department of Mechanical Engineering welcomed the participants and the speaker on the first session of the first day and delivered a formal welcome speech. The speakers were introduced by the coordinators during their first session. The expertise and experience of the speakers have benefited the participants and they have gained more insights on this course which could be seen from the positive feedback received on this FDP. The FDP was conducted through Zoom.



**ANNA UNIVERSITY Sponsored**  
Online Six Day FDP on  
**ME8493 THERMAL ENGINEERING I**  
[Regulation – 2017]

**REGISTRATION FORM**

Name : .....  
Designation : .....  
Qualification : .....  
Institution : .....  
Address for communication:.....  
.....  
.....  
Email : .....  
Mobile No : .....

Date: \_\_\_\_\_ Signature  
Head  
Department / Institution

Registration can also be done online

<https://forms.gle/5FwVj5P3ARAG5m5B3A>

Scanned copy of the registration form can be sent to the email address

[annaunivfdp@francisxavier.ac.in](mailto:annaunivfdp@francisxavier.ac.in)

**REGISTRATION**

- No. of participants is limited to 60
- Registration should be done online
- Selection is based on first come first serve
- Faculty members from engineering colleges affiliated to Anna university are eligible to attend this FDP
- Faculty members in Assistant/ Associate Professor category are encouraged to attend (but not restricted)
- Selected participants will be intimated by email.
- Confirmation by participants is to be made by email

**RESOURCE PERSON**

Eminent Professors from IITs, NITs, and reputed Institutions will handle the sessions of the Faculty Development Programme. Tutorial session will also be provided.

**REGISTRATION FEE**

There is no registration fee for the Faculty Development Programme.

**IMPORTANT DATES:**

- Last date for registration : **24.12.2021**
- Intimation of selection : **26.12.2021**
- Confirmation by Participants: **29.12.2021**
- Date of FDP : **03.01.2022**



**ANNA UNIVERSITY Sponsored**

Online Six Day FDP on

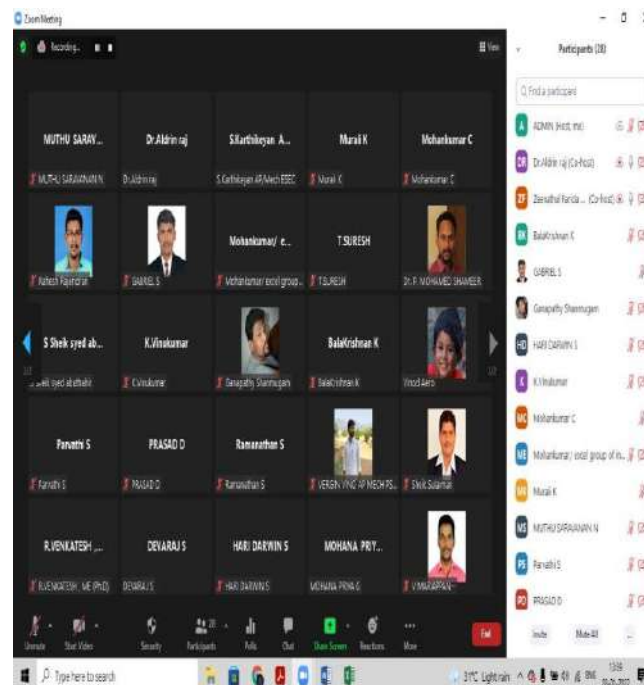
**ME8493 THERMAL ENGINEERING I**  
[Regulation – 2017]

**3<sup>rd</sup> to 8<sup>th</sup>**  
**January, 2022**

Coordinator(s)  
**Dr. Zeenathul Farida Abdul Gani**  
Professor  
**Mr.J. Jeremy Jeba Samuel**  
Assistant Professor

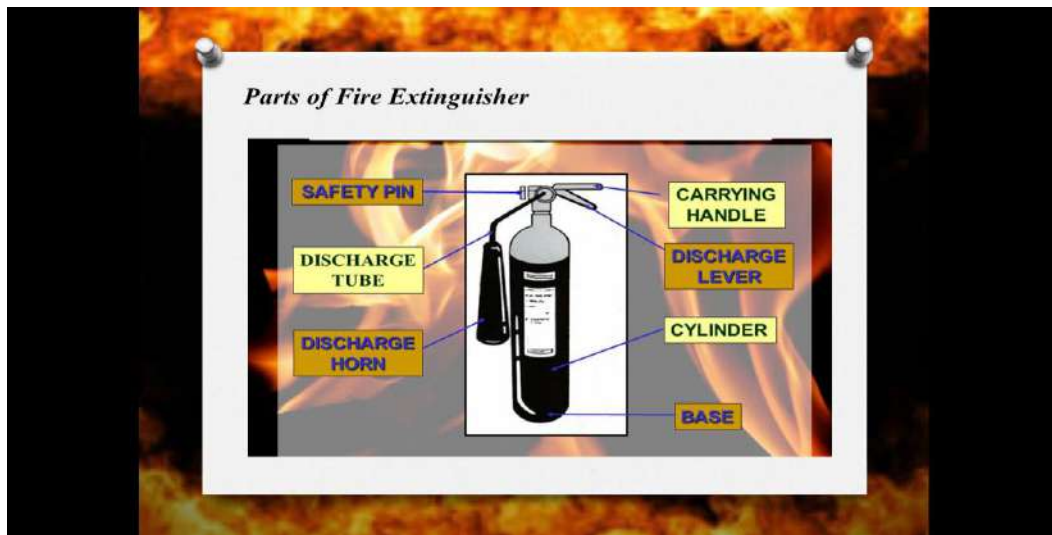


Organized by  
**Department of Mechanical Engineering**



## FACULTY INITIATIVE SKILLS

The Department of Mechanical Engineering conducted skill training about “How to use Fire Extinguisher in practical mode” & “Basics of Fire & Safety” via online mode from 24.01.2022 to 29.01.2022. Dr. R. K. A. Bhalaji, AP/Mech provides the skill training to the students. 40 students from various departments benefited from this program. He underlined how to use a fire extinguisher in a practical manner and Fundamentals of Fire & Safety.



## INAUGURATION DAY & WEBINAR

The Department of Mechanical Engineering organized an online webinar series for First-year - M.E. Industrial Safety Engineering. Dr. I. Neethi Manickam, HOD/Mech, inaugurated and welcomed the First-year M.E students followed by webinar series about Safety via online mode on Jan 27, 2022. The webinar series has organized four sessions in a full day. Webinar Topic: Roles & Responsibilities of Safety Officer, Resource Person: Mr.R.Prabhakaran, Senior Safety Officer, Sri Ramco Spinners, Rajapalayam at 9.30 AM. He explained the basic terms of safety, variation b/w unsafe act, an unsafe action as well as roles & responsibilities of safety officer under factories act 1948. Webinar Topic: The importance of safety in warehouse operations, Resource Person: Mr.S.P.Prasanna, Zonal Safety Manager, TVS Supply Chain Solutions, Chennai at 12 PM. He underlined the activities in warehouse operations, duties of safety officers in warehouses with real-time examples. Webinar Topic: How to become a successful safety officer, Resource Person: Mr.R.A.Vikranth Kumar, Group EHS Manager, Loyal Mills Ltd, Kovilpatti at 2 PM. He interacted and motivated the students to additionally learn some new things about safety such as lead auditing, NEBOSH, and IOSH. Totally 15 students from M.E (Industrial Safety Engineering) benefited from this program. Dr.R.K.A.Bhalaji, AP/Mech coordinator for this webinar series.

**FRANCIS XAVIER®**  
ENGINEERING COLLEGE  
AN AUTONOMOUS INSTITUTION  
Accredited by NBA  
Vannarpettai, Tirunelveli - 627 003

**TOPIC** **Roles & Responsibilities of Safety Officer** **SAFETY FIRST**

organized by  
**Department of Mechanical Engineering**

**January 27, 2022** **9.30 AM**

**RESOURCE PERSON**  
**Mr. R.Prabhakaran**  
Senior Officer – Safety  
Sri Ramco Spinners, Rajapalayam.

Google Meet Link: <https://meet.google.com/dbq-apry-ntv>

Coordinator: **Dr. R.K.A. Bhalaji** AP/Mech  
Convener: **Dr. I. Neethi Manickam** HOD/Mech  
**Dr. K. Jeyakumar** GM Development  
**Dr. V. Velmurugan** Principal

**FRANCIS XAVIER®**  
ENGINEERING COLLEGE  
AN AUTONOMOUS INSTITUTION  
Accredited by NBA  
Vannarpettai, Tirunelveli - 627 003

**TOPIC** **The Importance of Safety in Warehouse Operations** **SAFETY FIRST**

organized by  
**Department of Mechanical Engineering**

**January 27, 2022** **12.00 PM**

**RESOURCE PERSON**  
**Mr. S.P. Prasanna**  
Zonal Safety Manager,  
TVS Supply Chain Solutions, Chennai.

Google Meet Link: <https://meet.google.com/dbq-apry-ntv>

Coordinator: **Dr. R.K.A. Bhalaji** AP/Mech  
Convener: **Dr. I. Neethi Manickam** HOD/Mech  
**Dr. K. Jeyakumar** GM Development  
**Dr. V. Velmurugan** Principal

**FRANCIS XAVIER®**  
ENGINEERING COLLEGE  
AN AUTONOMOUS INSTITUTION  
Accredited by NBA  
Vannarpettai, Tirunelveli - 627 003

**TOPIC** **How to Become a Successful Safety Officer?** **SAFETY FIRST**

organized by  
**Department of Mechanical Engineering**

**January 27, 2022** **2.00 PM**

**RESOURCE PERSON**  
**Mr. R.A.Vikranth Kumar**  
Group EHS Manager  
Loyal Textile Mills Ltd. Kovilpatti.

Google Meet Link: <https://meet.google.com/dbq-apry-ntv>

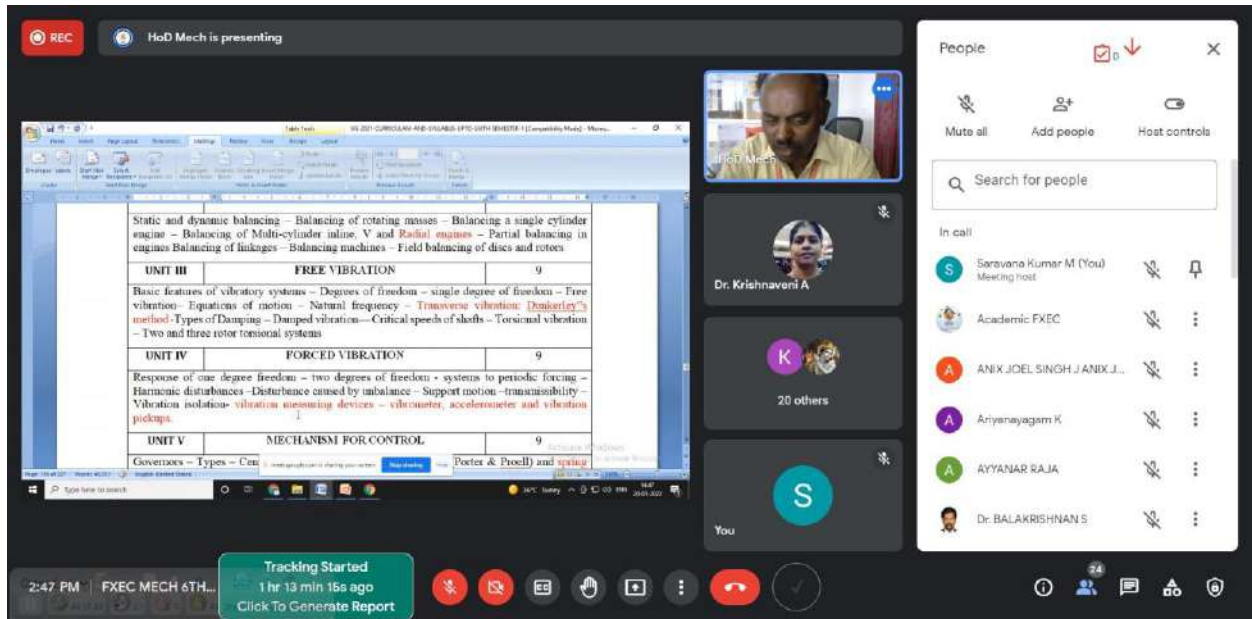
Coordinator: **Dr. R.K.A. Bhalaji** AP/Mech  
Convener: **Dr. I. Neethi Manickam** HOD/Mech  
**Dr. K. Jeyakumar** GM Development  
**Dr. V. Velmurugan** Principal

The screenshot shows a Google Meet interface with a presentation slide. The slide title is "TAMILNADU FACTORIES RULES 1950". It lists "Rule 69" and "Duties of Safety Officers". The duties include advising and assisting factory management in fulfilling obligations, preventing personal injuries, and maintaining a safe working environment. The total score is 13 points. The meeting interface shows a grid of participants and a toolbar at the bottom.

## BOARD OF STUDIES MEETING

The Sixth Board of Studies meeting was held on 20-01-2022 at 1.30 pm via online mode - google meet platform for approval and revision of UG - Syllabus regulation 2021 for 4th, 5th, and 6th semesters and PG - Syllabus regulation 2019 up to 4th semester. The meeting began with an expert committee and internal members. This BOS meeting was attended by approximately 23 members. Dr. I. Neethi Manickam, HOD/Mech, convened and welcomed the expert committees, which included Dr.A. Krishnaveni, Professor, GCE, Tirunelveli, Anna University Nominee, Dr.R. Sudhakarpanidiam, Associate Professor, VIT

University, Expert Member Other than Parent University, and Mr. Arul Marcel Moshi M.E., (Ph.D.), Assistant Professor, NEC, Aluminous. He presented the syllabus revision for Regulation 2021 and how it will benefit students' careers. Expert committees made suggestions and approved them.







## MEMORANDUM OF UNDERSTANDING

On January 25, 2021, a Memorandum of Understanding was signed between M/S. TOYOTA KIRLOSKAR MOTOR at the Virtual MoU Signs Off in FXEC the Principal's office. The signatories were Mr. Roshan R, Deputy General Manager, Toyota Learning & Development India, and Dr.V. Velmurugan, Principal, FXEC. Dr. S Cletus Babu, Founder & Chairman, SCAD Group of Institutions presided over the function, and Dr. K Jeyakumar, General Manager Development, SCAD Group of Institutions welcomed everyone and gave an introduction to the institution. This event was attended by Dr. S Sundararajan, Principal, SCAD College of Engineering and Technology, Dr. V Velmurugan, Principal, Francis Xavier Engineering College, Prof. A George Klinton, Principal, St. Mother Theresa Engineering College, Prof. J Monimaran, Principal, SCAD Polytechnic College, and Prof. J Johnson, Principal, FX Polytechnic College. This MOU outlined the initiative for cooperation between the two parties in the areas of training for students and faculty



based on Institute requirements as per the Syllabus.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement to be executed in duplicate by their authorized representatives and have one copy each.

For <b>TOYOTA KIRLOSKAR MOTOR</b>	For <b>FRANCIS XAVIER ENGINEERING COLLEGE</b>
	
Name: Roshan R. Designation: DGM-TLDI Date: 25 <sup>th</sup> Jan 2022	Name: Dr. V. Velmurugan Designation: Principal Date: 25 <sup>th</sup> Jan 2022
Witness: 	
Name: Mr. B. Jagadish Designation: Senior Manager	Name: Dr. I. Neethimanicam Designation: Professor & Head, Department of Mechanical Engineering