

SRI CHANDRASEKHARENDRA SARASWATHI VISWA MAHAVIDYALAYA, (SCSVMV)
 (Deemed to be University US 3 of UGC Act 1956) (Approved by All India Council for Technical Education (AICTE))
 Accredited with "A" Grade by NAAC
 Enathur, Kanchipuram – 631 561

Department of Mechanical Engineering

Lecture Schedule from 10-08-2020 to 05-09-2020

Date	Time	Name of the Faculty	Subject Name	Department	Year	Sem	Section	Topics to be covered	Reference	Online tool to be used (Zoom, Webex, etc)	
Monday, August 10, 2020	10 AM - 12 PM	Dr. B. Arunagan	Thermodynamics	Mechanical	II	3	A	Basic concepts - concept of continuum, comparison of microscopic and macroscopic approach. Path and point functions. Intensive and extensive, total and specific quantities. System and their types. Thermodynamic Equilibrium State, path and process. Quasi-static, reversible and irreversible processes. Heat and work transfer, definition and comparison, sign convention, Displacement work and other modes of work, P-V diagram. Zeroth law of thermodynamics - concept of temperature and thermal equilibrium - relationship between temperature scales - new temperature scales.	Nag P.K., "Engineering Thermodynamics", SRIEdition, Tata McGraw-Hill, New Delhi, 2013.	Microsoft Teams	
Monday, August 10, 2020	2 PM - 4 PM	Dr. S. Sathyanarayanan	Materials Engineering	Mechanical	II	3	A	Unit cells and crystal structures	U.C. Joshi "Engineering Materials and Metallurgy"	Webex	
Tuesday, August 11, 2020	10 AM - 12 PM	Dr. P. Chennayyan	Fluid Mechanics & Machinery	Mechanical	II	3	A	Flow visualization techniques, pathlines, streamlines, velocity profiles	P.K. Bansal	Google Meet	
Tuesday, August 11, 2020	2 PM - 4 PM	Dr. S. Vijayarathnam	Mathematics III (PDE, Probability & Statistics)	Mechanical	II	3	A	Introduction to PDE	General	Google Classroom	
Wednesday, August 12, 2020	2 PM - 4 PM	Dr. S. Arunagan	Thermodynamics	Mechanical	II	3	A	Maxwell relations, The Equations, Difference and ratio of heat capacities, Energy equation, Joule-Thomson Coefficient	Dr. N. Kottarathnam, "Engineering Mechanics - Statics & Dynamics"	Google Classroom	
Wednesday, August 12, 2020	10 AM - 12 PM	Mr. R. Balakumar	Engineering Mechanics	Mechanical	II	3	A	Introduction - Laws of Mechanics - Laws of Motion, Parallelogram and Triangle Law of Vectors	Dr. N. Kottarathnam, "Engineering Mechanics - Statics & Dynamics"	Microsoft Teams	
Thursday, August 13, 2020	2 PM - 4 PM	Dr. S. Arunagan	Electric & Hybrid Vehicles	Mechanical	II	3	E	Electric Vehicle - Need, Types - Cost and Efficiency - Cost of the Electric Vehicle, Technology - Insects, cables, components, Control	Dr. N. Kottarathnam, "Engineering Mechanics - Statics & Dynamics"	Microsoft Teams	
Thursday, August 13, 2020	10 AM - 12 PM	Dr. V. Vijayan	3-D Printing processes & Applications	Mechanical	II	3	A	3D Printing, Geometric 3D Printing Processes, Benefits of 3D Printing, Distinction Between 3D Printing and CPM, Manufacturing, Other Related Technologies	Jan Gibson, David W. Rosen, Brent Stucker, "Additive Manufacturing Technologies: Rapid Prototyping to Direct Digital Manufacturing", Springer, 2010	Webex	
Friday, August 14, 2020	2 PM - 4 PM	Dr. S. Sathyanarayanan	Materials Engineering	Mechanical	II	3	A	Introduction of Solenoid and Transducer, Classification of sensors	S.P. Srinivas Kumar, "Material and Metallurgical Science"	GOOGLE MEET / ZOOM	
Friday, August 14, 2020	10 AM - 12 PM	Dr. S. Vijayarathnam	Mathematics III (PDE, Probability & Statistics)	Mechanical	II	3	A	Types of III, IV	General	Google Classroom	
Saturday, August 15, 2020	2 PM - 4 PM	Mr. R. Balakumar	Engineering Mechanics	Mechanical	II	3	A	Force in cables - Equilibrium of a cable in cables - Equivalent systems of forces - Single equivalent force	Dr. N. Kottarathnam, "Engineering Mechanics - Statics & Dynamics"	Microsoft Teams	
Saturday, August 15, 2020	10 AM - 12 PM	Mr. G. Venkateshwararao Rao	Energy Storage system & Management System	Mechanical	II	3	E	Energy Storage system & Management System	F.W. Billmeyer Jr., Polymer Science, Inter science Publisher John Wiley and Sons, 3rd edition 2001	GOOGLE MEET	
Saturday, August 15, 2020	10 AM - 12 PM	Mr. R. Elappan	Polymer Engineering	Mechanical	II	3	3D printing	UNIT I BASIC CONCEPTS - Types of Polymers and Polymerization - Polymer Composition and Structure, Polymerization Mechanism	F.W. Billmeyer Jr., Polymer Science, Inter science Publisher John Wiley and Sons, 3rd edition 2001	Google Meet	
Saturday, August 15, 2020	10 AM - 12 PM	Mr. S. Saravathi	Automatic control system	Mechanical	II	3	Robotics	Introduction, Components of Automatic Control System - Open loop and closed loop systems - Examples	PP/PP/PP	Webex	
Monday, August 17, 2020	10 AM - 12 PM	Dr. S. Arunagan	Thermodynamics	Mechanical	II	3	A	First law of Thermodynamics, application to closed and open systems - steady and unsteady flow processes	Nag P.K., "Engineering Thermodynamics", SRIEdition, Tata McGraw-Hill, New Delhi, 2013.	Microsoft Teams	
Monday, August 17, 2020	2 PM - 4 PM	Dr. S. Sathyanarayanan	Materials Engineering	Mechanical	II	3	A	Interactions in solids, Point, line, interfacial and volume defects	U.C. Joshi "Engineering Materials and Metallurgy"	Webex	
Tuesday, August 18, 2020	10 AM - 12 PM	Dr. S. Vijayarathnam	Mathematics III (PDE, Probability & Statistics)	Mechanical	II	3	A	Separation by arbitrary constant	R.K. Bansal	Google Meet	
Tuesday, August 18, 2020	2 PM - 4 PM	Dr. S. Arunagan	Thermodynamics	Mechanical	II	3	A	Properties of real gas: Ideal and real gas comparison. Equations of state for ideal and real gases. Reduced properties, Compressibility factor, Principle of Corresponding states - Generalized Compressibility Chart and its use.	Nag P.K., "Engineering Thermodynamics", SRIEdition, Tata McGraw-Hill, New Delhi, 2013.	Microsoft Teams	
Wednesday, August 19, 2020	10 AM - 12 PM	Mr. R. Balakumar	Engineering Mechanics	Mechanical	II	3	A	Principle of superposition, "Virtual Work" representation of forces and moments	Dr. N. Kottarathnam, "Engineering Mechanics - Statics & Dynamics"	Microsoft Teams	
Wednesday, August 19, 2020	2 PM - 4 PM	Dr. S. Arunagan	Electric & Hybrid Vehicles	Mechanical	II	3	E	Batteries - overview and its types, Battery plug-in and the, Ultra capacitor, Charging - Methods and Standards, Alternate charging sources - Wireless & Solar	Jack Ewins & Jeff Allen, "Hybrid, Electric and Fuel Cell Vehicles", Campus Learning, 2012	Microsoft Teams	
Thursday, August 20, 2020	2 PM - 4 PM	Dr. V. Vijayan	3-D Printing processes & Applications	Mechanical	II	3	A	Development of 3D Printing Technology, Introduction, Components, Computer-Aided Design Technology, Other Associated Technologies	Jan Gibson, David W. Rosen, Brent Stucker, "Additive Manufacturing Technologies: Rapid Prototyping to Direct Digital Manufacturing", Springer, 2010	Webex	
Thursday, August 20, 2020	10 AM - 12 PM	Dr. S. Sathyanarayanan	Materials Engineering	Mechanical	II	3	A	Stress-strain, yield strength, ultimate strength, stress-strain curves	S.P. Srinivas Kumar, "Material and Metallurgical Science"	Webex	
Thursday, August 20, 2020	2 PM - 4 PM	Dr. S. Arunagan	Thermodynamics	Mechanical	II	3	A	Basic Characteristics	General	GOOGLE MEET / ZOOM	
Friday, August 21, 2020	2 PM - 4 PM	Mr. P. Chennayyan	Fluid Mechanics & Machinery	Mechanical	II	3	A	Problems in open channels	R.K. Bansal	Google Meet	
Friday, August 21, 2020	10 AM - 12 PM	Dr. S. Vijayarathnam	Mathematics III (PDE, Probability & Statistics)	Mechanical	II	3	A	Types of I, V, VI	General	Google Classroom	
Saturday, August 22, 2020	2 PM - 4 PM	Mr. R. Balakumar	Engineering Mechanics	Mechanical	II	3	A	Free body diagrams - Types of supports and their reactions	Dr. N. Kottarathnam, "Engineering Mechanics - Statics & Dynamics"	Microsoft Teams	
Saturday, August 22, 2020	10 AM - 12 PM	Mr. G. Venkateshwararao Rao	Energy Storage system & Management System	Mechanical	II	3	E	Energy Storage system & Management System	F.W. Billmeyer Jr., Polymer Science, Inter science Publisher John Wiley and Sons, 3rd edition 2001	GOOGLE MEET	
Saturday, August 22, 2020	10 AM - 12 PM	Mr. R. Elappan	Polymer Engineering	Mechanical	II	3	3D printing	Nomenclature of Polymers - Nomenclature Based on Source, Nomenclature Based on Structure, IUPAC, Structure-Based Nomenclature System	F.W. Billmeyer Jr., Polymer Science, Inter science Publisher John Wiley and Sons, 3rd edition 2001	Google Meet	
Saturday, August 22, 2020	10 AM - 12 PM	Mr. S. Saravathi	Automatic control system	Mechanical	II	3	Robotics	Transfer function, modeling of physical systems, Mechanical Systems - Translational System	PP/PP/PP	Webex	
Monday, August 24, 2020	10 AM - 12 PM	Dr. S. Arunagan	Thermodynamics	Mechanical	II	3	A	Second Law of Thermodynamics	Nag P.K., "Engineering Thermodynamics", SRIEdition, Tata McGraw-Hill, New Delhi, 2013.	Webex	
Monday, August 24, 2020	2 PM - 4 PM	Dr. S. Sathyanarayanan	Materials Engineering	Mechanical	II	3	A	Dislocation microstructure mechanism	U.C. Joshi "Engineering Materials and Metallurgy"	Webex	
Tuesday, August 25, 2020	10 AM - 12 PM	Mr. P. Chennayyan	Fluid Mechanics & Machinery	Mechanical	II	3	A	Flow velocity distribution, velocity profiles	R.K. Bansal	Google Meet	
Tuesday, August 25, 2020	2 PM - 4 PM	Dr. S. Vijayarathnam	Mathematics III (PDE, Probability & Statistics)	Mechanical	II	3	A	Elimination by arbitrary function	General	Google Classroom	
Wednesday, August 26, 2020	2 PM - 4 PM	Dr. S. Arunagan	Thermodynamics	Mechanical	II	3	A	Charles, Clausius, Joule, Kelvin, Rankine, Kelvin-Planck, Kelvin-Statement	Nag P.K., "Engineering Thermodynamics", SRIEdition, Tata McGraw-Hill, New Delhi, 2013.	Microsoft Teams	
Wednesday, August 26, 2020	10 AM - 12 PM	Mr. R. Balakumar	Engineering Mechanics	Mechanical	II	3	A	Vector operations, addition, subtraction, dot product, cross product - Geometric Interpretation	Dr. N. Kottarathnam, "Engineering Mechanics - Statics & Dynamics"	Microsoft Teams	
Thursday, August 27, 2020	2 PM - 4 PM	Dr. S. Arunagan	Electric & Hybrid Vehicles	Mechanical	II	3	E	The Use of - Introduction, Technologies & Types, Obstacles, Operation principles, Potential and I-V curve, Fuel and Oxidation Consumption, Fuel cell Characteristics	Electric and Hybrid Vehicles, Tom Denton, Taylor & Francis, 2018.	Microsoft Teams	
Thursday, August 27, 2020	10 AM - 12 PM	Dr. V. Vijayan	3-D Printing processes & Applications	Mechanical	II	3	3D printing	The Use of - Layers, Classification of 3D Printing Processes, Metal Systems, Hybrid Systems, 3D Printing, Distinction in 3D Printing around the World	Jan Gibson, David W. Rosen, Brent Stucker, "Additive Manufacturing Technologies: Rapid Prototyping to Direct Digital Manufacturing", Springer, 2010	Webex	
Thursday, August 27, 2020	10 AM - 12 PM	Dr. S. Sathyanarayanan	Materials Engineering	Mechanical	II	3	A	Yielding and void growth, ductility, resilience and toughness	S.P. Srinivas Kumar, "Material and Metallurgical Science"	Webex	
Thursday, August 27, 2020	2 PM - 4 PM	Dr. S. Arunagan	Thermodynamics	Mechanical	II	3	A	Error in measurement and its types	PP/PP/PP	GOOGLE MEET / ZOOM	
Friday, August 28, 2020	2 PM - 4 PM	Mr. P. Chennayyan	Fluid Mechanics & Machinery	Mechanical	II	3	A	Fundamentals of fluid mechanics	R.K. Bansal	Google Meet	
Friday, August 28, 2020	10 AM - 12 PM	Dr. S. Vijayarathnam	Mathematics III (PDE, Probability & Statistics)	Mechanical	II	3	A	Lagrange's Mean value theorem	General	GOOGLE MEET / ZOOM	
Saturday, August 29, 2020	10 AM - 12 PM	Mr. G. Venkateshwararao Rao	Energy Storage system & Management System	Mechanical	II	3	E	Energy Storage system & Management System	F.W. Billmeyer Jr., Polymer Science, Inter science Publisher John Wiley and Sons, 3rd edition 2001	GOOGLE MEET	
Saturday, August 29, 2020	10 AM - 12 PM	Mr. R. Elappan	Polymer Engineering	Mechanical	II	3	3D printing	Four Types of Lithium Ion Batteries based on electrolyte	Ulfman on batteries basics and evolution to silver batteries	F.W. Billmeyer Jr., Polymer Science, Inter science Publisher John Wiley and Sons, 3rd edition 2001	Google Meet
Saturday, August 29, 2020	10 AM - 12 PM	Dr. S. Arunagan	Thermodynamics	Mechanical	II	3	A	System Problems in First law of thermodynamics & S.F.E.E	Dr. N. Kottarathnam, "Engineering Mechanics - Statics & Dynamics"	GOOGLE MEET	
Monday, August 31, 2020	2 PM - 4 PM	Dr. S. Sathyanarayanan	Materials Engineering	Mechanical	II	3	A	Stress analysis and critically resolved shear stress	Dr. N. Kottarathnam, "Engineering Mechanics - Statics & Dynamics"	Google Classroom	
Tuesday, September 01, 2020	10 AM - 12 PM	Mr. P. Chennayyan	Fluid Mechanics & Machinery	Mechanical	II	3	A	Review of fluid types, selection of fluid, comparison of fluids	General	Google Classroom	
Tuesday, September 01, 2020	2 PM - 4 PM	Dr. S. Vijayarathnam	Mathematics III (PDE, Probability & Statistics)	Mechanical	II	3	A	Types of PDE, Types I, II, III	General	Google Classroom	
Wednesday, September 02, 2020	2 PM - 4 PM	Dr. S. Arunagan	Thermodynamics	Mechanical	II	3	A	Solving Problems on Compressibility chart	Nag P.K., "Engineering Thermodynamics", SRIEdition, Tata McGraw-Hill, New Delhi, 2013.	Microsoft Teams	
Thursday, September 03, 2020	10 AM - 12 PM	Mr. R. Balakumar	Engineering Mechanics	Mechanical	II	3	A	Resilience and Compressive forces - Equilibrium of a particle	Dr. N. Kottarathnam, "Engineering Mechanics - Statics & Dynamics"	Microsoft Teams	
Thursday, September 03, 2020	2 PM - 4 PM	Dr. S. Arunagan	Electric & Hybrid Vehicles	Mechanical	II	3	E	Efficiency, Durability, Specific power - Factors affecting Power design of Fuel Cell Vehicle and tractive capacity, Lifetime cost of Fuel Cell Vehicle - System, Components	Electric and Hybrid Vehicles, Tom Denton, Taylor & Francis, 2018.	Microsoft Teams	
Thursday, September 03, 2020	10 AM - 12 PM	Dr. V. Vijayan	3-D Printing processes & Applications	Mechanical	II	3	3D printing	Eight Steps in Additive Manufacturing, Variations from One 3D Printing Machine to Another, Metal Systems, Maintenance of Equipment, Material Handling Issues, Design for 3D Printing	Jan Gibson, David W. Rosen, Brent Stucker, "Additive Manufacturing Technologies: Rapid Prototyping to Direct Digital Manufacturing", Springer, 2010	Webex	
Thursday, September 03, 2020	10 AM - 12 PM	Dr. S. Sathyanarayanan	Materials Engineering	Mechanical	II	3	A	Rebound hardness test	S.P. Srinivas Kumar, "Material and Metallurgical Science"	Webex	
Thursday, September 03, 2020	2 PM - 4 PM	Dr. V. Vijayan	3-D Printing processes & Applications	Mechanical	II	3	Robotics	Calibration and Standardization	PP/PP/PP	GOOGLE MEET / ZOOM	
Friday, September 04, 2020	2 PM - 4 PM	Mr. P. Chennayyan	Fluid Mechanics & Machinery	Mechanical	II	3	A	Continuity, energy, Bernoulli equation	R.K. Bansal	Google Meet	
Friday, September 04, 2020	10 AM - 12 PM	Dr. S. Vijayarathnam	Mathematics III (PDE, Probability & Statistics)	Mechanical	II	3	A	Lagrange's Mean value theorem	General	Google Classroom	
Saturday, September 05, 2020	2 PM - 4 PM	Mr. R. Balakumar	Engineering Mechanics	Mechanical	II	3	A	Normal nomenclature of materials and alloys - Some components of a moment	Dr. N. Kottarathnam, "Engineering Mechanics - Statics & Dynamics"	Microsoft Teams	
Saturday, September 05, 2020	10 AM - 12 PM	Mr. G. Venkateshwararao Rao	Energy Storage system & Management System	Mechanical	II	3	E	Explain various types of Energy Storage system	F.W. Billmeyer Jr., Polymer Science, Inter science Publisher John Wiley and Sons, 3rd edition 2001	GOOGLE MEET	
Saturday, September 05, 2020	10 AM - 12 PM	Mr. R. Elappan	Polymer Engineering	Mechanical	II	3	3D printing	Determiners of Polymer Crystallinity, Thermal Transitions, Applications of Polymers - Mechanical Properties, Elastomers, Fibers, and Plastics	F.W. Billmeyer Jr., Polymer Science, Inter science Publisher John Wiley and Sons, 3rd edition 2001	Google Meet	
Saturday, September 05, 2020	10 AM - 12 PM	Mr. S. Saravathi	Automatic control system	Mechanical	II	3	Robotics	Problems in modeling mechanical system- Thermal and Hydraulic Systems	PP/PP/PP	Webex	