



**JSS Mahavidyapeetha**  
**JSS Academy of Technical Education, Noida**  
**Department of Mechanical Engineering.**



**Innovations by Faculty in Teaching and Learning**

**AY: 2020-21 ODD Semester**

<b>Sl NO</b>	<b>Subject &amp; Code</b>	<b>Innovative / Novel Approach Practiced</b>	<b>Learning Style</b>
1	CAD/CAM (RME701)	Simulate cutting, milling, drilling in CNC simulation software	Experimental Learning
3	Automotive Chassis & Suspension	Demonstrate & analyse the effect of various steering geometry on Ackerman steering using screw chief simulation software	Experimental Learning
5	Automobile Engineering	Enlists the task and their procedure of Servicing in a car service station	Activity based Learning
7	IoT Lab	Simulation of experiments are done in Tinker cad open-source software	Experimental Learning
11	Strength of Materials (RME 502)	Python programs on several topics of SOM	Activity based Learning
13	Supply Chain Management	Group discussion on Case study of supply chain of "ZARA"	Activity based Learning
14	Industrial Engineering( KME-503)	Case Studies, Group Discussions on various topics	Activity based Learning
17	Materials Engineering (KME 303)	Simulation of properties, Animated videos of structure and Case studies of Heat treatment and Failures	Activity based Learning
18	Heat and Mass Transfer (KME-501)	Explained the concepts with the help of virtual simulation videos for various components and experiments of heat transfer	Experimental Learning
22	Mini Project/Internship	Python Program is utilised for hand gesture recognition	Experimental Learning

**AY: 2020-21 EVEN Semester**

<b>SI NO</b>	<b>Subject &amp; Code</b>	<b>Innovative / Novel Approach</b>	<b>Topics covered</b>
1	KME-201T	Demonstration through model and group activity through animation	Activity based Learning
2	RER (ROE-0860	Demonstrate and analyse the performance of Solar thermal Power Plant :Using simulation software 'SAM'	Activity based Learning
3	KME 401	Explained various gas power cycles by using engine models in Thermodynamics labs	Activity based Learning
11	Energy Science & Engineering (KOE-043)	Case studies discussion on Solar Energy Scenario in India	Experimental Learning
13	Manufacturing Process (KME 403)	Simulation of Casting,Forming process and Welding , Animated videos of Tool geometry and Unconventional machining	Experimental Learning
14	Machine Design	Case Study for Design a gear set to transmit 5 KW at distance of one meter (incomplete data)	Activity based Learning
16	Applied Thermodynamics(KME-401)	Demonstration of steam turbine and power plant animated videos, Animated videos related to flow of charge during combustion in SI and CI engines	Activity based Learning