

Department: Mechanical Engineering; Term: Autumn Semester, 2020

Name of the Programme: B.Tech in Mechanical Engineering

Course title: Finite Element Methods in Engineering; Course Code: ME428; L-T-P-Cr: 3-0-0-3

Sl. No.	Course module	Delivery mode	URL link of content	Duration (Minutes)	No. of participants
	Course Plan		https://classroom.google.com/c/MTI1ODI4NjAwMTA3/m/MTI2MzcyNTkyMjQz/d/etails	NA	9
	Class note of chapter - 1		https://classroom.google.com/c/MTI1ODI4NjAwMTA3/m/MTI2OTA0NjY5MTg5/d/etails	NA	9
1	Introduction to FEM	Live lecture - 1	https://drive.google.com/file/d/1JbvVLMsu1lc1mpEDATyu8vfwCxFkokzC/view?usp=sharing	61	9
2		Live lecture - 2	https://drive.google.com/file/d/1ey6iHDLwL2vyvjYclU0YFctfxu0dBj0J/view?usp=sharing	56	9
3		Live lecture - 3	https://drive.google.com/file/d/1Qo86gJtptqbnc3LgQ19UCehcSPBQTckG/view?usp=sharing	63	9
	Link of NPTEL course on FEM by Prof. R Krishnakumar, IIT Madras		https://classroom.google.com/c/MTI1ODI4NjAwMTA3/p/MTQ5MDM4ODg1NTQw/details (https://nptel.ac.in/courses/112/106/112106135/)	NA	9
	Uploaded QIP Course material on FEM by Prof. U. S. Dixit, IIT		https://drive.google.com/file/d/1VD8b80NdpQk3P7jI9Q3AKmIU1QDyATgl/view?usp=sharing	NA	9
4	Analysis of 1D Problems	Live lecture - 1	https://drive.google.com/file/d/1qd3SOz4GY6yrGu6gV817XiccZ5ZaUNvW/view?usp=sharing	30	9
5		Live lecture - 2	https://drive.google.com/file/d/1h15TMfuM3nBsI7NFBPC8gLeZwcdWPKsZ/view?usp=sharing	54	9
6		Live lecture - 3	https://drive.google.com/file/d/1pLEZWtXlxj_JVh1rzhC9Yjvrce2TPx_V/view?usp=sharing	54	8
	Uploaded class note on Finite Element and Interpolation Function		https://classroom.google.com/c/MTI1ODI4NjAwMTA3/m/MTUyNzIxMjY4NzU1/d/etails	NA	9
7	Finite Element and Interpolation	Live lecture - 1	https://drive.google.com/file/d/1GoCodbLqYloUjhADRaNEbc-p1nTvqmfL/view?usp=sharing	53	8
8		Live lecture - 2	https://drive.google.com/file/d/1r9YaJKSBvPic3RsirQO-xd2O1XZySQIC/view?usp=sharing	52	8

9	and interpolation Function	Live lecture - 3	https://drive.google.com/file/d/1ZfCDSYx1QiTXRmo_Nsap3jNEHxw3Kfn/view?usp=sharing	47	9
10		Live lecture - 4	https://drive.google.com/file/d/14ga-1rhWfHZ50of-MVETHX4-C1NGBf6O/view?usp=sharing	62	8
	Uploaded class note on Element Characteristics		https://classroom.google.com/c/MTI1ODI4NjAwMTA3/m/MTUxMzMzMzc5NTYz/details	NA	9
	Uploaded class note on 2D FEM: Triangular element		https://classroom.google.com/c/MTI1ODI4NjAwMTA3/m/MjAxMDU5MjU3NzA0/details	NA	9
	Uploaded class note on 2D FEM: Rectangular element		https://classroom.google.com/c/MTI1ODI4NjAwMTA3/m/MTY1NzEzOTgyMjYy/details	NA	9
11	Analysis of 2D problem	Live lecture - 1	https://drive.google.com/file/d/1qiFCJt4udJdWQACRv3DYqqw7VxH0jybz/view?usp=sharing	53	7
12		Live lecture - 2	https://drive.google.com/file/d/1hWo05XJrtwv1aZFP9BF7AnXDyW-DBRI4/view?usp=sharing	58	7
13		Live lecture - 3	https://drive.google.com/file/d/1kmp0QndBm2TbiVpaJkPmIIY34ID-HD0f/view?usp=sharing	39	9
14		Live lecture - 4	https://drive.google.com/file/d/1wBGnSPV_TL7zIVE2x7xALBicxafvxNtU/view?usp=sharing	38	5
	Uploaded class note on "Introduction of Calculus of Variation"		https://classroom.google.com/c/MTI1ODI4NjAwMTA3/m/MTY3MjE4MTg1ODU3/details	NA	9
15	Introduction of Calculus of	Live lecture - 1	https://drive.google.com/file/d/1USlBjw-rQZ-p-tbk-6O925YSwVsU5HwT/view?usp=sharing	46	7
16	Test-III	Live class -1	https://drive.google.com/file/d/1XMP56LwH-qVcLWe-z2rSokYCgheVqyOK/view?usp=sharing	75	9
17		Live class - 2	https://drive.google.com/file/d/1xq2OhXQ0oLOgCzdKId5xdYloK4jk1Qfz/view?usp=sharing	56	9
18	Approximate method of analysis	Live lecture - 1	https://drive.google.com/file/d/1Y8getd-ROLxsv-qv9u20Izs8NFV_yRXH/view?usp=sharing	51	9
19	Test-III	Live class -3	https://drive.google.com/file/d/1B3tej46_AFmzZMLMXloHvYiNmF_o23pE/view?usp=sharing	57	7
20	Approximate method of analysis	Live lecture - 2	https://drive.google.com/file/d/1ynaC8er3SgdEKYhHsAyHXsryp4bOpCAj/view?usp=sharing	50	8

21	Test-III	Live class -4	https://drive.google.com/file/d/1CkMF1NcqFluLZhwlxpkvyvo45HVdfKcLv/view?usp=sharing	35	9
22	Numerical Integration	Live lecture - 1	https://drive.google.com/file/d/1ZWf4_q6iPVXh769Dg4MAzoUx7Neq_ESL/view?usp=sharing	48	5
23		Live lecture - 2	https://drive.google.com/file/d/1LWQMIAJ1uumyPZjo6GO9tZaKmYSgrWLH/view?usp=sharing	44	5
	Uploaded class note on "Numerical Integration"		https://classroom.google.com/c/MTI1ODI4NjAwMTA3/m/MjM4NTc2MDY5Njcw/details	NA	9