

COURSE DETAILS

SUBJECT: APPLIED MECHANICS

OBJECTIVE OF THE PROGRAM:

- After joining this program students will be benefitted in various ways like:
1. They will get the basic concepts of subject through different mode of learning's.
 2. To make students capable for cracking GATE and ES exams.

COURSE CONTENT:

CLASSES	TOPICS
CLASS I	Free-body diagrams and equilibrium; trusses and frames;
CLASS II	virtual work; kinematics and dynamics of particles and of rigid bodies in plane motion;
CLASS III	Impulse and momentum (linear and angular)
CLASS IV	Energy formulations, collisions.

SESSION PLAN:

SESSION	TOPICS	MODE OF LEARNING	CONTENT	TIME
CLASS I	Free-body diagrams and equilibrium; trusses and frames;	Chalk & Duster/Notes	Topic introduction	15mins.
			Force System	15mins
			Moment of force	15mins
			Perfect, deperfect , Redundant frames	20mins
			Method of joint	20mins
		Chalk & Duster/ppt	Method of section.	25mins
		Numerical Session	40mins	
CLASS II	virtual work; kinematics and dynamics of particles and of rigid bodies in plane motion;	Chalk & duster/ppt.	Topic Introduction	15mins.
			Work done by forces and moments	25mins
			Problems on kinematics	30mins.

		Class notes and test papers	Problems of dynamics of particles.	30mins.
		Question sets and Quizzes	Numerical Session	50mins.
CLASS III	Impulse and momentum (linear and angular)	Notes/ppt.	Topic Introduction	15mins.
			Linear impulse and momentum	25mins
		Question sets and Quizzes	connected bodies	20mins
			force of jet on a vane	20mins
			Conservation of momentum	25mins
Numerical Session	45mins			
CLASS IV	Energy formulations, collisions.	Chalk & duster/ppt.	Topic Introduction	15mins.
			Work done by a varying force	25mins.
			Energy & power	20mins.
		Class notes and test papers	motion of connected bodies	30mins.
Question sets and Quizzes	Numerical Session	60mins.		

FACULTY PROFILE:



PROF. Pramod kumar
ASST PROFESSOR
DEPT OF MECHANICAL, CIT
MOBILE: 7549169279

ACADEMIC PROFILE:

- Passed M.E in Design from BIT Mesra Ranchi, Jharkhand with 90% in 1st Class with Distinction
- Passed B.Tech in Mechanical from B.P.U.T. with 1st Class.
- Passed H.S. Examination from St Columba's college, Hazaribagh, Jharkhand with 1st Division.
- Passed S.E. from S.K.A.B Val vidyalaya Hazaribag Jharkhand with 1st Division.

TEACHING EXPERIENCE:

- Working as Assistant Professor in Mechanical department of Camellia Institute of Technology since June'2016..
- Pursuing Ph.D under the guidance of Professor S.C.Mondal & Susenjit Sarkar at Jadavpur University.
- Published five papers in international journals in M.E program.
- Qualified GATE several times