

SHORT TERM COURSE ON
Finite Element Method for Engineering Applications
July 1-5, 2013
Venue- Academic Block, IIT MANDI
PROGRAMME SEHEDULE

Date	9.30-10.30	10.30-11.00	11.00-12.00	12.00-13.00	13.00-14.30	14.30-15.30	15.30-16.30	16.30-17.00	17.00-19.00
1/07/2013	Registration (9.30-10.00) & Inaugural function (10.00-10.30)	TEA BREAK	Introduction to numerical methods and FEM: basics and fundamentals (RN208) (BKM)	FEM for solid mechanics problems (1D) (RN208) (BKM)	LUNCH	FEM for solid mechanics problems (2D) (RN208) (BKM)	FEM for solid mechanics problems (Isoparametric formulation) (RN208) (BKM)	TEA BREAK	Case study for static analysis (PC Lab) (RK)
2/07/2013	Introduction to structural dynamics : The time dimension (RN208) (MS)		FEM for structural dynamics-I (RN208) (MS)	FEM for structural dynamics-II (RN208) (MS)		Introduction to finite element programming in MATLAB (RN208) (RK)	Finite element programming of 1D element in MATLAB (RN208) (VSC)		Finite element programming of 2D element in MATLAB (RN208) (RK)
3/07/2013	FEM for composite structure problems (RN208) (RK)		FEM for heat transfer problems(1D) (RN208) (RK)	FEM for heat transfer problems(2D) (RN208) (RK)		FEM for fluid flow problems(1D) (RN208) (RK)	FEM for fluid flow problems(2D) (RN208) (RK)		Case study for dynamics analysis (PC Lab) (VSC)
4/07/2013	Introduction to extended finite element method (RN208) (IVS)		Extended finite element method for 1D problems (RN208) (IVS)	Introduction to mesh free method (RN208) (IVS)		FEM for Multi physics problems-I (RN208) (RJ)	FEM for Multi-physics problems-I (RN208) (RJ)		Case study for heat transfer and fluid flow analysis (PC Lab) (OPS)
5/07/2013	FEM for electrical engineering problems-I (RN208) (GK)		FEM for electrical engineering problems-II (RN208) (GK)	FEM for electrical engineering problems-III (RN208) (GK)		Feedback/Valedictory (RN208)			

BKM : Dr B.K. Mishra, Professor IIT Roorkee

MS : Dr. Manish Shrikhande, Associate Professor, IIT Roorkee

IVS : Dr. I.V. Singh, Associate Professor, IIT Roorkee

RJ : Dr. Rajeev Jain, Group Director, GTRE Bangalore

GK : Dr Ganesh Kumbhar, Assist. Professor, IIT Roorkee

RK : Dr. Rajeev Kumar, Assist. Professor, IIT Mandi

VSC : Dr. Vishal S Chauhan, Assist. Professor, IIT Mandi

OPS : Dr. Om Prakash Singh, Assist Professor, IIT Mandi