

Department of Civil Engineering

Value Added Course July-December 2020

Nowadays almost all moderate size real life structures are analysed using computers. The objective of this online internship is to develop an understanding of the basic principles of the matrix methods of structural analysis, so that they can be efficiently implemented on modern computers.

Date of Commencement: 15st August 2020 -14th September 2020

Course Title	Matrix Analysis of Structures
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Course Certificate: Certificate mentioning acquired grade will be provided as per performance in test at the end of Course.

Course Details	<p>Review of Structural Analysis and Matrix Algebra, Basics of displacement method, member stiffness matrices for different type of structural members, Analysis of two-dimensional framed structures: Trusses, Beams, Frames, The program will start with various aspects of structural analysis such as equilibrium, compatibility of deformation and constitutive laws, stiffness expressions and displacement method. Further, Various hands-on session is scheduled on freeware/ trial version of software used in structural analysis.</p> <ul style="list-style-type: none"> Identify, formulate and solve engineering problems with stiffness matrices as applied to continuous beams, rigid frames and trusses. Be able to interpret computer output and validate results <p>Eligibility and Pre-requisite: -</p> <ul style="list-style-type: none"> The student shall have some background of elementary matrix algebra and a keen interest in structural engineering with a prerequisite of at least one course in structural analysis at their pre-final level. For practical sessions student have to install trial version of software required all by themselves in case they do not have a licensed version 		
Faculty	Dr. Sanjay Tiwari, Civil Engineering Department		
Course Fee	Rs.-1000.00/-		
Fee Submission	Through Online mode NEFT/RTGS/IMPS/Others Account Number-521202051000101 IFSC Code-UBIN0570036 Name-Director MITS students Bank-Union Bank of India		
Duration	30 hours	Timings	17:30 to 18:30
Participants	The Online course is designed only for Pre-final & Final Year students of Civil Engineering Department.		
Registration Link	https://forms.gle/2L3Synj8PbTHP82b8 Last Date of Registration-10th August 2020.		
Other details	Kindly visit website www.mitsgwalior.in . Students should contact Dr. Sanjay Tiwari, Department of Civil Engineering for further queries.		
Contact Detail	stiwari.fce@mitsgwalior.in		

Dr. Sanjay Tiwari
(Course Coordinator)