

Department of Civil Engineering

Value Added Course
July-December 2020

Department of Civil Engineering, MITS Gwalior is offering Value Added Certificate Course that is being conducted to complement students' knowledge and skills in future research of Civil Engineering Field. Course offered is will be very useful for higher studies.

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

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

Course Title	NUMERICAL METHODS FOR ENGINEERS USING MATLAB		
Course Details	<p>Error in numerical calculations: Taylor Series, Sources of errors, significant digits and numerical instability, Approximations.</p> <p>System of Linear Algebraic Equations: Bisection method, Method of false position, Newton-Raphson method, Gauss Elimination, Matrix Inversion, Gauss-Seidel Iteration Fixed-point iteration, Rates of convergence of these methods.</p> <p>Polynomial Interpolation: Lagrange's interpolation, Newton's divided difference interpolation polynomial, Gregory-Newton Forward and Back ward difference interpolation formulae, Piecewise and Spline interpolation.</p> <p>Numerical integration: Trapezoidal and Simpson rules, Gaussian integration, Errors of integration formulas. Numerical solution of ordinary differential equations: Single step methods: Taylor series method, Picard's Method, Euler and Modified Euler methods, Runge-Kutta methods of 2nd and 4th order. Problem Solving using MATLAB</p>		
Faculty	Dr. Pankaj Kumar, Civil Engineering Department		
Course Fee	Rs. 2000.00/-		
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	60 hours	Timings	17:30 to 19:00
Participants	Students from MITS and other Institutes may apply.		
Registration Link	https://forms.gle/qRCzKKUczPfgmHfN9 Last Date of Registration-10th August 2020.		
Other details	Kindly visit website www.mitsgwalior.in . Students should contact Dr. Pankaj Kumar, Department of Civil Engineering for further queries.		
Contact Detail	pankaj437@mitsgwalior.in		

Dr. Pankaj Kumar
(Course Coordinator)