

THE COLLEGE

DCE at Greater Noida enters, with head held high, in the fourth session of B.Tech. and second batch of M.B.A. of fervent aspiration, dreams and hopes. It gives me immense pleasure to ascertain that our well conceptualized vision has worked as amazingly at the new college as at the sacred spot of our first stride whence we started our journey on the road to success. I have an unflinching faith in the proverbial saying: 'First deserve and then desire'. I exhort the new aspirants to work with an ideal sense of discipline and deep devotion with a sparkle of a dream in the eyes and the feet fervently gearing up towards the goal.

OBJECTIVE

Description: Engineers develop and analyze mathematical models of physical system for the purpose of designing these physical systems to perform a specific task. We then develop insight into the behavior of the physical system by analyzing those mathematical models. It is, therefore, essential for an engineer's success to have sound mathematical skills.

There is an enormous body of knowledge associated with mathematics. However, we only use a very small portion mostly time in engineering. As an example mathematicians considerable efforts finding solution of nonlinear equations. However, we as engineers rarely encounter mathematical models of systems that are nonlinear. Keep in mind that mathematics is only a means to an end much like a language is a means of communication. If our mathematical skills are rusty or nonexistent, this will get in the way of our ultimate engineering or the function of a system to accomplish a desired task.

The objective of this seminar is to discuss only those Mathematical models that are often encountered and which must be firmly mastered. The desired outcome of this series is to ensure that audience is able to "distinguish the trees from the forest" and comes away with a lasting and functional usage of this essential mathematical skill.

Prerequisites for the Seminar Series: The only prerequisites for being able to understand all of the contents of this seminar is that you have completed covered topics in (1) Bio Mathematics (2) Bio Mechanics and (3) Basic Differential and Integral Calculus.

TOPICS

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| Model 1 | Hypersonic wind tunnel (hypersonic wind tunnel facility for model testing) |
| Model 2 | System of Machines (Mathematical model for physical systems) |
| Model 3 | Bio-Mechanics (Mathematical model for devices to eliminate suffering of osteoporosis patient) |
| Model 4 | Bio-Mathematics (Mathematics modeling for blood through carotid artery with magnetic effects) |