

INDO-FRENCH CENTRE FOR APPLIED MATHEMATICS (IFCAM)



Summer School on **Applied Mathematics**

July 07 - 25, 2014 | Indian Institute of Science, Bangalore

The Indo-French Centre for Applied Mathematics (IFCAM) has been jointly set up by the Indian and French Governments at the Indian Institute of Science, Bangalore as an international joint research unit. IFCAM is designed as a platform for cooperation in mathematical sciences with the primary focus being the area of applied mathematics.

As part of its activities, IFCAM is organizing a Summer School that aims to introduce Indian students to some of the modern concepts in applied mathematics. The target audience for the School includes Masters and PhD students (in science and engineering) with an interest in applied mathematics. Fourth year BTech students can also apply if they have a strong mathematical background. The course details are as given below:

Basic courses

Optimization with Essential Real Analysis
Probability Theory and Stochastic Processes
Stochastic Calculus

Intermediate Courses

Basic Stochastic Optimization
First Order Methods for Convex Optimization
Distributed Optimization Methods for Learning models
Kernel Methods
Statistical Learning Theory
Option Pricing
Portfolio Optimization, Capital Asset Pricing
Basic Network Theory
Random matrix theory and random graphs

Advanced Lectures

Optimization and Learning
Stochastic Algorithms
Interest Rate Derivatives
Low-Rank Approximations of Matrices and their Applications

Application Deadline: April 25, 2014

For online registration and other details, please visit

<http://www.math.iisc.ernet.in/~ifcam/>

Interested candidates can register online or download and submit by either email or post to
**Director, Indo-French Centre for Applied Mathematics, Department of Mathematics,
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