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:

**Summer School on Applied Mathematics**

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

For online registration and other details, please visit [http://www.math.iisc.ernet.in/~ifcam/](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, Indian Institute of Science, Bangalore 560 012

Email: ifcam@math.iisc.ernet.in  |  Tel: +91-80-23600365  |  Fax: +91-80-23600365

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**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**

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**Speakers**
- Francis Bach, INRIA, France
- Gopal Basak, ISI Kolkata
- Chiranjib Bhattacharya, IISc
- Sourangshu Bhattacharya
- IIT Kharagpur
- Shalabh Bhatnagar, IISc
- Charles Bordenave
- Université de Toulouse, France
- Vivek Borkar, IITB
- S. Chakrabartth, IIT Guwahati
- Srikanth Iyer, IISc
- Suresh Kumar, IITB
- Laurent Miclo
- Université de Toulouse, France
- Vishnu Narayan, IITB
- Saketha Nath
- IITB
- R.V. Ramamoorthi, Michigan State University, USA
- S. Ramasubramanian
- ISI Bangalore
- Mallikarjuna Rao, IITB
- Rahul Roy, ISI Delhi

**Organizing Committee**
- Chiranjib Bhattacharyya
- IISc, Bangalore
- Vivek Borkar, IIT, Bombay
- Mrinal K. Ghosh, IISc, Bangalore
- Govindan Rangarajan
- IISc, Bangalore
- Jean-Pierre Raymond
- Université de Toulouse, France

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Summer school supported by Department of Science and Technology, India.