



Instructional Courses in Computer Science

Call for Proposals

The Indian Association for Research in Computing Science (IARCS) invites proposals from college and university teachers for organizing instructional courses into various aspects of Computer Science to strengthen their foundations in the area.

IARCS will provide the teaching resources (speakers) and partial financial support for travel and honorarium expenses for the speakers, and other local expenses. The hosting institution is expected to provide local infrastructural support (lecture rooms, Xeroxing facilities etc) and local hospitality (guest house/hotel accomodation) for the speakers. It should also provide publicity in colleges of their region so that the impact of the courses is maximum among the teachers in the region.

Possible topics for the courses

Discrete mathematics, Graph theory - concepts, applications and algorithms, Data structures and algorithms, automata and computability, NP-completeness and coping strategies, Distributed systems, Operating systems and computer organization, Verification, Introduction to complexity theory, Principles of programming languages, Databases, Computer logic, Parallel computing, Randomized algorithms, Approximation algorithms, Cryptography, Compilers, and Combinatorial Optimization. (Institutions can also request topics related to computer science not listed here.)

Suggested Course format

The course can be of one of the three formats:

- *mini* - two days, typically but not necessarily, over a weekend where one or two topics (say, automata theory and computability, or algorithms and data structures) is covered by two speakers. The course should be for a minimum of five hours.
- *short* - six days, where two to four topics is covered by two to four speakers.
- *long* - three weeks, where four to six topics (along a particular theme, say theoretical computer science) is covered by up to eight speakers.

Contact Information

Madhavan Mukund

Attn: IARCS Instructional Courses

Chennai Mathematical Institute

92 G N Chetty Road

Chennai 600 017, India.

email: iarcs@cmi.ac.in, fax: (044) 2815 7854.

Electronic submission (*in simple plain text*) of the application details is highly encouraged.

About IARCS: IARCS is an organization of leading researchers in computer science from reputed national institutes and industries. One of the mandates of the organization is to foster high quality teaching and research in computer science in colleges and universities across the country. For more details about IARCS, visit <http://www.iarcs.org.in>

The Details

Who can apply:

Any teacher (or a group of teachers) affiliated as faculty member(s) to academic institution(s) in India having computer science programs.

How to apply:

Write to the contact address along with the details requested *at least six weeks* before the expected date of the course for a mini or short term course and *at least three months* before the expected date for a long term course. (It is the responsibility of the applicant to obtain necessary permission from his/her head of the department or the institution to conduct the course on their premises.)

Personal Details: (if more than one, provide information of all)

Name, designation, institution, number of years in the institution with postal address, phone, fax and email.

Details about the organizing institution(s): (if more than one, give breakups)

Programmes in Computer Science offered (BSc/MCA/BE etc), number of students in each, number of teachers in the department(s).

Details about the proposed course:

Proposed dates (give at least two), location and format (short/mini/long), proposed topics, Justification for the topics (whether they are parts of course(s) or part of a research topic pursued in the department, the books followed etc), expected number of participants including teachers.

Available local support: (give breakup amount, in Rupees, where applicable)

Class rooms, Guest house/hotel, food, honorarium and travel support for speakers, food and travel support for outstation participants, miscellaneous (xeroxing, local transport etc).

Selection Process

All requests will be processed by a committee consisting of the following members.

Somenath Biswas (IIT, Kanpur)	Jaikumar Radhakrishnan (TIFR, Mumbai)
Mihir Chakraborty (Calcutta University)	Venkatesh Raman (IMSc, Chennai)
Madhavan Mukund (CMI, Chennai)	R. Ramanujam (IMSc, Chennai)
Sudeb Pal (IIT, Kharagpur)	Utpal Sharma (Tezpur University)
Vineeth Paleri (NIT, Calicut)	G. Sivakumar (IIT, Mumbai)
Sanjiva Prasad (IIT, Delhi)	V. Vinay (IISc/Picopeta Simputers, Bangalore)

Request for foundational courses will have preferences over other courses. For three week long term course, the hosting institution should have good infrastructure like library, computing facilities and the program should have significant teacher participants. A request will be granted based on the relevance of the course, the standing of the institution, the expected number of teacher participation and the availability of the teaching resources for the dates requested. The notification will be sent to the applicant at least three weeks before a short/mini course, and at least six weeks before a long term course.