

Sarvajanik College of Engineering and Technology  
RC ID: 1043

Report  
on  
Two Week ISTE STTP on  
“Introduction to Design of Algorithms”

The TWO - WEEK ISTE Workshop on "Introduction to Design of Algorithms" was conducted under the National Mission on Education through ICT (MHRD, Govt. of India) by IIT Kharagpur. The participating teachers completed the equivalent of two-week full time work online, spread over 6 physical weeks using video lectures and submitting assignments. The major topics covered in this workshop include:

- Elements of algorithm analysis
- Basic design methods
- Data structuring
- Searching and Sorting
- Basic graph algorithms
- Matrix and String problems
- Combinatorial optimization
- NP-Completeness, Approximation, Randomization

Algorithm Design is a core course for any undergraduate programme in Computer Science or Computer Science and Engineering. It is expected to be the first course on this topic and is typically meant for students who already have some introductory knowledge of programming and data structures. The course shall cover the basic foundations of designing correct and efficient sequential algorithm through a process of mathematical analysis and logical design steps which can be translated to software programs for effective deployment in practice. Analysis involves an understanding of algorithm complexity through asymptotic analysis of time and space requirements under worst, average and amortized scenarios.

## STTP Details:

**Date:** 25<sup>th</sup> May, 2015 to 30<sup>th</sup> May, 2015

**Time:** 9.00 am to 4.30 pm

**Venue:** N.J. Seminar Hall, SCET.

**Number of participants:** 21

## Teaching Faculty:

1. Prof. Partha Pratim Chakrabarti  
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## Members of Organizing Committee:

<b>Remote Center Coordinator</b>	: Prof. Hitesh Maheta
<b>Workshop Coordinator</b>	: Prof. (Dr.) Mayuri Mehta
<b>Teaching Assistants</b>	: Ms. Vandana Korde Ms. Ekta Marsonia
<b>A-VIEW Coordinator</b>	: Ms. Tejal Surati
<b>System Administrator</b>	: Ms. Bhumika Desai
<b>Helper</b>	: Mr. Alpesh

## Conclusion:

The workshop benefited regular/visiting faculty members who are teaching subjects like Algorithm Design, Programming & Data Structures, Numerical Algorithms, Parallel Algorithms, Distributed Algorithms, Software Engineering, and Object-Oriented Analysis & Design at the undergraduate or the postgraduate level.

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