



## आजादी का अमृत महोत्सव

### One Day National Workshop (Offline Mode)

On

**“Tools and Techniques for Scientific Research”**

Date: February 27, 2023



Organized by:

**Computer Science Section  
Mahila Mahavidyalaya(MMV)  
Banaras Hindu University  
Varanasi-221005 (India)**



### About Varanasi

Varanasi has been the capital of oriental learning since time immemorial and has given birth to great poets, writers, musicians and scholars. It is considered a holy city for Hinduism as well as a holy city for Buddhism and Jainism and is also called Avimukta Kshetra. The culture of Varanasi has an unbreakable relationship with the river Ganges, Shri Kashi Vishwanath Temple, and its religious importance. Kashi is often referred to as "the city of temples", "the religious capital of India", "the city of Lord Shiva", "the city of lights", "the city of knowledge", etc. The Banaras Hindu University was established in the southern part of this city in 1916 by the great visionary Bharat Ratna Mahamana Pandit Madan Mohan Malviya Ji to keep pace with the continuity and effort of ancient Indian knowledge and advanced modern knowledge. Banaras Hindu University has two large campuses (BHU Main Campus and Rajiv Gandhi South Campus, Barkachha) with 7 institutes, 15 faculties, 145 departments, and 25 centers that are promoting education all over the world in the various field of education such as science, technology, medicine, agriculture, arts, social sciences, commerce, education. In the field of law, women's education, visual arts, management, Sanskrit Vidyadharma faculty, etc.

### Mahila Mahavidyalaya

Since its inception in 1916, Banaras Hindu University has been striving for the education of women. Its visionary founder Mahamana Pandit Madan Mohan Malviya foresaw the immense importance of women's education and the vital role of women in the development of the country. However, the current social environment proved to be a deterrent. Mahamana decided to address this by opening a college -



exclusively for women, in which an amalgamation of Vedic ideals and modern scholarship would work towards shaping Indian women to play their roles as capable citizens. In his convocation address on 14 December 1929, Mahamana announced the establishment of the Women's College of the Banaras Hindu University.

### About the Workshop

Due to large amount of data generation from diverse sources, processing and storing of such huge amount of data is beyond the capability of traditional processing system hence several modern tools & techniques are used to analyze and integrate the data. Scientific computing uses computational machines to solve complex problems in science and engineering that involve a variety of mathematical models. Python is one of the world most popular general purpose programming language used to implement research in science and engineering as well as other domains. Programming is used in all areas of scientific computing, from developing mathematical models, developing numerical and combinatorial algorithms to evaluate or solve these models, and designing and implementing algorithms that run efficiently on highly parallel computers. It also used in the range of applications, including data analysis, data visualization, software and web development, automation, language translation, every day task etc. This workshop will be focused on use of programming languages for various research areas such as computer science, biological sciences, physical sciences, mathematical science, statistics, medical science, social sciences, art, humanities, and education.

### Topics to be covered

- Basics of programming and problem solving
- Plotting techniques and graphs
- Data analytics and machine learning through python.
- Case studies with hands-on training



### Resource Persons:

From various Universities, NITs and other eminent Institutions of India.

### Target Audience:

The Workshop is open for faculty members, researchers, Scientists, industry personnel, PhD, Masters and graduate students. The participants can be expected to come with laptop/tablet

## Workshop Venue

Conference Hall, Science Block,  
MMV, BHU, Varanasi

### Registration Link:

<https://forms.gle/KQQuDeUguDXyhAjf7>

### WhatsApp group link:

<https://chat.whatsapp.com/HSW3r1bCe7O2qwWYTCJ0aX>

### Registration Fee (To be submitted in cash in the office of

Computer Science, MMV, BHU):

**Faculty Members/Industry Person:** Rs. 300.00

**Students:** Rs. 200.00

**No. of Seats:** 60 (on first-come first-serve basis).

**Last date of Registration:** 25.02.2023

**No. of sessions:** 3 sessions

**Note:** On-spot registration will also be considered if seats are available only after filling up of Google Form.



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Vice-chancellor, BHU, Varanasi

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