

## **Report**

### **Department of Mathematics**

#### **Short Term Skill Development Certificate Course**

Department of Mathematics and Internal Quality Assurance Cell (IQAC), Mata Sundri College for Women in collaboration with 9LedgePro-Microsoft Partner Network organized a Short Term Skill Development Certificate Course on “Python for Machine Learning and Data Science”. The course commenced on 31<sup>st</sup> October 2020 with an inaugural ceremony which began with a melodious rendition of the college prayer. The Course Coordinator, Ms. Sonia Aneja welcomed the Principal Prof. Harpreet Kaur, the Course Speaker Mr. Parth Shukla, Co-founder, 9LedgePro-Microsoft Partner Network and the Teacher-In-Charge (TIC) of Department of Mathematics Ms. Mandeep Walia. The Principal then addressed the participants and motivated them with encouraging words. TIC also wished the students all the best for the successful completion of the course. The duration of the course was 30 hours. There were 12 live sessions, out of which 6 sessions of 3 hours each were held on weekends and 6 sessions of 2 hours each were held on the weekdays. Live sessions were conducted on Microsoft Teams. It was attended by 53 students.

The objective of the course was specifically to introduce various concepts of Python programming which would enable the participants to gain basic understanding of the tools and techniques involving in Data Sciences while providing exposure to different applications of Python through projects such as sentiment analysis, detection of fake news etc. Several useful topics like Python Data Structures, Python Programming Fundamentals, NumPy, Pandas and Matplotlib, Introduction to Machine Learning (ML) were covered. Students created python scripts and worked on the data-sets to apply ML. The Instructor interacted with the students on one-to-one basis and took their doubts in each session. 6 assessments and a final test were taken during the course to strengthen their knowledge of the Python language.

The live sessions concluded on 22<sup>nd</sup> November 2020 with a closing ceremony where the TIC, Ms. Mandeep Walia and the Course Coordinator Ms. Sonia Aneja proposed a vote of thanks and some of the participants shared their experiences and feedback of the course. The students participated in full enthusiasm and found the course beneficial and interesting. Successful students were given E-Certificates at the end of the course.