

<u>Department of Computer Science and Engineering</u> <u>Report on "Data Sciences – Industry 4.0"</u>

(27.09.2019 & 28.09.2019)

A Two Day seminar on Data Sciences – Industry 4.0 was conducted by Department of Computer Science and Engineering on 27.09.2019 and 28.09.2019 at Lecture Hall- T2. The Third and Final year students from Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering and Mechanical Engineering attended the seminar.

On the First Day the students were taught about evolution of big data, need for data analytics. Then various applications and tools in data analytics were discussed. Finally multiple choice questions on the above said topics were discussed, Students answered spontaneously.

The second day session was started with basics of data classifications, data prediction, data clustering and data reduction, followed by introduction to machine learning and artificial neural networks. Then multiple choice questions on the above said topics were discussed, Students answered voluntarily. Finally A demo has been shown on data handling using rapid miner.

The seminar was a very good experience for the students to gain knowledge in the area of data science and they gave a positive feedback about the seminar.

Topics Discussed:

Big Data Examples / Case Studies	Big Data Challenges
Customer Churn Analysis	 Possible Solutions
Point-of-Sale Transaction Analysis	 Scaling Up Vs. Scaling Out
Pre-requisite: Data Scale	 Solution for Data Explosion - Hadoop
Defining Big Data	 Challenges of Scaling Out
• 3 V's of Big Data	Hadoop: Introduction
Common Problems	 Tools: YARN, PIG, HIVE, SCALA, SPARK, KAFKA
Exploding Data Problem	Data- Working with Data
 Redefining the Challenges of Big Data 	Machine Learning – Tools