



Master of Computer Applications

Report On Value Added Course: Certificate Course in Data Science

ACTIVITY :Value Added Course

Title :Certificate Course in Data Science

Values : Domain Knowledge; Modern Tool Usage; Professional Ethical Edification

Organized by :Department of Computer Applications

Program Theme : Certificate Course in Data Science

Objective : The purpose of this course is to equip students with the knowledge, skills, and tools necessary to work effectively with data and derive meaningful insights from it. The course will make students to be able to understand the basic concepts of data collection, cleaning, exploration and visualization, allowing them to apply their knowledge and skills to solve practical problems.

Internal Expert : Ms. Sania

Internal Resource Person Profile : Ms. Sania is currently working in Tecnia Institute of Advanced Studies as an Assistant Professor. She has 6 years of teaching experience. Her expertise is in DBMS, Java, Computer Networks, etc.

External Expert : Dr. Shalini Goel

External Resource Person Profile: Dr. Shalini Goel is currently working in HMR Institute of Technology and Management, Delhi as an Associate Professor. She has 18 years of teaching experience. Her expertise is in DBMS, Programming, Object-oriented Programming, Operating System, Computer Architecture, etc. She has published several research papers and authored 2 books.

Date : 16-09-2019 to 24.10.2019

Time : 2:00 pm to 3:00 pm

Venue : Offline, Room No. 2203



TECNIA
INSTITUTE OF ADVANCED STUDIES
NAAC ACCREDITED GRADE "A" INSTITUTE
DELHI INDIA

MASTER OF COMPUTER APPLICATIONS

VALUE ADDED COURSE

Session 2019-2020

DATA SCIENCE

CERTIFICATE COURSE IN DATA SCIENCE

Preface:

Value Added Courses are designed to raise students' Level above and beyond the academic curriculum. Envisage Modern Tool Usage, Learners to up-skill their skillsets; Bridging the gap between academia and corporate requirements; VAC Certificate In Office Automation will ne able to attain as under:-

- Broadening of Domain Knowledge
- Apply techniques of appropriate software's validation
- Acquire technical skills to lead as productive IT Professional
- Enhancing Employability

Learning Outcomes:

At the end of this Course student will be able to:

- Demonstrate understanding of the mathematical foundations needed for data science.
- Collect, explore, clean, munge and manipulate data.
- Implement models such as KNN, Naive Bayes, linear and logistic regression & decision trees.
- **Build** data science applications using Python based toolkits.

Note:

- Batches will commence w.e.f 16.09.2019 from 02:00 p.m. to 03:00 p.m.
- Each batch shall comprise of 60 students only.
- Minimum 75% attendance is required by the candidate for assessment.
- Assessment will be made on the basis of Viva Voce and written/Practical Exam.
- Successful learners after assessment will get the certificate of the VAC.

Duration: 30 Hours

Timing: 2:00 to 3:00 P.M

Resource Person
Ms. Sania

Registration Date :
26.08.2019 – 05.09.2019

VAC Contents :

- Introduction to Data Science. (1 Hrs)
- Mathematics and Statistics for Data Science. (2 Hrs)
- Programming for Data Science. (4 Hrs)
- Data Wrangling and Pre-processing. (2 Hrs)
- Exploratory Data Analysis (EDA). (2 Hrs)
- Machine Learning Algorithms. (5 Hrs)
- Big Data Technologies. (3 Hrs)
- Data Mining and Pattern Recognition. (3 Hrs)
- Deep Learning and Neural Networks. (4 Hrs)
- Data Visualization and Communication. (2 Hrs)
- Ethical and Legal Considerations in Data Science. (2 Hrs)

For any queries related to the VAC Certification course, Please Feel Free to Contact

Mr. Mohit, VAC Coordinator


Email.: mohittiwari87@gmail.com

Social media link (promoting in any one Facebook/Instagram/Twitter is mandatory)

https://www.instagram.com/tecniaofficial?igs_h=MXdxdzZwb2EwaWszNg==

No. of Students* (only no. to be written, list in excel or word should be maintain at department level as proof for any further requirement)

50

No. of Faculty* <i>(only no. to be written , list in excel or word should be maintain at department level as proof for any further requirement)</i>	02
No. of External Participants (students + faculty) <i>[write NA if not applicable]</i>	NA
(Geotag) Photograph*	
<p style="text-align: center;">Photograph of the Event with the Caption</p>	
<p>Report: Description in (min 250 to max 800 words)*</p>	<p>Data science is a multidisciplinary field that combines scientific methods, algorithms, and tools to extract insights and knowledge from structured and unstructured data.</p> <p>The course started with the introduction of Data Science and the resource person, Ms. Sania made the students aware of the concepts of data science, its application and significance in the field of Information Technology.</p> <p>The students learnt various methods of Data Collection, from various sources, including databases, sensors, social media platforms, and other sources. They learnt how to prepare and clean the data collected, formally known Data Preprocessing.</p> <p>Furthermore, they were taught the concepts of Exploratory Data Analysis, Data Visualization and other advanced topics.</p> <p>Also, the students learnt the capability to create clear and informative visualization that effectively communicate insights derived from data analysis.</p> <p>Besides this, the students developed the ability to formulate and frame real world problems as data science tasks, and to develop and implement</p>

	<p>appropriate solutions. They were able to communicate effectively the findings and insights to diverse audience, both technical and non-technical, through reports and presentations.</p> <p>The students were also given Hands-on training on the systems. Finally, the students were assessed on the basis of Quiz , Practical and Viva voce and all 50 students were given certificates based on their evaluation.</p>
<p>Learning Outcomes</p>	<p>The Learning Outcomes of the Value Added Course are as under:</p> <ul style="list-style-type: none"> • Understanding, grasping meaning and information, Acquainted with internet • Demonstrate correct usage of method or procedure, Mathematics and Statistics for Data Science • Programming for Data Science • Data Wrangling and Pre-processing • Exploratory Data Analysis (EDA) • Machine Learning Algorithms • Data Mining and Pattern Recognition
<p>Attendance Sheet*</p>	<p><i>Attached at the end of Report</i></p>
<p>Feedback</p>	<p><i>Sample feedback Attached at the end of Report</i></p>
<p>Report Submitted by Convener <i>(write faculty coordinator name)</i></p>	<p>Mr. Mohit</p>
<p><i>For Office Use</i></p>	
<p style="text-align: center;"><i>Mohit</i></p> <p>Signature of VAC Coordinator</p>	<p style="text-align: center;"><i>Ushel</i></p> <p style="text-align: center;">Signature of School/Department Head <i>(With Seal)</i></p> <p style="text-align: right;">HoD MCA-TIAS</p>