Course Overview This VAC(value added course) is offered by the Faculty of Computer Application modules to complete this course, upon completion you will be awarded a Certificate. In added course students will learn how to extract insights from data using statistic techniques, as well as data visualization skills. Students learn to work with popular and such as python and machine learning frameworks. This course is for all the students a the Faculty of Computer Applications. The following are the details. Course Prerequisites Dedication to learn, Laptop with minimum i3 processor or better ,Comfort wit mathematics and programming will be required; Understanding of Basic Python Processor. To provide a strong foundation about Data Science To understand the use of statistics in data science To understand the use of statistics in data science To understand the essential concepts of basic probability To understand concepts about types of data To learn the fundamentals of Machine Learning. To understand obsic component of an intelligence system. To explore applications of Data science. To understand different types of machine learning algorithms and tools. To learn how to use machine learning model to solve real world problem to learn use machine learning algorithms to solve the real-world problem of the surface of the surface of personal use Apply the fundamentals of statistics on real world data List various approaches of Machine Learning. Use Data Science for personal use Describe machine learning algorithms to solve the real-world problems. Course Outcome Apply the fundamentals of statistics on real world data List various approaches of sugar machine learning problems. Classify data using Logistic regression Identify appropriate models for solving machine learning problems. Use to statistical tools to analyze and interpret data accurately To make informed decisions based on the data Module No. Module Title No. of h (per module structured Data Science, Machine Learning and Al, Overlap betw		Type of Course: Value Added Course	
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Module III Fundamentals of Statistics 5	Module III	Fundamentals of Statistics	5

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	e Statistics: Mean, Mode, Median, variance, standard deviation, Normal dist	tribution, Binomial
Module IV	Fundamentals of Probability	6
Definition, Important co	oncepts of probability theory including random variables and independence, its, collectively exhaustive events, conditional probability, Bayes Theorem, I	independent events,
Module V	Foundation of Linear Algebra	4
Introduction to linear al scalar multiplication, ve	gebra, notations and definitions, Operations on matrices: additions, subtraction multiplication, Matrix inversion, transformation,	on, multiplication,
Module VI	Python Libraries Required For Data Science	7
raphs		
Module VII	Supervised Learning and Linear Regression	7
Difference between sup	Supervised Learning and Linear Regression ervised, unsupervised and semi-supervised learning and Reinforcement learn on, Method of gradient descent	
	ervised, unsupervised and semi-supervised learning and Reinforcement learn	
Difference between sup Regression, Loss function Module VIII Introduction to classific	ervised, unsupervised and semi-supervised learning and Reinforcement learn on, Method of gradient descent	ing, Linear
Difference between sup Regression, Loss function Module VIII	ervised, unsupervised and semi-supervised learning and Reinforcement learn on, Method of gradient descent Classification and Logistic Regression	7 ss Classification,
Difference between sup Regression, Loss function Module VIII Introduction to classific Logistic Regression	crvised, unsupervised and semi-supervised learning and Reinforcement learn on, Method of gradient descent Classification and Logistic Regression ation problems and Types of classification - Binary Classification, Multi-Cla 1. Introduction to Machine Learning with Python: A Guide for Data Scien	7 ss Classification, ntists, Andreas C.

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Department of Computer Applications

02 Nov 2020

CIRCULAR .

VALUE ADDED COURSE (Data Science)- MCA

Students of MCA 1st year are hereby informed that value added course "Data Science" is scheduled from 18th November 2020 in your respective classroom, Academic Block-III.

Schedule:

Time Slot: 03:00 PM to 05:00 PMKey Speaker: Mr. Saurabh Kumar

• Duration: 2 hrs

Program Overview:

The objective of this course is to develop python skills of students who are ready to deal with complexities in the computing world and are able to maintain data science skills as per the requirement.

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Department of Computer Applications
Faculty of Computer Applications
Invertis University, Bareilly (UP)

Mr. Jitendra Choudhary

(HOD)

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Registration University
Invertis University
Bareilly

Data Science

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Organised By:

FACULTY OF COMPUTIER APPLICATIONS



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Department of Computer Application Faculty of Computer Applications HODinvertis University, Bareilly (UP) Mr. Jitendra Choudhary

Speaker: Mr. Saurabh Kumar



Invertis University Bareilly

Dean Academics Faculty of Computer Applications Invertis University, Bareilly (UP)



COURSE OVERVIEW

This course teaches students how to visualise data and extract insights from it using statistics and machine learning approaches.
Students also gain experience working with well-known analysis tools including Python and machine learning



HOD

MR. JITENDRA CHOUDHARY

frameworks.

Head

Department of Computer Applications Faculty of Computer Applications Invertis University, Bareilly (UP)

Registral Invertis University Bareilly SPEAKER MR. SAURABH KUMAR

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S.N	n Name	Course	Student ID	Year	18	15	20	23	24	33	-26	?	1	2	3	4	7	8	9	10	11	/4	15 1
1	DHARMENDRA KUMAR	MCA	MC 2020001	2020-21	P	P	P	P	P	P	3	P	P	P	P	P	P	P	12	P	P	12	PP
2	ZAHIRUDDIN	MCA	MC 2020002	2020-21	P	P	12	A	P	A	P	17	P	P	P	P	P	F	P	P	0	P	PF
3	MOHD, UROOJ ISMAIL	MCA	MC2020006	2020-21	P	P	12	P	P	P	P	A	P	P	A	P	P	P	A	P	P	P	Pi
4	SURBIII AGNIHOTRI	MCA	MC 2020008	2020-21	P	12	P	P	P	P	P	P	(A)	P	P	A	P	P	P	P	P	P	PI
5	BHANU PRATAP GANGWAR	MCA	MC2020003	2020-21	A	P	P	p	P	P	A	P	P	P	P	P	P	A	P	P	A	P	PF
6	AMIT KUMAR VERMA	MCA	MC 2020004	2020-21	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	PF
7	SRALINI DEVI	MCA	MC2020005	2020-21	A	P	P	P	P	0	P	P	A	P	P	P	P	P	A	A	A	P	PF
8	SHASHANK SHAKY A	MCA	MC2020007	2020-21	P	0	P	P	P	P	P	A	P	P	P	A	P	A	P	P	P	A	01
0	SACHIN SHARMA	MCA	MC2020009	2020-21	P	P	P	A	P	P	P	P	A	P	P	P	P	P	P	P	P	A	PP
10	JATIN MISHRA	MCA	MC2020010	2020-21	P	A	P	P	P	A	P	P	P	P	A	P	P	P	A	P	P	P	PP
11	ARUN KUMAR MISHRA	MCA	MC2020013	2020-21	P	P	A	P	A	P	A	P	P	1	P	P	P	A	P	P	P	P	PO
12	CHIRAG SAXENA	MCA	NIC2020015	2020-21	0	P	P	1	P	P	P	P	P	P	P	P	P	P	P	P	P	P	PP
13	AFTAB KHAN	MCA	MC2021002	2020-21	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	0	P	P	PP
14	MEGHA SINGII YADAV	MCA	NIC2020011	2020-21	P	P	10	12	12	P	P	P	P	P	P	P	P	P	P	P	P	P	PP
15	NISHA JAKHAR	MCA	MC2020012	2020-21	P	A	12	P	A	P	P	P	P	P	P	P	P	P	P	A	P	P	PP
16	AAYUSH SINGH	MCA	MC2020018	2020-21	(A)	P	P	p	P	A	P	P	P	A	P	A	P	P	P	P	A	D	DD
17	DIYA PUSHPADH	MCA	MC2020019	2020-21	P	p	P	P	P	P	P	P	p	17	P	P	A	P	A	D	P	P	PA
18	AKHILESH GANGWAR	MCA	MC2020020	2020-21	A	P	P	P	P	A	P	P	P	P	P	P	7	P	P	A	P	P	DF
19	SHOBHIT AGARWAL	MCA	MC2020022	2020-21	P	P	F	P	P	P	P	P	P	P	P	P	p	P	P	7	D	P	PP
20	DESHPAL	MCA	MC2020023	2020-21	P	P	P	p	A	p	P	P	P	P	P	P	P	Λ	P	P	D	5	PP
21	ASHISH GANGWAR	MCA	MC2020014	2020-21	P	12	P	A	P	P	A	P	A	P	A	P	P	P	p	P	P	p	DD
22	PARV SAXENA	MCA	NIC2020016	2020-21	j	p	P	p	P	P	P	P	P	P	P	P	A	P	P	P	P	p	PD
23	HARDIK SAXENA	MCA	MC2020021	2020-21	P	P	p	P	P	P	P	A	P	D	P	P	P	P	12	P	D	D	DP
24	GUNJAN ARORA	MCA	N1C2020026	2020-21	P	A	P	P	12	P	P	P	p	P	P	P	P	A	P	P	2	0	DP
15	ROHIT SAXENA	MCA	NIC2020027	2020-21	P	P	P	P	P	P	p.	P	P	A	P	P	P	P	P	P	P	P	PP
6	SOFIA ANJUM	MCA	MC2020028	2020-21	P	P	A	P	P	P	P	P	p	P	P	P	P	P	P	P	A	A	PP
7	AMAN SHARMA	MCA	MC2020030	2020-21	P	P	P	P	P	A	P	P	P	A	P	p	P	P	P	P	P	p	PP
8	NILOFAR	MCA !	NIC2020017	2020-21	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	D	P	D	PA
9 1	NITIN GUPTA	MCA I	MC2020032	2020-21	P	A	P	P	P	A	P	A	P	P	P	A	p	P	A	P	5	P	PP
0 0	GANESH	MCA N	1C2020033	2020-21	P	_	P	P	P	P	A	P	P	P	P	P	P	P	2	P	D	1	p p
1 /	AKASH KUMAR	MCA N	1C2020034	2020-21	P	P	P	A	P	P	P	p	p	P	P	P	P	A	P	2	P	D	PP
2 4	ANUBHAV RAJ	MCA N	1C2020035	2020-21	P	P	-	P	P	P	P	P	P	P	P	P	0	P	P	0	P	P	PP
3 1	IIMANSHU GANGWAR	MCA N	1C2021001	2020-21	P	P	p	17	P	P	p	P	p	p	P	P	P	P	n	F)	P	0	PP
4 E	JAZUL HAQUE	MCA A	IC2020024	2020-21	P	P	P	P	P	p	P	5	P	ρ	A	P	P	D	A	1	D	P	PP
5 P	OORVI GULATI		5.27.2490.V55-00.2V	2020-21	-	P	P	P	A	P	P	P	P	P	P	P	-	A	P	P	P	P	PP
6 J	ITIN KUMAR		IC2020031		P		12	12	1	P	P	12	P	1	1	-	1	**	1	1	1	1	1

Head

Department of Computer Applications
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41	MOHD BILAL KHAN	MCA	11.5.0.5.7.4.00	2020-21	P	A	A	P	P	P	P	P	P	A	P	A	P	P	P	P	P	P	P	Í
40	DEEPAK	MCA	MC2020038	2020-21	P	À	P	P	P	A	(-)	P	P	P	P	P	P	P	P	A	P	P	P	1
39	PRIYA KAPOOR	MCA	MC2020039	2020-21	P	P	P	p	P	P	P	P	A	P	A	P	P	P	P	P	P	P	P	1
38	PANKAJ KUMAR	MCA	MC2020029	2020-21	1	P	P	P	P	A	P	A	P	A	P	P	1)	P	P	P	P	A	P	i
37	VAIBHAV SINGH CHAUHAN	MCA	MC2020036	2020-21	P	P	P	P	P	P	1-)	P	P	P	P	P	P	P	P	P	1	P	P	1

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CERTIFICATE OF VALUE ADDED COURSE

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16 December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	by Department of
	DATA SCIENCE
dded course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
DHARMENDRA KUMAR	This Certificate is awarded to Mr./Ms. DHARMEN

Head of the Department

Department of Computer Applications Faculty of Computer Applications Invertis University, Bareilly (UF)

Registrar Invertis University Bareilly

Course Coordinator

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Faculty of Computer Applications
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Faculty of Computer Applications



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COMPUTER APPLICATIONS	by Department of
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I SEMESTER	of Program MCA Year/Semester
ZAHIRUDDIN	This Certificate is awarded to Mr./Ms.

Head of the Department

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Course Coordinator

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Registrar Invertis University Bareilly Head of the Department

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COMPUTER APPLICATIONS	by Department of
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I SEMESTER	of Program MCA Year/Semester
SURBHI AGNIHOTRI	This Certificate is awarded to Mr./Ms

Head of the Department

Department of Computer Applications Faculty of Computer Applications Invents University, Bareilly (UP)

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Course Coordinator

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Faculty of Computer Applications
Invertis University, Barnilly (UP)



CERTIFICATE OF VALUE ADDED COURSE

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COMPUTER APPLICATIONS	offered by Department of COMPI
	DATA SCIENCE
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I SEMESTER	of Program MCA Year/Semester _
BHANU PRATAP GANGWAR	This Certificate is awarded to Mr./Ms. BHANU PR./

Barelly Registrar Invertis University Head of the Department

Course Coordinator

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AMIT KUMAR VERMA	This Certificate is awarded to Mr./Ms.

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Course Coordinator

Head of the Department

Head

Department of Computer Applications
Faculty of Computer Applications
Inverte University, Barreily (175)

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Faculty of Computer Applications Inverse University, Bareilly (UP)



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Faculty of Computer Applications
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Department of Computer Applications
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Invertis University, Baretty (115)

Head of the Department

Invertis University

Course Coordinator

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JATIN MISHRA	of December 18 awarded to Mr./Ms.

Head of the Department

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Registrar Invertis University Bareilly

Course Coordinator

Dean Academics

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COMPUTER APPLICATIONS	offered by Department of COMPU
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ARUN KUMAR MISHRA	This Certificate is awarded to Mr./Ms

Head of the Department

Department of Computer Applications
Faculty of Computer Applications
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Course Coordinator

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Faculty of Computer Applications
Invertis University, Bareilly (UP)



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COMPUTER APPLICATIONS	offered by Department of COMPI
	DATA SCIENCE
ded course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
CHIRAG SAXENA	This Certificate is awarded to Mr./Ms.

Head of the Department

Head

Department of Computer Applications
Faculty of Computer Applications
Invertis University, Bareilly Proceedings

Course Coordinator





CERTIFICATE OF VALUE ADDED COURSE

	Control of the Contro
December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	by Department of
d course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
AFTAB KHAN	This Certificate is awarded to Mr./Ms

Registrar Invertis University

Course Coordinator

Head of the Department

Dean Adademics
Faculty of Computer Applications
Inverts University, Baroilly (UP)



CERTIFICATE OF VALUE ADDED COURSE

6 December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	\Box
	DATA SCIENCE
ed course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
MEGHA SINGH YADAV	This Certificate is awarded to Mr./Ms

Head of the Department

Head
Department of Computer Applications
Faculty of Computer Applications
Faculty of Computer Applications
Inverse University, Bareill; (UP)

Registrar Invertis University Baroilly

Course Coordinator

Dean Academics
Faculty of Computer Applications
Invertis University, Bareitly (UP)



CERTIFICATE OF VALUE ADDED COURSE

16 December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	offered by Department of COMP
	DATA SCIENCE
ded course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
NISHA JAKHAR	This Certificate is awarded to Mr./Ms.

Head of the Department

Coursé Coordinator



Invertis University

Dean Academics Faculty of Computer Applications Invertis University, Bareilly (UP)



CERTIFICATE OF VALUE ADDED COURSE

1.2	during 18 November 2020- 16 December 2020	:)	DATA SCIENCE	for successfully completing a value added course	of Program MCA Year/Semester I	This Certificate is awarded to Mr./Ms. AAYU
$\hat{\mathcal{L}}$	r 2020	LICATIONS			SEMESTER	AYUSH SINGH

Registrar Invertis University Head of the Department

Dean Acasemics

Course Coordinator

Dean Academics
Faculty of Cemputer Applications
Throme University, Barolly (UP)



CERTIFICATE OF VALUE ADDED COURSE

Course Coordinator	Head of the Department
	The same of the sa
18 November 2020- 16 December 2020	luring 18 November 2020
PUTER APPLICATIONS	offered by Department of COMPUTER APPLICATIONS
	DATA SCIENCE
idded course	or successfully completing a value added course
	of Program MCA Year/Semester
	This Certificate is awarded to Mr./Ms.

Department of Computer Applications

Faculty of Computer Applications Invertis University, Baredly (UP)

Invertis University

Barelly

Dean Academics Faculty of Computer Applications Invertis University, Baredty (UP) Registrar



CERTIFICATE OF VALUE ADDED COURSE

16 December 2020	furing 18 November 2020- 16 December 20
COMPUTER APPLICATIONS	offered by Department of COMP
	DATA SCIENCE
ded course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester _
AKHILESH GANGWAR	This Certificate is awarded to Mr./Ms.

Head of the Department

Head
Department of Computer Applications
Faculty of Computer Applications
Faculty Of Computer Applications
Invertis University, Bareilly (UP)

Registrar Invertis University Bareilly

Course Coordinator

Dean Academics
Faculty of Computer Applications
Invertis University, Bareuly (UP)



CERTIFICATE OF VALUE ADDED COURSE

O December 7070	during 18 November 2020- to December 2020
Charambar 2020	,
COMPUTER APPLICATIONS	offered by Department of COMPL
	DATA SCIENCE
led course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
SHOBHIT AGARWAL	This Certificate is awarded to Mr./Ms.

Head of the Department

Department of Computer Applications
Faculty of Computer Applications
Faculty of Computer Applications
Invertis University, Barcilly (UP)

Registrar Invertis University Bareilly

Course Coordinator

Dean Academics
Faculty of Computer Applications
Invertis University, Bareilly (UP)



CERTIFICATE OF VALUE ADDED COURSE

16 December 2020	18 November 2020- 16 December 2020	during1
COMPUTER APPLICATIONS		offered by Department of
		DATA SCIENCE
ded course	mpleting a value ado	for successfully completing a value added course
I SEMESTER	_Year/Semester _	of Program MCA Year/Semester
DESHPAL	warded to Mr./Ms.	This Certificate is awarded to Mr./Ms.

Head of the Department

Head
Department of Computer Applications
Faculty of Computer Applications
Invertis University, Bareilly (1979)

Registrar Invertis University Bareilly

Course Coordinator

Dean Academics
Faculty of Computer Applications
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CERTIFICATE OF VALUE ADDED COURSE

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December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	offered by Department of COMPUT
	DATA SCIENCE
d course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
ASHISH GANGWAR	This Certificate is awarded to Mr./Ms

Head of the Department

Department of Computer Applications
Faculty of Computer Applications
Invertis University, Barcelly (UP)

Registrar Invertis University Bareilly

Course Coordinator

Dean Academics
Faculty of Computer Applications
Invertis University, Barelly (UP)



CERTIFICATE OF VALUE ADDED COURSE

December 7070	duling To November 2020- 10 December 2020
December 2020	
COMPUTER APPLICATIONS	offered by Department of COMPUT
	DATA SCIENCE
d course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
PARV SAXENA	This Certificate is awarded to Mr./Ms

Head of the Department

Department of Computer Applications
Faculty of Computer Applications
Faculty of Computer Applications
Inverts University, Barelily (UF)

Registrar Invertis University Bareilly

Coursesoordinator

Dean Academics
Faculty of Computer Applications
Inversity, Barcilly (UP)



CERTIFICATE OF VALUE ADDED COURSE

Course Coordinator	Used of the Denartment
	S. C.
6 December 2020	during 18 November 2020- 16 December 2020
JTER APPLICATIONS	\exists
	DATA SCIENCE
led course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
HARDIK SAXENA	This Certificate is awarded to Mr./Ms.

Head of the Department

Department of Computer Applications Faculty of Computer Applications Invertis University, Bare: 11y (UP)

Invertis University

Bareilly /

Faculty of Computer Applications Invertis University, Bareilly (UP)

Dean Academics

Registrar

Head



CERTIFICATE OF VALUE ADDED COURSE

6 December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	_
	DATA SCIENCE
led course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
GUNJAN ARORA	This Certificate is awarded to Mr./Ms.

Head of the Department

Head

Department of Computer Applications
Faculty of Computer Applications
Invertis University, Bareilly (UF)

Registrar Invertis University Bareilly

Course Coordinator

Dean Academics Faculty of Computer Applications Inversity, Bareilly (UP)



CERTIFICATE OF VALUE ADDED COURSE

6 December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	by Department of
	DATA SCIENCE
ed course	for successfully completing a value added course
SE	of Program MCA Year/Semester
ROHIT SAXENA	This Certificate is awarded to Mr./Ms.

Head of the Department

Department of Computer Applications Faculty of Computer Applications Inversity University, Bareilly (UP)

Registrar Invertis University Bareilly

Course Coordinator

Dean Academics
Faculty of Computer Applications
Invertis University, Bereilly (UP)



CERTIFICATE OF VALUE ADDED COURSE

December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	offered by Department of COMPU
	DATA SCIENCE
ed course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
SOFIA ANJUM	This Certificate is awarded to Mr./Ms.

Head of the Department

Head
Department of Computer Applications
Faculty of Computer Applications
Inversity University, Bareilly (UP)

Registrar Invertis University Bareilly

Course Coordinator

Dean Academics Faculty of Computer Applications Invertis University, Bareilly (UP)



CERTIFICATE OF VALUE ADDED COURSE

December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	offered by Department of COMPU'
	DATA SCIENCE
ed course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
AMAN SHARMA	This Certificate is awarded to Mr./Ms

Head of the Department

Department of Computer Applications
Faculty of Computer Applications
Invertis University, Bareilly (UP)

Registrar Invertis University Bareilly

Course Coordinator

Dean Academics
Faculty of Computer Applications
Invertis University, Bareilly (UP)



CERTIFICATE OF VALUE ADDED COURSE

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December 2020	furing18 November 2020- 16 December 20
COMPUTER APPLICATIONS	offered by Department of COMPUT
	DATA SCIENCE
d course	or successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
NILOFAR	This Certificate is awarded to Mr./Ms.

Registrar Invertis University Bareilly

Course Coordinator

Head of the Department

Department of Computer Applications Faculty of Computer Applications Invertis University, Earning 19

Dean Acetemics Incidity of Computer Applications inverse Unificially Barelly 4424

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CERTIFICATE OF VALUE ADDED COURSE

18 Novembe	by Department of	This Certificate is awarded to Mr./Ms. Of Program MCA Year/Semester for successfully completing a value added course DATA SCIENCE NITIN GUPTA I SEMESTER
	18 Novembe	offered by Department of COMPUTER APPLICATIONS during 18 November 2020- 16 December 2020

Head of the Department

Course Coordinator

Department of Computer Applications Faculty of Computer Applications Invents University, Bare in 1916

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6 December 2020	18 November 2020- 16 December 2020
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COMPLITER APPLICATIONS	
	DATA SCIENCE
ied course	for successfully completing a value added course
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I SEMESTER	of Program MCA Year/Semester
GANESH	This Certificate is awarded to Mr./Ms.
CANECII	

Head of the Department

Head
Department of Computer Applications
Faculty of Combuter Applications
Invertis University, Barpilly (UP)







CERTIFICATE OF VALUE ADDED COURSE

December 2020	during 18 November 2020- 16 December 2020
ER APPLICATIONS	by Departn
course	for successfully completing a value added course
SEI	of Program MCA Year/Semester
AKASH KUMAR	This Certificate is awarded to Mr./Ms

Head of the Department

Head

Department of Computer Applications
Faculty of Computer Applications
Inverte University, Barcilly (UP)

Registrar Invertis University

Barcilly

Course Coordinator

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CERTIFICATE OF VALUE ADDED COURSE

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December 2020	18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	offered by Department of COMPUT
	DATA SCIENCE
d course	or successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
ANUBHAV RAJ	This Certificate is awarded to Mr./Ms.

Head of the Department

Head

Department of Computer Applications Faculty of Computer Applications Inversity, Bareilly (199)

Registrar Invertis University Barcilly

Course Coordinator

Dean Abademics

Faculty of Computer Applications

Faculty of Computer Applications

Faculty of Computer Applications



CERTIFICATE OF VALUE ADDED COURSE

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6 December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	Ξ
٠	DATA SCIENCE
ed course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
HIMANSHU GANGWAR	This Certificate is awarded to Mr./Ms.

Head of the Department
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Head
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Department of Computer Applications Faculty of Computer Applications Invents University, Bareilly (UP)

Registrar Invertis University

Baredly





CERTIFICATE OF VALUE ADDED COURSE

6 December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	by Departm
	DATA SCIENCE
ed course	for successfully completing a value added course
SE	of Program MCA Year/Semester
EJAZUL HAQUE	This Certificate is awarded to Mr./Ms

Head of the Department







CERTIFICATE OF VALUE ADDED COURSE

6 December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	offered by Department of COMPU
	DATA SCIENCE
ed course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
POORVI GULATI	This Certificate is awarded to Mr./Ms.

Head of the Department

Department of Computer Applications Faculty of Computer Applications Invertis University, Barcilly (UP)

Registrar Invertis University Bareilly

Course Coordinator

Dean Academics
Faculty of Computer Applications
Invertis University, Bareilly (UP)



CERTIFICATE OF VALUE ADDED COURSE

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December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	\Box
	DATA SCIENCE
ed course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
JITIN KUMAR	This Certificate is awarded to Mr./Ms

Head of the Department

Invertis University
Bareilly

Course Coordinator

Dean Academics
Faculty of Computer Applications
Invertis University, Barbilly (UP)



CERTIFICATE OF VALUE ADDED COURSE

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16 December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	offered by Department of COMP
	DATA SCIENCE
lded course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester _
VAIBHAV SINGH CHAUHAN	This Certificate is awarded to Mr./Ms. VAIBHAV SI

Head of the Department

Course Coordinator

Bareilly

Invertis University

Registrar

Dean Academics

Faculty of Computer Applications Invertis University, Barelly (UP)



CERTIFICATE OF VALUE ADDED COURSE

This Certificate is awarded to Mr./Ms.	PANKAJ KUMAR
of Program MCA Year/Semester	I SEMESTER
for successfully completing a value added course	course
DATA SCIENCE	
ment of	COMPUTER APPLICATIONS
during 18 November 2020- 16 December 2020	December 2020

Head of the Department

Department of Computer Applications Faculty of Computer Applications Invertis University, Bareilly (UP)

Registrar Invertis University Bareitty

Course Coordinator

Dean Academics
Feculty of Computer Applications
Invertis University, Barbilly (UP)



CERTIFICATE OF VALUE ADDED COURSE

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December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	offered by Department of COMPUT
	DATA SCIENCE
d course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
PRIYA KAPOOR	This Certificate is awarded to Mr./Ms

Head of the Department

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Registrar Invertis University Bareilly

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CERTIFICATE OF VALUE ADDED COURSE

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December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	offered by Department of COMPUT
	DATA SCIENCE
d course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
DEEPAK	This Certificate is awarded to Mr./Ms.

Head of the Department

Course-Coordinator

Dean Academics
Faculty of Computer Applications
Forwards University, Bareitly (UP)

Registrar Invertis University

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CERTIFICATE OF VALUE ADDED COURSE

December 2020	during 18 November 2020- 16 December 2020
COMPUTER APPLICATIONS	offered by Department of COMPU
	DATA SCIENCE
ed course	for successfully completing a value added course
I SEMESTER	of Program MCA Year/Semester
MOHD BILAL KHAN	This Certificate is awarded to Mr./Ms.

Head of the Department

Department of Computer Applications Faculty of Computer Applications Inversity, Barrelly (**)

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Bareilly

Course Coordinator

Dean Academics Faculty of Computer Applications preents University, Bareilly (UP)