Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)
NAAC
BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai , T.N - 600 073.

Requisition Letter

Date:25.05.2020

From
Dr. K.P.Kaliyamurthie,
Professor & Head,
Department of CSE,
Bharath Institute of Higher Education and Research,
Chennai

To
The Dean Engineering,
Bharath Institute of Higher Education and Research,
Chennai

Respected sir

Subject: Request of Permission to conduct a value-added course on "**Statistics with R Specialization" (online)** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course on "**Statistics with R Specialization"** in our campus premises on **02-06-2020**, students would be participating in this course. We request you kindly to give permission to organize this event.

Timing: 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

Submitted to Principal for approval to organize this value-added course.

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be Univ... U/S 3 Of UGC Act, 1956)
Chennai-6...

DEAN ENGINEERING

DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

29.05.2020

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course of Statistics with R Specialization** for the benefit of students. This course is scheduled from 02.06.2020 to 13.06.2020 which includes theory and practical. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr.S.Sadagopan	Professor
2	Ms.C.Geetha	Assistant Professor

Head of Department

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1...
Chennai - 600 073. INDIA

To

Copy to CSE

Copy to IT

Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON STATISTICS WITH R SPECIALIZATION (ONLINE)

Date of Introduction of the Course: 02.07.2020

COURSE SYLLABUS

1. Introduction of Statistics with R Specialization

To learn and analyse and visualize data in R and create reproducible data analysis reports

2. Statistical Inference Fundamentals -1

Demonstrates a conceptual understanding of the unified nature of statistical inference.

3. Bayesian Statistical Inference Based Decisions

Performs frequentist and Bayesian statistical inference and modelling to understand natural phenomena and make data-based decisions.

4. Statistical Results

Explains the communication of statistical results correctly.

5. Statistical Jargon

Describes effectively, and in context without relying on statistical jargon

6. Data-Based Decisions

Explains the critique data-based claims and evaluated data-based decisions, and wrangle and visualize data with R packages for data analysis.

7. Statistical Data Analysis

Demonstrates mastery of statistical data analysis from exploratory analysis to inference to modelling, suitable for applying for statistical analysis or data scientist positions.

8. Bayesian Regression

Explains the Bayesian linear regressions and model averaging, which allows to make inferences and predictions using several models.

9. Perspectives on Bayesian Applications

Describes statisticians on how Applications use Bayesian statistics in various stages.

10. Bayesian Comparisons Techniques

Demonstrates Bayesian comparisons of means and proportions.

11. Bayesian regression Techniques

Explains the Bayesian regression and inference using multiple models.

12. Implementation in R Programming

Describes eliciting prior probabilities to implementing in R (free statistical software) the final posterior distribution.

COURSE OBJECTIVES

To learn and analyse and visualize data in R and learn to perform frequentist and Bayesian statistical inference and modelling to understand natural phenomena and make data-based decisions.

Specifically, the course has the following objectives:

Students will learn

1. Understanding Bayesian Statistics
2. Understanding linear regression.
3. Analyse and visualize data in R
4. Create reproducible data analysis reports,
5. Demonstrate a conceptual understanding of the unified nature of statistical inference
6. Perform frequentist and Bayesian statistical inference and modelling to understand natural phenomena

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
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Chennai - 600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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CERTIFICATE COURSE ON STATISTICS WITH R SPECIALIZATION

Date of Introduction of the Course: 02.07.2020

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN)
Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	02-06-2020 (FN)	**1. Introduction of Statistics with R Specialization** To learn and analyse and visualize data in R and create reproducible data analysis reports
2	03-06-2020 (FN)	**2. Statistical Inference Fundamentals -1** Demonstrates a conceptual understanding of the unified nature of statistical inference
3	04-06-2020 (FN)	**3. Bayesian Statistical Inference Based Decisions** Performs frequentist and Bayesian statistical inference and modelling to understand natural phenomena and make data-based decisions.
4	05-06-2020 (FN)	**4. Statistical Results** Explains the communication of statistical results correctly
5,6	06-06-2020 (FN & AN)	**5. Statistical Jargon** Describes effectively, and in context without relying on statistical jargon
7	08-06-2020 (FN)	**6. Data-Based Decisions** Explains the critique data-based claims and evaluated data-based decisions, and wrangle and visualize data with R packages for data analysis.
8	09-06-2020 (FN)	**7. Statistical Data Analysis** Demonstrates mastery of statistical data analysis from exploratory analysis to inference to modelling, suitable for applying for statistical analysis or data scientist positions.
9	10-06-2020 (FN)	**8. Bayesian Regression** Explains the Bayesian linear regressions and model averaging, which allows to make inferences and predictions using several models.
10	11-06-2020 (FN)	**9. Perspectives on Bayesian Applications** Describes statisticians on how Applications use Bayesian statistics in various stages.
11	12-06-2020 (FN)	**10. Bayesian Comparisons Techniques** Demonstrates Bayesian comparisons of means and proportions.

12	13-06-2020(FN)	**11. Bayesian regression Techniques** Explains the Bayesian regression and inference using multiple models.
13	13-06-2020(AN)	**12. Implementation in R Programming** Describes eliciting prior probabilities to implementing in R (free statistical software) the final posterior distribution.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

Statistics with R Specialization
Date of Introduction of the Course: 02.07.2020

School of Computing
Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U15CS001	ABHIJEET KUMAR
2	U15CS002	ABHIJIT KUMAR GUPTA
3	U15CS003	ABHISHEK KUMAR SINGH
4	U15CS004	ALLU SAI SIVA PRIYANKA NAIDU
5	U15CS005	AMBIKE KUMAR SINGH
6	U15CS006	ANBUMANI S
7	U15CS007	ANJAR ALI
8	U15CS008	ANKAM MANJUNATH
9	U15CS009	ANNADI DHANUSH
10	U15CS010	ANNAVARAPU DIVYA
11	U15CS011	ANUMOLU YESWANTH
12	U15CS012	ARAVAPALLI SIVA VINAYA
13	U15CS013	ARAVINDHAN K R
14	U15CS014	ARVIND KUMAR YADAV
15	U15CS015	ARYAN SAHU
16	U15CS016	ASHISH AGARWAL
17	U15CS017	ASHISH RANJAN
18	U15CS018	ATTANTI RAVIKANTH
19	U15CS019	BANAVATH SUNIL NAIK
20	U15CS020	BANDARU RAMESH
21	U15CS021	BATTA SIVA PRASAD
22	U15CS022	BHARATH K
23	U15CS023	BHARATHI V
24	U15CS024	BIKKI KUMAR SHA

25	U15CS025	BINGEWAR SAISHARAN
26	U15CS026	BIRADAVOLU SUCHARITHA
27	U15CS027	BODA AKHIL WESLEY
28	U15CS028	BONALA SRIDHAR RAO
29	U15CS029	BRYAN STEVE PUSHPARAJ I
30	U15CS030	CHAKKA KSHITHIJA
31	U15CS031	CHAMARTHI LAKSHMI NARAYANA AVINASH
32	U15CS032	CHANDRA KANT CHOUDHARY
33	U15CS033	CHAPPIDI LAKSHMIKANTH REDDY
34	U15CS034	CHIDIPOTHU PRATHYUSHA
35	U15CS035	CHINTAGINJALA VENKATA SRI SAI SRAVYA
36	U15CS036	CHOWDHARY PRASANNA KUMAR
37	U15CS037	CHUNDI VENKATA SESHASAI RAMANAPATANJALI
38	U15CS038	CILLA SAI KISHORE
39	U15CS039	D N S HRUDAY BHARADWAJ
40	U15CS040	DADAM CHAITHRA
41	U15CS041	DEEPAK KUMAR SINGH
42	U15CS042	DILLIGANESH V
43	U15CS043	DIVAKAR M
44	U15CS044	DIVYA VANI T
45	U15CS045	DODDI PUJITHA
46	U15CS046	DOOLIGANTI AKHIL REDDY
47	U15CS047	DUPUGUNTLA BHANU SIVA KASINADH
48	U15CS048	GANDLUR REDDY GREESHMA

COURSE COORDINATOR

HEAD OF THE DEPAR

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1...
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Statistics with R Specialization					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80	✓	80-100	

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	Yes
(ii)	Has adequate prior exposure to the prerequisites	No
(iii)	Had to pickup relevant additional topics through concurrent study	No
(iv)	Have no exposure to the background material	Yes

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression		✓			
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.
Bharath Institute Of Higher Education & Research
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Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Statistics with R Specialization					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

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(c)	Curiosity	Yes
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
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Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Statistics with R Specialization					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

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(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression		✓			
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)

Bharath UNIVERSITY

பாரத் பல்கலைக்கழகம்

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be-University, u/s 3 of the UGC Act, 1956)

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Ms. BANDARU RAMESH

For actively participating in the value added course **"Statistics with R Specialization "**Conducted by School of Computing, BIHER from 02-06-2020 to 13.06.2020 .

Course Coordinator | **Head of the Department** | **Director**

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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NAAC
BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai , T.N - 600 073.

Requisition Letter

Date: 26.05.2020

From
Dr. K.P.Kaliyamurthie,
Professor & Head,
Department of CSE,
Bharath Institute of Higher Education and Research,
Chennai

To
The Dean Engineering,
Bharath Institute of Higher Education and Research,
Chennai

Respected sir

Subject: Request of Permission to conduct a value-added course on **"Training on CCNA Routing and Switching" (online)** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course on **"Training on CCNA Routing and Switching"** in our campus premises on **02.06.2020**, students would be participating in this course. We request you kindly to give permission to organize this event.

Timing : 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

Submitted to Principal for approval to organize this value-added course.

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
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Chennai - 600 073. INDIA

DEAN ENGINEERING

DEAN (Engineering)
Bharath Institute of Science & Technology
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Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

29.05.2020

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Training on CCNA Routing and Switching** for the benefit of students. This course is scheduled from 02.06.2020 to 11.06.2020 which includes theory and practical. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr. G. Michael.	Professor
2	Mrs. N. Priya	Assistant Professor

Head of Department

HEAD OF DEPARTMENT

To

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Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON Training on CCNA Routing and Switching

Date of Introduction of the Course: 02.07.2020

COURSE SYLLABUS

1. Network Fundamentals

To learn the role and function of network components (Routers, Switches, Bridges and Hubs). OSI and TCP/IP models Data flow between two hosts across a network

2. Characteristics of network topology architectures

Learn about 2 tier, 3 tier, Spine-leaf, WAN, Small office/home office (SOHO), On-premises and cloud

3. LAN Switching Technologies

Configure and verify initial switch configuration. Switch operation (ping, telnet), Identify enhanced switching technologies

4. Switching concepts

MAC learning and aging, Frame switching, Frame flooding, MAC address table

5. IP Routing Technologies

Basic routing concepts, describe the boot process of Cisco IOS routers, Configure and verify basic Router configuration

6. IP Connectivity

Interpret the components of routing table

7. IP Services

Configure and verify DHCP (IOS Router), ACL (Types, Features & Applications of ACLs), and Identify the basic operation of NAT, Describe SNMP v2 & v3

8. WAN Technologies

Identifying different WAN Technologies

9. IP addressing (IPv4 / IPv6)

Private and public IP addresses for IPv4, IPv6 addressing scheme, IPv4 addressing scheme using VLSM and summarization

10. Network Device Security

Define key security concepts, Describe security program elements, and Describe security password policies elements, such as management, complexity, and password alternatives

11. Troubleshooting

Utilize net flow data, Troubleshoot and Resolve VLAN problems, Identify and correct common network problems

12. Automation and programmability

How automation impacts network management, traditional networks with controller-based networking

COURSE OBJECTIVES

This course is designed to impart knowledge about detailed knowledge of Computer Networks, various protocols used in Communication, Managing and configuring Switches and Routers and various WAN technologies.

Students will learn

1. Understanding Network Fundamentals
2. Understanding LAN Switching Technologies
3. Analyse IP Routing Technologies
4. Understanding different WAN Technologies
5. Demonstrate Private and public IP addresses for IPv4, IPv6 addressing scheme
6. Knowing to resolve VLAN problems

M. Priya

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci... Engg.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON STATISTICS WITH R SPECIALIZATION

Date of Introduction of the Course: 02.07.2020

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN)
Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	02-06-2020(FN)	**1.Network Fundamentals** To learn the role and function of network components (Routers, Switches, Bridges and Hubs). OSI and TCP/IP models Data flow between two hosts across a network
2	03-06-2020 (FN)	**2.Characteristics of network topology architectures** Learn about 2 tier, 3 tier, Spine-leaf, WAN, Small office/home office (SOHO), On-premises and cloud
3	04-06-2020 (FN)	**3. LAN Switching Technologies** Configure and verify initial switch configuration. Switch operation (ping, telnet), Identify enhanced switching technologies
4	05-06-2020 (FN)	**4. Switching concepts** MAC learning and aging, Frame switching, Frame flooding, MAC address table
5	06-06-2020 (FN)	**5. IP Routing Technologies** Basic routing concepts, describe the boot process of Cisco IOS routers, Configure and verify basic Router configuration
6,7	06-06-2020 (FN & AN)	**6. IP Connectivity** Interpret the components of routing table **7. IP Services** Configure and verify DHCP (IOS Router), ACL (Types, Features & Applications of ACLs), and Identify the basic operation of NAT, Describe SNMP v2 & v3

8	08-06-2020 (FN)	**8. WAN Technologies** Identifying different WAN Technologies
9	09-06-2020 (FN)	**9. IP addressing (IPv4 / IPv6)** Private and public IP addresses for IPv4, IPv6 addressing scheme, IPv4 addressing scheme using VLSM and summarization
10	10-06-2020 (FN)	**10. Network Device Security** Define key security concepts, Describe security program elements, and Describe security password policies elements, such as management, complexity, and password alternatives
11,12	11-06-2020 (FN & AN)	**11. Troubleshooting** Utilize net flow data, Troubleshoot and Resolve VLAN problems, Identify and correct common network problems **12. Automation and programmability** How automation impacts network management, traditional networks with controller-based networking

N. Priya

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act, 1956)
(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4th July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING		
Date of Introduction of the Course: 02.07.2020		
B.Tech Computer Science and Engineering		
Traning on CCNA Routing and Switching		
S. No	**REG.NO**	**NAME OF THE CANDIDATE**
1	U15CS042	DILLIGANESH V
2	U15CS043	DIVAKAR M
3	U15CS044	DIVYA VANI T
4	U15CS045	DODDI PUJITHA
5	U15CS046	DOOLIGANTI AKHIL REDDY
6	U15CS047	DUPUGUNTLA BHANU SIVA KASINADH
7	U15CS048	GANDLUR REDDY GREESHMA
8	U15CS049	GANESH BAG
9	U15CS050	GANGARAJU RAHUL
10	U15CS051	GANGARAPU UKESH
11	U15CS052	GANGU BHAGYA
12	U15CS053	GLADSON J
13	U15CS054	GOLI SUDEEP KRISHNA
14	U15CS055	GOLLAPUDI KALYAN KUMAR
15	U15CS056	GORRE THIRUPATHI REDDY
16	U15CS057	GUJJETI MAHESH
17	U15CS058	GUNDA VINAY KUMAR
18	U15CS059	HANUMAN B
19	U15CS060	HARI HARAN M
20	U15CS061	HASTHI RUCHITHA
21	U15CS062	HEMA NARAYANAN R
22	U15CS063	INAPARTHI RAGHAVA
23	U15CS064	INJE RAVI TEJA
24	U15CS065	INNURU SWATHI
25	U15CS066	JAGADEESH K
26	U15CS067	JAGADEESWARA RAO JADDU
27	U15CS068	JAICHAND KUMAR
28	U15CS069	JANAKI RAMAN V
29	U15CS070	JHA ABHISHEK AJAY
30	U15CS071	JOHN PARAM JYOTHI JYOTHULA
31	U15CS072	JOTHI R
32	U15CS073	K THULASIRAM
33	U15CS074	KADALI VINAY NARASIMHA

34	U15CS075	KADUMU MOUNIKA
35	U15CS076	KAIPU PRANAY REDDY
36	U15CS077	KALYANAM JASWANTH NAIDU
37	U15CS078	KAMBLE NIKHIL KUMAR
38	U15CS079	KANCHARLAPALLI LOKESHWAR RAO
39	U15CS080	KANCHUMARTHI BHUVANESWAR VINAY
40	U15CS081	KANCHUPATI JAGANMOHAN RAO
41	U15CS082	KANDI ASHOKA REDDY
42	U15CS083	KANDI MOUNIKA
43	U15CS084	KANDUKURI JESHWANTH
44	U15CS085	KANDULA SRINATH
45	U15CS086	KARAPAREDDY BHARGAVI
46	U15CS087	KARTHEESWARAN P
47	U15CS088	KARTHICK S
48	U15CS089	KARUTURI SREE RAM
49	U15CS090	KATTA NARENDRA
50	U15CS091	KHALYAN S N
51	U15CS092	KISHORE VENKAT
52	U15CS093	KM AYUSHI JAISWAL

N. Priya

COURSE CO-ORDINATOR

HOD

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Training on CCNA Routing and Switching					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80	✓	80-100	

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	No
(ii)	Has adequate prior exposure to the prerequisites	No
(iii)	Had to pickup relevant additional topics through concurrent study	Yes
(iv)	Have no exposure to the background material	No

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	No
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent		B: Very Good		C: Good	✓	D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Training on CCNA Routing and Switching					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8	✓	8-10	

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	No
(ii)	Has adequate prior exposure to the prerequisites	Yes
(iii)	Had to pickup relevant additional topics through concurrent study	Yes
(iv)	Have no exposure to the background material	No

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	No
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class		✓			
7.	Others (please specify	✓				

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Training on CCNA Routing and Switching					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	No
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(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	No
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent		B: Very Good		C: Good	✓	D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

Bharath UNIVERSITY

பாரத் பல்கலைக்கழகம்

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be-University, u/s 3 of the UGC Act, 1956)

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Mr. JOTHI R

For actively participating in the value added course **"Training on CCNA Routing and Switching"** Conducted by School of Computing, BIHER from 02-06-2020 to 11-06-2020 .

N. Priya
Course Coordinator

Head of the Department

C. Vin
Director

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

Requisition letter

Date: **18.05.2020**

From

Dr.Kaliyamurthy M.E.,Ph.D.,

Professor & Head,

Department of CSE,

Bharath Institute of Higher Education and Research,

Chennai.

To

Dean Engineering,

Bharath Institute of Higher Education and Research,

Chennai.

Respected Sir

Sub: Request of permission to conduct a value – added course on **"Core java for android programming" (online)** -Reg

With reference to above subject, I would like to bring to your kind notice that , our department interested to organize value added course **"Core java for android programming"** – Reg in our campus premises on 28.05.2020 students would be participating in this course. We request you kindly to give permission to organize this event.

Timing: 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN)

Submitted to principal for approval to organize this value-added course.

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research

DEAN ENGINEERING

DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

21.05.2020

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course of CORE JAVA FOR ANDROID PROGRAMMING** for the benefit of students. This course is scheduled from 28.05.2020 to 09.06.2020 The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr. G. Michael	Professor
2	Mrs. R. Kavitha	Assistant Professor

Head of Department

To

Copy to CSE

Copy to IT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON CORE JAVA FOR ANDROID PROGRAMMING

Date of Introduction of the Course: 02.07.2020

COURSE SYLLABUS

1. Introduction of Core Java

To learn and analyse Core java for android

2. Introduction to android studio

Provides an overview of Android Studio, explaining how to install it and apply it to develop a simple app using basic Java and Android features presented in this MOO

3. MOOC Overview

organization of the MOOC and the topics it covers. It also discusses the MOOC prerequisites, workload, and learning strategies needed to complete the MOOC successfully. It then presents an overview of key features in the Java language, outlining its support for object-oriented programming concepts that guide the development of Android apps.

4. Writing a Simple Android App Using Basic Java Features

Explains how to write a simple Android app that defines variables using primitive Java data types, shows how to assign values to those variables, and output them to the Android display using Java classes and methods

5. Control Flow

Covers Java's looping constructs (e.g., for loops, while loops, and do/while loops), as well as its conditional statements (e.g., if/else statements)

6. Structured Data

Provides more detail on common data structures supported by Java, including built-in arrays, as well as core classes in the Java Collections Framework, such as ArrayList and HashMap.

7. Classes and Interfaces

overs Java classes and interfaces, focusing on data types, fields, methods, generic parameters, and exceptions.

8. Inheritance

Explains the inheritance and its view towards android programming

9. Polymorphism

Examines Java's polymorphism features (e.g., extending classes and virtual methods).

10. Android Calculator App

Guides learners through the creation of an Android app that implements a simple calculator, which provides features for adding, subtracting, multiplying, and dividing numbers input by various means (e.g., via numbers and buttons on the Android user interface).

COURSE OBJECTIVES

This Specialization enables learners to successfully apply core Java programming languages features & software patterns needed to develop maintainable mobile apps comprised of core Android components, as well as fundamental Java I/O & persistence mechanisms.

Specifically, the course has the following objectives:

Students will learn

1. Understanding Core java
2. Understanding Android app.
3. Analyse and inherit java in android
4. Create Android programming with java.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON CORE JAVA FOR ANDROID PROGRAMMING

Date of Introduction of the Course: 02.07.2020

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	28-05-2020(FN)	**1. Introduction of Core Java** To learn and analyse Core java for android
2	29-05-2020 (FN)	**2. Introduction to android studio** Provides an overview of Android Studio, explaining how to install it and apply it to develop a simple app using basic Java and Android features presented in this MOO.
3,4	30-05-2020 (FN & AN)	*3.* **MOOC Overview** organization of the MOOC and the topics it covers. It then presents an overview of key features in the Java language, outlining its support for object-oriented programming concepts that guide the development of Android apps.
5	01-06-2020 (FN)	**4. Writing a Simple Android App Using Basic Java Features** Explains how to write a simple Android app that defines variables using primitive Java data types
6	02-06-2020 (FN)	*5.* **Control Flow** Covers Java's looping constructs (e.g., for loops, while loops, and do/while loops), as well as its conditional statements (e.g., if/else statements)

7	03-06-2020 (FN)	**6.Structured Data** Provides more detail on common data structures supported by Java, including built-in arrays, as well as core classes in the Java Collections Framework, such as ArrayList and HashMap.
8	05-06-2020 (FN)	**7. Classes and Interfaces** Provide overs Java classes and interfaces, focusing on data types, fields, methods, generic parameters, and exceptions.
9,10	06-06-2020 (FN &AN)	*8.* **Inheritance** Explains the inheritance and its view towards android programming.
11	08-06-2020 (AN)	**9. Polymorphism** Examines Java's polymorphism features (e.g., extending classes and virtual methods).
12	09-06-2020 (FN)	**10.Android Calculator App** Guides learners through the creation of an Android app that implements a simple calculator, which provides features for adding, subtracting, multiplying, and dividing numbers input by various means (e.g., via numbers and buttons on the Android user interface).

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act, 1956)
(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4th July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

B.Tech Computer Science and Engineering

Academic year 2020-21

CORE JAVA FOR ANDROID PROGRAMMING

DATE OF INTRODUCTION: 02.07.2020

S. No	REG.NO	NAME OF THE CANDIDATE
1	U15CS039	D N S HRUDAY BHARADWAJ
2	U15CS040	DADAM CHAITHRA
3	U15CS041	DEEPAK KUMAR SINGH
4	U15CS042	DILLIGANESH V
5	U15CS043	DIVAKAR M
6	U15CS044	DIVYA VANI T
7	U15CS045	DODDI PUJITHA
8	U15CS046	DOOLIGANTI AKHIL REDDY
9	U15CS047	DUPUGUNTLA BHANU SIVA KASINADH
10	U15CS048	GANDLUR REDDY GREESHMA
11	U15CS049	GANESH BAG
12	U15CS050	GANGARAJU RAHUL
13	U15CS051	GANGARAPU UKESH
14	U15CS052	GANGU BHAGYA
15	U15CS053	GLADSON J
16	U15CS054	GOLI SUDEEP KRISHNA
17	U15CS055	GOLLAPUDI KALYAN KUMAR
18	U15CS056	GORRE THIRUPATHI REDDY
19	U15CS057	GUJJETI MAHESH
20	U15CS058	GUNDA VINAY KUMAR
21	U15CS059	HANUMAN B
22	U15CS060	HARI HARAN M
23	U15CS061	HASTHI RUCHITHA
24	U15CS062	HEMA NARAYANAN R
25	U15CS063	INAPARTHI RAGHAVA
26	U15CS064	INJE RAVI TEJA
27	U15CS065	INNURU SWATHI
28	U15CS066	JAGADEESH K
29	U15CS067	JAGADEESWARA RAO JADDU
30	U15CS068	JAICHAND KUMAR
31	U15CS069	JANAKI RAMAN V
32	U15CS070	JHA ABHISHEK AJAY

COURSE COORDINATOR

HOD

COURSE FEEDBACK FORM

Academic Year		2020-21					
Term							
Course Number							
Course Title		CORE JAVA FOR ANDROID PROGRAMMING					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	No
(ii)	Has adequate prior exposure to the prerequisites	Yes
(iii)	Had to pickup relevant additional topics through concurrent study	yes
(iv)	Have no exposure to the background material	No

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓	✓			
2.	Comment of the Subject	✓				
3.	Clarity of expression		✓			
4.	Level of preparation					
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓	✓			
7.	Others (please specify	✓				

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

COURSE FEEDBACK FORM

Academic Year		2020-21					
Term							
Course Number							
Course Title		CORE JAVA FOR ANDROID PROGRAMMING					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80	✓	80-100	

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0-2		2-4		4-6		6-8		8-10	✓

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(iii)	Had to pickup relevant additional topics through concurrent study	yes
(iv)	Have no exposure to the background material	No

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(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	No
(d)	Better Employment Opportunity	yes
(e)	Complete Course requirements	yes
(f)	To Improve CGPA	yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent		B: Very Good		C: Good	✓	D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

COURSE FEEDBACK FORM

Academic Year		2020-21					
Term							
Course Number							
Course Title		CORE JAVA FOR ANDROID PROGRAMMING					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8	✓	8-10	

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(e)	Complete Course requirements	No
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class		✓			
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

Bharath UNIVERSITY

பாரத் பல்கலைக்கழகம்

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be-University u/s 3 of the UGC Act, 1956)

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Ms. HEMA NARAYANAN

For actively participating in the value added course **"core java for Android Programming "**Conducted by School of Computing, BIHER

from 28-05-2020 to 09.06.2020 .

Course Coordinator

Head of the Department

Director

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

Requisition letter

Date: **18.05.2020**

From

Dr.Kaliyamurthy M.E.,PH.D,

Professor & Head,

Department of CSE,

Bharath Institute of Higher Education and Research,

Chennai.

To

Dean Engineering,

Bharath Institute of Higher Education and Research,

Chennai.

Respected Sir

Sub: Request of permission to conduct a value – added course on **"IBM AI Enterprise workflow specialization" (online)** -Reg

With reference to above subject, I would like to bring to your kind notice that , our department interested to organize value added course **"IBM AI enterprise workflow specialization"**-Reg in our campus premises on 28.05.2020 students would be participating in this course. We request you kindly to give permission to organize this event.

Timing: 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN)

Submitted to principal for approval to organize this value-added course.

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

DEAN ENGINEERING

DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

21.05.2020

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course of IBM AI Enterprise Workflow Specialization** for the benefit of students. This course is scheduled from 28.05.2020 to 09.06.2020. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr A.R. Arunachalam	Professor
2	Mrs G. Kavitha	Assistant Professor

Head of Department

To

Copy to CSE

Copy to IT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON IBM AI ENTERPRISE WORKFLOW SPECIALIZATION

Date of Introduction of the Course: 02.07.2020

COURSE SYLLABUS

1. **IBM AI Enterprise Workflow Introduction**

The goal of this first module is to introduce you to the overall specialization requirements, evaluate your understanding of some key prerequisite knowledge, and familiarize you with several process models commonly used .

2. **Technical essentials for AI**

Describe and explain the key terms in the field of artificial intelligence (Analytics, Data Science, Machine Learning, Deep Learning, Artificial Intelligence etc.)

3. Application of AI in business

Identify use cases where artificial intelligence solutions can address business opportunities. Demonstrate knowledge of scenarios for application of machine learning.

4. **Data understanding techniques in AI.**

Demonstrate knowledge of data collection practices. Explain characteristics of different data types.

5. Data Preparation technique in data science

Demonstrate expertise cleaning data and addressing data anomalies. Show knowledge of feature engineering and dimensionality reduction techniques.

6. **Data Preparation technique in AI**

Demonstrate mastery preparing and cleaning unstructured text data.

7. Application of data science and models

Explain machine learning algorithms and the theoretical basis behind them.

8. **Application of AI techniques and models.**

Demonstrate practical experience building machine learning models and using different machine learning algorithms.

9. Evaluation of AI models

Identify different evaluation metrics for machine learning algorithms and how to use them in the evaluation of model performance

10. Deployment of AI models

Demonstrate knowledge of requirements for model monitoring, management and maintenance. Identify IBM technology capabilities for building, deploying, and managing AI models.

11. **Technical stack of Data science**

Describe the differences between traditional programming and machine learning. Demonstrate foundational knowledge of using python as a tool for building AI solutions.

12. **Technical stack of AI**

Describe the differences between traditional programming and machine learning. Demonstrate foundational knowledge of using python as a tool for building AI solutions

COURSE OBJECTIVES

This six-course specialization is designed to prepare you to take the certification examination for IBM AI Enterprise Workflow Specialist. IBM AI Enterprise Workflow is a comprehensive, end-to-end process that enables data scientists to build AI solutions, starting with business priorities and working through to taking AI into production.

Specifically, the course has the following objectives:

Students will learn

1. The fundamental terms and concepts of design thinking.
2. The different types of fundamental Data Science
3. Thr general properties of common probability distributions.
4. Basic understanding of computer vision
5. Demonstrate basic understanding of IBM Watson AI services

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON IBM AI ENTERPRISE WORKFLOW SPECIALIZATION

Date of Introduction of the Course: 02.07.2020

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	28-05-2020 (FN)	1. **IBM AI Enterprise Workflow Introduction** The goal of this first module is to introduce you to the overall specialization requirements, evaluate your understanding of some key prerequisite knowledge, and familiarize you with several process models commonly used today.
2	29-01-2020 (FN)	*2.* **Technical essentials for AI** Describe and explain the key terms in the field of artificial intelligence (Analytics, Data Science, Machine Learning, Deep Learning, Artificial Intelligence etc.)
3,4	30-05-2020 (FN & AN)	*3.* **Application of AI in business** Identify use cases where artificial intelligence solutions can address business opportunities. Demonstrate knowledge of scenarios for application of machine learning.
5	01-06-2020 (FN)	**4. Data understanding techniques in AI.** Demonstrate knowledge of data collection practices. Explain characteristics of different data types.
6	02-06-2020 (FN)	**5. Data Preparation technique in data science** Demonstrate expertise cleaning data and addressing data anomalies. Show knowledge of feature engineering and dimensionality reduction techniques.
7	03-06-2020 (FN)	**7. Application of data science and models** Explain machine learning algorithms and the theoretical basis behind them.

9	**04-06-2020 (FN)**	**8. Application of AI techniques and models.** Demonstrate practical experience building machine learning models and using different machine learning algorithms.
10	**05-06-2020 (FN)**	**9. Evaluation of AI models** Identify different evaluation metrics for machine learning algorithms and how to use them in the evaluation of model performance.
11	**06-06-2020 (FN)**	**10. Deployment of AI models** Demonstrate knowledge of requirements for model monitoring, management and maintenance. Identify IBM technology capabilities for building, deploying, and managing AI models.
12	**08-06-2020 (FN)**	**11. Technical stack of Data science** Describe the differences between traditional programming and machine learning. Demonstrate foundational knowledge of using python as a tool for building AI solutions
13	**09-06-2020 (FN)**	10. **Technical stack of AI** Describe the differences between traditional programming and machine learning. Demonstrate foundational knowledge of using python as a tool for building AI solutions

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act, 1956)
(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4th July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

B.Tech Computer Science and Engineering

Academic year 2020-21

IBM AI Enterprise Workflow Specialization

DATE OF INTRODUCTION:02.07.2020

S. No	REG.NO	NAME OF THE CANDIDATE
1	U15CS071	JOHN PARAM JYOTHI JYOTHULA
2	U15CS072	JOTHI R
3	U15CS073	K THULASIRAM
4	U15CS074	KADALI VINAY NARASIMHA
5	U15CS075	KADUMU MOUNIKA
6	U15CS076	KAIPU PRANAY REDDY
7	U15CS077	KALYANAM JASWANTH NAIDU
8	U15CS078	KAMBLE NIKHIL KUMAR
9	U15CS079	KANCHARLAPALLI LOKESHWAR RAO
10	U15CS080	KANCHUMARTHI BHUVANESWAR VINAY
11	U15CS081	KANCHUPATI JAGANMOHAN RAO
12	U15CS082	KANDI ASHOKA REDDY
13	U15CS083	KANDI MOUNIKA
14	U15CS084	KANDUKURI JESHWANTH
15	U15CS085	KANDULA SRINATH
16	U15CS086	KARAPAREDDY BHARGAVI
17	U15CS087	KARTHEESWARAN P
18	U15CS088	KARTHICK S
19	U15CS089	KARUTURI SREE RAM
20	U15CS090	KATTA NARENDRA
21	U15CS091	KHALYAN S N
22	U15CS092	KISHORE VENKAT
23	U15CS093	KM AYUSHI JAISWAL
24	U15CS094	KOLUKULURI ADITHYA RAGHAV VARMA
25	U15CS095	KONATALA PUSHPA
26	U15CS096	KONDURU PREM KUMAR
27	U15CS097	KONGARA KIRAN KUMAR
28	U15CS098	KOPPA SEKHAR SAI VISWAM
29	U15CS099	KOTHAPALLI ARYAN VARMA
30	U15CS100	KOTIPALLI SRI SAI SURYA PRASANTH

31	U15CS101	KOTNANI KRISHNA VAMSI
32	U15CS102	KRISHNA KUMAR YADAV
33	U15CS103	KUMMETA SAI VAMSI KRISHNA REDDY

COURSE COORDINATOR

HOD

COURSE FEEDBACK FORM

Academic Year		2020- 21					
Term							
Course Number							
Course Title		IBM AI ENTERPRISE WORKFLOW SPECIALIZATION					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	No
(ii)	Has adequate prior exposure to the prerequisites	No
(iii)	Had to pickup relevant additional topics through concurrent study	YES
(iv)	Have no exposure to the background material	No

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	YES
(b)	Get exposed to a relevant subject	YES
(c)	Curiosity	YES
(d)	Better Employment Opportunity	YES
(e)	Complete Course requirements	YES
(f)	To Improve CGPA	YES

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation		✓			
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

COURSE FEEDBACK FORM

Academic Year		2020- 21					
Term							
Course Number							
Course Title		IBM AI ENTERPRISE WORKFLOW SPECIALIZATION					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

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2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

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(c)	Curiosity	yes
(d)	Better Employment Opportunity	No
(e)	Complete Course requirements	yes
(f)	To Improve CGPA	yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

COURSE FEEDBACK FORM

Academic Year	2020- 21
Term	
Course Number	
Course Title	IBM AI ENTERPRISE WORKFLOW SPECIALIZATION
Number of Credits	

Type of Course	Regular		Elective		Add-on	✓

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80	✓	80-100	

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8	✓	8-10	

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(c)	Curiosity	Yes
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture		✓			
2.	Comment of the Subject	✓				
3.	Clarity of expression		✓			
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

Bharath UNIVERSITY

பாரத பல்கலைக்கழகம்

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be University u/s 3 of the UGC Act, 1956)

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Mr. THULASIRAM

For actively participating in the value added course **"IBM AI Enterprise Workflow Specialization "**Conducted by School of Computing, BIHER from 28-05-2020 to 09.06.2020 .

Course Coordinator

Head of the Department

Director

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)
BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agherem Road, Selaiyur, Chennai , T.N - 600 073.

Requisition Letter

Date:03.08.2020

From
Dr. K.P.Kaliyamurthie,
Professor & Head,
Department of CSE,
Bharath Institute of Higher Education and Research,
Chennai

To
The Dean Engineering,
Bharath Institute of Higher Education and Research,
Chennai

Respected sir

Subject: Request of Permission to conduct a value-added course on " **Short term course on Fuzzy Sets And its Application** "**(online)** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course on **"Short term course on Fuzzy Sets And its Application"** in our campus premises on **11.08.2020** , students would be participating in this course. We request you kindly to give permission to organize this event.

Timing : 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

Submitted to Principal for approval to organize this value-added course.

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

DEAN ENGINEERING

DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

05.08.2020

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Short term course on Fuzzy Sets And its Application** for the benefit of students. This course is scheduled from 11.08.2020 to 18.08.2020. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr. C. Rajabhushanam	Professor
2	Mrs. C. Anuradha	Assistant Professor

Head of Department

To

Copy to CSE

Copy to IT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON Short term course on Fuzzy Sets And its Application

Date of Introduction of the Course: 03.09.2020

COURSE SYLLABUS

1. Introduction and Fuzzy Sets Theory

Fuzzy set theory permits membership function valued

2. Membership Functions

Fuzzy sets theory is an extension of classical set theory

3. Set Theoretic Operations

The symbol ∪ is employed to denote the union of two sets. Thus, the set A ∪ B—read "A union B" or "the union.

4. Fuzzy Arithmetic

Explains the communication of statistical results correctly.

5. Fuzzy Relations

A fuzzy relation is the Cartesian product of mathematical fuzzy sets.

6. Fuzzy Inference Systems I

Fuzzy Inference System is the key unit of a fuzzy logic system having decision making as its primary work. It uses the "IF…THEN" rules along with connectors...

7. Fuzzy Inference Systems II

Fuzzy inference systems, input values are fuzzified by finding the corresponding degree of membership in both the UMFs and LMFs from the rule

8 Wang and Mendel Model

The Wang-Mendel (WM) modelling method is capable of extracting fuzzy rules from data directly without any prior knowledge

9. TSK Model

We propose to generalize TSK fuzzy model applying nonlinear functions in the rule consequences.

10. Fusiliers and Defuzzifiers

Fuzzification is the process of converting a clear input to a fuzzy value. It converts a clear point price of the process state variable

11 ANFIS Architecture

Inference system corresponds to a set of fuzzy IF–THEN rules that have learning capability to approximate nonlinear functions

12. Fuzzy Systems and Machine Learning

Fuzzy logic is used in Natural language processing and various intensive applications.

COURSE OBJECTIVES

To learn and analyse and visualize data in **Understand the concept of fuzziness involved in various systems** and fuzzy set theory. **Specifically, the course has the following objectives:**

Students will learn

1. Understanding Fuzzy Inference Systems I
2. Understanding Fuzzy Inference Systems II.
3. Fuzzy Relations
4. Create Set Theoretic Operations
5. Fuzzy logic system is capable of providing the most effective solution to complex issues
6. Fuzzy system helps in dealing engineering uncertainties.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956,
Chennai - 600 073. INDIA

11	17-08-2020 (FN)	**Fusiliers and Defuzzifiers** Fuzzification is the process of converting a clear input to a fuzzy value. It converts a clear point price of the process state variable
12	18-08-2020 (FN)	**ANFIS Architecture** Inference system corresponds to a set of fuzzy IF–THEN rules that have learning capability to approximate nonlinear functions
13	18-08-2020 (FN)	**Fuzzy Systems and Machine Learning** Fuzzy logic is used in Natural language processing and various intensive applications.

C. Anuradha.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
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Chennai - 600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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CERTIFICATE COURSE Short term course on Fuzzy Sets And its Application

Date of Introduction of the Course: 03.09.2020

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	11-08-2020(FN)	**Introduction and Fuzzy Sets Theory** Fuzzy set theory permits membership function valued
2	12-08-2020 (FN)	**Membership Functions** Fuzzy sets theory is an extension of classical set theory
3	12-08-2020 (FN)	**Set Theoretic Operation** The symbol ∪ is employed to denote the union of two sets. Thus, the set A ∪ B—read "A union B" or "the union.
4	13-08-2020 (FN)	**Fuzzy Arithmetic** Explains the communication of statistical results correctly.
5	13-08-2020 (FN)	**Fuzzy Relations** A fuzzy relation is the Cartesian product of mathematical fuzzy sets.
6	14-08-2020 (FN)	**Fuzzy Inference Systems I** Fuzzy Inference System is the key unit of a fuzzy logic system having decision making as its primary work. It uses the "IF…THEN" rules along with connectors
7,8	15-08-2020 (FN&AN)	**Fuzzy Inference Systems II** Fuzzy inference systems, input values are fuzzified by finding the corresponding degree of membership in both the UMFs and LMFs from the rule
9	17-08-2020 (FN)	**Wang and Mendel Model** The Wang-Mendel (WM) modelling method is capable of extracting fuzzy rules from data directly without any prior knowledge.
10	17-08-2020 (FN)	**TSK Model** Generalize TSK fuzzy model applying nonlinear functions in the rule consequences.

11	17-08-2020 (FN)	**Fusiliers and Defuzzifiers** Fuzzification is the process of converting a clear input to a fuzzy value. It converts a clear point price of the process state variable
12	18-08-2020 (FN)	**ANFIS Architecture** Inference system corresponds to a set of fuzzy IF–THEN rules that have learning capability to approximate nonlinear functions
13	18-08-2020 (FN)	**Fuzzy Systems and Machine Learning** Fuzzy logic is used in Natural language processing and various intensive applications.

C. Anuradha

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
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Chennai - 600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act, 1956)
(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4th July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date of Introduction of the Course: 03.09.2020

B.Tech Computer Science and Engineering

Introduction to Short term course on fuzzy Sets And its Applications

S. No	REG.NO	NAME OF THE CANDIDATE
1	U15CS032	CHANDRA KANT CHOUDHARY
2	U15CS033	CHAPPIDI LAKSHMIKANTH REDDY
3	U15CS034	CHIDIPOTHU PRATHYUSHA
4	U15CS035	CHINTAGINJALA VENKATA SRI SAI SRAVYA
5	U15CS036	CHOWDHARY PRASANNA KUMAR
6	U15CS037	CHUNDI VENKATA SESHASAI RAMANAPATANJALI
7	U15CS038	CILLA SAI KISHORE
8	U15CS039	D N S HRUDAY BHARADWAJ
9	U15CS040	DADAM CHAITHRA
10	U15CS041	DEEPAK KUMAR SINGH
11	U15CS042	DILLIGANESH V
12	U15CS043	DIVAKAR M
13	U15CS044	DIVYA VANI T
14	U15CS045	DODDI PUJITHA
15	U15CS015	ARYAN SAHU
16	U15CS047	DUPUGUNTLA BHANU SIVA KASINADH
17	U15CS048	GANDLUR REDDY GREESHMA
18	U15CS049	GANESH BAG
19	U15CS050	GANGARAJU RAHUL
20	U15CS051	GANGARAPU UKESH
21	U15CS052	GANGU BHAGYA
22	U15CS053	GLADSON J
23	U15CS054	GOLI SUDEEP KRISHNA
24	U15CS055	GOLLAPUDI KALYAN KUMAR
25	U15CS056	GORRE THIRUPATHI REDDY
26	U15CS057	GUJJETI MAHESH
27	U15CS058	GUNDA VINAY KUMAR
28	U15CS059	HANUMAN B
29	U15CS060	HARI HARAN M
30	U15CS061	HASTHI RUCHITHA
31	U15CS062	HEMA NARAYANAN R
32	U15CS063	INAPARTHI RAGHAVA
33	U15CS064	INJE RAVI TEJA

34	U15CS238	VATHADI SWAMYVENKATESH
35	U15CS239	AVINASH KUMAR
36	U15CS240	YUGESH S

COURSE COORDINATOR

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
Declared as Deemed to be University U/S 3 Of UGC Act, 1.
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Short term course on Fuzzy Sets And its Application					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80	✓	80-100	

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	NO
(ii)	Has adequate prior exposure to the prerequisites	NO
(iii)	Had to pickup relevant additional topics through concurrent study	YES
(iv)	Have no exposure to the background material	YES

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	YES
(b)	Get exposed to a relevant subject	NO
(c)	Curiosity	NO
(d)	Better Employment Opportunity	YES
(e)	Complete Course requirements	NO
(f)	To Improve CGPA	NO

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation		✓			
5.	Level of interaction		✓			
6.	Accessibility outside the class		✓			
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.,
Bharath Institute of Higher Education & Research
(Declared as Deemed-to-be-University u/s 3 of UGC Act, 1956)
Chennai-600 073.(INDIA)

COURSE FEEDBACK FORM

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		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓	✓			
5.	Level of interaction		✓			
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

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Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Short term course on Fuzzy Sets And its Application					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

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2. **Number of hours per week spent on the course (Other than lecture hours)**

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(e)	Complete Course requirements	No
(f)	To Improve CGPA	No

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture		✓			
2.	Comment of the Subject		✓			
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7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.
Bharath Institute Of Higher Education & Research
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Chennai-600 073.

Bharath UNIVERSITY

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Mr. ARYAN SAHU

For actively participating in the value added course **"Short term course on Fuzzy Sets And its Applications "**Conducted by School of Computing, BIHER from 11-08-2020 to 18.08.2020 .

Course Coordinator

Head of the Department

Director

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

Requisition letter

Date: **1.08.2020**

From

Dr.Kaliyamurthy M.E.,PH.D,

Professor & Head,

Department of CSE,

Bharath Institute of Higher Education and Research,

Chennai.

To

Pro.VC Academics,

Bharath Institute of Higher Education and Research,

Chennai.

Respected Sir

Sub: Request of permission to conduct a value – added course on **"Google Android Application Development Training" (online)** - Reg

With reference to above subject, I would like to bring to your kind notice that , our department interested to organize value added course **"Google Android Application Development Training"** in our campus premises on 08.08.2020, students would be participating in this course. We request you kindly to give permission to organize this event.

Timing: 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN)

Submitted to principal for approval to organize this value-added course.

HOD

DEAN ENGINEERING

DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

4.8.2020

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course of Google Android Application Development Training** for the benefit of students. This course is scheduled from 08.08.2020 to 19.08.2020. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1.	Dr. C. Nalini	Professor
2.	Mrs. Cr. Kavitha	Assistant professor

Head of Department

HEAD OF DEPARTMENT
Department of Computer Science
Bharath Institute of Higher Education
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)
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Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON GOOGLE ANDROID APPLICATION DEVELOPMENT TRAINING

Date of Introduction of the Course: 12.09.2020

COURSE SYLLABUS

1. Creating Project Sunshine

To learn how to create and run a simple Android app, create simple layouts for Android, learn about the Android Studio IDE

2. Loading Data from the Internet

To connect to the Internet and communicate with web APIs, learn about threading and how to make requests without slowing down your app, learn how to add menus to your app

3. Recycler View

To learn about the components that convert a list of data into visual UI elements

4. Intents

To learn the difference between Explicit and Implicit Intents, learn how to navigate inside your apps using intents. To learn how to create Intents that apps outside your control can respond.

5. The Application Lifecycle

To understand the phases of the Android application lifecycle, learn how to persist data between orientation and other changes

6. Preferences

To allow users to customize some aspects of your app
Consider when to omit or add a preference

7. Content Providers

To learn how Content Providers provide an interface to share data, consume data from an already existing Content Provider.

8. Android Architecture Components

To learn how to use Room, LiveData, ViewModel and Lifecycle components, understand how architecture components can help you build robust and efficient apps

9. Background Tasks

To run jobs in the background of an app and create notifications and schedule long-running background processes

10. Completing the UI

To build a well-organized, accessible UI for your app, try different layouts, views, viewgroups, and methods of databinding, design your UI for users who speak different languages

11. Polishing the UI

To add visual polish to your apps with different layouts, fonts, and colors, use design principles to create apps that look great across multiple form factors

COURSE OBJECTIVES

This course blends theory and practice to help you build great apps the right way. In this course, you'll work with instructors step-by-step to build a cloud-connected Android app, and learn best practices of mobile development, and Android development in particular.

Specifically, the course has the following objectives:

Students will learn

1. Understanding data loading.
2. Understanding Recycler view.
3. Analyse and visualize data in application life cycle.
4. Create reproducible data analysis reports.
5. Run jobs in the background of an app.
6. Create apps that look great across multiple form factors.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci...
Bharath Institute of Higher Education...
(Declared as Deemed to be U... u/s 3 of U...
Chennai-600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON GOOGLE ANDROID APPLICATION DEVELOPMENT TRAINING

Date of Introduction of the Course: 12.09.2020

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	08-08-2020(FN)	**1. Creating Project Sunshine** To learn how to create and run a simple Android app, create simple layouts for Android, learn about the Android Studio IDE
2	10-08-2020 (FN)	**2. Loading Data from the Internet** To connect to the Internet and communicate with web APIs, learn about threading and how to make requests without slowing down your app, learn how to add menus to your app
3	10-08-2020 (FN)	**3. Recycler View** To learn about the components that convert a list of data into visual UI elements
4, 5	11-08-2020 (FN & AN)	**4. Intents** To learn the difference between Explicit and Implicit Intents, learn how to navigate inside your apps using intents.
6	12-08-2020 (FN)	**5. Intents** To learn how to create Intents that apps outside your control can respond.
7	13-08-2020 (FN)	**6. The Application Lifecycle** To understand the phases of the Android application lifecycle, learn how to persist data between orientation and other changes
8	14-08-2020 (FN)	**7. Preferences** To allow users to customize some aspects of your app Consider when to omit or add a preference
9	15-08-2020 (FN)	**8. Content Providers** To learn how Content Providers provide an interface to share data, consume data from an already existing Content Provider.
10	17-08-2020 (AN)	**9. Android Architecture Components** To learn how to use Room, LiveData, ViewModel and Lifecycle components, understand how architecture components can help you build robust and efficient apps
11, 12	18-08-2020 (FN)	**10. Background Tasks** To run jobs in the background of an app

		Create notifications and schedule long-running background processes
13	**18-08-2020 (AN)**	**11. Completing the UI** To build a well-organized, accessible UI for your app, try different layouts, views, viewgroups, and methods of databinding, design your UI for users who speak different languages
14	**19-08-2020 (FN)**	**12. Polishing the UI** To add visual polish to your apps with different layouts, fonts, and colors, use design principles to create apps that look great across multiple form factors

COURSE COORDINATOR

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Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4th July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date of Introduction of the Course: 12.09.2020

B.Tech Computer Science and Engineering

Google Android Application Development Training

S. No	REG.NO	NAME OF THE CANDIDATE
1	U15CS001	ABHIJEET KUMAR
2	U15CS002	ABHIJIT KUMAR GUPTA
3	U15CS003	ABHISHEK KUMAR SINGH
4	U15CS004	ALLU SAI SIVA PRIYANKA NAIDU
5	U15CS005	AMBIKE KUMAR SINGH
6	U15CS006	ANBUMANI S
7	U15CS007	ANJAR ALI
8	U15CS008	ANKAM MANJUNATH
9	U15CS009	ANNADI DHANUSH
10	U15CS010	ANNAVARAPU DIVYA
11	U15CS011	ANUMOLU YESWANTH
12	U15CS012	ARAVAPALLI SIVA VINAYA
13	U15CS013	ARAVINDHAN K R
14	U15CS014	ARVIND KUMAR YADAV
15	U15CS015	ARYAN SAHU
16	U15CS016	ASHISH AGARWAL
17	U15CS017	ASHISH RANJAN
18	U15CS018	ATTANTI RAVIKANTH
19	U15CS019	BANAVATH SUNIL NAIK
20	U15CS020	BANDARU RAMESH
21	U15CS021	BATTA SIVA PRASAD
22	U15CS022	BHARATH K
23	U15CS023	BHARATHI V
24	U15CS024	BIKKI KUMAR SHA
25	U15CS025	BINGEWAR SAISHARAN
26	U15CS026	BIRADAVOLU SUCHARITHA
27	U15CS027	BODA AKHIL WESLEY
28	U15CS028	BONALA SRIDHAR RAO
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30	U15CS030	CHAKKA KSHITHIJA
31	U15CS031	CHAMARTHI LAKSHMI NARAYANA AVINASH
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34	U15CS034	CHIDIPOTHU PRATHYUSHA
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41	U15CS041	DEEPAK KUMAR SINGH
42	U15CS042	DILLIGANESH V
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47	U15CS047	DUPUGUNTLA BHANU SIVA KASINADH
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55	U15CS055	GOLLAPUDI KALYAN KUMAR
56	U15CS056	GORRE THIRUPATHI REDDY
57	U15CS057	GUJJETI MAHESH

COURSE COORDINATOR

Head of the Department

HEAD OF DEPARTMENT
Dept. of Computer Scien
Amrita School of Engineering

COURSE FEEDBACK FORM

Academic Year		2020 - 2021					
Term							
Course Number							
Course Title		Google Android Application Development Training					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	NO
(ii)	Has adequate prior exposure to the prerequisites	NO
(iii)	Had to pickup relevant additional topics through concurrent study	yes
(iv)	Have no exposure to the background material	yes.

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	yes
(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	NO
(d)	Better Employment Opportunity	yes
(e)	Complete Course requirements	NO
(f)	To Improve CGPA	yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class		✓			
7.	Others (please specify		✓			

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

COURSE FEEDBACK FORM

Academic Year		2020 - 2021					
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Course Number							
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HEAD OF THE DEPARTMENT

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COURSE FEEDBACK FORM

Academic Year		2020 - 2021					
Term							
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7.	Others (please specify	✓				

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HEAD OF THE DEPARTMENT

Bharath UNIVERSITY

பாரத் பல்கலைக்கழகம்

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be-University, u/s 3 of the UGC Act, 1956)

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Mr. GANESH BAG

For actively participating in the value added course **"Google Android Application Development Training"** Conducted by School of Computing, BIHER from 08-08-2020 to 19.08.2020 .

Course Coordinator | **Head of the Department** | **Director**

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

Requisition letter

Date: **1.08.2020**

From

Dr.Kaliyamurthy M.E.,PH.D,

Professor & Head,

Department of CSE,

Bharath Institute of Higher Education and Research,

Chennai.

To

Pro.VC Academics,

Bharath Institute of Higher Education and Research,

Chennai.

Respected Sir

Sub: Request of permission to conduct a value – added course on **"Google Android Application Development Training" (online)** - Reg

With reference to above subject, I would like to bring to your kind notice that , our department interested to organize value added course **"Google Android Application Development Training"** in our campus premises on 08.08.2020, students would be participating in this course. We request you kindly to give permission to organize this event.

Timing: 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN)

Submitted to principal for approval to organize this value-added course.

HOD

DEAN ENGINEERING

DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

4.8.2020

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course of Google Android Application Development Training** for the benefit of students. This course is scheduled from 08.08.2020 to 19.08.2020. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1.	Dr. C. Nalini	Professor
2.	Mrs. Cr. Kavitha	Assistant professor

Head of Department

HEAD OF DEPARTMENT
Department of Computer Science
Bharath Institute of Higher Education
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)
Chennai-600 073. INDIA

To

Copy to CSE

Copy to IT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON GOOGLE ANDROID APPLICATION DEVELOPMENT TRAINING

Date of Introduction of the Course: 12.09.2020

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COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Sci...
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date of Introduction of the Course: 12.09.2020

B.Tech Computer Science and Engineering

Google Android Application Development Training

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COURSE COORDINATOR

Head of the Department

HEAD OF DEPARTMENT
Dept. of Computer Scien
Amrita School of Engineering

COURSE FEEDBACK FORM

Academic Year		2020 - 2021					
Term							
Course Number							
Course Title		Google Android Application Development Training					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	NO
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4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	yes
(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	NO
(d)	Better Employment Opportunity	yes
(e)	Complete Course requirements	NO
(f)	To Improve CGPA	yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
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HEAD OF THE DEPARTMENT

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Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80	✓	80-100	

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	yes
(ii)	Has adequate prior exposure to the prerequisites	NO
(iii)	Had to pickup relevant additional topics through concurrent study	NO
(iv)	Have no exposure to the background material	yes

4. **The expectations for taking the course by the student are:**

		yes
(a)	Enhance by skill base in the area of specializations	yes
(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	yes
(d)	Better Employment Opportunity	yes
(e)	Complete Course requirements	yes
(f)	To Improve CGPA	yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

HEAD O
Department of C
Institute
as Deemed
Chen

COURSE FEEDBACK FORM

Academic Year		2020 - 2021					
Term							
Course Number							
Course Title		Google Android Application Development Training					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80	✓	80-100	

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	NO
(ii)	Has adequate prior exposure to the prerequisites	NO
(iii)	Had to pickup relevant additional topics through concurrent study	NO
(iv)	Have no exposure to the background material	Yes

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	yes
(e)	Complete Course requirements	NO
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture		✓			
2.	Comment of the Subject		✓			
3.	Clarity of expression		✓			
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class		✓			
7.	Others (please specify	✓				

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

Bharath UNIVERSITY

பாரத் பல்கலைக்கழகம்

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be-University, u/s 3 of the UGC Act, 1956)

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Mr. GANESH BAG

For actively participating in the value added course **"Google Android Application Development Training"** Conducted by School of Computing, BIHER from 08-08-2020 to 19.08.2020 .

Course Coordinator | **Head of the Department** | **Director**

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

Requisition letter

Date: **1.08.2020**

From

Dr.Kaliyamurthy M.E.,PH.D,

Professor & Head,

Department of CSE,

Bharath Institute of Higher Education and Research,

Chennai.

To

Pro.VC Academics,

Bharath Institute of Higher Education and Research,

Chennai.

Respected Sir

Sub: Request of permission to conduct a value – added course on **"Google Android Application Development Training" (online)** - Reg

With reference to above subject, I would like to bring to your kind notice that , our department interested to organize value added course **"Google Android Application Development Training"** in our campus premises on 08.08.2020, students would be participating in this course. We request you kindly to give permission to organize this event.

Timing: 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN)

Submitted to principal for approval to organize this value-added course.

HOD

DEAN ENGINEERING

DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

4.8.2020

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course of Google Android Application Development Training** for the benefit of students. This course is scheduled from 08.08.2020 to 19.08.2020. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1.	Dr. C. Nalini	Professor
2.	Mrs. Cr. Kavitha	Assistant professor

Head of Department

HEAD OF DEPARTMENT
Department of Computer Science
Bharath Institute of Higher Education
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)
Chennai-600 073. INDIA

To

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Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON GOOGLE ANDROID APPLICATION DEVELOPMENT TRAINING

Date of Introduction of the Course: 12.09.2020

COURSE SYLLABUS

1. Creating Project Sunshine

To learn how to create and run a simple Android app, create simple layouts for Android, learn about the Android Studio IDE

2. Loading Data from the Internet

To connect to the Internet and communicate with web APIs, learn about threading and how to make requests without slowing down your app, learn how to add menus to your app

3. Recycler View

To learn about the components that convert a list of data into visual UI elements

4. Intents

To learn the difference between Explicit and Implicit Intents, learn how to navigate inside your apps using intents. To learn how to create Intents that apps outside your control can respond.

5. The Application Lifecycle

To understand the phases of the Android application lifecycle, learn how to persist data between orientation and other changes

6. Preferences

To allow users to customize some aspects of your app
Consider when to omit or add a preference

7. Content Providers

To learn how Content Providers provide an interface to share data, consume data from an already existing Content Provider.

8. Android Architecture Components

To learn how to use Room, LiveData, ViewModel and Lifecycle components, understand how architecture components can help you build robust and efficient apps

9. Background Tasks

To run jobs in the background of an app and create notifications and schedule long-running background processes

10. Completing the UI

To build a well-organized, accessible UI for your app, try different layouts, views, viewgroups, and methods of databinding, design your UI for users who speak different languages

11. Polishing the UI

To add visual polish to your apps with different layouts, fonts, and colors, use design principles to create apps that look great across multiple form factors

COURSE OBJECTIVES

This course blends theory and practice to help you build great apps the right way. In this course, you'll work with instructors step-by-step to build a cloud-connected Android app, and learn best practices of mobile development, and Android development in particular.

Specifically, the course has the following objectives:

Students will learn

1. Understanding data loading.
2. Understanding Recycler view.
3. Analyse and visualize data in application life cycle.
4. Create reproducible data analysis reports.
5. Run jobs in the background of an app.
6. Create apps that look great across multiple form factors.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci...
Bharath Institute of Higher Education...
(Declared as Deemed to be U... u/s 3 of U...
Chennai-600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON GOOGLE ANDROID APPLICATION DEVELOPMENT TRAINING

Date of Introduction of the Course: 12.09.2020

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	08-08-2020(FN)	**1. Creating Project Sunshine** To learn how to create and run a simple Android app, create simple layouts for Android, learn about the Android Studio IDE
2	10-08-2020 (FN)	**2. Loading Data from the Internet** To connect to the Internet and communicate with web APIs, learn about threading and how to make requests without slowing down your app, learn how to add menus to your app
3	10-08-2020 (FN)	**3. Recycler View** To learn about the components that convert a list of data into visual UI elements
4, 5	11-08-2020 (FN & AN)	**4. Intents** To learn the difference between Explicit and Implicit Intents, learn how to navigate inside your apps using intents.
6	12-08-2020 (FN)	**5. Intents** To learn how to create Intents that apps outside your control can respond.
7	13-08-2020 (FN)	**6. The Application Lifecycle** To understand the phases of the Android application lifecycle, learn how to persist data between orientation and other changes
8	14-08-2020 (FN)	**7. Preferences** To allow users to customize some aspects of your app Consider when to omit or add a preference
9	15-08-2020 (FN)	**8. Content Providers** To learn how Content Providers provide an interface to share data, consume data from an already existing Content Provider.
10	17-08-2020 (AN)	**9. Android Architecture Components** To learn how to use Room, LiveData, ViewModel and Lifecycle components, understand how architecture components can help you build robust and efficient apps
11, 12	18-08-2020 (FN)	**10. Background Tasks** To run jobs in the background of an app

		Create notifications and schedule long-running background processes
13	**18-08-2020 (AN)**	**11. Completing the UI** To build a well-organized, accessible UI for your app, try different layouts, views, viewgroups, and methods of databinding, design your UI for users who speak different languages
14	**19-08-2020 (FN)**	**12. Polishing the UI** To add visual polish to your apps with different layouts, fonts, and colors, use design principles to create apps that look great across multiple form factors

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act, 1956)
(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4th July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date of Introduction of the Course: 12.09.2020

B.Tech Computer Science and Engineering

Google Android Application Development Training

S. No	REG.NO	NAME OF THE CANDIDATE
1	U15CS001	ABHIJEET KUMAR
2	U15CS002	ABHIJIT KUMAR GUPTA
3	U15CS003	ABHISHEK KUMAR SINGH
4	U15CS004	ALLU SAI SIVA PRIYANKA NAIDU
5	U15CS005	AMBIKE KUMAR SINGH
6	U15CS006	ANBUMANI S
7	U15CS007	ANJAR ALI
8	U15CS008	ANKAM MANJUNATH
9	U15CS009	ANNADI DHANUSH
10	U15CS010	ANNAVARAPU DIVYA
11	U15CS011	ANUMOLU YESWANTH
12	U15CS012	ARAVAPALLI SIVA VINAYA
13	U15CS013	ARAVINDHAN K R
14	U15CS014	ARVIND KUMAR YADAV
15	U15CS015	ARYAN SAHU
16	U15CS016	ASHISH AGARWAL
17	U15CS017	ASHISH RANJAN
18	U15CS018	ATTANTI RAVIKANTH
19	U15CS019	BANAVATH SUNIL NAIK
20	U15CS020	BANDARU RAMESH
21	U15CS021	BATTA SIVA PRASAD
22	U15CS022	BHARATH K
23	U15CS023	BHARATHI V
24	U15CS024	BIKKI KUMAR SHA
25	U15CS025	BINGEWAR SAISHARAN
26	U15CS026	BIRADAVOLU SUCHARITHA
27	U15CS027	BODA AKHIL WESLEY
28	U15CS028	BONALA SRIDHAR RAO
29	U15CS029	BRYAN STEVE PUSHPARAJ I
30	U15CS030	CHAKKA KSHITHIJA
31	U15CS031	CHAMARTHI LAKSHMI NARAYANA AVINASH
32	U15CS032	CHANDRA KANT CHOUDHARY
33	U15CS033	CHAPPIDI LAKSHMIKANTH REDDY

34	U15CS034	CHIDIPOTHU PRATHYUSHA
35	U15CS035	CHINTAGINJALA VENKATA SRI SAI SRAVYA
36	U15CS036	CHOWDHARY PRASANNA KUMAR
37	U15CS037	CHUNDI VENKATA SESHASAI RAMANAPATANJALI
38	U15CS038	CILLA SAI KISHORE
39	U15CS039	D N S HRUDAY BHARADWAJ
40	U15CS040	DADAM CHAITHRA
41	U15CS041	DEEPAK KUMAR SINGH
42	U15CS042	DILLIGANESH V
43	U15CS043	DIVAKAR M
44	U15CS044	DIVYA VANI T
45	U15CS045	DODDI PUJITHA
46	U15CS046	DOOLIGANTI AKHIL REDDY
47	U15CS047	DUPUGUNTLA BHANU SIVA KASINADH
48	U15CS048	GANDLUR REDDY GREESHMA
49	U15CS049	GANESH BAG
50	U15CS050	GANGARAJU RAHUL
51	U15CS051	GANGARAPU UKESH
52	U15CS052	GANGU BHAGYA
53	U15CS053	GLADSON J
54	U15CS054	GOLI SUDEEP KRISHNA
55	U15CS055	GOLLAPUDI KALYAN KUMAR
56	U15CS056	GORRE THIRUPATHI REDDY
57	U15CS057	GUJJETI MAHESH

COURSE COORDINATOR

Head of the Department

HEAD OF DEPARTMENT
Dept. of Computer Scien
Amrita School of Engineering

COURSE FEEDBACK FORM

Academic Year		2020 - 2021					
Term							
Course Number							
Course Title		Google Android Application Development Training					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	NO
(ii)	Has adequate prior exposure to the prerequisites	NO
(iii)	Had to pickup relevant additional topics through concurrent study	yes
(iv)	Have no exposure to the background material	yes.

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	yes
(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	NO
(d)	Better Employment Opportunity	yes
(e)	Complete Course requirements	NO
(f)	To Improve CGPA	yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class		✓			
7.	Others (please specify		✓			

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

COURSE FEEDBACK FORM

Academic Year		2020 - 2021					
Term							
Course Number							
Course Title		Google Android Application Development Training					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80	✓	80-100	

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	yes
(ii)	Has adequate prior exposure to the prerequisites	NO
(iii)	Had to pickup relevant additional topics through concurrent study	NO
(iv)	Have no exposure to the background material	yes

4. **The expectations for taking the course by the student are:**

		yes
(a)	Enhance by skill base in the area of specializations	yes
(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	yes
(d)	Better Employment Opportunity	yes
(e)	Complete Course requirements	yes
(f)	To Improve CGPA	yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

HEAD O
Department of C
Institute
as Deemed
Chen

COURSE FEEDBACK FORM

Academic Year		2020 - 2021					
Term							
Course Number							
Course Title		Google Android Application Development Training					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80	✓	80-100	

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	NO
(ii)	Has adequate prior exposure to the prerequisites	NO
(iii)	Had to pickup relevant additional topics through concurrent study	NO
(iv)	Have no exposure to the background material	Yes

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	yes
(e)	Complete Course requirements	NO
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture		✓			
2.	Comment of the Subject		✓			
3.	Clarity of expression		✓			
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class		✓			
7.	Others (please specify	✓				

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

Bharath UNIVERSITY

பாரத் பல்கலைக்கழகம்

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be-University, u/s 3 of the UGC Act, 1956)

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Mr. GANESH BAG

For actively participating in the value added course **"Google Android Application Development Training"** Conducted by School of Computing, BIHER from 08-08-2020 to 19.08.2020 .

Course Coordinator | **Head of the Department** | **Director**

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)
NAAC
BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai , T.N - 600 073.

Requisition Letter

Date: 05.08.2020

From
Dr. K.P.Kaliyamurthie,
Professor & Head,
Department of CSE,
Bharath Institute of Higher Education and Research,
Chennai

To
The Dean Engineering,
Bharath Institute of Higher Education and Research,
Chennai

Respected sir

Subject: Request of Permission to conduct a value-added course on" **HAND ON TRAINING "IOT" (online)** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course on "**HAND ON TRAINING "IOT"**" in our campus premises on **10.08.2020**, students would be participating in this course. We request you kindly to give permission to organize this event.

Timing: 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) and Saturday (FN&AN).

Submitted to Principal for approval to organize this value-added course.

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Chennai - 600 073.

DEAN ENGINEERING

DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

07.08.2020

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course of Hand on Training "IOT"** for the benefit of students. This course is scheduled from 10.08.2020 to 21.08.2020 which includes theory and practical. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr. R Karthikeyan	Professor
2	Mr. Sridhar R	Assistant Professor

Head of Department

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Chennai - 600 073

To

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INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON STATISTICS WITH HAND ON TRAINING "IOT"

Date of Introduction of the Course: 12.09.2020

COURSE SYLLABUS

1.Introduction to IOT

Understanding IoT fundamentals , IOT Architecture and protocols, Various Platforms for IoT

2.Real time Examples of IoT

Overview of IoT components and IoT Communication Technologies, Challenges in IOT

3. Arduino Simulation Environment

Arduino Uno Architecture, Setup the IDE, Writing Arduino Software

4. Arduino Libraries

Basics of Embedded C programming for Arduino, Interfacing LED, push button and buzzer with Arduino, Interfacing Arduino with LCD

5. Sensor & Actuators with Arduino

Overview of Sensors working , Analog and Digital Sensors

6. Interfacing of Temperature, Humidity, Motion, Light and Gas Sensor with Arduino

Interfacing of Actuators with Arduino, Interfacing of Relay Switch and Servo Motor with Arduino

7. Basic Networking with ESP8266 WiFi module

Basics of Wireless Networking, Introduction to ESP8266 Wi-Fi Module

8. Various Wi-Fi library

Web server- introduction, installation, configuration, Posting sensor(s) data to web server NIELIT DELHI Page

9. IoT Protocols • M2M vs. IOT

Communication Protocols 6. Cloud Platforms for IOT, Virtualization concepts and Cloud Architecture

10. Cloud computing, benefits

Cloud services -- SaaS, PaaS, IaaS, Cloud providers & offerings

11.Study of IOT Cloud platforms

ThingSpeak API and MQTT

12.Interfacing ESP8266 with Web services

Brief note on Interfacing ESP8266 with Web services

COURSE OBJECTIVES

This Course focuses on hands-on IoT concepts such as sensing, actuation and communication. It covers the development of Internet of Things (IoT) prototypes—including devices for sensing, actuation, processing, and communication—to help you develop skills and experiences. The Internet of Things (IOT) is the next wave, world is going to witness.

Specifically, the course has the following objectives:

Students will learn

1. Describe what IoT is and how it works today
2. Recognise the factors that contributed to the emergence of IoT
3. Design and program IoT devices
4. Use real IoT protocols for communication
5. Secure the elements of an IoT device
6. Design an IoT device to work with a Cloud Computing infrastructure.
7. Transfer IoT data to the cloud and in between cloud providers
8. Define the infrastructure for supporting IoT deployments

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON HAND ON TRAINING "IOT"

Date of Introduction of the Course: 12.09.2020

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN)
Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	10-08-2020(FN)	**1.Introduction to IOT** Understanding IoT fundamentals, IOT Architecture and protocols, Various Platforms for IoT
2	11-08-2020 (FN)	**2.Real time Examples of IoT** Overview of IoT components and IoT Communication Technologies, Challenges in IOT
3	12-08-2020 (FN)	**3. Arduino Simulation Environment** Arduino Uno Architecture, Setup the IDE, Writing Arduino Software
4	13-08-2020 (FN)	**4. Arduino Libraries** Basics of Embedded C programming for Arduino, Interfacing LED, push button and buzzer with Arduino, Interfacing Arduino with LCD
5	14-08-2020 (FN)	**5. Sensor & Actuators with Arduino** Overview of Sensors working , Analog and Digital Sensors
6,7	15-08-2020 (FN & AN)	**6. Interfacing of Temperature, Humidity, Motion, Light and Gas Sensor with Arduino** Interfacing of Actuators with Arduino, Interfacing of Relay Switch and Servo Motor with Arduino **7. Basic Networking with ESP8266 WiFi module** Basics of Wireless Networking, Introduction to ESP8266 Wi-Fi Module
8	17-08-2020 (FN)	**8. Various Wi-Fi library** Web server- introduction, installation, configuration, Posting sensor(s) data to web server NIELIT DELHI Page

9	18-08-2020 (FN)	**8. Various Wi-Fi library** Web server- introduction, installation, configuration, Posting sensor(s) data to web server NIELIT DELHI Page
10	19-08-2020 (FN)	**9. IoT Protocols • M2M vs. IOT** Communication Protocols 6. Cloud Platforms for IOT, Virtualization concepts and Cloud Architecture
11	20-08-2020 (FN)	**10. Cloud computing, benefits** Cloud services -- SaaS, PaaS, IaaS, Cloud providers & offerings
12	20-08-2020 (FN)	**11.Study of IOT Cloud platforms** ThingSpeak API and MQTT
13	21-08-2020 (FN)	**12.Interfacing ESP8266 with Web services** Brief note on Interfacing ESP8266 with Web services

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act, 1956)
(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4th July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date of Introduction of the Course: 12.09.2020

B.Tech Computer Science and Engineering

HAND ON TRAINING "IOT"

S. No	REG.NO	NAME OF THE CANDIDATE
1	U15CS091	KHALYAN S N
2	U15CS092	KISHORE VENKAT
3	U15CS093	KM AYUSHI JAISWAL
4	U15CS094	KOLUKULURI ADITHYA RAGHAV VARMA
5	U15CS095	KONATALA PUSHPA
6	U15CS096	KONDURU PREM KUMAR
7	U15CS097	KONGARA KIRAN KUMAR
8	U15CS098	KOPPA SEKHAR SAI VISWAM
9	U15CS099	KOTHAPALLI ARYAN VARMA
10	U15CS100	KOTIPALLI SRI SAI SURYA PRASANTH
11	U15CS101	KOTNANI KRISHNA VAMSI
12	U15CS102	KRISHNA KUMAR YADAV
13	U15CS103	KUMMETA SAI VAMSI KRISHNA REDDY
14	U15CS104	KUNISETTY JYOTHSNA
15	U15CS105	LALJEE
16	U15CS106	LINGAMPELLY SANNITH REDDY
17	U15CS107	LOHESH WARAN S
18	U15CS108	M SHIVA PRAKASH
19	U15CS109	M UTTEJ
20	U15CS110	M. DINESH REDDY
21	U15CS111	M.YESHWITHA REDDY
22	U15CS112	MAILE ARUN KUMAR
23	U15CS113	MAMUNDURU BHARATH KUMAR
24	U15CS114	MANCHALA ROHITH
25	U15CS115	MANCHIKANTI RAJITHA

26	U15CS117	MANOJ KUMAR R
27	U15CS118	MANUGUNTA BHARGAVI
28	U15CS119	MARRIBOYINA GOVARDHAN YADAV
29	U15CS120	MARRIPUDI KRISHNA CHAITANYA
30	U15CS121	MD MINHAZ RAZA HASHMI
31	U15CS122	MOHAMED SAJEEN N
32	U15CS123	MOHAMMAD ASLAM SHAREEF
33	U15CS124	MOHANKUMAR J
34	U15CS125	MOLAPANTI SIVA KALPANA
35	U15CS126	MOORABOINA NARESH
36	U15CS127	MUPPALLA SURENDRA
37	U15CS128	MURARI KUMAR CHAUDHARY
38	U15CS129	N SWAPNA RAAGA
39	U15CS130	NAGANNAGARI JAGADISH
40	U15CS132	NALLANALLI SATYA SANDEEP KUMAR
41	U15CS133	NALLURI AKHIL BABU
42	U15CS134	NAMBURI VIJAY KUMAR

Course Coordinator

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Hand on Training "IOT"					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	Yes
(ii)	Has adequate prior exposure to the prerequisites	NO
(iii)	Had to pickup relevant additional topics through concurrent study	NO
(iv)	Have no exposure to the background material	Yes

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	NO
(e)	Complete Course requirements	NO
(f)	To Improve CGPA	NO

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture		✓			
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify		✓			

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
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(e)	Complete Course requirements	No
(f)	To Improve CGPA	No

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture		✓			
2.	Comment of the Subject		✓			
3.	Clarity of expression		✓			
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, ...
Chennai - 600 073, India

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Hand on Training "IOT"					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

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(e)	Complete Course requirements	No
(f)	To Improve CGPA	No

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

Bharath UNIVERSITY

பாரத் பல்கலைக்கழகம்

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be-University u/s 3 of the UGC Act, 1956)

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

MR. M. DINESH REDDY

For actively participating in the value added course **" Hand on Training "IOT"** Conducted by School of Computing, BIHER from 10-08-2020 to 21.10.2020 .

Course Coordinator | **Head of the Department** | **Director**

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)
BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai - T.N - 600 073.

Requisition Letter

Date: **05.08.2020**

From
Dr. K.P.Kaliyamurthie,
Professor & Head,
Department of CSE,
Bharath Institute of Higher Education and Research,
Chennai

To
The Dean Engineering,
Bharath Institute of Higher Education and Research,
Chennai

Respected sir

Subject: Request of Permission to conduct a value-added course on "**Data Analysis Using Excel And Spss"(online)** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course "**Data Analysis Using Excel And Spss**" -Reg in our campus premises on **10.08.2020**, students would be participating in this course. We request you kindly to give permission to organize this event

Timing: 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

Submitted to Principal for approval to organize this value-added course.

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University, U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

DEAN ENGINEERING

DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

07.08.2020

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Data Analysis using Excel And Spss** for the benefit of students. This course is scheduled from 10.08.2020 to 19.08.2020. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr. C. Nalini	Professor
2	Mrs. C. Anuradha	Assistant Professor

Head of Department

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute of Higher Education & Research
(Declared as Deemed-to-be University under Sec 3 of UGC Act 1956)
Chennai-600 073.

To

Copy to CSE

Copy to IT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON Data Analysis using Excel And Spss

Date of Introduction of the Course: 12.09.2020

COURSE SYLLABUS

1. Create an Excel report

This module explains how to create a report in Excel
Filtering and Formatting Data Charts
Excel Tables
Filtering Excel Data, Formatting, Excel Data,
Create excel Charts,Filter and format data,Create charts.

2. Create an Excel Table

create data tables in Excel, Excel Data Tables,Summarizing Data

3. Pivot Tables and Pivot Charts

Create an Excel Table,Summarize Excel Data Explain what Excel Data tables are Sort, filter, and validate data,Summarize data,Format summarized data.

4. Importing Data from a CSV File

Creating a Pivot Table,Creating a Pivot Chart,Editing Pivot Tables and Pivot Charts,Describe pivot tables and how to create them,Describe the various elements of a pivot chart,Edit pivot tables and pivot charts.

5. Dashboards

Arranging Tables and Charts,Slicing Data,Data Analysis,Describe a dashboard. Filter data using a slicer,Add calculated columns to a dashboard,Find anomalies.

6. Creating Hierarchies

. Hierarchies,Time ,DataCreate a Hierarchy,Configure Time data,Create an Animated Time Chart

7. The Excel Data Model

This module explores the Excel data model and looks at ways of extending it.

8. Explore an Excel Data Model

Explain an Excel Data Model and how to use it.

9. Add Multiple Tables

Import External Data and use it.

10. Create Relationships

Link out to external data.

11.Add External Data
Etxternal data is to extend it

COURSE OBJECTIVES

To learn and analyse and visualize data in R and learn to perform frequentist and Bayesian statistical inference and modelling to understand natural phenomena and make data-based decisions.

Specifically, the course has the following objectives:
Students will learn

1. Understanding Filtering Excel Data, Formatting .
2. Understanding External Data.
3. Charts,Slicing Data,Data Analysis .
4. Arranging Tables and Charts,Slicing Data.
5. Import External Data and use it.
6. Excel Table,Summarize Excel Data

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE Short term course on DATA ANALYSIS USING EXCEL AND SPSS

Date of Introduction of the Course: 12.09.2020

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN)
Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	10-08-2020 (FN)	**1. Create an Excel report** Filtering and Formatting Data Charts Excel Tables Filtering Excel Data, Formatting, Excel Data, Create excel Charts,Filter and format
2	11-08-2020 (FN)	**2. Create an Excel Table** create data tables in Excel, Excel Data Tables,Summarizing Data
3	12-08-2020 (FN)	**3. Pivot Tables and Pivot Charts** Create an Excel Table,Summarize Excel Data
4	13-08-2020 (FN)	**4 Importing Data from a CSV File** Creating a Pivot Table,Creating a Pivot Chart,Editing
5	14-08-2020 (FN)	**5 Dashboards** Arranging Tables and Charts,Slicing Data,Data Analysis
6	15-08-2020 (FN)	**6. Creating Hierarchies** Hierarchies,Time ,DataCreate a Hierarchy
7	15-08-2020 (AN)	**7 The Excel Data Model** Time data,Create an Animated Time Chart

8	17-08-2020 (FN)	**8. Explore an Excel Data Model** Excel Data Model and how to use it. **9. Add Multiple Tables** Import External Data and use it.
9	18-08-2020 (FN)	**10. Create Relationships** Link out to external data.
10	19-08-2020 (FN)	**11.Add External Data** Etxternal data is to extend it

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4th July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING		
Date of Introduction of the Course: 12.09.2020		
B.Tech Computer Science and Engineering		
Introduction to DataAnalysis using Excel Spss		
S. No	**REG.NO**	**NAME OF THE CANDIDATE**
1	U15CS001	ABHIJEET KUMAR
2	U15CS002	ABHIJIT KUMAR GUPTA
3	U15CS003	ABHISHEK KUMAR SINGH
4	U15CS004	ALLU SAI SIVA PRIYANKA NAIDU
5	U15CS005	AMBIKE KUMAR SINGH
6	U15CS006	ANBUMANI S
7	U15CS007	ANJAR ALI
8	U15CS008	ANKAM MANJUNATH
9	U15CS009	ANNADI DHANUSH
10	U15CS010	ANNAVARAPU DIVYA
11	U15CS011	ANUMOLU YESWANTH
12	U15CS012	ARAVAPALLI SIVA VINAYA
13	U15CS013	ARAVINDHAN K R
14	U15CS014	ARVIND KUMAR YADAV
15	U15CS015	ARYAN SAHU
16	U15CS016	ASHISH AGARWAL
17	U15CS017	ASHISH RANJAN
18	U15CS018	ATTANTI RAVIKANTH
19	U15CS019	BANAVATH SUNIL NAIK
20	U15CS020	BANDARU RAMESH
21	U15CS021	BATTA SIVA PRASAD
22	U15CS022	BHARATH K
23	U15CS023	BHARATHI V
24	U15CS024	BIKKI KUMAR SHA
25	U15CS025	BINGEWAR SAISHARAN
26	U15CS026	BIRADAVOLU SUCHARITHA
27	U15CS027	BODA AKHIL WESLEY
28	U15CS028	BONALA SRIDHAR RAO
29	U15CS029	BRYAN STEVE PUSHPARAJ I
30	U15CS234	DUVVURU SUNEESH KUMAR
31	U15CS235	ASHWIN VISHAL A
32	U15CS236	MALKANNAGARI HARSHAVARDHAN REDDY
33	U15CS237	BUDDI VAMSI

34	U15CS238	VATHADI SWAMYVENKATESH
35	U15CS239	AVINASH KUMAR
36	U15CS240	YUGESH S
37	U15CS030	CHAKKA KSHITHIJA
38	U15CS031	CHAMARTHI LAKSHMI NARAYANA AVINASH

C - Anuradha

Course Coordinator

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Data Analysis using Excel and Spss					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

1. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80	✓	80-100	

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	Yes
(ii)	Has adequate prior exposure to the prerequisites	NO
(iii)	Had to pickup relevant additional topics through concurrent study	NO
(iv)	Have no exposure to the background material	NO

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	No
(c)	Curiosity	NO
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class		✓			
7.	Others (please specify		✓			

A: Excellent	✓	**B: Very Good**		**C: Good**		**D: Satisfactory**		**E: Poor**	

HEAD OF THE DEPARTMENT

COURSE FEEDBACK FORM

Academic Year	2020-2021						
Term							
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Course Title	Data Analysis using Excel and Spss						
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6.	Accessibility outside the class		✓			
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of C[illegible]
Bharath Institute [illegible]
(Declared as Deemed to be [illegible]
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Data Analysis using Excel and Spss					
Number of Credits							
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2.	Comment of the Subject	✓				
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HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of ...
(Declared as Deemed to be University ...)
Chennai ...

Bharath UNIVERSITY

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Mr. BODA AKHIL WESLEY

For actively participating in the value added course **"Data Analysis Using Excel And Spss "**Conducted by School of Computing, BIHER from 10-08-2020 to 19.08.2020 .

Course Coordinator

Head of the Department

Director

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai , T.N - 600 073.

Requisition Letter

Date: 02.12.2020

From
Dr. K.P.Kaliyamurthie,
Professor & Head,
Department of CSE,
Bharath Institute of Higher Education and Research,
Chennai

To
The Dean Engineering,
Bharath Institute of Higher Education and Research,
Chennai

Respected sir

Subject: Request of Permission to conduct a value-added course on "**Introduction to Fuzzy Logic Tool Box**" (online) -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course on "**Introduction to Fuzzy Logic Tool Box**" in our campus premises on **10.12.2020** students would be participating in this course. We request you kindly to give permission to organize this event.

Timing : 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

Submitted to Principal for approval to organize this value-added course.

HOD
HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

DEAN ENGINEERING
DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

05.12.2020

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Introduction to Fuzzy Logic Tool Box** for the benefit of students. This course is scheduled from 10.12.2020 to 19.12.2020.The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr. G. Michael	Professor
2	Mr. B. Sundaraj	Assistant Professor

Head of Department
HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

To

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INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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CERTIFICATE COURSE ON Training on INTRODUCTION TO FUZZY - LOGIC TOOL BOX

COURSE SYLLABUS

1. Fuzzy Logic Toolbox Product Description

Key Features, What is Different About Using Fuzzy Logic Toolbox Online.

2. Foundations of Fuzzy Logic

Fuzzy Sets , Membership Functions . Logical Operations . If-Then Rules . Types of Fuzzy Inference Systems .

3. Description of Fuzzy Logic

Why Use Fuzzy Logic , When Not to Use Fuzzy Logic , What Can Fuzzy Logic Toolbox Software do.

4. Fuzzy Modeling and Identification

About the Toolbox and the installation.

5. Fuzzy Inference Process

Fuzzify Input , Apply Fuzzy Operator, Apply Implication Method, Aggregate All Outputs, Defuzzify, Fuzzy Inference Diagram .

6. Fuzzy Logic Designer

Fuzzy Logic Toolbox Graphical User Interface Tools, The Basic Tipping Problem , The Fuzzy Logic Designer

7. Fuzzy vs. Nonfuzzy Logic

Basic Tipping Problem, Nonfuzzy Approach, Fuzzy Logic Approach

8. Build Fuzzy Systems Using Custom Functions

Build Fuzzy Inference Systems Using Custom Functions in Fuzzy Logic Designer, Specify Custom Membership Functions, Specify Custom Membership Functions.

9. Adaptive Neuro-Fuzzy Modeling

Neuro-Adaptive Learning and ANFIS, Comparison of Dnfis and Neuro-Fuzzy Designer Functionality.

10. Data Clustering

Fuzzy Clustering , Cluster Quasi-Random Data Using Fuzzy C-Means Clustering .

11. Deployment

Deploy Fuzzy Inference Systems

12. Compile and Evaluate Fuzzy Systems

Compile and Evaluate Fuzzy Systems on Windows Platforms, Compile and Evaluate Fuzzy Systems on UNIX Platforms

COURSE OBJECTIVES

This course is designed to impart knowledge about Fuzzy Logic Toolbox Product and to Compile and Evaluate Fuzzy Systems on Windows Platforms, Compile and Evaluate Fuzzy Systems on UNIX Platforms

Students will learn

1. Understanding Fuzzy Logic Toolbox Product
2. Understanding Fuzzy Modeling and Identification
3. Analyse Fuzzy Inference Process
4. Understanding Fuzzy vs. Nonfuzzy Logic
5. Knowing Neuro-Fuzzy Modeling
6. Compile and Evaluate Fuzzy Systems on Windows Platforms as well as UNIX Platforms

B. Sandhya

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
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Chennai - 600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON STATISTICS WITH INTRODUCTION TO FUZZY LOGIC TOOL BOX

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	10-12-2020 (FN)	**1. Fuzzy Logic Toolbox Product Description** Key Features, What is Different About Using Fuzzy Logic Toolbox Online.
2	11-12-2020 (FN)	**2. Foundations of Fuzzy Logic** Fuzzy Sets , Membership Functions . Logical Operations . If-Then Rules . Types of Fuzzy Inference Systems .
3,4	12-12-2020 (FN & AN)	**3. Description of Fuzzy Logic** Why Use Fuzzy Logic , When Not to Use Fuzzy Logic , What Can Fuzzy Logic Toolbox Software do. **4. Fuzzy Modeling and Identification** About the Toolbox and the installation.
5	14-12-2020 (FN)	**5. Fuzzy Inference Process** Fuzzify Input , Apply Fuzzy Operator, Apply Implication Method, Aggregate All Outputs, Defuzzify, Fuzzy Inference Diagram .
6	15-12-2020 (FN)	**6. Fuzzy Logic Designer .** Fuzzy Logic Toolbox Graphical User Interface Tools, The Basic Tipping Problem , The Fuzzy Logic Designer **7. Fuzzy vs. Nonfuzzy Logic** Basic Tipping Problem, Nonfuzzy Approach, Fuzzy Logic Approach

7	16-12-2020 (FN)	**8. Build Fuzzy Systems Using Custom Functions** Build Fuzzy Inference Systems Using Custom Functions in Fuzzy Logic Designer, Specify Custom Membership Functions, Specify Custom Membership Functions.
8	17-12-2020 (FN)	**9. Adaptive Neuro-Fuzzy Modeling** Neuro-Adaptive Learning and ANFIS, Comparison of Dnfis and Neuro-Fuzzy Designer Functionality.
9	18-12-2020 (FN)	**10. Data Clustering** Fuzzy Clustering , Cluster Quasi-Random Data Using Fuzzy C-Means Clustering .
10	19-12-2020 (FN)	**11. Deployment** Deploy Fuzzy Inference Systems
11	19-12-2020 (FN)	**12. Compile and Evaluate Fuzzy Systems** Compile and Evaluate Fuzzy Systems on Windows Platforms, Compile and Evaluate Fuzzy Systems on UNIX Platforms

B. Sundar

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073, India.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act, 1956)
(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4th July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

B.Tech Computer Science and Engineering

Introduction To Fuzzy Logic Tool Box

S. No	REG.NO	NAME OF THE CANDIDATE
1	U15CS111	M.YESHWITHA REDDY
2	U15CS112	MAILE ARUN KUMAR
3	U15CS113	MAMUNDURU BHARATH KUMAR
4	U15CS114	MANCHALA ROHITH
5	U15CS115	MANCHIKANTI RAJITHA
6	U15CS117	MANOJ KUMAR R
7	U15CS118	MANUGUNTA BHARGAVI
8	U15CS119	MARRIBOYINA GOVARDHAN YADAV
9	U15CS120	MARRIPUDI KRISHNA CHAITANYA
10	U15CS121	MD MINHAZ RAZA HASHMI
11	U15CS122	MOHAMED SAJEEN N
12	U15CS123	MOHAMMAD ASLAM SHAREEF
13	U15CS124	MOHANKUMAR J
14	U15CS125	MOLAPANTI SIVA KALPANA
15	U15CS126	MOORABOINA NARESH
16	U15CS127	MUPPALLA SURENDRA
17	U15CS128	MURARI KUMAR CHAUDHARY
18	U15CS129	N SWAPNA RAAGA
19	U15CS130	NAGANNAGARI JAGADISH
20	U15CS132	NALLANALLI SATYA SANDEEP KUMAR
21	U15CS133	NALLURI AKHIL BABU
22	U15CS134	NAMBURI VIJAY KUMAR
23	U15CS135	NARENDULA NIREESHA
24	U15CS136	NARESH K
25	U15CS137	NEDUNURI NAGA SAI SURYA SUJITH
26	U15CS138	NEELA SAI KUMAR
27	U15CS139	NIKHIL KUMAR
28	U15CS140	NIRANJAN S
29	U15CS141	NITIN SINGH
30	U15CS142	NUKALA BHODANANDA CHARAN
31	U15CS143	OLIVER S
32	U15CS144	OMPRAKASH YADAV
33	U15CS145	PADMAVATY V

34	U15CS147	PALEPU SIVA MANIKANTA CHARI
35	U15CS148	PARTHIBAN S
36	U15CS174	RAMACHANDRAN J
37	U15CS175	RAMIREDDY LAKSHMAN AJAY
38	U15CS176	RAMIREDDY SURENDRA REDDY
39	U15CS177	RANGISETTY KARTHIK
40	U15CS178	RAPARTHY SAI KIRAN
41	U15CS179	RAVANAM CHAITANYA ARAVIND VISHNU VARDHAN
42	U15CS180	RAVURI SRIKANTH
43	U15CS181	RESHMA A
44	U15CS182	RICHARD WMVRAND J
45	U15CS183	S. PUNITHA

B. Sundar

COORSE CO-ORDINATOR

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Introduction To Fuzzy Logic Tool Box					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	No
(ii)	Has adequate prior exposure to the prerequisites	Yes
(iii)	Had to pickup relevant additional topics through concurrent study	No
(iv)	Have no exposure to the background material	Yes

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073.

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Introduction To Fuzzy Logic Tool Box					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8	✓	8-10	

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	No
(ii)	Has adequate prior exposure to the prerequisites	Yes
(iii)	Had to pickup relevant additional topics through concurrent study	No
(iv)	Have no exposure to the background material	Yes

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	No

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation		✓			
5.	Level of interaction	✓				
6.	Accessibility outside the class		✓			
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Introduction To Fuzzy Logic Tool Box					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8	✓	8-10	

3. **Preparation for the course by the student:**

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(ii)	Has adequate prior exposure to the prerequisites	Yes
(iii)	Had to pickup relevant additional topics through concurrent study	Yes
(iv)	Have no exposure to the background material	No

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(a)	Enhance by skill base in the area of specializations	No
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	No
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation		✓			
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

Bharath UNIVERSITY

பாரத் பல்கலைக்கழகம்

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be-University, u/s 3 of the UGC Act, 1956)

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Ms. S.PUNITHA

For actively participating in the value added course "**Introduction To Fuzzy Logic Tool Box**" Conducted by School of Computing, BIHER from 10-12-2020 to 19-12-2020 .

B. Sunel

Course Coordinator

Head of the Department

Director

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)
BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai , T.N - 600 073.

Requisition Letter

Date:02.03.2021

From
Dr. K.P.Kaliyamurthie,
Professor & Head,
Department of CSE,
Bharath Institute of Higher Education and Research,
Chennai

To
The Dean Engineering,
Bharath Institute of Higher Education and Research,
Chennai

Respected sir

Subject: Request of Permission to conduct a value-added course on "**Certificate Course on CRS Amadeus**" (online) -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course on "**Certificate Course on CRS Amadeus**" in our campus premises on **14.03.2021**, students would be participating in this course. We request you kindly to give permission to organize this event.

Timing: 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

Submitted to Principal for approval to organize this value-added course.

HOD

HEAD OF DEPARTMENT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

10.03.2021

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course on CRS Amadeus** for the benefit of students. This course is scheduled from 14.03.2021 which includes theory and practical. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr.C.Rajabhushanam	Professor
2	Mr.G Michael	Assistant Professor

Head of Department

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

To

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Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON ON CRS AMADEUS

Date of Introduction of the Course: 28.03.2021

COURSE SYLLABUS

1. Mathematical Basics 1

Introduction to Machine Learning, Linear Algebra

2. Mathematical Basics 2

Describes about Probability and its basic.

3. Computational Basics

Explains Numerical computation and optimization, Introduction to Machine Learning packages

4. Linear and Logistic Regression

Describes about Bias/Variance Tradeo, Regularization, Variants of Gradient Descent, MLE, MAP, Applications

5. Neural Networks

Describes about Multilayer Perceptron, Backpropagation, Applications

6. Convolutional Neural Networks 1

Explains CNN Operations, CNN architectures

7. Convolutional Neural Networks 2

Explains Training, Transfer Learning, Applications

8. Recurrent Neural Networks

Explains RNN, LSTM, GRU, Applications

9. Classical Techniques 1

Describes about Bayesian Regression, Binary Trees, Random Forests, SVM, Naïve Bayes, Applications

COURSE OBJECTIVES

This course helps to understand Functional programming is an elegant, concise and powerful programming paradigm. This style encourages breaking up programming tasks into logical units that can be easily translated into provably correct code. Haskell brings together the best features of functional programming and is increasingly being used in the industry, both for building rapid prototypes and for actual deployment.

Course Coordinator

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act)
Chennai - 600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON CRS AMADEUS

Date of Introduction of the Course: 28.03.2021

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1,	14.3.2021	**1. Mathematical Basics 1** Introduction to Machine Learning, Linear Algebra
2	15.3.2021	**2. Mathematical Basics 2** Describes about Probability and its basic
3	16.3.2021	**3. Computational Basics** Explains Numerical computation and optimization, Introduction to Machine Learning packages
4	17.3.2021	**4. Linear and Logistic Regression** Describes about Bias/Variance Tradeo, Regularization, Variants of Gradient Descent, MLE, MAP, Applications
5	18.3.2021	**5. Neural Networks** Describes about Multilayer Perceptron, Backpropagation, Applications
6	19.3.2021	**6. Convolutional Neural Networks 1** Explains CNN Operations, CNN architectures
7	21.3.2021	**7. Convolutional Neural Networks 2** Explains Training, Transfer Learning, Applications
8	22.3.2021	**8. Recurrent Neural Networks** Explains RNN, LSTM, GRU, Applications
9	23.3.2021	**9. Classical Techniques 1** Describes about Bayesian Regression, Binary Trees, Random Forests, SVM, Naïve Bayes, Applications

Course Coordinator

HOD

Bharath Institute of Science and Technology
Department of Computer Science and Engineering
School of Computing
Certificate Course on CRS Amadeus

Registered Students Name List

S.No	RegNo	Student Name
1	U15CS046	DOOLIGANTI AKHIL REDDY
2	U15CS047	DUPUGUNTLA BHANU SIVA KASINADH
3	U15CS048	GANDLUR REDDY GREESHMA
4	U15CS049	GANESH BAG
5	U15CS050	GANGARAJU RAHUL
6	U15CS051	GANGARAPU UKESH
7	U15CS052	GANGU BHAGYA
8	U15CS053	GLADSON J
9	U15CS054	GOLI SUDEEP KRISHNA
10	U15CS055	GOLLAPUDI KALYAN KUMAR
11	U15CS056	GORRE THIRUPATHI REDDY
12	U15CS057	GUJJETI MAHESH
13	U15CS058	GUNDA VINAY KUMAR
14	U15CS059	HANUMAN B
15	U15CS060	HARI HARAN M
16	U15CS061	HASTHI RUCHITHA
17	U15CS062	HEMA NARAYANAN R
18	U15CS063	INAPARTHI RAGHAVA
19	U15CS064	INJE RAVI TEJA
20	U15CS065	INNURU SWATHI
21	U15CS066	JAGADEESH K
22	U15CS067	JAGADEESWARA RAO JADDU
23	U15CS068	JAICHAND KUMAR
24	U15CS069	JANAKI RAMAN V
25	U15CS070	JHA ABHISHEK AJAY
26	U15CS071	JOHN PARAM JYOTHI JYOTHULA
27	U15CS072	JOTHI R
28	U15CS073	K THULASIRAM
29	U15CS074	KADALI VINAY NARASIMHA
30	U15CS075	KADUMU MOUNIKA
31	U15CS076	KAIPU PRANAY REDDY
32	U15CS077	KALYANAM JASWANTH NAIDU
33	U15CS078	KAMBLE NIKHIL KUMAR
34	U15CS079	KANCHARLAPALLI LOKESHWAR RAO
35	U15CS080	KANCHUMARTHI BHUVANESWAR VINAY

Course Coordinator

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act)
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Certificate Course on CRS Amadeus					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

	(i)	Have done part of this course earlier yes
	(ii)	Has adequate prior exposure to the prerequisites yes
	(iii)	Had to pickup relevant additional topics through concurrent study yes
	(iv)	Have no exposure to the background material yes

4. **The expectations for taking the course by the student are:**

	(a)	Enhance by skill base in the area of specializations yes
	(b)	Get exposed to a relevant subject yes
	(c)	Curiosity no
	(d)	Better Employment Opportunity yes
	(e)	Complete Course requirements yes
	(f)	To Improve CGPA no

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓	✓			
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1...
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Certificate Course on CRS Amadeus					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8	✓	8-10	

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	NO
(ii)	Has adequate prior exposure to the prerequisites	no
(iii)	Had to pickup relevant additional topics through concurrent study	yes
(iv)	Have no exposure to the background material	NO

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	yes
(b)	Get exposed to a relevant subject	no
(c)	Curiosity	yes
(d)	Better Employment Opportunity	no
(e)	Complete Course requirements	NO
(f)	To Improve CGPA	yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation		✓			
5.	Level of interaction	✓				
6.	Accessibility outside the class		✓			
7.	Others (please specify	✓				

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Certificate Course on CRS Amadeus					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	no
(ii)	Has adequate prior exposure to the prerequisites	no
(iii)	Had to pickup relevant additional topics through concurrent study	yes
(iv)	Have no exposure to the background material	yes

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	no
(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	yes
(d)	Better Employment Opportunity	no
(e)	Complete Course requirements	yes
(f)	To Improve CGPA	no

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.,
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Chennai - 600 073. INDIA

Bharath UNIVERSITY

பாரத் பல்கலைக்கழகம்

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be-University, u/s 3 of the UGC Act, 1956)

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Mr. GANGARAPU UKESH

For actively participating in the value added course **"Certificate Course on CRS Amadeus"**Conducted by School of Computing, BIHER from 14.03.2021.

Course Coordinator

Head of the Department

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)

Director

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

Requisition letter

Date: **18.02.2021**

From

Dr.K.P.Kaliyamurthie,

Professor & Head,

Department of CSE,

Bharath Institute of Higher Education and Research,

Chennai.

To

The Dean Engineering,

Bharath Institute of Higher Education and Research,

Chennai.

Respected Sir

Sub: Request of permission to conduct a value – added course on **"Microsoft Cloud Application" (online)** -Reg

With reference to above subject, I would like to bring to your kind notice that , our department interested to organize value added course "Microsoft Cloud Application" – reg in our campus premises on 22.02.2021, students would be participating in this course. We request you kindly to give permission to organize this event.

Timing: 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN)

Submitted to principal for approval to organize this value-added course.

HOD
HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

DEAN ENGINEERING
DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CIRCULAR

20.02.2021

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course of Microsoft Cloud Application** for the benefit of students. This course is scheduled from 22.02.2021 to 03.03.2021. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr.C. Rajabooshnam	Professor
2	Mr. R. Sridhar	Assistant Professor

Head of Department

Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

To

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INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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CERTIFICATE COURSE ON MICROSOFT CLOUD APPLICATION

Date of Introduction of the Course: 07.03.2021

COURSE SYLLABUS

1. Introduction of cloud computing

General Benefits and Architecture, Business Drivers, Main players in the Field, Overview of Security Issues, XaaS Cloud Based Service Offerings

2. Key Amazon offerings

EC2, Simple DB, S3, Simple Queue, Simple Relational Database, Elastic Map Reduce, Virtual Amazon Cloud. S3 Command Line tool

3. Bundling Amazon instances

We will learn how to create and manipulate Amazon instances with command line tools, transfer application software to instances and bundle them into new AMI-s that could be offered to the public.

4. Amazon's Elastic Block Storage

(EBS) provides persistence storage in the cloud. We will learn how to move application code and data from non-EBS instance into EBS volumes, and create our own EBS based AMI-

5 Amazon's AWS Identity

Management **and** Security in the Cloud

6. Amazon's Virtual Private Cloud

Amazon's Virtual Private Cloud (VPC) and Directory Service

7. Java AWS SDK, S3 API

Java AWS SDK, S3 API, Relational Database Service, SimlpeDB Service , NoSQL Databases

8. Amazon's Messaging in the Cloud

We will review details of AWS Simple Notification and Simple Queuing Service.

9. Amazon's Restful Web Services

AWS APIs are sufficiently rich to allow you easy interaction with AWS service. However, in order to establish connectivity between your own modules in the Cloud you should use Restful Web Services

10. Elastic Load Balancing and Auto Scaling

allow automation of resource manipulation

11. Introduction to Microsoft Cloud

Microsoft offers a set of resources and features that are of great utility to those who are restricted to programming in .Net Environment

12. Map Reduce

Performs large distributed computation as a set of distributed operations on data sets composed of key-value pairs producing a reduced set of key-value pairs. We will learn the basics of Hadoop, an open-source implementation of Map Reduce, and its Java API. Hadoop Distributed File System (HDFS) features.

COURSE OBJECTIVES

To learn and analyse the Cloud Computing has transformed the IT industry by opening the possibility for infinite or at least highly elastic scalability in the delivery of enterprise applications and software as a service (SaaS).

Specifically, the course has the following objectives:

Students will learn

1. Understanding cloud concepts
2. Understanding key amazon offerings.
3. Analyse bundling amazon instances.
4. Create amazon messaging in the cloud,
5. Demonstrate a conceptual understanding of the unified nature of map reduce.
6. Understanding about amazon virtual private cloud.

R. Sridhar

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
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CERTIFICATE COURSE ON MICROSOFT COLUD APPLICATION

Date of Introduction of the Course: 07.03.2021

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	22-02-2021(FN)	**1. Introduction of cloud computing** General Benefits and Architecture, Business Drivers, Main players in the Field, Overview of Security Issues, XaaS Cloud Based Service Offerings
2	23-02-2021 (FN)	**2. Key Amazon offerings** EC2, Simple DB, S3, Simple Queue, Simple Relational Database, Elastic Map Reduce, Virtual Amazon Cloud. S3 Command Line tool
3	24-02-2021(FN)	**3. Bundling Amazon instances** We will learn how to create and manipulate Amazon instances with command line tools, transfer application software to instances and bundle them into new AMI-s that could be offered to the public.
4	25-02-2021(FN)	**4. Amazon's Elastic Block Storage** (EBS) provides persistence storage in the cloud. We will learn how to move application code and data from non-EBS instance into EBS volumes, and create our own EBS based AMI
5	26-02-2021(FN)	**5. Amazon's AWS Identity** Management and Security in the Cloud
6,7	27-02-2021 (FN&AN)	**6. Amazon's Virtual Private Cloud** **7. Java AWS SDK, S3 API** Java AWS SDK, S3 API, Relational Database Service, Simple DB Service, NoSQL Databases
8	29-02-2021(FN)	**8. Amazon's Messaging in the Cloud** We will review details of AWS Simple Notification and Simple Queuing Service.
9	01-03-2021 (FN)	**9. Amazon's RESTFul Web Services** AWS APIs are sufficiently rich to allow you easy interaction with AWS service. However, in order to establish connectivity between your own modules in the Cloud you should use RESTFul Web Services.

10	**02-03-2021 (FN)**	**10. Elastic Load Balancing and Auto Scaling** Allow automation of resource manipulation
11	**03-03-2021 (FN)**	**11. Introduction to Microsoft Cloud** Microsoft offers a set of resources and features that are of great utility to those who are restricted to programming in .Net Environment
12	**03-03-2021 (FN)**	**12. MapReduce** Performs large distributed computation as a set of distributed operations on data sets composed of key-value pairs producing a reduced set of key-value pairs. We will learn the basics of Hadoop, an open-source implementation of MapReduce, and its Java API. Hadoop Distributed File System (HDFS) features.

R. Sridhar

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Chennai - 600 073. INDIA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING		
Microsoft Cloud Application		
B.Tech Computer Science and Engineering(2020-2021)		
S. No	**REG.NO**	**NAME OF THE CANDIDATE**
1	U15CS101	KOTNANI KRISHNA VAMSI
2	U15CS102	KRISHNA KUMAR YADAV
3	U15CS103	KUMMETA SAI VAMSI KRISHNA REDDY
4	U15CS104	KUNISETTY JYOTHSNA
5	U15CS105	LALJEE
6	U15CS106	LINGAMPELLY SANNITH REDDY
7	U15CS107	LOHESH WARAN S
8	U15CS108	M SHIVA PRAKASH
9	U15CS109	M UTTEJ
10	U15CS110	M. DINESH REDDY
11	U15CS111	M.YESHWITHA REDDY
12	U15CS112	MAILE ARUN KUMAR
13	U15CS113	MAMUNDURU BHARATH KUMAR
14	U15CS114	MANCHALA ROHITH
15	U15CS115	MANCHIKANTI RAJITHA
16	U15CS117	MANOJ KUMAR R
17	U15CS118	MANUGUNTA BHARGAVI
18	U15CS119	MARRIBOYINA GOVARDHAN YADAV
19	U15CS120	MARRIPUDI KRISHNA CHAITANYA

20	U15CS121	MD MINHAZ RAZA HASHMI
21	U15CS122	MOHAMED SAJEEN N
22	U15CS123	MOHAMMAD ASLAM SHAREEF
23	U15CS124	MOHANKUMAR J
24	U15CS125	MOLAPANTI SIVA KALPANA
25	U15CS126	MOORABOINA NARESH
26	U15CS127	MUPPALLA SURENDRA
27	U15CS128	MURARI KUMAR CHAUDHARY
28	U15CS129	N SWAPNA RAAGA
29	U15CS130	NAGANNAGARI JAGADISH
30	U15CS132	NALLANALLI SATYA SANDEEP KUMAR
31	U15CS133	NALLURI AKHIL BABU
32	U15CS134	NAMBURI VIJAY KUMAR
33	U15CS135	NARENDULA NIREESHA
34	U15CS200	SITAROJ SRIKANTH
35	U15CS201	SMITHA C.S
36	U15CS202	SODISETTY SANDEEP
37	U15CS203	SUBASH CHANDRAN V
38	U15CS204	SUBHAM RAY
39	U15CS205	SUDALAGUNTA GOPI KRISHNA
40	U15CS206	SUJEETH KUMAR K
41	U15CS207	SWARNA LAKSHMI PRIYANKA
42	U15CS208	TAGORE S

R. Sri

COURSE CO-ORDINATOR

HEAD OF THE DEPARTMENT
Department Of Computer Science & Engg.
Bharath Institute Of Higher Education
(Declared as Deemed to be University U/S
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Microsoft Cloud Application					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8	✓	8-10	

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	No
(ii)	Has adequate prior exposure to the prerequisites	Yes
(iii)	Had to pickup relevant additional topics through concurrent study	Yes
(iv)	Have no exposure to the background material	No

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	No
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject		✓			
3.	Clarity of expression		✓			
4.	Level of preparation		✓			
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent		B: Very Good		C: Good	✓	D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Microsoft Cloud Application					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	90

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8	✓	8-10	

3.	**Preparation for the course by the student:**	No
	(i) Have done part of this course earlier	No
	(ii) Has adequate prior exposure to the prerequisites	No
	(iii) Had to pickup relevant additional topics through concurrent study	Yes
	(iv) Have no exposure to the background material	No
4.	**The expectations for taking the course by the student are:**	
	(a) Enhance by skill base in the area of specializations	Yes
	(b) Get exposed to a relevant subject	No
	(c) Curiosity	Yes
	(d) Better Employment Opportunity	Yes
	(e) Complete Course requirements	Yes
	(f) To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	-	✓			
3.	Clarity of expression	✓				
4.	Level of preparation		✓			
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
Declared as Deemed to be University U/S 3 Of UGC Act, 195
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Microsoft Cloud Application					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60	✓	60-80		80-100	

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	Yes
(ii)	Has adequate prior exposure to the prerequisites	NO
(iii)	Had to pickup relevant additional topics through concurrent study	Yes
(iv)	Have no exposure to the background material	Yes

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	NO
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

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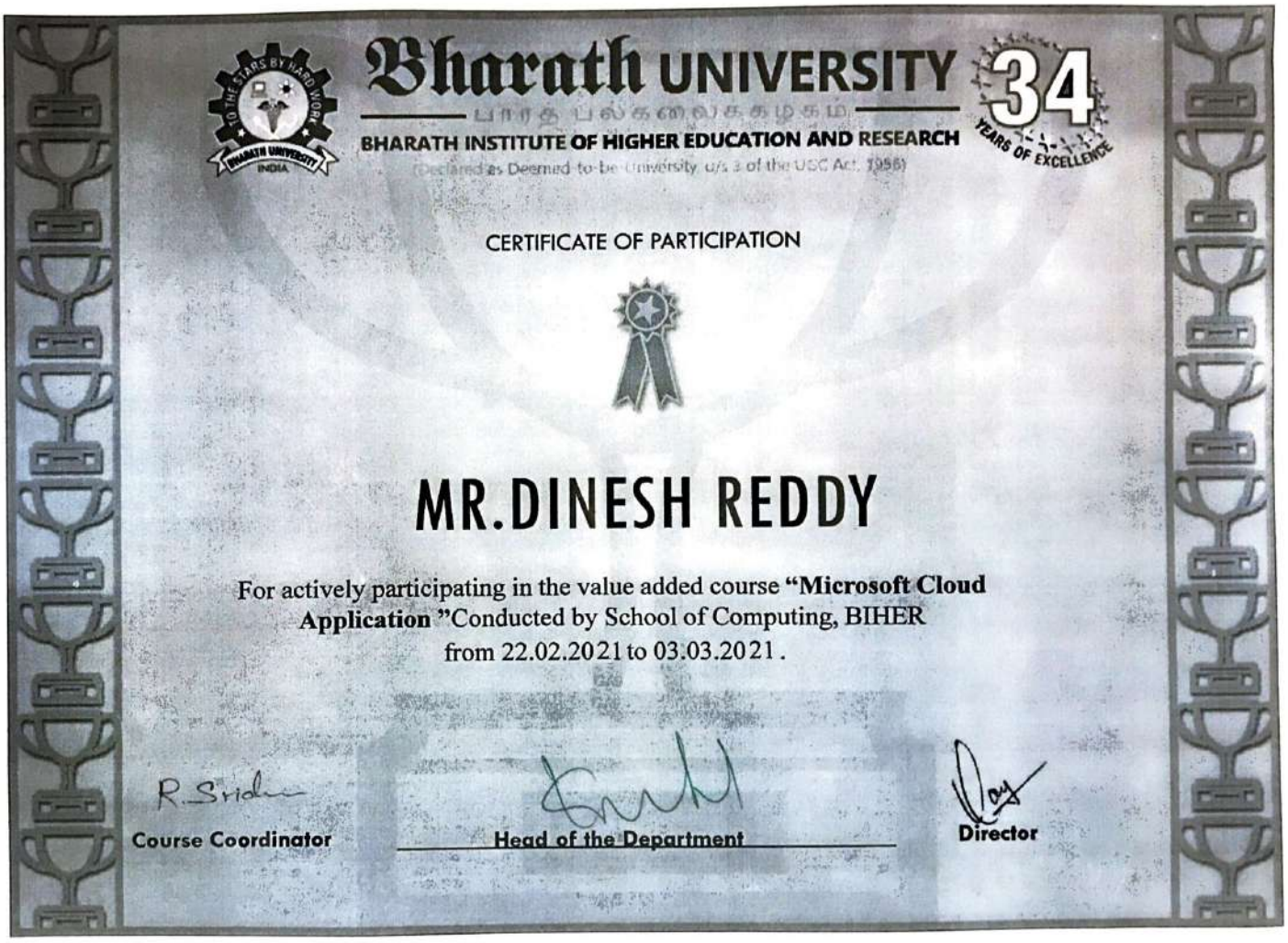
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA



Bharath UNIVERSITY

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BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be University u/s 3 of the UGC Act, 1956)

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

MR.DINESH REDDY

For actively participating in the value added course **"Microsoft Cloud Application "**Conducted by School of Computing, BIHER from 22.02.2021 to 03.03.2021 .

R. Sridhar

Course Coordinator

Head of the Department

Director

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

Requisition letter

Date: **28.03.2021**

From

Dr. K.P.Kaliyamurthie,

Professor & Head,

Department of CSE,

Bharath Institute of Higher Education and Research,

Chennai.

To

The Dean Engineering,

Bharath Institute of Higher Education and Research,

Chennai.

Respected Sir

Sub: Request of permission to conduct a value – added course on "**Microsoft Windows Application" (online)** -Reg

With reference to above subject, I would like to bring to your kind notice that , our department interested to organize value added course "**Microsoft Windows Application**" – reg in our campus premises on 30.03.2021, students would be participating in this course. We request you kindly to give permission to organize this event.

Timing: 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN)

Submitted to principal for approval to organize this value-added course.

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

DEAN ENGINEERING

DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
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Selaiyur, Chennai-600 073.

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CIRCULAR

29.03.2021

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course of Microsoft Windows Application** for the benefit of students. This course is scheduled from 30.03.2021 to 09.04.2021 The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr. C. Rajabhushanam	Professor
2	Mrs. G. Kavitha	Assistant Professor

Head of Department

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
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To

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INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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CERTIFICATE COURSE ON MICROSOFT WINDOWS APPLICATION

Date of Introduction of the Course: 11.04.2021

COURSE SYLLABUS

1. Installing Windows

This module covers installing the Windows client OS. Students will learn the different editions of Windows client, requirements, and new features introduced.

2. Configuring Authorization and Authentication

This module introduces the tools and features of Windows for authorizing access to Windows clients. Students will learn about methods for how users sign-in to Windows.

3. Post Installation Configuration and Personalization

This module covers common post-installation tasks in Windows client. Students will learn how to customize the user interface, as well as using the control panel and settings app to configure common OS settings.

4. Updating Windows

Servicing model and how it applies to various scenarios. Students will learn the various different methods for updating Windows and applications, as well as managing updates using tools like group policy and Windows Update for Business.

5. Configuring Networking

This module will introduce to IPv4 and IPv6, and concepts like DNS. Students will learn how to configure network settings in Windows, as well as learn about wireless network technologies.

6. Configuring Storage

This module covers storage configuration and management in Windows 10. Students will be introduced to local, cloud and virtual storage options.

7. Configuring Data Access and Usage

Students will learn how to configure file and folder permissions as well as shared folders. Students will also learn configuring settings through methods such as local and group policy.

8. Managing Apps in Windows Client

This module will cover the different types of apps and supported installation methods. Students will learn how to install apps using manual and automated methods, as well as manage app delivery using the Windows Store.

9. Configuring Threat Protection and Advanced Security

This module will teach students about using encryption, firewalls, and IPSec to help protect against threats. The module will conclude with how to configure and use Windows Defender and AppLocker.

10. Supporting the Windows Client Environment

This module will also discuss methodologies for effectively troubleshooting issues and how to proactively manage and optimize Windows.

11. Trouble Shooting Flies and Application

This module also includes common methods for troubleshooting application installation issues, compatibility issues, and resolving browser issues.

12. Trouble Shooting Hardware and Drivers

Students will also learn steps for troubleshooting system hardware and external peripherals such as USB drives and printers, including diagnostic methods and remediation.

COURSE OBJECTIVES

To learn and analyse how to managing storage, files, and devices as well as how to configure network connectivity for Windows. Students will also learn how to secure the Windows OS and protect the data on the device. Finally, students will learn how to manage and troubleshoot Windows clients.

Specifically, the course has the following objectives:

Students will learn

1. Understanding Microsoft application
2. Understanding authorization and authentication.
3. Analyse updating windows.
4. Configuring data access and usage.
5. Understanding of trouble shooting and application.
6. Understanding of trouble shooting hardware and drivers.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
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Chennai - 600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON MICROSOFT WINDOWS APPLICATION

Date of Introduction of the Course: 11.04.2021

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN)
Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	30-03-2021(FN)	**1. Installing Windows** This module covers installing the Windows client OS. Students will learn the different editions of Windows client, requirements, and new features introduced.
2	31-03-2021 (FN)	**2.Configuring Authorization and Authentication** This module introduces the tools and features of Windows for authorizing access to Windows clients. Students will learn about methods for how users sign-in to Windows.
3	01-04-2021(FN)	**3.Post Installation Configuration and Personalization** This module covers common post-installation tasks in Windows client. Students will learn how to customize the user interface, as well as using the control panel and settings app to configure common OS settings.
4,5	02-04-2021(FN) &(AN)	**4. Updating Windows** **5. Configuring Networking** Servicing model and how it applies to various scenarios. Students will learn the various different methods for updating Windows and applications, as well as managing updates using tools like group policy and Windows Update for Business.
6	04-04-2021(FN)	**6. Configuring Storage** This module will introduce to IPv4 and IPv6, and concepts like DNS. Students will learn how to configure network settings in Windows, as well as learn about wireless network technologies.
7	05-04-2021 (FN)	**7. Configuring Data Access and Usage** Students will learn how to configure file and folder permissions as well as shared folders. Students will also learn configuring settings through methods such as local and group policy.

8	**06-04-2021(FN)**	**8. Managing Apps in Windows Client** This module will cover the different types of apps and supported installation methods. Students will learn how to install apps using manual and automated methods, as well as manage app delivery using the Windows Store.
9	**07-04-2021 (FN)**	**9. Configuring Threat Protection and Advanced Security** This module will teach students about using encryption, firewalls, and IPSec to help protect against threats. The module will conclude with how to configure and use Windows Defender and AppLocker.
10	**08-04-2021 (FN)**	**10. Supporting the Windows Client Environment** This module also includes common methods for troubleshooting application installation issues, compatibility issues, and resolving browser issues.
11,12	**09-04-2021 (FN)&(AN)**	**11. Trouble Shooting Hardware and Drivers** **12. Trouble Shooting Flies and Application** Students will also learn steps for troubleshooting system hardware and external peripherals such as USB drives and printers, including diagnostic methods and remediation.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act, 1956)
(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4th July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING		
Microsoft Windows Application		
B.Tech Computer Science and Engineering (2020-2021)		
S. No	**REG.NO**	**NAME OF THE CANDIDATE**
1	U15CS050	PERABATHULA SUNIL KUMAR
2	U15CS051	PERAM ANTONY
3	U15CS052	PERAM VENKATA KRISHNA REDDY
4	U15CS053	PERURI V S V KRISHNA MOHAN
5	U15CS054	POORVISHA M
6	U15CS055	PRADEEP YADAV
7	U15CS056	PRASAD ABHISHEK KUMAR
8	U15CS057	PRASHANT PATHAK
9	U15CS058	PRATHI VENKAT RANJITH KUMAR
10	U15CS059	PRAVEENA S
11	U15CS060	PUJALA NARENDRA BABU
12	U15CS061	PULAGAM SAI PRATHAP REDDY
13	U15CS062	PULIMUNI HIMAJA
14	U15CS063	PULUKURI SASIDHAR
15	U15CS064	PUPPALLA SANDEEP KUMAR
16	U15CS065	PUTLURI ANURADHA
17	U15CS066	R4AVI NARENDRA
18	U15CS067	RAGILLA SANTHOSH KUMAR
19	U15CS068	RAJULA SREEVANI
20	U15CS069	RAKESH RATHI
21	U15CS070	RAMACHANDRAN J
22	U15CS071	RAMIREDDY LAKSHMAN AJAY
23	U15CS072	RAMIREDDY SURENDRA REDDY
24	U15CS073	RANGISETTY KARTHIK
25	U15CS074	RAPARTHY SAI KIRAN
26	U15CS075	RAVANAM CHAITANYA ARAVIND VISHNU VARDHAN
27	U15CS076	RAVURI SRIKANTH
28	U15CS077	RESHMA A
29	U15CS078	RICHARD WMVRAND J
30	U15CS079	S. PUNITHA
31	U15CS080	S. SAI SHRUTHI
32	U15CS081	SADHOLLA PRANAY REDDY
33	U15CS082	SAI RAMANA S M
34	U15CS083	SANAYAGARI JAYA CHANDRA REDDY
35	U15CS084	SANDANAMUDI CHANDRA TEJA

36	U15CS085	SANTHOSH RAJ M
37	U15CS086	SATHISH S
38	U15CS087	SEETAPATI HEMA SEKHAR
39	U15CS088	SESHA SRUJAN B
40	U15CS089	SHAIK AFRIDI
41	U15CS090	SHAIK SABIR
42	U15CS091	SHAIK YASMEEN
43	U15CS092	SHARYARAI S
44	U15CS093	SHATRUGHAN SUMAN S
45	U15CS094	SINGAMALA VENKATA SAI RAVI TEJESWAR REDDY
46	U15CS095	SIRI GIRI HAREESH
47	U15CS096	SITAROJ SRIKANTH
48	U15CS097	SMITHA C.S
49	U15CS098	SODISETTY SANDEEP
50	U15CS099	SUBASH CHANDRAN V
51	U15CS100	SUBHAM RAY
52	U15CS101	SUDALAGUNTA GOPI KRISHNA
53	U15CS102	SUJEETH KUMAR K
54	U15CS218	SWARNA LAKSHMI PRIYANKA
55	U15CS219	TAGORE S
56	U15CS220	TAKKELLA AJITH CHOWDARY

Course Coordinator

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Microsoft Windows Application					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8 ✓		8-10	

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	NO
(ii)	Has adequate prior exposure to the prerequisites	yes
(iii)	Had to pickup relevant additional topics through concurrent study	NO
(iv)	Have no exposure to the background material	yes

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	yes
(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	yes
(d)	Better Employment Opportunity	yes
(e)	Complete Course requirements	yes
(f)	To Improve CGPA	yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture		✓			
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class		✓			
7.	Others (please specify		✓			

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

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Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Microsoft Windows Application					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

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2. **Number of hours per week spent on the course (Other than lecture hours)**

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(iii)	Had to pickup relevant additional topics through concurrent study	NO
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(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	yes
(d)	Better Employment Opportunity	yes
(e)	Complete Course requirements	yes
(f)	To Improve CGPA	NO

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture		✓			
2.	Comment of the Subject	✓				
3.	Clarity of expression		✓			
4.	Level of preparation	✓				
5.	Level of interaction		✓			
6.	Accessibility outside the class	✓				
7.	Others (please specify		✓			

A: Excellent		B: Very Good	✓	C: Good		D: Satisfactory		E: Poor	

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COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Microsoft Windows Application					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	yes
(ii)	Has adequate prior exposure to the prerequisites	yes
(iii)	Had to pickup relevant additional topics through concurrent study	yes
(iv)	Have no exposure to the background material	yes

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	no
(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	yes
(d)	Better Employment Opportunity	no
(e)	Complete Course requirements	yes
(f)	To Improve CGPA	no

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.,
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Chennai - 600 073. INDIA

Bharath UNIVERSITY

பாரத் பல்கலைக்கழகம்

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

Declared as Deemed-to-be-University, u/s 3 of the UGC Act, 1956

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

MS. PUNITHA

For actively participating in the value added course **"Microsoft Windows Application "**Conducted by School of Computing, BIHER from 30.03.2021 to 09.04.2021 .

Course Coordinator

Head of the Department

Director

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)
BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai - T.N - 600 073.

Requisition Letter

Date:31.03.2021

From
Dr. K.P.Kaliyamurthie,
Professor & Head,
Department of CSE,
Bharath Institute of Higher Education and Research,
Chennai

To
PRO VICE CHANCELLOR,
Bharath Institute of Higher Education and Research,
Chennai

Respected sir

Subject: Request of Permission to conduct a value-added course on **"BUILDING WEB APPLICATIONS IN PHP" (ONLINE)** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course on **"BUILDING WEB APPLICATIONS IN PHP"** in our campus premises from **6.04.2021**, students would be participating in this course. We request you kindly to give permission to organize this event.

Timing : 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

Submitted to Principal for approval to organize this value-added course.

HOD

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act, 1956)
Chennai - 600 073. INDIA

DEAN ENGINEERING
DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
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Selaiyur, Chennai-600 073.

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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CIRCULAR

2.04.2021

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course of BUILDING WEB APPLICATIONS IN PHP** for the benefit of students. This course is scheduled from 6.04..2021 to 16.04.2021. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr. C. Rajabhushanam	Professor
2	Ms. N. Priya	Assistant Professor

Head of Department

HEAD OF DEPARTMENT
Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
(Declared as Deemed to be University U/S 3 Of UGC Act 1956)
Chennai - 600 073. INDIA

To

Copy to CSE

Copy to IT

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON BUILDING WEB APPLICATIONS IN PHP

Date of Introduction of the Course: 9.05.2021

COURSE SYLLABUS

1. Introduction of Web applications in PHP

To learn and analyse Web applications that use a combination of **server-side scripts** (PHP and ASP) to handle the storage and retrieval of the information, and client-side scripts (JavaScript and HTML) to present information to users.

2. Web applications in PHP Fundamentals -1

The web browser or client permits the users to interact with the functio ns of the web developed with HTML, CSS, and JavaScript.

3. Introduction to Dynamic Web Content

It is the basic structure of a web application and how a web browser interacts with a web server. We explore the Request-Response Cycle that is the basis of the Hypertext Transfer Protocol (HTTP).

4. HyperText Markup Language (HTML)

HTML cover the basics of the HyperText Markup Language (HTML) that is the markup for web pages.

5. Cascading Style Sheets (CSS)

Describes effectively, and in context with basics of cascading Style Sheets (CSS) that allow us to style the markup for web pages.

6. Installing PHP and SQL

The task is to work through the installation steps including installing a text editor, installing MAMP or XAMPP (or equivalent), creating a MySql Database, and writing a PHP program.

7. Introduction to PHP

Begins learning PHP.

8. PHP Arrays

We learn unique aspects of arrays in the PHP language.

9. PHP Functions

We look at unique aspects of functions in PHP.

10. PHP and HTML Forms

We look at how HTML forms are created and processed in the PHP language.

COURSE OBJECTIVES

Analyze the basic structure of a PHP web application and be able to install and maintain the web server, compile, and run a simple web application and learn how databases work and how to design one, as well as how to use php MyAdmin to work with MySQL.

Specifically, the course has the following objectives:

Students will learn

1. Understanding basic PHP programming
2. Learning to design and implement simple SQL databases.
3. To construct Web Applications that
    - Access simple databases from PHP using dynamically generated SQL.
    - Extract information from foreign websites.
    - Send email to potential users.
    - Perform access control using cookies.
4. To describe and evualate the mechanisms behind dynamic websites.
5. To introduce the techniques used for constructing advanced community websites.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON BUILDING WEB APPLICATIONS IN PHP

Date of Introduction of the Course: 09.05.2021

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1,	6-04-2021(FN)	**1. Introduction of Web applications in PHP** To learn and analyse Web applications that use a combination of side scripts (PHP and ASP) to handle the storage and retrieve information
2	7-04-2021(FN)	**2. Web applications in PHP Fundamentals -1** The web browser or client permits the users to interact with the f of the web developed with HTML, CSS, and JavaScript.
3	8-04-2021 (FN)	**3 Introduction to Dynamic Web Content** It is the basic structure of a web application and how a web browser interacts with a web server. We explore the Request-Response C that is the basis of the Hypertext Transfer Protocol (HTTP).
4,5	9-04-2021 (FN&AN)	**4. Hypertext Markup Language (HTML)** HTML cover the basics of the HyperText Markup Language (HTM is the markup for web pages.
6	11-04-2021 (FN)	**5 Cascading Style Sheets (CSS)** Describes effectively, and in context with basics of cascading Sheets (CSS) that allow us to style the markup for web pages.
7	12-04-2021 (FN)	6. Installing PHP and SQL The task is to work through the installation steps in installing a text editor, installing MAMP or XAMPP creating a MySQL Database, and writing a PHP program Begins learning PHP
8,9	14-04-2021 (FN) & 15-04-2021 (FN)	**8. PHP Arrays** We learn unique aspects of arrays in the PHP language
10	16-04-2021 (FN)	**9. PHP Functions** We look at unique aspects of functions in PHP.

N. priya

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.,
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(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4th July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

BUILDING WEB APPLICATIONS IN PHP

DATE OF INTRODUCTION:09-05-2021

STUDENT NAME LIST

S. No	REG.NO	NAME OF THECANDIDATE
1	U15CS001	ABHIJEET KUMAR
2	U15CS002	ABHIJIT KUMARGUPTA
3	U15CS003	ABHISHEK KUMARSINGH
4	U15CS004	ALLU SAI SIVA PRIYANKA NAIDU
5	U15CS005	AMBIKE KUMARSINGH
6	U15CS006	ANBUMANI S
7	U15CS007	ANJAR ALI
8	U15CS008	ANKAM MANJUNATH
9	U15CS009	ANNADI DHANUSH
10	U15CS010	ANNAVARAPU DIVYA
11	U15CS011	ANUMOLU YESWANTH
12	U15CS012	ARAVAPALLI SIVAVINAYA
13	U15CS013	ARAVINDHAN K R
14	U15CS014	ARVIND KUMARYADAV
15	U15CS015	ARYAN SAHU
16	U15CS016	ASHISH AGARWAL
17	U15CS017	ASHISH RANJAN
18	U15CS018	ATTANTI RAVIKANTH
19	U15CS019	BANAVATH SUNIL NAIK
20	U15CS020	BANDARU RAMESH
21	U15CS021	BATTA SIVA PRASAD
22	U15CS022	BHARATH K
23	U15CS023	BHARATHI V
24	U15CS024	BIKKI KUMAR SHA
25	U15CS025	BINGEWAR SAISHARAN
26	U15CS026	BIRADAVOLUSUCHARITHA

27	U15CS027	BODA AKHIL WESLEY
28	U15CS028	BONALA SRIDHAR RAO
29	U15CS029	BRYAN STEVEPUSHPARAJ I
30	U15CS030	CHAKKA KSHITHIJA
31	U15CS031	CHAMARTHI LAKSHMI NARAYANAAVINASH
32	U15CS032	CHANDRA KANTCHOUDHARY
33	U15CS033	CHAPPIDI LAKSHMIKANTH REDDY
34	U15CS034	CHIDIPOTHU PRATHYUSHA
35	U15CS035	CHINTAGINJALA VENKATA SRI SAISRAVYA
36	U15CS036	CHOWDHARY PRASANNA KUMAR
37	U15CS037	CHUNDI VENKATA SESHASAI RAMANAPATANJALI
38	U15CS038	CILLA SAI KISHORE
39	U15CS039	D N S HRUDAYBHARADWAJ
40	U15CS040	DADAM CHAITHRA
41	U15CS041	DEEPAK KUMAR SINGH
42	U15CS042	DILLIGANESH V
43	U15CS043	DIVAKAR M
44	U15CS044	DIVYA VANI T
45	U15CS045	DODDI PUJITHA
46	U15CS046	DOOLIGANTI AKHILREDDY
47	U15CS047	DUPUGUNTLA BHANU SIVA KASINADH
48	U15CS048	GANDLUR REDDYGREESHMA
49	U15CS049	GANESH BAG
50	U15CS050	GANGARAJU RAHUL
51	U15CS051	GANGARAPU UKESH
52	U15CS052	GANGU BHAGYA

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Chennai - 600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		BUILDING WEB APPLICATIONS IN PHP					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8	✓	8-10	

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	No
(ii)	Has adequate prior exposure to the prerequisites	No
(iii)	Had to pickup relevant additional topics through concurrent study	Yes
(iv)	Have no exposure to the background material	Yes

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	Yes
(d)	Better Employment Opportunity	No
(e)	Complete Course requirements	No
(f)	To Improve CGPA	No

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture	✓				
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class		✓			
7.	Others (please specify		✓			

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

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COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		BUILDING WEB APPLICATIONS IN PHP					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80	✓	80-100	

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

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(iii)	Had to pickup relevant additional topics through concurrent study	Yes
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4. **The expectations for taking the course by the student are:**

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(b)	Get exposed to a relevant subject	No
(c)	Curiosity	NO
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	NO
(f)	To Improve CGPA	NO

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture		✓			
2.	Comment of the Subject		✓			
3.	Clarity of expression		✓			
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

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COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		BUILDING WEB APPLICATIONS IN PHP					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80	✓	80-100	

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8		8-10	✓

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	Yes
(ii)	Has adequate prior exposure to the prerequisites	No
(iii)	Had to pickup relevant additional topics through concurrent study	NO
(iv)	Have no exposure to the background material	NO

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	NO
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	NO
(f)	To Improve CGPA	NO

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		A	B	C	D	E
1.	Pace of the Teaching/lecture		✓			
2.	Comment of the Subject		✓			
3.	Clarity of expression	✓				
4.	Level of preparation	✓				
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent	✓	B: Very Good		C: Good		D: Satisfactory		E: Poor	

HEAD OF THE DEPARTMENT

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Department Of Computer Science & Engg.,
Bharath Institute Of Higher Education & Research
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Chennai - 600 073. INDIA

Bharath UNIVERSITY

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BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed-to-be-University, u/s 3 of the UGC Act, 1956)

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Ms.BHARATHI.V

For actively participating in the value added course **"BUILDING WEB APPLICATIONS IN PHP "**conducted by School of Computing, BIHER from 6-4-2021 to 16-4-2021.

Course Coordinator | **Head of the Department** | **Director**

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai - T.N - 600 073.

Requisition Letter

Date:31.03.2021

From
Dr. K.P.Kaliyamurthie,
Professor & Head,
Department of CSE,
Bharath Institute of Higher Education and Research,
Chennai

To
PRO VICE CHANCELLOR,
Bharath Institute of Higher Education and Research,
Chennai

Respected sir

Subject: Request of Permission to conduct a value-added course on **"RECENT TRENDS IN BIG DATA ANALYTICS" -(ONLINE)** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course on **"RECENT TRENDS IN BIG DATA ANALYTICS"** in our campus premises from **6.04.2021**, students would be participating in this course. We request you kindly to give permission to organize this event.

Timing : 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

Submitted to Principal for approval to organize this value-added course.

HOD

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DEAN ENGINEERING
DEAN (Engineering)
Bharath Institute of Science & Technology
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Selaiyur, Chennai-600 073.

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CIRCULAR

2.04.2021

The school of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course of RECENT TRENDS IN BIG DATA ANALYTICS** for the benefit of students. This course is scheduled from 6.04.2021 to 17.04.2021. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1	Dr. C. Nalini	Professor
2	Mr. Sai Goutham	Assistant Professor

Head of Department

To

Copy to CSE

Copy to IT

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Department Of Computer Science & Engg.,
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CERTIFICATE COURSE ON RECENT TRENDS IN BIG DATA ANALYTICS

Date of Introduction of the Course: 9.05.2021

COURSE SYLLABUS

1. Introduction to Big data
To learn and analyse Big Data which is a collection of data that **is huge in volume, yet growing exponentially with time.**

2. Understanding Big Data Storage
Demonstrates a conceptual understanding of collection and management of large datasets.

3. Introduction to HDFS Architecture
HDFS is a distributed file system that handles large data sets running on commodity hardware.

4. Map Reduce Programming Model
Map Reduce is **a** programming model for processing large data sets with a parallel , distributed algorithm on a cluster. Introduction to Map Reduce Programming Model.

5. Advanced Analytical Theory and Methods
Describes effectively, and in context with Advanced analytic techniques include those such as **data/text mining, machine learning, pattern matching, forecasting, visualization, semantic analysis, sentiment analysis, network and cluster analysis** , multivariate statistics, graph analysis, simulation, complex event processing, neural networks.

6. Overview of Clustering and Classification
Understanding clustering and classification techniques.

7. Association rules
Association rule mining, at a basic level, involves the use of machine learning models to analyze data for patterns, or co-occurrences, in a database.

8. Introduction to Recommendation system
A recommender system is a type of information filtering system.

9. Introduction to Stream concepts

Big data streaming is a process in which big data is quickly processed in order to extract real-time insights from it.

10. NOSQL DATA MANAGEMENT FORBIGDATA
NoSQL is a better choice for businesses whose data workloads are more geared toward the rapid processing and analyzing of vast amounts of varied and unstructured data, aka Big Data

11. Visualization

Data visualization is the graphical representation of information and data

COURSE OBJECTIVES

To learn and analyse and visualize the process of inspecting, cleansing, transforming, and modelling data with the goal of **discovering useful information, informing conclusions, and supporting decision-making.**

Specifically, the course has the following objectives:

Students will learn

1. To study the basic technologies that forms the foundations of Big Data.
2. To study the programming aspects of cloud computing with a view to rapid prototyping of complex applications.
3. To understand the specialized aspects of big data including big data application, and big dataanalytics.
4. To study different types Case studies on the current research and applications of the Hadoopand big data in industry.

COURSE COORDINATOR

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CERTIFICATE COURSE ON RECENT TRENDS IN BIG DATA ANALYTICS

Date of Introduction of the Course: 09.05.2021

The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM(AN) Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	6-04-2021(FN)	**1.Introduction to Big data** To learn and analyse Big Data which is a collection of data that **is huge in volume, yet growing exponentially with time.**
2	7-04-2021 (FN)	**2. Understanding Big Data Storage** Demonstrates a conceptual understanding of collectionand management of large datasets.
3	8-04-2021 (FN)	**3. Introduction to HDFS Architecture** is a distributed file system that handles large datasets running on commodity hardware.
4,5	9-4-2021 (FN & AN)	**4. Map Reduce Programming Model** Map Reduce is **a** programming model for processing large data sets with a parallel, distributed algorithm on a cluster. Introduction to Map Reduce Programming Model.
6	11-04-2021 (FN)	**5. Advanced Analytical Theory and Methods** Describes effectively, and in context with Advanced analytic techniques include those such as data/text mining, machine ext
7	12-04-2021 (FN)	**6. Overview of Clustering and Classification** . Understanding clustering and classification

8	**13-04-2021 (FN)**	**7. Association rules** Association rule mining, at a basic level, involves the use of machine learning models to analyze data for patterns, or co-occurrences, in a database.
9	**14-04-2021 (FN)**	**8. Introduction to Recommendation system** A recommender system is a type of information filtering system.
10	**15-04-2021 (FN)**	**9. Introduction to Stream concepts** Big data streaming is a process in which big data is quickly processed in order to extract real-time insights from it
11, 12	**16-04-2021 (FN & AN)**	10. **NOSQL DATA MANAGEMENT FOR BIG DATA** NoSQL is a better choice for businesses whose data workloads are more geared toward the rapid processing and analyzing of vast amounts of varied and unstructured data, aka Big Data.
13.	**18-04-2021 (AN)**	**11.Visualization** Data visualization is the graphical representation of information and data

COURSE COORDINATOR

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(Vide Notification No. F.9-5/2000 - U.3, Ministry of Human Resource Development, Govt. of India, dated 4th July 2002)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

RECENT TRENDS IN BIG DATA ANALYTICS

B.Tech Computer Science and Engineering (2020-2021)

S. No	REG.NO	NAME OF THE CANDIDATE
1	U15CS001	ABHIJEET KUMAR
2	U15CS002	ABHIJIT KUMAR GUPTA
3	U15CS003	ABHISHEK KUMAR SINGH
4	U15CS004	ALLU SAI SIVA PRIYANKA NAIDU
5	U15CS005	AMBIKE KUMAR SINGH
6	U15CS006	ANBUMANI S
7	U15CS007	ANJAR ALI
8	U15CS008	ANKAM MANJUNATH
9	U15CS009	ANNADI DHANUSH
10	U15CS010	ANNAVARAPU DIVYA
11	U15CS011	ANUMOLU YESWANTH
12	U15CS012	ARAVAPALLI SIVA VINAYA
13	U15CS013	ARAVINDHAN K R
14	U15CS014	ARVIND KUMAR YADAV
15	U15CS015	ARYAN SAHU
16	U15CS016	ASHISH AGARWAL
17	U15CS017	ASHISH RANJAN
18	U15CS018	ATTANTI RAVIKANTH
19	U15CS019	BANAVATH SUNIL NAIK
20	U15CS020	BANDARU RAMESH
21	U15CS021	BATTA SIVA PRASAD
22	U15CS022	BHARATH K
23	U15CS023	BHARATHI V
24	U15CS024	BIKKI KUMAR SHA
25	U15CS025	BINGEWAR
26	U15CS026	BIRADAVOLU SUCHARITHA
27	U15CS027	BODA AKHIL WESLEY
28	U15CS028	BONALA SRIDHAR RAO
29	U15CS029	BRYAN STEVE PUSHPARAJ I
30	U15CS030	CHAKKA KSHITHIJA

31	U15CS031	CHAMARTHI LAKSHMI NARAYANA AVINASH
32	U15CS032	CHANDRA KANT CHOUDHARY
33	U15CS033	CHAPPIDI LAKSHMIKANTH REDDY
34	U15CS034	CHIDIPOTHU PRATHYUSHA
35	U15CS035	CHINTAGINJALA VENKATA SRI SAI SRAVYA
36	U15CS036	CHOWDHARY PRASANNA KUMAR
37	U15CS037	CHUNDI VENKATA SESHASAI RAMANAPATANJALI
38	U15CS038	CILLA SAI KISHORE
39	U15CS039	D N S HRUDAY BHARADWAJ
40	U15CS040	DADAM CHAITHRA
41	U15CS041	DEEPAK KUMAR SINGH
42	U15CS042	DILLIGANESH V.
43	U15CS043	DIVAKAR M
44	U15CS044	DIVYA VANI T
45	U15CS045	DODDI PUJITHA
46	U15CS046	DOOLIGANTI AKHIL REDDY

COURSE CO-ORDINATOR

HOD
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COURSE FEEDBACK FORM

Academic Year		2020-2021					
Term							
Course Number							
Course Title		Recent Trends In Big Data Analytics					
Number of Credits							
Type of Course	Regular		Elective		Add-on	✓	

I. Information on the Respondent: (Tick (√) Appropriately)

1. **Percentage of classes attended**

0-20		20-40		40-60		60-80		80-100	✓

2. **Number of hours per week spent on the course (Other than lecture hours)**

0-2		2-4		4-6		6-8	✓	8-10	

3. **Preparation for the course by the student:**

(i)	Have done part of this course earlier	No
(ii)	Has adequate prior exposure to the prerequisites	Yes
(iii)	Had to pickup relevant additional topics through concurrent study	No
(iv)	Have no exposure to the background material	Yes

4. **The expectations for taking the course by the student are:**

(a)	Enhance by skill base in the area of specializations	Yes
(b)	Get exposed to a relevant subject	Yes
(c)	Curiosity	No
(d)	Better Employment Opportunity	Yes
(e)	Complete Course requirements	Yes
(f)	To Improve CGPA	Yes

About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

			B	C	D	E
1.	Pace of the Teaching/lecture		✓			
2.	Comment of the Subject	✓				
3.	Clarity of expression	✓				
4.	Level of preparation		✓			
5.	Level of interaction	✓				
6.	Accessibility outside the class	✓				
7.	Others (please specify	✓				

A: Excellent		B: Very Good		C: Good		D: Satisfactory		E: Poor	

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Academic Year		2020-2021					
Term							
Course Number							
Course Title		Recent Trends In Big Data Analytics					
Number of Credits							
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34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

MR. ASHISH AGARWAL

For actively participating in the value-added course **"RECENT TRENDS IN BIG DATA ANALYTICS "** Conducted by School of Computing, BIHER from 6-04-2021 to 18.04-2021.

Course Coordinator **Head of the Department** **Director**