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: 20.07.2018

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 **"WEB TECHNOLOGY CMS,JOOMLA,PHP"** -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 **"WEB TECHNOLOGY CMS,JOOMLA,PHP"** in our campus premises on **02.08.2018**, students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing 4:00 PM to 5:00 PM.Monday to Friday

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

HOD

DEAN ENGINEERING

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CIRCULAR

27.07.2018

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on**WEB TECHNOLOGY CMS,JOOMLA,PHP** for the benefit of II, III and IV year students. This course is scheduled from 02.08.2018 for 30hours which includes theory and practical. The timings are 4:00 PM to 5:00 PM from Monday to Friday.

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	Mr.M.Ramamoorthy	Professor
2	Mrs. Velvizhi	Professor

Head of Department

HEAD OF DEPARTMENT
Department of Computer Sci... & 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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CERTIFICATE COURSE APPLIED WEB TECHNOLOGY CMS, JOOMLA, PHP
Date of Introduction of the Course:02.08.2018

The timings are

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	2.8.2018 3.8.2018	**1. MODULE 1:** An Exploration of Content Management Systems: Introduction to content development and management, Norms and Guidelines for Content Development, Content types and formats, Multimedia content development basics.
3,4	6.8.2018 7.8.2018	**2. MODULE 2:** This lesson will give learners an overview of some of the different tools and methods that today's web publishers are using to create highly-tailored dynamic web content.
5,6	8.8.2018 9.8.2018	**3. MODULE 3:** Planning and Developing Dynamic Web Content Sites: Successful web sites are those which carefully plan. During this session, we will explore the process of planning out goal specific and effectives.
7,8	10.8.2018 13.8.2018	**4. MODULE 4:** Web site structures along with how to set up CMS tools and platforms at the server level. Special focus will be on how to install and implement CMS software using ISP provided tools and how to customize web databases using tools like MySQL.
9,10	14.8.2018 15.8.2018	**MODULE 5:** Building and Administrating a Word press Blog Site, Installing and configuring a new Social Go basedsite, Overview of site design and editingfeatures. Promoting new social mediasites.
11,12	16.8.2018 17.8.2018	**6. MODULE 6:** Web Site Design Using CSS, Overview of CSS value andfeatures, Exploration of how to use CSS to redesign textfeatures, use CSS to move and position webgraphics.
13,14	20.8.2018 21.8.2018	**7. MODULE 7:** CMS Development using Wix,The process of creating dynamic web sites through the powerful but easy-to-use interface and construction platform – Wix.

15,16	22.8.2018 23.8.2018	**8. MODULE 8:** Introduction to Joomla, Installing Joomla, Exploring the Admin Interface, Content creation using the CAM model, Content customization: images, video, audioetc. Adding and displaying menus, Linking menus to articles and other features.
17,18	24.8.2018 27.8.2018	**9. MODULE 9:** This week we will explore the addition of creation and uses of customized Joomla templates as well as take a look at modifying templates using CSS and HTML tricks.
19,20	28.8.2018 29.8.2018	**10. MODULE 10:** Creating customized Joomlatemplates,ModifyingJoomla CSS and HTML parameters,Tweaking the Joomlabackend,Mobile considerations.
21,22	30.8.2018 318.2018	**11. MODULE 11:** Introduction PHP: Starting to script on server side, Arrays function and forms advance PHP Databases.
23,24	3.9.2018 4.9.2018	**12. MODULE 12:** Basic command with PHP examples, Connection to server, creating database, selecting a database, listing database, listing table names creating a table, inserting data, altering tables, queries, deleting functions.
25,26	5.9.2018 6.9.2018	**13. MODULE 13:** PHP my admin and database bugs. System Programming Components.
27,28	7.9.2018 10.9.2018	**14. MODULE 14:** Working with file and directories, Understanding file& directory, Opening and closing a fileCoping, renaming and deleting a file, Working with directories.File Uploading & Downloading.
29,30	11.9.2018 12.9.2018	**15. MODULE 15:** Database connectivity with MySQL, Introduction to RDBMS, Connection with MySQL Database, Performing basic database operation(DML) (Insert, Delete, Update, Select),Setting query parameter.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Sci... & Engg.,
Bharath Institute of Higher Education & Research
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CERTIFICATE COURSE ON WEB TECHNOLOGY CMS, JOOMLA, PHP PRACTITIONER PROFESSIONAL

Date of Introduction of the Course:2.08.2018

COURSE SYLLABUS

1. MODULE 1:

An Exploration of Content Management Systems: Introduction to content development and management, Norms and Guidelines for Content Development, Content types and formats, Multimedia content development basics.

2. MODULE 2:

This lesson will give learners an overview of some of the different tools and methods that today's web publishers are using to create highly-tailored dynamic web content.

3. MODULE3:

Planning and Developing Dynamic Web Content Sites: Successful web sites are those which carefully plan how to best meet the needs of site visitors. During this session, we will explore the process of planning out goal specific and effectives.

4. MODULE 4:

Web site structures along with how to set up CMS tools and platforms at the server level. Special focus will be on how to install and implement CMS software using ISP provided tools and how to customize web databases using tools like MySQL.

5. MODULE 5:

Building and Administrating a Word press Blog Site, Installing and configuring a new Social Go basedsite, Overview of site design and editingfeaturesCreating customized look andfeel ,Promoting new social mediasites.

6. MODULE 6:

Web Site Design Using CSS, Overview of CSS value andfeatures, Exploration of how to use CSS to redesign textfeatures, use CSS to move and position webgraphics.

7. MODULE 7:

CMS Development using Wix,The process of creating dynamic web sites through the powerful but easy-to-use interface and construction platform – Wix.

8. MODULE 8:

Introduction to Joomla, InstallingJoomla, Exploring the Admin Interface, Content creation using the CAM model, Content customization: images, video, audio, tags, formats, etc. Adding and displaying menus, Linking menus to articles and other features.

9. MODULE 9:

This week we will explore the addition of creation and uses of customized Joomla templates as well as take a look at modifying templates using CSS and HTML tricks.

10. MODULE 10:

Creating customizedJoomlatemplates,ModifyingJoomla CSS and HTML parameters,Tweaking the Joomlabackend,Mobile considerations.

11. MODULE 11:

IntroductionPHP: Starting to script on server side, Arrays, function and forms, advance PHP Databases.

12. MODULE 12:

Basic command with PHP examples, Connection to server, creating database, selecting a database, listing database, listing table names creating a table, inserting data, altering tables, queries, deleting database, deleting data and tables,

13. MODULE 13:

PHP myadmin and database bugs.System Programming Components.

14. MODULE 14:

Working with file and directories, Understanding file& directory, Opening and closing a file Coping, renaming and deleting a file, Working with directories.File Uploading & Downloading.

15. MODULE 15:

Database connectivity with MySQL, Introduction to RDBMS, Connection with MySQL Database, Performing basic database operation(DML) (Insert, Delete, Update, Select),Setting query parameter.

COURSE OBJECTIVES

In this course we plan to give students an overview of the field Web Technologyand an in-depth of technologies of CMS, JOOMLA, and PHP.The focus in this course is on the World Wide Web as a platform for interactive applications, content publishing and social services. The development of web-based applications requires knowledge about the underlying technology and the formats and standards the web is based upon. In this course you will learn about the HTTP communication protocol, the markup languages HTML, XHTML and XML, the CSS and XSLT standards for formatting and transforming web content, interactive graphics and multimedia content on the web, client-side programming using cms,php and joomla.

Specifically, the course has the following objectives:

Students will learn

1) To introduce learners to several Content Management Systems that will be used to develop an in-depth understanding of the general processes used to set up CMS sites and the applications and platforms which can be used to create dynamically updated content systems Software deployment considerations.

2) Joomla was selected as the technology of choice by Intuitive Websites for non-eCommerce Websites after much experience with a variety of software and development platforms including .NET, Flash, Cold Fusion, Front Page and DreamWeaver to name a few. Joomla outperforms these software options in several areas described in this document.

3) The PHP Workshop all students will learn to Gain the PHP programming skills needed to successfully build interactive, data-driven sites. Use the MVC pattern to organize code.Test and debug a PHP application. Work with form data. Use cookies and sessions. Work with regular expressions, handle exceptions, and validate data.

COURSE COORDINATOR **HEAD OF THE DEPARTMENT**

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CERTIFICATE COURSE ON WEB TECHNOLOGY CMS,JOOMLA,PHP
Date of Introduction of the Course: 02.08.2018

School of Computing
Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U17CS001	YALAMADDI BHARGAV
2	U17CS002	MAMDARAPU SARTHIK
3	U17CS076	BANDARI RANJITH REDDY
4	U17CS077	REKAPALLISASAANK
5	U17CS152	JAMMULADINNE RANGA REDDY
6	U17CS153	BANDARU JANARDHAN
7	U17CS227	SHAIK KHADARVALI
8	U17CS228	MURIKIPUDI ALEX
9	U16CS701	PRADEEP SURIYA
10	U16CS702	MOHANRAJ
11	U16CS100	GALLA BHUCHANDRA
12	U16CS101	NITHISHVAR S
13	U16CS151	PODAPATI ASMITHA
14	U16CS152	NALLAPU RAJESH
15	U16CS707	HANUMANTHU RAO
16	U16CS708	SIMRAN ALIZA NISAR
17	U15CS034	CHIDIPOTHU PRATHYUSHA
18	U15CS035	CHINTAGINJALA VENKATA SRI SAI SRAVYA
19	U15CS087	KARTHEESWARAN P
20	U15CS088	KARTHICK S
21	U15CS180	RAVURI SRIKANTH
22	U15CS182	RICHARD WUMBRAND J
23	U15CS183	S. PUNITHA
24	U15CS184	S. SAI SHRUTHI
25	U15CS185	SADHOLLA PRANAY REDDY
26	U15CS241	RUPESH KUMAR ROY
27	U15CS242	KOTAGIRI SAI CHAND

28	U15CS243	RANDHIR KUMAR
29	U15CS244	RAJESH.D
30	U15CS246	J.SAI RAM MADHAV

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

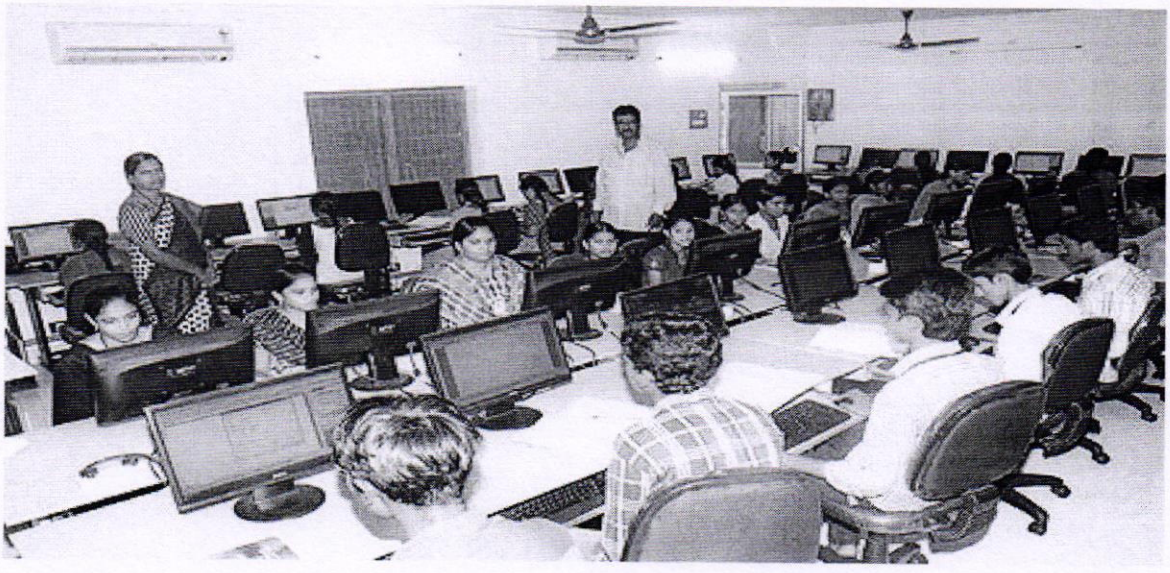
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CERTIFICATE COURSE ON WEB TECHNOLOGY CMS,JOOMLA,PHP



COURSE COORDINATOR

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CERTIFICATE OF PARTICIPATION

This certificate is presented to

S.PUNITHA(REG NO:U15CS183)

For actively participating in the value added course **"APPLIED WEB TECHNOLOGY CMS, JOOMLA, PHP"** Conducted by School of Computing, BIHER from 02.08.2018 to 06.09.2018.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2018 – 2019					
Term		ODD					
Course Number		Web Technology CMS, Joomla, Php etc.					
Course Title							
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	

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		2018 – 2019					
Term		ODD					
Course Number							
Course Title		Web Technology CMS, Joomla, Php etc..					
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	

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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Requisition Letter

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

Date: 23.07.2018

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 "**Graduate Diploma in Professional Game Development**" -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 "**Graduate Diploma in Professional Game Development**" in our campus premises on **02/08/2018**.

45 students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing : **9 am to 4.30 pm**

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

HOD/CSE

DEAN ENGINEERING

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CIRCULAR

27.07.2018

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on**GRADUATE DIPLOMO IN PROFESSIONAL GAME DEVELOPMENT**for the benefit of II, III and IV year students. This course is scheduled from 02.08.2018 for 30hours which includes theory and practical. The timings are 3:00 PM to 4:00 PM from Monday To Friday

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	AllinJeo	Assistant Professor
2	R.Velvizhi	Assistant Professor

Head of Department

To

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HEAD OF DEPARTMENT
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CERTIFICATE COURSE ON GRADUATE DIPLOMO IN PROFESSIONAL GAME DEVELOPMENT

Date of Introduction of the Course: 02.08.2018

COURSE SYLLABUS

Course Description:

This purpose of this course is twofold: to provide a strong foundation in softwareengineering, programming, and the C# language; and to work on all major aspects of developing video games using the Unity engine.These two purposes are closely tied: a large part of video game development centerson programming and software development, and to be a game developer requires ahigh level of knowledge in a modern, object-oriented language like C#. Through thiscourse, students will learn programming by working on games, and will learn to writecode to run every part of their game, from physics to AI to game servers.Rather than focusing narrowly on topics needed to make games, this course willteach you to be a programmer with a solid foundation. This course will allow you tobe able to enter any programming field you'd like, from mobile apps to web servers.(This is actually a common path for game developers: they spend a few years in arelated field working on their programming skills before moving to gamedevelopment.)

1. Introduction

Introduction to game design and production

Unity production basics: Lighting, materials - effects etc - Creating a simple game - C# in game development

2. 3D Technology

Working with 3D - games Rigidbody – physics - User input and UI - Game Design 101: Balancing games - analyzing games - the MDA framework - CubeShip Game - Game Programming - 101 Working withAnimations.

3.Programming Games

Game Programming 102

Game Design 102: Choice, agency, aesthetics, and moreUI Development - Unity Editor Intermediate Topics - Raycasting- Exam.

4.Game Design

Start on Game Design 1 - Game Programming 103 - 3D Characters: Animation & control Intermediate Game Production - Event Systems & Delegates.

5.Game Libraries

Game Design 1 wrap-up - Intermediate Game Production Topics - Game Programming 104 - Useful code libraries - Data Structures - Global Illumination

6.Game Tutorials

2D Game Jam - Exam 2 - Game Design 103: Level Design & Tutorials.

7.Debugging Games

Start on Last major game design - 3D Models – Debugging - Introduction to Git - Editor extensions I/O.

8.Artificial Intelligence

Intro to AI – FSMs - Game design project.

9.Game Project

Procedural - generation Exam 3 - Game design project.

10.Programming Applications

Beyond Game Design: Programming - applications Algorithms & Trees - Game design project.

11.Design Patterns

Affordances & User - Experience Design Patterns - Final game design - presentations Exam 3

12.Web servers

Networking intro & JSON - Creating non-Unity C# - applications Web server basics.

13.Deployment of Servers

Deploying web servers - Creating a RESTful–interface.

14.Database Connectivity

Connecting games toservices Databases - Other networking topics

15.Advancement in GameDevelopment

Course Wrap-Up - Advanced programming topics (TBD)

Course Objectives:

Students will work on nearly all aspects of game design and production: storyboarding, level design, texturing & materials, programming, terrain, physics,animation, 2D & 3D rendering, and user interface, among others. Students willlearn the Unity game engine and the C# programming language, and create multiplegames for their portfolio. Other topics may be introduced, for instance shadergeneration, game server development, VR, and other advanced topics.

The course will focus heavily on making actual games and writing software. Studentswill create 4-5 games through the course, with 2 major game designs that will be demoed publicly to members of the local game dev community.More than half of the course focuses on programming, software development, andthe C# language, which is a major component of game development. The courseintroduces advanced C# topics like polymorphism, generics, and reflection. It alsointroduces general software engineering topics like design patterns, algorithms, datastructures, memory management, serialization / JSON, and more. The courseincludes an introduction to server-side architecture(C# server applications, RESTful interfaces, SQL databases, and more), which is acritical part of most modern game development and can also be a career outside ofgames.

By the end of the course, if you've kept up with all materials, you can expect an intermediate mastery of the Unity engine and the C# programming language, withsome knowledge of advanced topics. You will have the foundation to become anadvanced game developer. You will also have the foundation to pursue other careersin programming, from PC and mobile applications to web servers. You will have bothknowledge (of ideas, terms, programming topics, and game design topics) andpractical skills, and should be well on your way to being prepared for an entry job inthe field (or related fields).

R. Velmurugan

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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CERTIFICATE COURSE ON GRADUATE DIPLOMO IN PROFESSIONAL GAME DEVELOPMENT

Date of Introduction of the Course:02.08.2018

The timings are 2:00 PM to 4:00 PM from Friday (AN) and Saturday (FN&AN).

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	2.8.2018(AN)	**1. Introduction** Introduction to game design and production Unity production basics: Lighting, materials - effects etc - Creating a simple game - C# in game development
3,4	3.8.2018(AN)	**2. 3D Technology** Working with 3D - games Rigidbody – physics - User input and UI - Game Design 101: Balancing games - analyzing games - the MDA framework - CubeShip Game - Game Programming - 101 Working withAnimations
5,6	4.8.2018(FN)	**3.Programming Games** Game Programming 102 Game Design 102: Choice, agency, aesthetics, and moreUI Development - Unity Editor Intermediate Topics - Raycasting- Exam..
7,8	4.8.2018(AN)	**4.Game Design** Start on Game Design 1 - Game Programming 103 - 3D Characters: Animation & controlIntermediate Game Production - Event Systems & Delegates.
9,10	10.8.2018(AN)	**5.Game Libraries** Game Design 1 wrap-up - Intermediate Game Production Topics - Game Programming 104 - Useful code libraries - Data Structures - Global Illumination

11,12	**11.8.2018(FN)**	**6.Game Tutorials** 2D Game Jam - Exam 2 - Game Design 103: Level Design & Tutorials.
13,14	**11.8.2018(AN)**	**7.Debugging Games** Start on Last major game design - 3D Models – Debugging - Introduction to Git - Editor extensions I/O.
15,16	**17.8.2018(AN)**	**8.Artificial Intelligence** Intro to AI – FSMs - Game design project.
17,18	**18.8.2018(FN)**	**9.Game Project** Procedural - generation Exam 3 - Game design project.
19,20	**18.8.2018(AN)**	**10.Programming Applications** Beyond Game Design: Programming - applications Algorithms & Trees - Game design project.
21,22	**24.8.2018(AN)**	**11.Design Patterns** Affordances & User - Experience Design Patterns - Final game design - presentations Exam 3
23,24	**25.8.2018(FN)**	**12.Web servers** Networking intro & JSON - Creating non-Unity C# - applications Web server basics.
25,26	**25.8.2018(AN)**	**13.Deployment of Servers** Deploying web servers - Creating a RESTful – interface
27,28	**31.8.2018(AN)**	**14.Database Connectivity** Connecting games toservices Databases - Other networking topics
29,30	**01.9.2018(FN)**	**15.Advancement in GameDevelopment** Course Wrap-Up - Advanced programming topics (TBD)

COURSE COORDINATOR

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CERTIFICATE COURSE ON GRADUATE DIPLOMO IN PROFESSIONAL GAME DEVELOPMENT

Date of Introduction of the Course: 02.08.2018

School of Computing

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U15CS001	ABHJEET
2	U15CS003	ABHISHEK KUMAR SINGH
3	U15CS004	Allu Sai Siva Priyanka Naidu
4	U15CS005	AMBIKE KUMAR SINGH
5	U15CS006	ANBUMANI S
6	U15CS007	ANJAR ALI
7	U15CS031	Ch.l.n.Avinash
8	U15CS032	Chandra kant Choudhary
9	U15CS034	CHIDIPOTHU PRATHYUSHA
10	U15CS035	Ch. V s s sravya
11	U15CS036	Ch.Prasanna kumar
12	U15CS706	AHENUO MERE
13	U15CS709	NINGSANGPENLA
14	U15CS071	John Param Jyothi Jyothula
15	U15CS073	K Thulasiram
16	U15CS075	Kadumu Mounika
17	U15CS076	Kaipu Pranay Reddy
18	U15CS077	Kalyanam Jaswanth Naidu

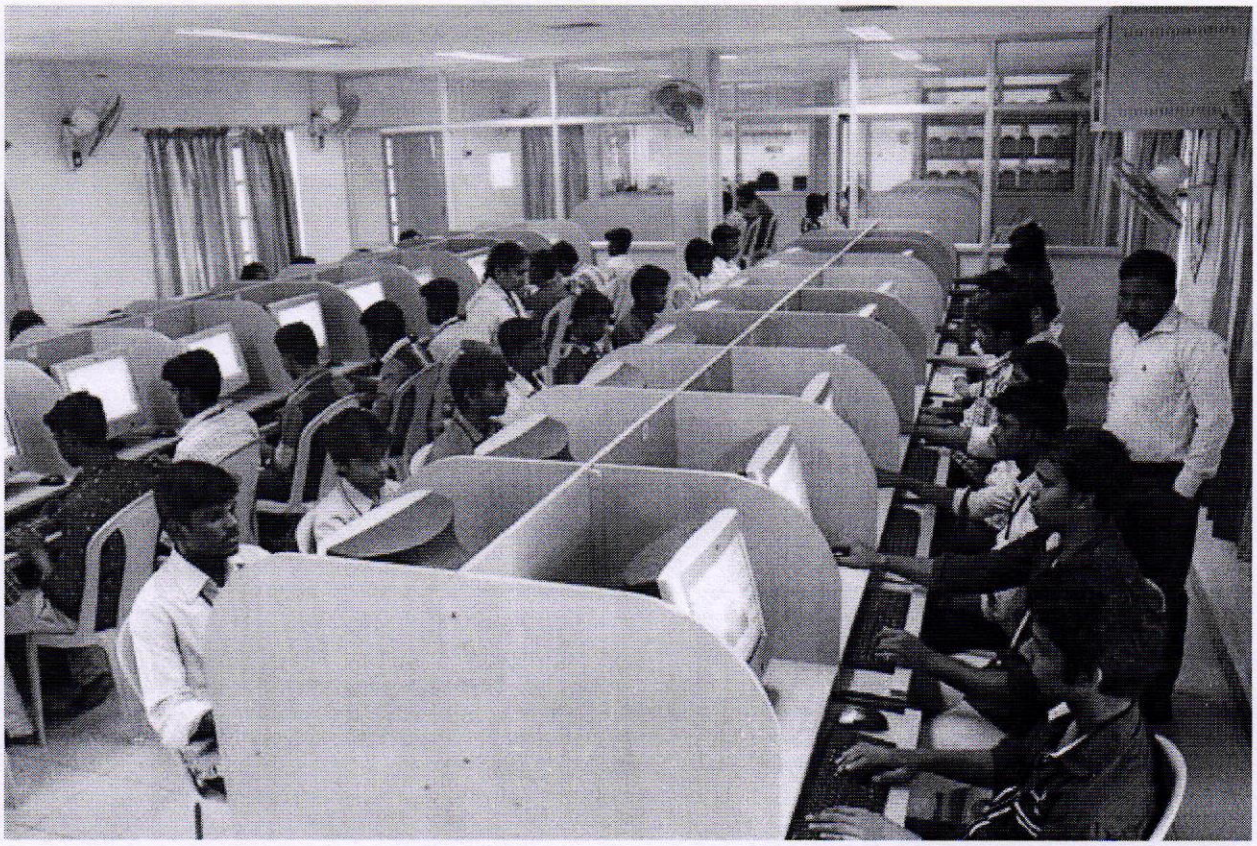
19	U15CS078	Kamble Nikhil Kumar
20	U15CS079	Kancharlapalli Lokeshwar Rao
21	U15CS125	Molapanti Siva Kalpana
22	U15CS126	Mooraboina Naresh
23	U15CS133	NALLURI AKHIL BABU
24	U15CS134	NAMBURI VIJAY KUMAR
25	U15CS135	NARENDULA NIREESHA
26	U15CS136	NARESH K
27	U15CS138	NEELA SAI KUMAR
28	U15CS139	NIKHIL KUMAR
29	U15CS140	NIRANJAN S
30	U15CS141	NITIN SINGH
31	U15CS142	NUKALA BHODANANDA CHARAN
32	U15CS143	OLIVER S
33	U15CS144	OMPRAKASH YADAV
34	U15CS145	PADMAVATY V
35	U15CS147	PALEPU SIVA MANIKANTA CHARI
36	U15CS148	PARTHIBAN S
37	U15CS710	JAYANTHI..S
38	U15CS502	DANIEL BRITTO
39	U15CS194	SHAIK SABIR
40	U15CS195	SHAIK YASMEEN
41	U15CS196	SHARYARAI.S
42	U15CS197	SHATRUGHAN SUHAN.S
43	U15CS199	SIRI GIRI HAREESH
44	U15CS200	SITAROJ SRIKANTH
45	U15CS201	SMITHA C.S

COURSE COORDINATOR **HEAD OF THE DEPARTMENT**

HEAD OF DEPARTMENT
Department of Computer Sci... & 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 GRADUATE DIPLOMO IN PROFESSIONAL GAME DEVELOPMENT



R. Velmurugi

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 OF PARTICIPATION

This certificate is presented to

K.NARESH (REG NO:U15CS136)

For actively participating in the value added course **"GRADUATE DIPLOMO IN PROFESSIONAL GAME DEVELOPMENT "** Conducted by School of Computing, BIHER from 02.08.2018 to 1.09.2018.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2018-2019					
Term		Odd Sem					
Course Number							
Course Title		Graduate Diploma in Professional Game development					
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	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		2018-2019					
Term		odd sem					
Course Number							
Course Title		Graduate Dip. in Profesional Game Development					
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	yes

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

Requisition Letter

Date: 03.09.2018

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 **"GOOGLE AD WORD OR GOOGLE"** -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 **"GOOGLE AD WORD OR GOOGLE"** in our campus premises on **19.9.2018**, students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing 4:00 PM to 5:00 PM.Monday to Friday

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

HOD

DEAN ENGINEERING

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INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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CIRCULAR

17.09.2018

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on**GOOGLE AD WORD OR GOOGLE** for the benefit of II, III and IV year students. This course is scheduled from 19.09.2018 for 30hours which includes theory and practical. The timings are 4:00 PM to 5:00 PM from Monday to Friday.

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	Mrs.Velvizhi	Professor
2	Mrs.C.Anuratha	Professor

Head of Department

HEAD OF DEPARTMENT
Department of Computer Sci... & Eng
Bharath Institute of Higher Education & Rese...
(Declared as Deemed to be University U/S 3 of UGC Act, 1...
Chennai-600 073. INDIA

To

Copy to CSE

Copy to IT

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CERTIFICATE COURSE APPLIED GOOGLE AD WORD OR GOOGLE
Date of Introduction of the Course:02.08.2018

The timings are

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	19.9.2018 20.9.2018	**1. MODULE 1:** Introduction of Google Ad Words overview of Google's business, its networks and advertising programmers. We review the Search, Display and growing Mobile networks.
3,4	21.9.2018 24.9.2018	**2. MODULE 2:** This including Google's Cost Per Click (CPC), Cost Per Acquisition (CPA) and Cost Per Mille (CPM) advertising models.
5,6	25.9.2018 26.9.2018	**3. MODULE 3:** Understanding the concepts which lie behind AdWords™ is vital to developing profitable campaigns. We explain Google's results page (including features such as Instant and the integration of Google+ within their SERPs), Quality Score, the AdWords
7,8	27.9.2018 28.9.2018	**4. MODULE 4:** A major focus of Enhanced Campaigns is the way AdWords™ handles devices (PCs, tablets and Smartphones), the user's location and time-of-day (collectively referred to as "context").
9,10	1.10.2018 2.10.2018	**MODULE 5:** We've developed an account model for Google AdWords that delivers a solid Return on Investment (ROI) using a methodology that is affordable, maintainable and scalable.
11,12	3.10.2018 4.10.2018	**6. MODULE 6:** Tiered Account Model (TAM) mirrors your website structure and AdWords™ Match types, thereby ensuring you intercept the cheapest searches in your market nationally, internationally or via custom geographic targeting.
13,14	5.10.2018 8.10.2018	**7. MODULE 7:** AdWords fundamentals, search advertising, display advertising, video advertising and shopping advertising internationally using TAM concepts or via custom geographic targeting.

15,16	**9.10.2018** **10.10.2018**	**8. MODULE 8:** Explore the demographics (who) and psychographics (why) of your target audience, together with key assumptions - such as your site's conversion rate - that determine the profitability of your online campaigns.
17,18	**11.10.2018** **12.10.2018**	**9. MODULE 9:** The cornerstone of a successful Google Ad Words campaign is keyword research. This should drive both your PPC and Search Engine Optimization(SEO) strategies. We show you how to undertake effective keyword discovery and mining.
19,20	**15.10.2018** **16.10.2018**	**10. MODULE 10:** Show you how to develop a profitable bidding strategy for your campaigns, and the effective use of Ad Words™ settings to control ad delivery and audience targeting.
21,22	**17.10.2018** **18.10.2018**	**11. MODULE 11:** Identifying and understanding visitor trends in your market will be vital to the success of your campaigns, and we show you how to tailor your campaigns to exploit these trends, and how to ensure your ads are always at the top of Google's results page.
23,24	**19.10.2018** **22.10.2018**	**12. MODULE 12:** Treating your keywords, ads and landing pages as a unit is the key to maximising conversion rates. We show you how to develop and test your ads, explaining the impact of each element and its effect on an ad's Click-Through-Rate (CTR).
25,26	**23.10.2018** **24.10.2018**	**13. MODULE 13:** Understanding how visitors' scan web pages, how the human eye and brain process information on-screen will help you design more effective landing pages. We accompany these aspects with a review of your website.
27,28	**25.10.2018** **26.10.2018**	**14. MODULE 14:** Optimising your Ad Words campaigns without a methodology is the main reason most company's advertising fails to deliver the expected ROI. We provide you with a template schedule and clear rules to apply to your own campaigns.
29,30	**29.10.2018** **30.10.2018**	**15. MODULE 15:** Google now offers a growing range of other services that every company should employ as part of their online marketing activities. We cover the most important of these, including Google Analytics, Webmaster and Alerts.

C. Amuthan

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci... & 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 GOOGLE AD WORD OR GOOGLE

Date of Introduction of the Course:19.09.2018

COURSE SYLLABUS

1. MODULE 1:

IntroductionofGoogle Ad Wordsoverview of Google's business, its networks and advertising programmers. We review the Search, Display and growing Mobile networks.

2. MODULE 2:

This including Google's Cost Per Click (CPC), Cost Per Acquisition (CPA) and Cost Per Mille (CPM) advertising models.

3. MODULE3:

Understanding the concepts which lie behind AdWords™ is vital to developing profitable campaigns. We explain Google's results page (including features such as Instant and the integration of Google+ within their SERPs), Quality Score, the AdWords.

4. MODULE 4:

A major focus of Enhanced Campaigns is the way AdWords™ handles devices (PCs, tablets and Smartphones), the user's location and time-of-day (collectively referred to as "context").

5. MODULE 5:

We've developed an account model for Google AdWords™ that delivers a solid Return on Investment (ROI) using a methodology that is affordable, maintainable and scalable.

6. MODULE 6:

Tiered Account Model (TAM) mirrors your website structure and AdWords™ Match types, thereby ensuring you intercept the cheapest searches in your market nationally, internationally or via custom geographic targeting.

7. MODULE 7:

AdWords fundamentals, search advertising, display advertising, video advertising and shopping advertising internationally using TAM concepts or via custom geographic targeting.

8. MODULE 8:

Explore the demographics (who) and psychographics (why) of your target audience, together with key assumptions - such as your site's conversion rate - that determine the profitability of your online campaigns.

9. MODULE 9:

The cornerstone of a successful Google Ad Words campaign is keyword research. This should drive both your PPC and Search Engine Optimization (SEO) strategies. We show you how to undertake effective keyword discovery and mining.

10. MODULE 10:

Show you how to develop a profitable bidding strategy for your campaigns, and the effective use of Ad Words™ settings to control ad delivery and audience targeting.

11. MODULE 11:

Identifying and understanding visitor trends in your market will be vital to the success of your campaigns, and we show you how to tailor your campaigns to exploit these trends, and how to ensure your ads are always at the top of Google's results page.

12. MODULE 12:

Treating your keywords, ads and landing pages as a unit is the key to maximising conversion rates. We show you how to develop and test your ads, explaining the impact of each element and its effect on an ad's Click-Through-Rate (CTR).

13. MODULE 13:

Understanding how visitors' scan web pages, how the human eye and brain process information on-screen will help you design more effective landing pages. We accompany these aspects with a review of your website.

14. MODULE 14:

Optimising your Ad Words campaigns without a methodology is the main reason most company's advertising fails to deliver the expected ROI. We provide you with a template schedule and clear rules to apply to your own campaigns.

15. MODULE 15:

Google now offers a growing range of other services that every company should employ as part of their online marketing activities. We cover the most important of these, including Google Analytics, Webmaster and Alerts.

COURSE OBJECTIVES

This Google AdWords training course is very interactive, which includes practical demonstrations of the Google AdWords interface, case studies, best practices, trends and discussions. During the course, students will be advised to run live campaigns so that they can get better understanding of Google AdWords in real time. Digital Ready's Certificate Course in Google AdWords, you will be able to maximize the return on investments (ROI). With our up-to-date and practical Google AdWords training, you will be able to know effective PPC advertising strategies and wealth of information to optimize your PPC campaigns effectively so that they meet your business objectives and goals.

Specifically, the course has the following objectives:

Students will learn

- Understand how Google AdWords Work
- Setup PPC account and goals
- Plan and Setup Google AdWords campaigns
- Perform keyword research to develop highly targeted keywords list
- Learn about your quality score and influencing factors
- Optimize the landing pages for better conversion
- Get the most out of your campaigns and budgets with account optimization skills
- Optimize and manage your campaigns
- Track, measure and create reports

COURSE COORDINATOR **HEAD OF THE DEPARTMENT**

HEAD OF DEPARTMENT
Department of Computer Sci... Engg.,
Bharath Institute of Higher Education & Research
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CERTIFICATE COURSE ON GOOGLE AD WORD OR GOOGLE

Date of Introduction of the Course: 19.09.2018

School of Computing
Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U17CS001	YALAMADDI BHARGAV
2	U17CS002	MAMDARAPU SARTHIK
3	U17CS076	BANDARI RANJITH REDDY
4	U17CS077	REKAPALLISASAANK
5	U17CS152	JAMMULADINNE RANGA REDDY
6	U17CS153	BANDARU JANARDHAN
7	U17CS227	SHAIK KHADARVALI
8	U17CS228	MURIKIPUDI ALEX
9	U16CS701	PRADEEP SURIYA
10	U16CS702	MOHANRAJ
11	U16CS100	GALLA BHUCHANDRA
12	U16CS101	NITHISHVAR S
13	U16CS151	PODAPATI ASMITHA
14	U16CS152	NALLAPU RAJESH
15	U16CS707	HANUMANTHU RAO
16	U16CS708	SIMRAN ALIZA NISAR
17	U15CS034	CHIDIPOTHU PRATHYUSHA
18	U15CS035	CHINTAGINJALA VENKATA SRI SAI SRAVYA
19	U15CS087	KARTHEESWARAN P
20	U15CS088	KARTHICK S
21	U15CS180	RAVURI SRIKANTH
22	U15CS182	RICHARD WUMBRAND J
23	U15CS183	S. PUNITHA
24	U15CS184	S. SAI SHRUTHI
25	U15CS185	SADHOLLA PRANAY REDDY
26	U15CS241	RUPESH KUMAR ROY
27	U15CS242	KOTAGIRI SAI CHAND

28	U15CS243	RANDHIR KUMAR
29	U15CS244	RAJESH.D
30	U15CS246	J.SAI RAM MADHAV
31	U15CS704	Karam
32	U15CS010	Divya
33	U15CS505	C.koushik
34	U15CS149	P.Khaja khan
35	U15CS122	MAHAMOD SHAJEEN
36	U15CS509	S.AJAY PERUMAL
37	U15CS511	PUJARI DOLIKASREE
38	U15CS512	KATTA PARDHU CHANDRAKANTH
39	U15CS513	KOMARA VENKATESH
40	U15CS188	SANDANAMUDI CHANDRA TEJA
41	U15CS189	SANTHOSH RAJ M
42	U15CS190	SATHISH S
43	U15CS707	ARVING.S.PINTO
44	U15CS708	C.A.AJISH MON
45	U15CS710	JAYANTHI..S
46	U15CS502	DANIEL BRITTO
47	U15CS503	AKASH VENKATRAMAN
48	U15CS712	N VENKAT SUBHASH
49	U15CS237	BUDDI VAMSI
50	U15CS239	AVINASH KUMAR
51	U15CS240	YUGESH.S
52	U15CS241	RUPESH KUMAR ROY
53	U15CS242	KOTAGIRI SAI CHAND

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

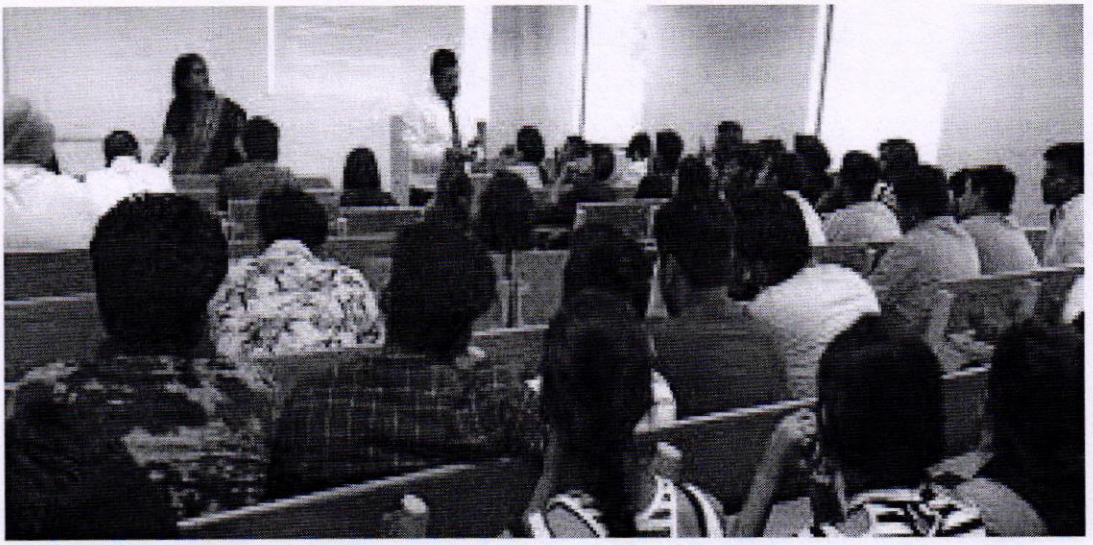
HEAD OF DEPARTMENT
Department of Computer Sci & Engg.,
Bharath Institute of Higher Education & Research
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Chennai-600 073. INDIA

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CERTIFICATE COURSE ON GOOGLE AD WORD OR GOOGLE



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 OF PARTICIPATION

This certificate is presented to

S.SATHISH(REG NO:U15CS190)

For actively participating in the value added course **"GOOGLE AD WORD OR GOOGLE "**

Conducted by School of Computing, BIHER from 19.09.2018 to 30.10.2018.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2018 – 2019					
Term		ODD					
Course Number							
Course Title		Google Ad Word or Google.					
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

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

COURSE FEEDBACK FORM

Academic Year		2018 - 2019					
Term		ODD					
Course Number							
Course Title		Google Ad Word or Google.					
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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(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

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(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	

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

Requisition Letter

Date:17.09.2018

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 **"Computer Trouble Shooting and Networking"**-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 **"Computer Trouble Shooting and Networking"** in our campus premises on **19.09.2018**, students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing 2:00 PM to 4:0 PM(AN) and Saturday (FN&AN).

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

HOD

DEAN ENGINEERING

HEAD OF DEPARTMENT
Department of Computer Sci... & 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)

CIRCULAR

17.09.2018

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Computer trouble shooting and networking** for the benefit of II, III and IV year students. This course is scheduled from 19.09.2018 for 28hours which includes theory and practical. The timings are 2:00 PM to 4:00 PM from Wednesday (AN) and Friday (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	R.MuthuVenkataKrishnan	Assistant Professor
2	S.Sangeetha	AssistantProfessor

Head of Department

To

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HEAD OF DEPARTMENT
Department of Computer Sci & Engg.,
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INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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CERTIFICATE COURSE ON COMPUTER TROUBLE SHOOTING AND NETWORKING

Date of Introduction of the Course: 19.09.2018

COURSE SYLLABUS

01. HARDWARE AND TROUBLE SHOOTING

Overview of H/W & S/W, network, internet, Operating system, Application program, File types & managing files, file backups, Common windows problem & troubleshooting.

02. WINDOWS MANAGEMENT

Windows problem:- After installation of new Software, Running slow, Running error.

03. ERROR HANDLING METHOD

Running error, Runtime error, dived error, windows program not responding, Restart without warning.

04. BOOTING

Turn off without warning, freezing of windows, booting slow, win32 error. Fixing: Invalid page fault.

05. SECURITY

Security-Viruses, Worms, Spam, E-Mail Virus, Securing pc, Boot device.

06. BASIC CONCEPT OF NETWORKS

Basic network concepts, applications & uses of computer networks, different layers in networks, internet & web concepts, network security.

07. SOFTWARE AND HARDWARE NETWORKING

Software & hardware issues in networking, reference models, OSI, TCP, IP, UDP

08. COMMUNICATION NETWORKING

Transmission medium wired communication, wireless communication.

09. EVALUATION OF COMMUNICATION.

Satellite communication, PSTN-first generation, second generation, third generation.

10. NETWORKING MEDIUM

Modern Network Techniques: Basic modern network mediums, basic modern Modem, Ethernet, Switch, Hub, Routers

11. FIREWALLS

Internet Standardization, fire walls, proxy server, URI, URN, HTML, XML, HTTP Sockets.

COURSE OBJECTIVES

In this course we plan to give students an overviewof the field of Trouble shooting, and an in-depth study into its enabling technologies and main building blocks. Students will gain hands-on experience solving relevant problems through projects that will utilize existing public cloud tools. It is our objective that students will develop the skills needed to become a practitioner or carry out research projects in this domain.

Specifically, the course has the following objectives:

Students will learn

1) At the end of the program the students will be able to understand the trouble shooting in hardware Specific.

2) The basic ideas and principles in data centre design; Network and Troubleshooting techniques.

3) Different CPU, memory and I/O virtualization techniques that serve in offering software, computation and storage services on the cloud; Software Defined Networks (SDN) and Software Defined Storage (SDS);

4) The variety of programming models and develops working experience in several of them.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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CERTIFICATE COURSE ON COMPUTER TROUBLE SHOOTING AND NETWORKING

Date of Introduction of the Course: 19.09.2018

The timings are 2.00 PM to 4: PM from Wednesday (AN) and Friday (AN).

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	19-09-2018(AN)	**01. HARDWARE AND TROUBLE SHOOTING** Overview of H/W & S/W, network, internet, Operating system, Application program, File types & managing files, file backups, Common windows problem & troubleshooting.
3,4	21-09-2018(AN)	**02. WINDOWS MANAGEMENT** Windows problem:- After installation of new Software, Running slow, Running error.
5,6	26-09-2018(AN)	**03. ERROR HANDLING METHOD** Running error, Runtime error, dived error, windows program not responding, Restart without warning.
7,8	28-09-2018 (AN)	**04. BOOTING** Turn off without warning, freezing of windows, booting slow, win32 error. Fixing: Invalid page fault.
9,10	03-10-2018 (AN)	**05. SECURITY** Security-Viruses, Worms, Spam, E-Mail Virus, Securing pc, Boot device.
11,12	05-10-2018 (AN)	**06. BASIC CONCEPT OF NETWORKS** Basic network concepts, applications & uses of computer networks, different layers in networks, internet & web concepts, network security. .
13,14	10-10-2018 (AN)	**07. SOFTWARE AND HARDWARE NETWORKING** Software & hardware issues in networking, reference models, OSI, TCP, IP, UDP

15,16	**12-10-2018 (AN)**	**08. COMMUNICATION NETWORKING** Transmission medium wired communication, wireless communication.
17,18	**16-10-2018 (AN)**	**09. EVALUATION OF COMMUNICATION.** Satellite communication, PSTN-first generation, second generation, third generation.
19,20	**10-10-2018 (AN)**	**10. NETWORKING MEDIUM** Modern Network Techniques: Basic modern network mediums, basic modern Modem, Ethernet, Switch, Hub, Routers
21,22	**12-10-2010 (AN)**	**11. FIREWALLS** Internet Standardization, fire walls, proxy server, URI, URN, HTML, XML, HTTP Sockets.

COURSE COORDINATOR

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CERTIFICATE COURSE ON COMPUTER TROUBLE SHOOTING AND NETWORKING

Date of Introduction of the Course: 19.09.2018

School of Computing

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT	
1	U18CN167	GUNDA MANIDEEP .	
2	U18CN168	MAHANKALI RAHUL .	
3	U18CN169	ANUGANTI YASHWANTH SAI NIKHIL .	
4	U18CN170	MATTE SURYANARAYANA	
5	U18CN171	KANKATALA N V S SIVA SAI KIRAN	
6	U18CN172	RAMISETTY JAGADEESH KUMAR .	
7	U18CN173	KRISHNAKUMAR TARUNDEEP .	
8	U18CN174	VALLAMSETTI REVANTH .	
9	U18CN175	CHAMARTHI SAHIL	
10	U18CN177	MIZANUR RAHMAN .	
11	U18CN178	MOTHE VINOD .	
12	U18CN179	PADKANTI CHINNA REDDY .	
13	U18CN180	KATIPALLY VENKAT REDDY .	
14	U18CN181	YERRA MANISH .	
15	U18CN182	LAXMAPURAM SRINIVAS .	
16	U18CN183	PUTAKALA SURYA CHANDRA .	
17	U18CN184	JEEDI BHANU PRASAD .	
18	U18CN185	PABATHI SRIDHAR REDDY .	
19	U18CN186	ERIGINENI GURU PRASAD .	
20	U18CN187	VISHAL KUMAR	
21	U18CN188	GADUPUTI PRADEEP .	
22	U18CN189	LOKESHWARI G M .	
23	U18CN190	YETUKURI KUMARA SWAMY .	
24	U18CN191	SHAIK NAGUR BASHA .	
25	U18CN192	KOMMALAPATI BHARATH .	

26	U18CN193	NUKAPELLY MAHIPAL .	
27	U18CN194	Padala Akhilesh Reddy P	
28	U18CN195	THUMALA RAM REDDY .	
29	U18CN196	ALLAPULLA RAKESH REDDY .	
30	U18CN197	MD ALI .	
31	U18CN198	DONTHLA NITYANAND .	
32	U18CN199	EDIGA THRIVIKRAM GOWD .	
33	U18CN200	MANNE PAVAN SATYA SIDDHI KUMAR .	
34	U18CN202	PARIMI VENKAT RAO .	
35	U18CN203	SINGHU PAVAN KUMAR	
36	U18CN204	UMER YASEEN	
37	U18CN205	POTU CHANDU SREE CHOWDARY .	
38	U18CN206	SAMA INDRASENA REDDY .	
39	U18CN207	GUNTAMUKKALA BHARATHI .	
40	U18CN208	SAMA ARUN KUMAR GOUD .	
41	U18CN209	ROHITH JETTY .	
42	U18CN210	ORUGANTI RAHUL .	
43	U18CN211	VANJARI RAMESH	
44	U18CN212	TOTA SAI RAM	
45	U18CN213	KARIPE SHIVA KUMAR	

COURSE COORDINA

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COURSE FEEDBACK FORM

Academic Year		2018-19					
Term							
Course Number							
Course Title		Computer Trouble Shooting & Networking					
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	

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COURSE FEEDBACK FORM

Academic Year		2018-19					
Term							
Course Number		–					
Course Title		Computer Forensic Shooting & networking.					
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	

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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CERTIFICATE OF PARTICIPATION

This certificate is presented to

LOKESHWARI.G.M

For actively participating in the value added course "Computer Trouble Shooting and Networking" Conducted by School of Computing, BIHER from 19.09.2018 to 12.10.2018.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

HEAD OF DEPARTMENT
Department of Computer Sci...
Bharath Institute of Higher ...
Chennai-600 073. INDIA



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

Requisition Letter

Date: 14.09.2018

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 "H**ands on Training Web Designing Using PHP**" -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 "H**ands on Training Web Designing Using PHP**" in our campus premises on **19/09/2018**.

37 students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing : **9 am to 4.30 pm**

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

HOD/CSE

DEAN ENGINEERING

HEAD OF DEPARTMENT
Department of Computer Sci... & Engg.,
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CIRCULAR

14.09.2018

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course – **Hands on Training Web Designing Using PHP** for the benefit of II, III and IV year students. This course is scheduled from 19.09.2018 for 30hours which includes theory and practical. The timings are 1:30 PM to 4:30 PM from Friday (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	R.Velvizhi	Assistant Professor

Head of Department

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

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CERTIFICATE COURSE- HANDS ON TRAINING WEB DESIGNING USING PHP

Date of Introduction of the Course: 19.09.2018

COURSE SYLLABUS

1. HTML,CSS

Introduction to HTML, HTML Tags ,Creating Forms,Introduction to CSS, CSS Properties,Designing website

2. JAVA SCRIPT, AJAX

Introduction to Javascript,Three ways to use Javascript,Working with events, Introduction to AJAX,PHP with AJAX,Working with database.

3. INTRODUCTION TO PHP

PHP Introduction , Variables, Constants, Datatypes, Operators and Control Structures,Looping satatements, arrays and For each loop , PHP functions.

4. HANDLING HTML FORM WITH PHP

PHP Form Handling,PHP Form Validation,PHP Form Required,PHP Form URL/E-mail,PHP Form Complete, File Handling.

5. WORKING WITH FILE AND DIRECTORIES

Understanding file& directory,Opening and closing a file,Coping ,renaming and deleting a file,Working with directories,Building a text editor,File Uploading & Downloading.

6. INTRODUCTION TO MYSQL

Introduction to Mysql, Data base, Constraints, Select, Oderby,Limit, Functions - Number, Date, Character, Control Flow, Joins, Groupby, Having, Subquery, Indexing.

7.PHP WITH MYSQL

PHP With Mysql, cookies in Php, Sessiions in Php, Blog Project Demo, PhpMyAdmin,Project.

8. DATABASE CONNECTIVITY WITH MYSQL

Introduction to RDBMS,Connection with MySql Database Performing basic database operation(DML) (Insert, Delete, Update, Select) Setting query parameter Join (Cross joins, Inner joins, Outer Joins, Self joins.)Framework- CodeIgniter

9. OOPS WITH PHP

Oops with Php – Basics, Oops with Php – Advanced, Javascript- Introduction, Functions, Events, Validation.

10. INTRODUCTION TO CODEIGNITER

Understanding the MVC Pattern Models,How MVC works?,Configuration,CodeIgniter,Setting up CodeIgniter with apache Environment eg. Enable mod_rewrite Configuration CodeIgniter to work with database

11. MODELS: CREATING UP MODEL FOR A DATABASE TABLE

Fetching data, Saving and updating data, Deleting data, User defined function in model,Data Validation.

12. CONTROLLER: CREATING CONTROLLER

Controller function,Interacting with model,Interacting with views
Controller variables and parameters,Redirection,Getting post dat.

13. VIEWS: CREATING VIEWS

Working with configuration layout,Creating custom layout,Element and helpers.

14. CODEIGNITER SESSION

Storing data in cake session,Reading a session data, Delete data from session.

15. PROJECT HOSTING IN INTERNET

Paypal Payment Gateway Integration, Facebook API Integration, Facebook API Integration, Responsive Web Design using Bootstrap framework, Project Advanced Features.

COURSE OBJECTIVES

In this course we plan to give students an overview of basic concepts and terminology related to PHP. PHP is a widely used programming language which works on the principal of server side scripting to produce dynamic Web pages. It can be easily integrated with HTML and SQL to produce these dynamic web pages, and is often used to process the contents of a Web page form as it is more secure and reliable than JavaScript. You will learn how PHP can be combined with MySQL to create a very powerful online database engine. This course will be of great interest to learn more about using PHP and MySQL to integrate database functions into Websites, and to learners who would like to learn more about the functionality of PHP and MySQL. Our students will develop the skills needed to become a practitioner or carry out research projects in this domain.

Specifically, the course has the following objectives:

Students will learn

1. Write PHP scripts to handle HTML forms.
2. Write regular expressions including modifiers, operators, and metacharacters.
3. Create PHP programs that use various PHP library functions, and that manipulate files and directories.
4. Analyze and solve various database tasks using the PHP language.
5. Analyze and solve common Web application tasks by writing PHP programs

R. Velmurugan

COURSE COORDINATOR **HEAD OF THE DEPARTMENT**

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Department of Computer Sci... & Engg.,
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CERTIFICATE COURSE-HANDS ON TRAINING WEB DESIGNING USING PHP

Date of Introduction of the Course: 19.09.2018

The timings are 1:30 PM to 4:30 PM from Friday (AN) and Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1,2	19-09-2018(AN)	**HTML,CSS** Introduction to HTML, HTML Tags ,Creating Forms,Introduction to CSS, CSS Properties,Designing website
3,4	21-09-2018(AN)	**JAVA SCRIPT, AJAX** Introduction to Javascript,Three ways to use Javascript,Working with events, Introduction to AJAX,PHP with AJAX,Working with database.
5,6	22-09-2018(FN)	**INTRODUCTION TO PHP** PHP Introduction , Variables, Constants, Datatypes, Operators and Control Structures,Looping satatements, arrays and For each loop , PHP functions.
7,8	22-09-2018(AN)	**HANDLING HTML FORM WITH PHP** PHP Form Handling,PHP Form Validation,PHP Form Required,PHP Form URL/E-mail,PHP Form Complete, File Handling.
9,10	28-09-2018(AN)	**WORKING WITH FILE AND DIRECTORIES** Understanding file& directory,Opening and closing a file,Coping ,renaming and deleting a file,Working with directories,Building a text editor,File Uploading & Downloading.
11,12	29-09-2018(FN)	**INTRODUCTION TO MYSQL** Introduction to Mysql, Data base, Constraints, Select, Oderby,Limit, Functions - Number, Date, Character, Control Flow, Joins, Groupby, Having, Subquery, Indexing.
13,14	29-09-2018(AN)	**PHP WITH MYSQL** PHP With Mysql, cookies in Php, Sessiions in Php, Blog Project Demo, PhpMyAdmin,Project.

15,16	**05-10-2018(AN)**	**DATABASE CONNECTIVITY WITH MYSQL** Introduction to RDBMS,Connection with MySql Database Performing basic database operation(DML) (Insert, Delete, Update, Select) Setting query parameter Join (Cross joins, Inner joins, Outer Joins, Self joins.)Framework-CodeIgniter
17,18	**06-10-2018 (FN)**	**OOPS WITH PHP** Oops with Php – Basics, Oops with Php – Advanced, Javascript- Introduction, Functions, Events, Validation.
19,20	**06-10-2018 (AN)**	**INTRODUCTION TO CODEIGNITER** Understanding the MVC Pattern Models,How MVC works?,Configuration,CodeIgniter,Setting up CodeIgniter with apache Environment eg. Enable mod_rewrite Configuration CodeIgniter to work with database
21,22	**12-10-2018 (AN)**	**MODELS: CREATING UP MODEL FOR A DATABASE TABLE** Fetching data, Saving and updating data, Deleting data, User defined function in model,Data Validation.
23,24	**13-10-2018 (FN)**	**CONTROLLER: CREATING CONTROLLER** Controller function,Interacting with model,Interacting with views Controller variables and parameters,Redirection,Getting post dat.
25,26	**13-10-2018 (AN)**	**VIEWS: CREATING VIEWS** Working with configuration layout,Creating custom layout,Element and help
27,28	**19-10-2018 (AN)**	**CODEIGNITER SESSION** Storing data in cake session,Reading a session data, Delete data from session.
29,30	**20-10-2018(FN)**	**PROJECT HOSTING IN INTERNET** Paypal Payment Gateway Integration, Facebook API Integration, Facebook API Integration, Responsive Web Design using Bootstrap framework, Project Advanced Features.

R.Velmurugi

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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CERTIFICATE COURSE - HAND ON TRAINING WEB DESIGNING USING PHP
Date of Introduction of the Course: 19.09.2018

School of Computing

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U14CS005	ABDUR RASEED
2	U14CS009	AKASH CHANDRA AMBASTHA
3	U14CS027	BALAJI SINGH. T
4	U14CS034	BOYAPATI VINAY
5	U14CS042	CHUDAAMANI.V
6	U14CS702	S.KUMARAN
7	U14CS058	HARI TEJA.G
8	U14CS064	K. LAKSHMIKANTH REDDY
9	U14CS072	KATKURI.KUMAR
10	U14CS088	MADDIPATI BHARAT
11	U14CS100	MOHAMED SALMAN.R
12	U14CS225	ARJHUN KUMAR.K
13	U14CS118	NETHI MUKESH
14	U14CS127	PELVIN CHRISTY
15	U14CS143	RAJNISH RANJAN PANDEY
16	U14CS162	SANTHOSH KUMAR.N
17	U14CS173	SHEKH ADNAN NIYARIYA
18	U14CS183	SULEKHA KUMARI
19	U14CS193	THEJA.T
20	U14CS196	TUMU SRINIKHIL
21	U15CS148	Parthiban S
22	U15CS157	Poorvisha M
23	U15CS166	Pulimuni Himaja
24	U15CS170	Raavi Narendra
25	U15CS183	S. Punitha
26	U15CS188	Sandanamudi Chandra Teja
27	U15CS502	Daniel Britto
28	U15CS712	N Venkat Subhash
29	U15CS191	Seetapti Hema Sekhar
30	U15CS199	Siri Giri Hareesh
31	U15CS208	Tagore S
32	U15CS217	Verisetty Subbarao
33	U15CS232	Nikita Sharma
34	U15CS244	Rajesh.D
35	U15CS255	Aditya
36	U15CS701	Praveen Raj.V
37	U15CS508	T.Saivani

R. Velmurugan
COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Bharath Institute of Higher Educa... Research
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CERTIFICATE COURSE - HAND ON TRAINING WEB DESIGNING USING PHP



R. Velumylu

COURSE COORDINATOR

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CERTIFICATE OF PARTICIPATION

This certificate is presented to

KADUMU MOUNIKA

For actively participating in the value added course **"Hands On Training Web Designing Using PHP "** Conducted by School of Computing, BIHER from 19.09.2018 to 20.10.2018.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2018 – 2019					
Term		odd sem					
Course Number							
Course Title		Hands On traning web Designing using 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	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	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 Sci... & Engg.,
Bharath Inst... Higher Education & Research
(Declared a... u/s 3 of UGC Act, 1956)
...-073. INDIA

COURSE FEEDBACK FORM

Academic Year		2018-2019					
Term		Odd Sem					
Course Number							
Course Title		hands on training web designing using 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	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	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 Sci... & 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)
BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai , T.N - 600 073.

Requisition Letter

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

Date: 24.09.2018

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 "**INNOVATIVE LEARNING STRATERGIES FOR MODERN PEDAGOGY**" -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 "**INNOVATIVE LEARNING STRATERGIES FOR MODERN PEDAGOGY**"" in our campus premises on **04/10/2018**.Students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: CSE Smart Room

Timing : 1:30-4.30P.M

9.00-4:00 P.M

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

HOD

DEAN ENGINEERING

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

Bharath
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CIRCULAR

01.10.2018

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **INNOVATIVE LEARNING STRATEGIES FOR MODERN PEDAGOGY** for the benefit of II, III and IV year students. This course is scheduled from 04-10-2018 for 30hours which includes theory and practical. The timings are 1:30 PM to 4:30 PM from Friday (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	Dr.C.Nalini	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 INNOVATIVE LEARNING STRATEGIES FOR MODERN PEDAGOGY

Date of Introduction of the Course: 04-10-2018

COURSE SYLLABUS

1. **Crossover Learning**

   Learning in informal settings- museums- after-school clubs- link educational content with issues to learners- informal learning- adding questions and knowledge from the classroom- effective method- propose and discuss a question-explore question on a museum visit or field trip- crossover learning- experiences across multiple settings, the wider opportunity is to support learners in recording- linking- recalling and sharing their diverse learning events.

2. **Learning Through Argumentation**

   Advance understanding of science and mathematics by arguing- ways similar to professional scientists and mathematicians-Argumentation-attend to contrasting ideas-deepen their learning. spark meaningful discussion- to ask open-ended questions-re-state remarks in more scientific language-develop and use models to construct explanations. Argue in scientific ways- Professional development strategies and overcome challenges

3. **Teaching through Smart Boards**

   Smart boards - deeper level of engagement and understanding- course content interactive and visual. Smart boards transform the teaching experience into an interactive and collaborative experience -use dynamic multimedia content, to help convey the topic more effectively and making it a visual, engaging experience.

4. **Teaching through Flipping Classrooms**

   An instructional strategy - a type of blended learning, and work on live problem-solving during class time- a classroom with a traditional style of instruction-individual lessons focused on an explanation of content using a lecture style. content delivery- video- online collaborative discussions, digital research, and text readings.

   Class activities vary but include: using math-manipulatives and emerging mathematical technologies, in-depth laboratory experiments, original document analysis, debate or speech presentation, current event discussions, peer reviewing, project-based learning, and skill development or concept practice.

5. **Incidental Learning**

   Incidental learning –unplanned, unintentional learning- formal education, incidental learning follow a structured curriculum, result in formal certification- trigger self-reflection- encourage learners to reconceive- isolated learning fragments as part of more coherent and longer-term learning journeys.

6. Computational Thinking

Approach to thinking and problem solving- decomposition- recognizing- pattern recognition details abstraction- identifying and developing steps to reach a solution algorithms and refining these steps debugging. computational thinking skills- to deploying a scientific team to tackle a difficult challenge

7. Embodied Learning

Embodied learning self-awareness - body interaction simulate to support the learning process- Technology gather personal physical and biological data, visual systems respond to actions. General learning. process of physical action.

8. Adaptive Teaching

Adaptive teaching systems recommend new content- review old content- provide various tools for monitoring one's progress. Build on longstanding learning practices- textbook reading-add a layer of computer-guided support.

9. Analytics Of Emotions

Automated methods - eye tracking and facial recognition- respond to their emotional and cognitive states- cognitive aspects of learning- Non-cognitive aspects- strategies reflecting on learning, planning qualities of engagement.

10. Stealth Assessment

automatic data collection with digital environments- Stealth assessment techniques from online role-playing games .stealth assessment test hard-to-measure aspects of learning perseverance, creativity, and strategic thinking

11. **Collaborative Learning**

This practise was widespread in traditional teaching methods- solve their problem, debates on topics, and clear their queries- developing social skills- allows to understand the subject faster- Learners learn to tolerate others- develop skills to listen to others -to work in a team. meet different personalities and get a genuine review of their work.

12. **Gamification**

Teaching through games- significance of Gamification- in the elementary and preschool system- the online platform under Gamification- organize online quiz, puzzles or brain games- modern teaching method is a fun learning method .

13. **VAK teaching**

VAK is a modern teaching method- Visual, Audio, and kinesthetic (movement)- In the time of the internet, watching and learning through videos

14. **Problem-Based Learning**

The problem-based learning- set of activities under the tag of problems - providing solutions enhance the skills – knowledge- provoke their enthusiasm level - initiates the problem-solving aspect of the thinking in their minds.

15. **Design Thinking**

Promote Innovation and creativity - make use of the design thinking approach in order to promote innovative ideas - offered with a particular set of questions or problems that triggers their creative mindset and forces them to pull out some successful innovative solutions to the issue.

COURSE OBJECTIVES

In this course we plan to give students an overview of the field of Innovative learning strategies for modern pedagogy will gain hands-on experience in solving relevant problems through projects that will utilize existing public tools monitoring one's progress. It is our objective that students will develop the skills needed to become a practitioner or carry out research projects in this domain.

Specifically, the course has the following objectives:

Students will learn

1) The fundamental ideas behind Innovative learning strategies for modern pedagogy, the evolution of the paradigm, its applicability; Benefits, as well as current and future challenges;

2) The basic ideas and principles of modern Pedagogy is the subjectivity of consciousness and professional activity.deployment considerations;

3) A remote lab typically consists of apparatus or equipment, robotic arms to operate it, and cameras that provide views of the experiments. Remote lab systems participation by providing user-friendly Web interfaces, curriculum materials, and professional development

4) Engaging with authentic scientific tools and practices such as controlling remote laboratory experiments or telescopes can build science inquiry skills, improve conceptual understanding, and increase motivation

5) The variety of programming models and develop working experience in several of them.

COURSE COORDINATOR **HEAD OF THE DEPARTMENT**

HEAD OF DEPARTMENT
Department of Computer Sci & Engg.,
Bharath Institute of Higher Education & Research
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INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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CERTIFICATE COURSE ON INNOVATIVE LEARNING STRATEGIES FOR MODERN PEDAGOGY

Date of Introduction of the Course: 04.10.2018

The timings are 1:30 PM to 4:30 PM from Friday (AN) and Saturday (FN&AN).

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	04-10-2018(AN)	**1. Crossover Learning** Learning in informal settings- museums- after-school clubs- link educational content with issues to learners- informal learning- adding questions and knowledge from the classroom- effective method-propose and discuss a question-explore question on a museum visit or field trip- crossover learning-experiences across multiple settings, the wider opportunity is to support learners in recording-linking- recalling and sharing their diverse learning events
3,4	04-10-2018(AN) 05-10-2018(FN)	**2. Learning Through Argumentation** Advance understanding of science and mathematics by arguing- ways similar to professional scientists and mathematicians-Argumentation-attend to contrasting ideas- deepen their learning. spark meaningful discussion- to ask open-ended questions-re-state remarks in more scientific language-develop and use models to construct explanations. Argue in scientific ways- Professional development strategies and overcome challenges
5,6	05-10-2018(FN)	**3.Teaching through Smart Boards** Smart boards - deeper level of engagement and understanding- course content interactive and visual. **Smart boards transform the teaching experience** into an interactive and collaborative experience -use dynamic multimedia content, to help convey the topic more effectively and making it a visual, engaging experience
7,8	05-10-2018 (FN) 06-10-2018(AN)	**4.Teaching through Flipping Classrooms** An instructional strategy - a type of blended learning, and work on live problem-solving during class time- a classroom with a traditional style of

		instruction- individual lessons focused on an explanation of content using a lecture style. content delivery- video- online collaborative discussions, digital research, and text readings. Class activities vary but include: using math-manipulatives and emerging mathematical technologies, in-depth laboratory experiments, original document analysis, debate or speech presentation, current event discussions, peer reviewing, project-based learning, and skill development or concept practice.
9,10	**06-10-2018 (AN)**	**5.Incidental Learning** Incidental learning –unplanned, unintentional learning- formal education, incidental learning follow a structured curriculum, result in formal certification- trigger self-reflection- encourage learners to reconceive- isolated learning fragments as part of more coherent and longer-term learning journeys
11,12	**06-10-2018 (AN)**	**6.Computational Thinking** Approach to thinking and problem solving- decomposition- recognizing- pattern recognition details abstraction- identifying and developing steps to reach a solution algorithms and refining these steps debugging. computational thinking skills- to deploying a scientific team to tackle a difficult challenge
13,14	**06-10-2018 (AN)** **12-10-2018 (FN)**	**7.Embodied Learning** Embodied learning self-awareness - body interaction simulate to support the learning process- Technology gather personal physical and biological data, visual systems respond to actions. General learning. process of physical action.
15,16	**12-10-2018 (FN)**	**8.Adaptive Teaching** Adaptive teaching systems recommend new content- review old content- provide various tools for monitoring one's progress. Build on longstanding learning practices-textbook reading-add a layer of computer-guided support
17,18	**12-10-2018 (FN)** **12-10-2018 (AN)**	**9.Analytics Of Emotions** Automated methods - eye tracking and facial recognition- respond to their emotional and cognitive states- cognitive aspects of learning- Non-cognitive aspects- strategies reflecting on learning, planning qualities of engagement.
19,20	**12-10-2018 (AN)**	**10.Stealth Assessment** automatic data collection with digital environments- Stealth assessment techniques from online role-playing games .stealth assessment test hard-to-

		measure aspects of learning perseverance, creativity, and strategic thinking
21,22	**12-10-2018 (AN)**	**11. Collaborative Learning** This practise was widespread in traditional teaching methods- solve their problem, debates on topics, and clear their queries- developing social skills- allows to understand the subject faster- Learners learn to tolerate others- develop skills to listen to others -to work in a team. meet different personalities and get a genuine review of their work.
23,24	**12-10-2018 (AN) 12-10-2018 (FN)**	12. **Gamification** Teaching through games- significance of Gamification- in the elementary and preschool system- the online platform under Gamification- organize online quiz, puzzles or brain games- modern teaching method is a fun learning method.
25,26	**13-10-2018 (FN)**	**13. VAK teaching** VAK is a modern teaching method- Visual, Audio, and kinesthetic (movement)- In the time of the internet, watching and learning through videos
27,28	**13-10-2018 (FN) 13-10-2018 (AN)**	14.**Problem-Based Learning** The problem-based learning- set of activities under the tag of problems - providing solutions enhance the skills – knowledge- provoke their enthusiasm level - initiates the problem-solving aspect of the thinking in their minds.
29,30	**13-10-2018 (AN)**	15.**Design Thinking** Promote Innovation and creativity - make use of the design thinking approach in order to promote innovative ideas - offered with a particular set of questions or problems that triggers their creative mindset and forces them to pull out some successful innovative solutions to the issue.

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

COURSE FEEDBACK FORM

Academic Year		2018					
Term		ODD					
Course Number							
Course Title		INNOVATIVE LAERNING STRATEGIES FOR MODERN PEDAGOGY					
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	✓
(ii)	Has adequate prior exposure to the prerequisites	
(iii)	Had to pickup relevant additional topics through concurrent study	✓
(iv)	Have no exposure to the background material	

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

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

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Bharath Institute of Higher Education & Research
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Chennai-600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2018					
Term							
Course Number							
Course Title		INNOVATIVE LEARNING STRATEGIES FOR MODERN PEDAGOGY					
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	

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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Department of Computer Sci & Engg.,
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CERTIFICATE COURSE ON INNOVATIVE LEARNING STRATEGIES FOR MODERN PEDAGOGY

Date of Introduction of the Course: 04.10.2018

School of Computing

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U14CS001	AADHITYA MALLIKA ARJUN
2	U14CS002	AAVULA DIXITH REDDY
3	U14CS003	ABDUL RAHIM.M
4	U14CS004	ABDUL RAZVI .M.K
5	U14CS005	ABDUR RASEED
6	U14CS006	ABHIKAMALI .A
7	U14CS007	ABHISHEK MANDURI
8	U14CS008	AJAY.D
9	U14CS009	AKASH CHANDRA AMBASTHA
10	U14CS010	AKHIL REDDY.G
11	U14CS011	AKSHAY.R
12	U14CS012	AMAR BASUMATARY
13	U14CS013	ANDREW JOSEPH.V
14	U14CS014	ANGELIN .R
15	U14CS015	ANKITA
16	U14CS016	ANNILKRISHNAN .K
17	U14CS017	ASHUTOSH SRIVASTAVA
18	U14CS019	ARAMBAKAM,YASWANTH
19	U14CS021	AREEF SYED
20	U14CS022	ARUN KUMAR SINGH
21	U14CS023	ASIF NAZIR WANI
22	U14CS024	ATUL ANAND
23	U14CS025	BACHU HARISH
24	U14CS026	BALA MURUGAN .P
25	U14CS027	BALAJI SINGH. T

26	U14CS028	BALAJI.S
27	U14CS029	BALAKRISHNAN.T
28	U14CS031	BISHAL BANIK
29	U14CS032	BODA VEERA VENKATA RAVI TEJA
30	U14CS033	BOORAGADDA VAMSI KRISHNA
31	U14CS034	BOYAPATI VINAY
32	U14CS035	BYSANI VENKAT SANDEEP
33	U14CS036	CHARAN.G
34	U14CS038	CHIDIRALA.SAI SHANKAR
35	U14CS039	CHINTAGUNTA MARUTHI VENKATESWA

COURSE COORDINATOR

1. Coal :

HOD

HEAD OF DEPARTMENT
Department of Computer Sci[illegible] & 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 OF PARTICIPATION

This certificate is presented to

AKHIL REDDY.G

For actively participating in the value added course **"INNOVATIVE LEARNING STRATEGIES FOR MODERN PEDAGOGY"** Conducted by School of Computing, BIHER from 04.10.2018 to 13.10.2018

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

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CERTIFICATE COURSE ON INNOVATIVE LEARNING STRATERGIES FOR MODERN PEDAGOGY

Date of Introduction of the Course: 04.10.2018

School of Computing



COURSE CO ORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Sci... & Engg.,
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BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai , T.N - 600 073.

Requisition Letter

Date:27.11.2018

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 **"Web Development :: PHP and Mysql"** -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 **"Web Development :: PHP and Mysql"** in our campus premises on **05.12.2018**, students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing 1:30 PM to 4:30 PM Friday(AN) and Saturday (FN&AN).

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

HOD

HEAD OF DEPARTMENT
Department of Computer Sci... & Engg.,
Bharath Institute of Higher Education & Research
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DEAN ENGINEERING

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

CIRCULAR

30.11.2018

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on Web Development :: PHP and Mysql for the benefit of II, III and IV year students. This course is scheduled from 05.12.2018 for 30 hours which includes theory and practical. The timings are 1:30 PM to 4:30 PM from Friday (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	Dr.C.Rajabhushanam	Professor

Head of Department

HEAD OF DEPARTMENT
Department of Computer Sci... & 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
(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON Web Development: PHP and Mysql

Date of Introduction of the Course:5.12.2018

COURSE OBJECTIVES

This course will enable the students to understand and develop competency amongst the students to design professional database backed dynamic and feature based web sites. The course covers the use of programming with PHP and the concepts of database with MySQLStudents will be introduced to popular web application frameworks for building scalable web applications. The main objective for this course is to motivate student's interest in learning Web-app development by giving them an insight into its possibilities through practical applications. In addition, the course also provides a sufficiently broad but practical introduction to Server-side web technologies.

After learning, Students can able to

- Perform various logical operations in PHP
- Create simple programmes to validate forms in PHP
- Perform various database operations in Mysql
- Perform database connectivity using PHP with Mysql
- Apply the basic concepts, principles and practices of Web-site development using PHP &Mysql

COURSE SYLLABUS

1. **Introduction to PHP and Mysql**
    - Introduction of PHP
    - How PHP better than other
    - Benefits Of using PHP MYSQL
    - Server Client Environment
    - Web Browse Web Server
    - Installation & Configuration Files
    - What is Database?
    - Understanding an RDBMS
    - Understanding Tables, Record & Fields
    - SQL Language

2. **Development Concept**
    - How PHP Script Work
    - PHP Syntax
    - Embed PHP In HTML/HTML In PHP
    - PHP Data Type
    - Variable In PHP
    - Contents In PHP
    - Operator In PHP

3. **Control Structures and Looping structure:**
    - If Statement
    - If.....Else Statement
    - If...If Else Statement
    - Nested If Statement
    - Switch Statement
    - For Loop
    - While Loop
    - Do...While Loop
    - For each Loop

4. **Function**
    - User Defined Function
    - System Defined Function
    - Parameterized Function
    - Parameterized Function
    - Date & Time Function
    - Hash Function
    - Mail Function
    - String Function

5. **File Inclusion and Array**
    - Include()
    - Require()
    - Associative Array
    - Numeric Array
    - Multi-Dimensional Array

6. **Working with File**
    - Opening File
    - Reading File
    - Writing File
    - Closing File
    - Appending File
    - Uploading File

7. **OOPs Concept**
    - Class & Object
    - Access Modifier
    - Properties of Object
    - Encapsulation and abstraction
    - Inheritance
    - Polymorphism
    - Function overriding
    - Abstract class

8. **State Management &Error Handling & Exception**
    - Creating Cookies
    - Set Cookies
    - Destroying Cookies
    - Creating Session
    - Set Session
    - Destroying Session

- Introduction to Error
- Try,catch,throwBlockHandling

9. Working with MYSQL Admin

- Working with PHP My Admin
- Types Data Type
- Creating Database & Tables
- Dropping Database & Tables
- Adding Fields
- Selecting Table
- Alerting Fields Properties

10. SQL Queries

- Create Database & Table
- Drop Database & Table
- Insert, select, delete, modify Record
- WHERE Clause
- Using Operators
- Sorting Records
- Eliminating Duplicates
- Grouping Records, Having Clause
- Joining Tables
- Sub queries
- Using Table And Column Aliases

11. MySQL Function in PHP

- Database Connections
- Managing Database Connections
- Performing Queries
- Closing Connection

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci & Engg.,
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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 WEB DEVELOPMENT: PHP ANDMYSQL

Date of Introduction of the Course: 05.12.20218

The timings are 1:30 PM to 4:30 PM from Friday (AN) and Saturday (FN&AN).

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	07-12-2018(AN)	1. **Introduction to PHP and Mysql** • Introduction of PHP • How PHP better than other • Benefits Of using PHP MYSQL • Server Client Environment • Web Browse Web Server
3,4	07-12-2018(AN) 08-12-2018(FN)	• Installation & Configuration Files • What is Database? • Understanding an RDBMS • Understanding Tables, Record & Fields • SQL Language
5,6	08-12-2018 (AN)	2. **Development Concept** • How PHP Script Work • PHP Syntax • Embed PHP In HTML/HTML In PHP • PHP Data Type • Variable In PHP • Contents In PHP • Operator In PHP
7,8	14-12-2018(AN) 15-12-2017(FN)	3. **Control Structures and Looping structure:** • If Statement • If.....Else Statement • If...If Else Statement • Nested If Statement • Switch Statement
9,10	15-12-2018(AN)	• For Loop • While Loop • Do...While Loop • For each Loop
11,12	21-12-2018 (AN)	4. **Function** • User Defined Function • System Defined Function • Parameterized Function • Parameterized Function

		• Date & Time Function • Hash Function • Mail Function • String Function
13,14	**21-12-2018(AN)** **22-12-2018 (FN)**	**5. File Inclusion and Array** • Include() • Require() • Associative Array • Numeric Array • Multi-Dimensional Array
15,16	**22-12-2018 (AN)**	**6. Working with File** • Opening File • Reading File • Writing File • Closing File • Appending File • Uploading File
17,18	**28-12-2018 (AN)** **29-12-2018 (FN)**	**7. OOPs Concept** • Class & Object • Access Modifier • Properties of Object • Encapsulation and abstraction • Inheritance • Polymorphism • Function overriding • Abstract class
19,20	**29-12-2018 (AN)**	**8. State Management & Error Handling & Exception** • Creating Cookies • Set Cookies • Destroying Cookies • Creating Session • Set Session • Destroying Session • Introduction to Error • Try,catch,throwBlockHandling
21,22	**04-01-2019 (AN)**	**9. Working with MYSQL Admin** • Working with PHP My Admin • Types Data Type • Creating Database & Tables • Dropping Database & Tables • Adding Fields • Selecting Table • Alerting Fields Properties
23,24	**04-01-2019 (AN)** **05-01-2019 (FN)**	**10. SQL Queries** • Create Database & Table • Drop Database & Table • Insert, select, delete, modify Record • WHERE Clause • Using Operators
25,26	**05-01-2019 (FN)**	• Sorting Records • Eliminating Duplicates

		• Grouping Records, Having Clause • Joining Tables • Sub queries • Using Table And Column Aliases
27,28	**05-01-2019 (AN)** **11-01-2019(AN)**	**11. MySQL Function in PHP** • Database Connections • Managing Database Connections
29,30	**12-01-2019(FN)** **12-01-2019(AN)**	• Performing Queries • Closing Connection

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School of Computing

CERTIFICATE COURSE ON WEB DEVELOPMENT:PHP AND MYSQL

Date of Introduction of the Course: 05.12.2018

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U14CS002	AAVULA DIXITH REDDY
2	U14CS006	ABHIKAMALI .A
3	U14CS007	ABHISHEK MANDURI
4	U14CS024	ATUL ANAND
5	U14CS029	BALAKRISHNAN.T
6	U14CS044	DARA DEEPTHI
7	U14CS045	DEEPAKSANKAR REDDY.M
8	U14CS052	GARLAPATI HEMA SAI KRISHNA
9	U14CS053	GODJSELA SRINATH
10	U14CS062	JERIPOTHULA SURESH GOUD
11	U14CS066	KARAN KUMAR CHETTRI
12	U14CS072	KATKURI.KUMAR
13	U14CS078	KODALI AKHIL
14	U14CS085	LAKSHMI PRIYA.A
15	U14CS100	MOHAMED SALMAN.R
16	U14CS109	N.UMA VENKATA MAHESHWARA SWAMY
17	U14CS110	NAGA TEJA.K
18	U14CS114	NANDALA SWETHA
19	U14CS115	NANDIPALLI MOUNICA
20	U14CS123	PANKAJ SARKAR
21	U14CS136	RAHUL GOUD.P
22	U14CS153	RONU SHARMA
23	U14CS156	SAGI AKSHAY KUMAR
24	U14CS157	SAJJA. SURENDRA PRASAD

25	U14CS187	SURYA.A
26	U14CS197	TWINKLE
27	U14CS201	VASI KARTHIK
28	U14CS208	VIVEK.G
29	U14CS209	YASVAND CUMAAR .S
30	U14CS216	SUNDAR.V.
31	U14CS218	MAKKAPTI SIDDHARDHA
32	U15CS001	ABHIJEET KUMAR
33	U15CS005	AMBIKE KUMAR SINGH
34	U15CS020	BANDARU RAMESH
35	U15CS068	JAICHAND KUMAR
36	U15CS083	KANDI MOUNIKA
37	U15CS087	KARTHEESWARAN P
38	U15CS133	NALLURI AKHIL BABU
39	U15CS140	NIRANJAN S
40	U15CS159	PRADEEP YADAV
41	U15CS196	SHARYARAI.S
42	U16CS004	ABDUL KHADIR L
43	U16CS017	VARUN KANNA A
44	U16CS034	GUNDU NIKITHA REDDY
45	U16CS061	NAGIREDDY GARI SANJUNATH REDDY
46	U16CS067	ABDUL HASEEB
47	U16CS115	BHUMIRDDY MAHITHA
48	U16CS124	SURLA SRINUVASU
49	U16CS133	NAVULURI RAJENDRA MOHAN
50	U16CS169	RAVILLA HARSHITHA
51	U16CS220	AFREEN

COURSE COORDINATOR

HOD(CSE)

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Chennai-600 073. INDIA

Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

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CERTIFICATE OF PARTICIPATION

This certificate is presented to

AFREEN

For actively participating in the value added course **"Web Development: PHP and Mysql "** Conducted by School of Computing, BIHER from 07.12.2018 to 06.01.2018.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2018 - 2019							
Term									
Course Number									
Course Title		Web Development : php & Mysql.							
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	

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COURSE FEEDBACK FORM

Academic Year	2018-2019
Term	
Course Number	
Course Title	Web Development : php & MySql
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

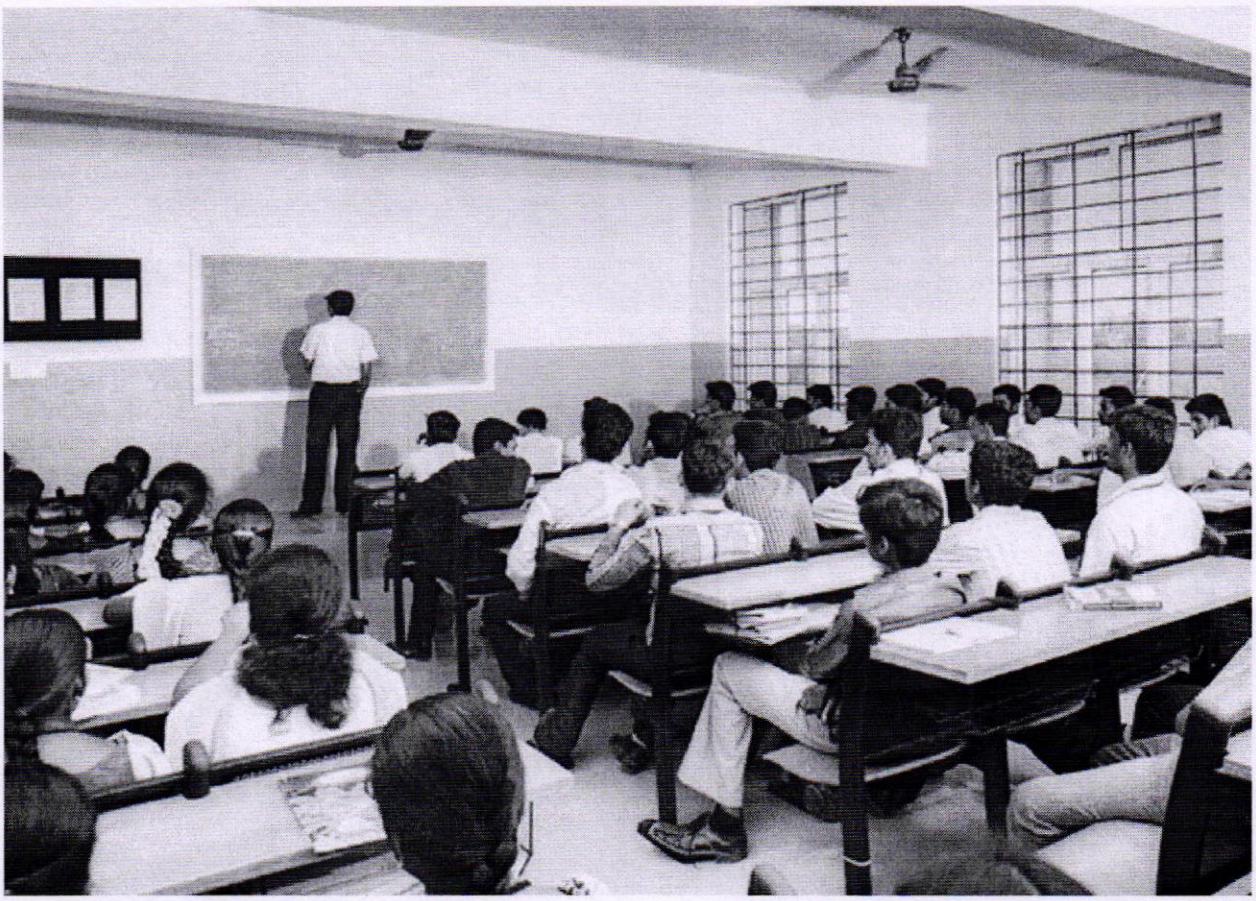
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CERTIFICATE COURSE ON WEB DEVELOPMENT :: PHP and Mysql



COURSE COORDINATOR

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

Requisition Letter

Date: 28.11.2018

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 "**Recent Trends and Technology**" -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 and Technology**" in our campus premises on **05/12/2018**.

50 students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing : **9 am to 4.30 pm**

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

HOD/CSE

DEAN ENGINEERING

HEAD OF DEPARTMENT
Department of Computer Sci... & Engg.,
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CIRCULAR

03.12.2018

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Recent Trends and Technology** for the benefit of II, III and IV year students. This course is scheduled from 05.12.2018 for 30 hours which includes theory and practical. The timings are 9:30 AM to 12:30 PM from Friday (FN) 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.Velvizhi	Assistant Professor

Head of Department

To

Copy to CSE

Copy to IT

HEAD OF DEPARTMENT
Department of Computer Science & Engg.,
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CERTIFICATE COURSE ON RECENT TRENDS AND TECHNOLOGY

Date of Introduction of the Course: 05.12.2018

COURSE SYLLABUS

1. Artificial Intelligence

Introduction to AI-Problem formulation, Search Algorithms, Knowledge Representation, Knowledge Inference, Game Playing, Planning.

2. Machine Learning

Machine Learning Algorithms, Supervised Learning, Unsupervised Learning, Reinforcement Learning, Generative Adversarial Networks.

3. Deep Learning

Introduction to Neural Nets, Deep Networks, Dimensionality Reduction, Optimization and Generalization, Applications.

4. Neural Networks

Basics of Neurons, Perception Algorithm, Feed Forward and Back Propagation Networks, Installation of TensorFlow and Keras.

5. Robotic Process Automation

Robotic Spectrum, 6 Step RPA, Difference between Regular Automation and RPA, C-level decision-making around RPA, Applications of RPA.

6. Data Science

Linear Algebra, Statistics, Data Mining, Data Visualization, Applications of Data Science.

7. Internet of Things

Introduction to IOT, Sensor networks, Embedded systems, Real-time systems, Cloud, Resource and application models.

8. Blockchain

Bitcoins, Blockchain Architecture, Security measures, Blockchain smart contracts, Blockchain Standards, Use cases.

9. Augmented Reality and Virtual Reality

Three I's of VR, Classic components of VR system, VR Development Process, Content creation considerations of VR, VR on Web, Vr on Mobile, Applications.

10. Cognitive Cloud Computing

Introduction, Brain Inspired Architecture, Neuroscience, Nano Technology, Super Computing, Cognitive Computing Power Efficient Architecture.

11. Edge Computing

Introduction, Three-level Architecture, Content Delivery Network, Fog Nodes- Cloudlets, Micro Datacentres, Edge x, AWS Lambda.

12. Big Data Analytics

Big Data Characteristics, Big Data Storage, HDFS, Map Reduce, Clustering and Classification, NoSQL Data Management.

13. Data Visualization

Context of Data Visualization, Visualizing Data Methods, Visualizing Data Process, Interactive Data Visualization, Security Data Visualiztion.

14. DevOps

Infrastructure Automation, Configuration Management, Deployment Automation, Performance Management, Log Management, Monitoring.

15. Intelligent Apps

Introduction to Intelligent Apps, Four Stage Framework, Key Functionalities, Natural Language Processing, Real-Time Applications.

COURSE OBJECTIVES

In this course we plan to give students an overview of the recent upgraded Trends and Technology in the field of Computer Science and Information Technology, and an in-depth study into its enabling technologies and main building blocks. Students will gain hands-on experience solving relevant problems through projects that will utilize existing public cloud tools. It is our objective that students will develop the skills needed to become a practitioner or carry out research projects in this domain.

Specifically, the course has the following objectives:

Students will learn

1) Design a project plan that incorporates a new and emerging technology and illustrates its impact on organizations and industries.

2) Compare and contrast current and emerging technologies and their implications for social ethics and the global workplace.

3) Appreciate the unique characteristics of and differences between disruptive technologies and their impacts.

4) Recognize the importance of ethical practices with new technologies.

R. Velumighi

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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CERTIFICATE COURSE ON RECENT TRENDS AND TECHNOLOGY

Date of Introduction of the Course: 05.12.2018

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

Time Table & Lesson plan

CLASS	DATE	TOPIC
1,2	05-12-2018(FN)	**1.Artificial Intelligence** Introduction to AI-Problem formulation, Search Algorithms, Knowledge Representation, Knowledge Inference, Game Playing, Planning.
3,4	07-12-2018(FN)	**2. Machine Learning** Machine Learning Algorithms, Supervised Learning, Unsupervised Learning, Reinforcement Learning, Generative Adversarial Networks.
5,6	08-12-2018 (FN) 08-12-2018(AN)	**3. Deep Learning** Introduction to Neural Nets, Deep Networks, Dimensionality Reduction, Optimization and Generalization, Applications.
7,8	14-12-2018(FN)	**4. Neural Networks** Basics of Neurons, Perception Algorithm, Feed Forward and Back Propagation Networks, Installation of TensorFlow and Keras.
9,10	15-12-2018(FN) 15-12-2018(AN)	**5. Robotic Process Automation** Robotic Spectrum, 6 Step RPA, Difference between Regular Automation and RPA, C-level decision-making around RPA, Applications of RPA.
11,12	21-12-2018(FN)	**6. Data Science** Linear Algebra, Statistics, Data Mining, Data Visualization, Applications of Data Science.
13,14	22-12-2018(FN)	**7. Internet of Things** Introduction to IOT, Sensor networks, Embedded systems, Real-time systems, Cloud, Resource and application models.
15,16	22-12-2018(AN)	**8. Blockchain** Bitcoins, Blockchain Architecture, Security measures, Blockchain smart contracts, Blockchain Standards, Use cases

17,18	28-12-2018(FN)	**9. Augmented Reality and Virtual Reality** Three I's of VR, Classic components of VR system, VR Development Process, Content creation considerations of VR, VR on Web, Vr on Mobile, Applications.
19,20	29-12-2018(FN) 29-12-2018(AN)	**10. Cognitive Cloud Computing** Introduction, Brain Inspired Architecture, Neuroscience, Nano Technology, Super Computing, Cognitive Computing Power Efficient Architecture.
21,22	04-01-2019(FN)	**11. Edge Computing** Introduction, Three-level Architecture, Content Delivery Network, Fog Nodes- Cloudlets, Micro Datacentres, Edge x, AWS Lambda.
23,24	05-01-2019(FN)	**12. Big Data Analytics** Big Data Characteristics, Big Data Storage, HDFS, Map Reduce, Clustering and Classification, NoSQL Data Management.
25,26	05-01-2019(AN)	**13. Data Visualization** Context of Data Visualization, Visualizing Data Methods, Visualizing Data Process, Interactive Data Visualization, Security Data Visualiztion.
27,28	11-01-2019(FN)	**14. DevOps** Infrastructure Automation, Configuration Management, Deployment Automation, Performance Management, Log Management, Monitoring.
29,30	12-01-2019(FN) 12-01-2019(AN)	**15. Intelligent Apps** Introduction to Intelligent Apps, Four Stage Framework, Key Functionalities, Natural Language Processing, Real-Time Applications.

COURSE COORDINATOR

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CERTIFICATE COURSE ON RECENT TRENDS AND TECHNOLOGY

Date of Introduction of the Course: 05.12.2018

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	U15CS031	Ch.l.n.Avinash
9	U15CS032	Chandra kant Choudhary
10	U15CS034	CHIDIPOTHU PRATHYUSHA
11	U15CS035	Ch. V s s sravya
12	U15CS036	Ch.Prasanna kumar
13	U15CS706	AHENUO MERE
14	U15CS709	NINGSANGPENLA
15	U15CS071	John Param Jyothi Jyothula
16	U15CS073	K Thulasiram
17	U15CS074	Kadali Vinaynarasimha
18	U15CS075	Kadumu Mounika
19	U15CS076	Kaipu Pranay Reddy
20	U15CS077	Kalyanam Jaswanth Naidu
21	U15CS078	Kamble Nikhil Kumar
22	U15CS079	Kancharlapalli Lokeshwar Rao
23	U15CS125	Molapanti Siva Kalpana
24	U15CS126	Mooraboina Naresh
25	U15CS704	Karam
26	U14CS008	AJAY.D
27	U14CS009	AKASH CHANDRA AMBASTHA
28	U14CS010	AKHIL REDDY.G
29	U14CS011	AKSHAY.R

30	U14CS090	MAL REDDY GANESH REDDY
31	U14CS091	MALLISETTI SAI SANDEEP
32	U14CS092	MANDELA SAIKIRAN
33	U14CS093	MANIMALA.G
34	U14CS144	RAKESH KUMAR
35	U14CS145	RAKHI PRASAD
36	U14CS146	RAM KUMAR PANDEY
37	U14CS147	RAMANATHAN.J
38	U14CS228	ELACATI JAGANNADHA HARSHITHA
39	U14CS230	MARAM REDDY RAJASEKHAR
40	U14CS234	DANDU MOHAN RAJENDRA VARMA
41	U14CS706	RAFTEN WANCHU
42	U14CS217	CHILLIMUNTA VENKATESH
43	U14CS218	MAKKAPTI SIDDHARDHA
44	U14CS223	ARUN
45	U14CS226	SARAVANAN.B
46	U14CS227	I.SUKAPATLA AVINASH
47	U14CS237	CHARAN KUMAR
48	U14CS701	BALAJI
49	U14CS707	ARNISHA DAS
50	U14CS708	SUSMITA MOG

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Science & Engg.,
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CERTIFICATE COURSE ON RECENT TRENDS AND TECHNOLOGY



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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 OF PARTICIPATION

This certificate is presented to

SHAIK YASMEEN

For actively participating in the value added course **"Recent Trends and Technology"** Conducted by School of Computing, BIHER from 05.12.2018 to 12.01.2019.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2018 - 2019					
Term		ODD Sem					
Course Number							
Course Title		Recent Trends & Technology.					
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	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 Sci... & 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		2018 - 2019.							
Term		ODD Sem.							
Course Number									
Course Title		Recent Trends & Technology.							
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
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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	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

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: 23.11.2018

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 IMPLEMENT ADOBE ADVERTISING CLOUD SEARCH ACCORDING TO BUISNESS GOALS"** -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 IMPLEMENT ADOBE ADVERTISING CLOUD SEARCH ACCORDING TO BUISNESS GOALS"** in our campus premises on **5.12.2018**, students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing 4:00 PM to 6:00 PM.Monday to Friday

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

HOD

HEAD OF DEPARTMENT
Department of Computer Sci... & 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

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

CIRCULAR

30.11.2018

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **IMPLEMENT ADOBE ADVERTISING CLOUD SEARCH ACCORDING TO BUISNESS GOALS**for the benefit of II, III and IV year students. This course is scheduled from 5.12.2018 for 30hours which includes theory and practical. The timings are 4:00 PM to 6:00 PM from Monday to Friday.

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	Mrs.Velvizhi	Professor
2	Mrs.Nalini	Professor

Head of Department

HEAD OF DEPARTMENT
Department of Computer Sci... & 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

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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 IMPLEMENT ADOBE ADVERTISING CLOUD SEARCH ACCORDING TO BUISNESS GOALS

Date of Introduction of the Course:5.12.2018

COURSE SYLLABUS

1. MODULE 1:

Cloud Computing fundamentals, private, public and hybrid cloud. Cloud types; IaaS, PaaS, SaaS. Benefits and challenges of cloud computing, public vs private clouds, role of virtualization in enabling the cloud; Business Agility: Benefits and challenges to Cloud architecture .

2. MODULE 2:

CLOUD APPLICATIONS:Technologies and the processes required when deploying web services; Deploying a web service from inside and outside a cloud architecture, advantages and disadvantages.

3. MODULE3:

MANAGEMENT OF CLOUD SERVICES :Reliability, availability and security of services deployed from the cloud. Performance and scalability of services, tools and technologies used to manage cloud services deployment.

4. MODULE 4:

Cloud Economics : Cloud Computing infrastructures available for implementing cloud based services. Economics of choosing a Cloud platform for an organization, based on application requirements, economic constraints and business needs (e.g Amazon, Microsoft and Google, Salesforce.com, Ubuntu and Redhat.

5. MODULE 5:

APPLICATION DEVELOPMENT :Service creation environments to develop cloud based applications. Development environments for service development; Amazon, Azure, Google App.

6. MODULE 6:

CLOUD IT MODEL : Analysis of Case Studies when deciding to adopt cloud computing architecture. How to decide if the cloud is right for your requirements. Cloud based service, applications and development platform deployment so as to improve the total cost of ownership (TCO).

7.MODULE 7:

VIRTUALIZED DATA CENTER ARCHITECTUR:Cloud infrastructures; public, private, hybrid. Service provider interfaces; Saas, Paas, Iaas. VDC environments; concept, planning and design, business continuity and disaster recovery principles. Managing VDC and cloud environments and infrastructures.

8. MODULE 8:

INFORMATION STORAGE SECURITY & DESIGN:Storage strategy and governance; security and regulations. Designing secure solutions; the considerations and implementations involved. Securing storage in virtualized and cloud environments.

9. MODULE 9:

Monitoring and management; security auditing and SIEM.

10. MODULE 10:

INFORMATION STORAGE SECURITY & DESIGN :Storage strategy and governance; security and regulations. Designing secure solutions; the considerations and implementations involved. Securing storage in virtualized and cloud environments. Monitoring and management; security auditing and SIEM.

11. MODULE 11:

OPTIMIZATION OF CLOUD STORAGE: Global storage management locations, scalability, operational efficiency. Global storage distribution; terabytes to petabytes and greater. Policy based information management; metadata attitudes; file systems or object storage

12. MODULE 12:

INFORMATION AVAILABILITY DESIGN : Designing backup/recovery solutions to guarantee data availability in a virtualized environment. Design a replication solution, local remote and advanced. Investigate Replication in NAS and SAN environments. Data archiving solutions; analyzing compliance and archiving design considerations.

13. MODULE 13:

VIRTUALIZATION SYSTEM-SPECIFIC ATTACKS:Guest hopping, attacks on the VM (delete the VM, attack on the control of the VM, code or file injection into the virtualized file structure), VM migration attack, hyperjacking.

14. MODULE 14:

LEGAL AND COMPLIANCE ISSUES :Responsibility, ownership of data, right to penetration test, local law where data is held, examination of modern Security Standards (eg PCIDSS),

15. MODULE 15:

How standards deal with cloud services and virtualization, compliance for the cloud provider vs. compliance for the customer

COURSE OBJECTIVES

This course provides a comprehensive view of storage and networking infrastructures for highly virtualized cloud ready deployments. The course on cloud security introduces the basic concepts of security systems and cryptographic protocols, which are widely used in the design of cloud security. The issues related multi tenancy operation, virtualized infrastructure security and methods to improve virtualization security are also dealt with in this course.

Specifically, the course has the following objectives

1. Critically appraise the opportunities and challenges of information management in complex business environments
2. Evaluate information storage management design in a cloud environment and how it relates to the business objectives of an organization .
3. Analyze how best to provide reliable access to information both locally and remotely using storage technologies .
4. Investigate how a global storage solution can be optimized so that it can be delivered successfully from the cloud

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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

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CERTIFICATE COURSEON IMPLEMENT ADOBE ADVERTISING CLOUD SEARCH ACCORDING TO BUISNESS GOALS

Date of Introduction of the Course: 5.12.2018

The timings are

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	5.12.2018	**1. MODULE 1:** Cloud Computing fundamentals, private, public and hybrid cloud. Cloud types; IaaS, PaaS, SaaS. Benefits and challenges of cloud computing, public vs private clouds, role of virtualization in enabling the cloud; Business Agility: Benefits and challenges to Cloud architecture .
3,4	6.12.2018	**2. MODULE 2:** CLOUD APPLICATIONS :Technologies and the processes required when deploying web services; Deploying a web service from inside and outside a cloud architecture, advantages and disadvantages.
5,6	7.12.2018	**3. MODULE 3:** MANAGEMENT OF CLOUD SERVICES :Reliability, availability and security of services deployed from the cloud. Performance and scalability of services, tools and technologies used to manage cloud services deployment.
7,8	10.12.2018	**4. MODULE 4:** Cloud Economics : Cloud Computing infrastructures available for implementing cloud based services. Economics of choosing a Cloud platform for an organization, based on application requirements, economic constraints and business needs (e.g Amazon, Microsoft and Google, Salesforce.com, Ubuntu and Redhat.

9,10	**11.12.2018**	**MODULE 5:** APPLICATION DEVELOPMENT :Service creation environments to develop cloud based applications. Development environments for service development; Amazon, Azure, Google App.
11,12	**12.12.2018**	**6. MODULE 6:** CLOUD IT MODEL :Analysis of Case Studies when deciding to adopt cloud computing architecture. How to decide if the cloud is right for your requirements. Cloud based service, applications and development platform deployment so as to improve the total cost of ownership (TCO).
13,14	**13.12.2018**	**7. MODULE 7:** VIRTUALIZED DATA CENTER ARCHITECTUR:Cloud infrastructures; public, private, hybrid. Service provider interfaces; Saas, Paas, Iaas. VDC environments; concept, planning and design, business continuity and disaster recovery principles. Managing VDC and cloud environments and infrastructures.
15,16	**14.12.2018**	**8. MODULE 8:** INFORMATION STORAGE SECURITY & DESIGN:Storage strategy and governance; security and regulations. Designing secure solutions; the considerations and implementations involved. Securing storage in virtualized and cloud environments.
17,18	**17.12.2018**	**9. MODULE 9:** Monitoring and management; security auditing and SIEM.
19,20	**18.12.2018**	**10. MODULE 10:** INFORMATION STORAGE SECURITY &DESIGN :Storage strategy and governance; security and regulations. Designing secure solutions; the considerations and implementations involved. Securing storage in virtualized and cloud environments. Monitoring and management; security auditing and SIEM.
21,22	**19.12.2018**	**11. MODULE 11:** OPTIMIZATION OF CLOUD STORAGE: Global storage management locations, scalability, operational efficiency. Global storage distribution; terabytes to petabytes and greater. Policy based information management; metadata attitudes; file systems or object storage

23,24	**20.12.2018**	**12. MODULE 12:** INFORMATION AVAILABILITY DESIGN : Designing backup/recovery solutions to guarantee data availability in a virtualized environment. Design a replication solution, local remote and advanced. Investigate Replication in NAS and SAN environments. Data archiving solutions; analyzing compliance and archiving design considerations.
25,26	**21.12.2018**	**13. MODULE 13:** VIRTUALIZATIONSYSTEM-SPECIFIC ATTACKS:Guest hopping, attacks on the VM (delete the VM, attack on the control of the VM, code or file injection into the virtualized file structure), VM migration attack, hyperjacking.
27,28	**24.12.2018**	**14. MODULE 14:** LEGAL AND COMPLIANCE ISSUES :Responsibility, ownership of data, right to penetration test, local law where data is held, examination of modern Security Standards (eg PCIDSS),
29,30	**26.12.2018**	**15. MODULE 15:** How standards deal with cloud services and virtualization, compliance for the cloud provider vs. compliance for the customer

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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

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

IMPLEMENT ADOBE ADVERTISING CLOUD SEARCH ACCORDING TO BUISNESS GOALS

Date of Introduction of the Course: 5.12.2018

School of Computing
Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U17CS001	YALAMADDI BHARGAV
2	U17CS002	MAMDARAPU SARTHIK
3	U17CS076	BANDARI RANJITH REDDY
4	U17CS077	REKAPALLISASAANK
5	U17CS152	JAMMULADINNE RANGA REDDY
6	U17CS153	BANDARU JANARDHAN
7	U17CS227	SHAIK KHADARVALI
8	U17CS228	MURIKIPUDI ALEX
9	U16CS701	PRADEEP SURIYA
10	U16CS702	MOHANRAJ
11	U16CS100	GALLA BHUCHANDRA
12	U16CS101	NITHISHVAR S
13	U16CS151	PODAPATI ASMITHA
14	U16CS152	NALLAPU RAJESH
15	U16CS707	HANUMANTHU RAO
16	U16CS708	SIMRAN ALIZA NISAR
17	U15CS034	CHIDIPOTHU PRATHYUSHA
18	U15CS035	CHINTAGINJALA VENKATA SRI SAI SRAVYA
19	U15CS087	KARTHEESWARAN P
20	U15CS088	KARTHICK S
21	U15CS180	RAVURI SRIKANTH
22	U15CS182	RICHARD WUMBRAND J
23	U15CS183	S. PUNITHA
24	U15CS184	S. SAI SHRUTHI
25	U15CS185	SADHOLLA PRANAY REDDY
26	U15CS241	RUPESH KUMAR ROY
27	U15CS242	KOTAGIRI SAI CHAND
28	U15CS243	RANDHIR KUMAR

29	U15CS244	RAJESH.D
30	U15CS246	J.SAI RAM MADHAV
31	U15CS704	Karam
32	U15CS010	Divya
33	U15CS505	C.koushik
34	U15CS149	P.Khaja khan
35	U15CS122	MAHAMOD SHAJEEN
36	U15CS509	S.AJAY PERUMAL
37	U15CS511	PUJARI DOLIKASREE
38	U15CS512	KATTA PARDHU CHANDRAKANTH
39	U15CS513	KOMARA VENKATESH
40	U15CS188	SANDANAMUDI CHANDRA TEJA
41	U15CS189	SANTHOSH RAJ M
42	U15CS190	SATHISH S
43	U15CS707	ARVING.S.PINTO
44	U15CS708	C.A.AJISH MON
45	U15CS710	JAYANTHI..S
46	U15CS123	Mohammad Aslam Shareef
47	U15CS124	Mohankumar J
48	U15CS125	Molapanti Siva Kalpana
49	U15CS126	Mooraboina Naresh
50	U15CS704	Karam
51	U15CS010	Divya
52	U15CS505	C.koushik
53	U15CS149	P.Khaja khan
54	U15CS122	MAHAMOD SHAJEEN
55	U15CS509	S.AJAY PERUMAL
56	U15CS511	PUJARI DOLIKASREE
57	U15CS512	KATTA PARDHU CHANDRAKANTH
58	U15CS513	KOMARA VENKATESH

COURSE COORDINATOR **HEAD OF THE DEPARTMENT**

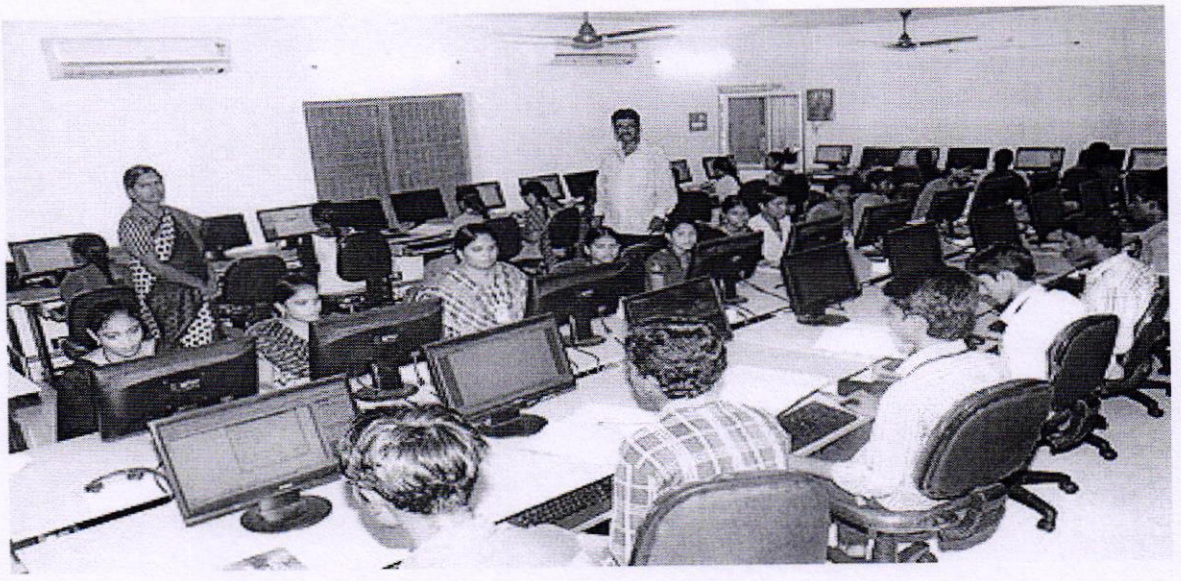
Department of Computer Science & Engg.,
Sathyabama Institute of Higher Education - Research
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Chennai-600 073. INDIA

Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

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

CERTIFICATE COURSE ON CERTIFICATE COURSE ON IMPLEMENT ADOBE ADVERTISING CLOUD SEARCH ACCORDING TO BUISNESS GOALS



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 OF PARTICIPATION

This certificate is presented to

S.SAI SHRUTHI (REG NO:U15CS184)

For actively participating in the value added course **"IMPLEMENT ADOBE ADVERTISING CLOUD SEARCH ACCORDING TO BUISNESS GOALS "** Conducted by School of Computing, BIHER from 05.12.2018 to 25.12.2018.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2018-2019					
Term							
Course Number							
Course Title		Implement Adobe Advertising cloud search according to Business goals					
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	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
Dept of Computer Sci...
Institute of Higher Educati...
Deemed to be University U/S 3 of UGC Act, 1956
Chennai-600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2018 - 2019					
Term							
Course Number							
Course Title		Implement adobe Advertising cloud Search According to Business goals.					
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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(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 Sci... & 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)
NAAC
BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai , T.N - 600 073.

Requisition Letter

Date:28.06.2018

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 **"SOLVING VERBAL ABILITY"** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organizevalue added course on **"SOLVING VERBAL ABILITY"** in our campus premises on **09.07.2018**, studentswould be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing 4:00 PM to 5:00 PM.Monday to Friday

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

HOD

HEAD OF DEPARTMENT
Department of Computer Sci... & 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

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

CIRCULAR

02.07.2018

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **SOLVING VERBAL ABILITY** for the benefit of II, III and IV year students. This course is scheduled from 09.07.2018 for 30hours which includes theory and practical. The timings are 4:00 PM to 5:00 PM from Monday to Friday.

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	Mr.M.Ramamoorthy	Professor
2	Mrs.R.Velvizhi	Professor

Head of Department

To

Copy to CSE

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HEAD OF DEPARTMENT
Department of Computer Sci & Eng
Bharath Institute of Higher Education & Resea
(Declared as Deemed to be University U/S 3 of UGC Act, 19
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 SOLVING VERBAL ABLITY

Date of Introduction of the Course:9.07.2018

COURSE SYLLABUS

1. MODULE 1:

Reading Comprehension (RC) is the ability to actively read the information (mostly passages) provided and assimilate the information to answer.

2. MODULE 2:

A Cloze test is an amalgamation of comprehension and fills in the blanks where you're reading, analysing and vocabulary skills are all tested at once. A comprehension or a passage is given in the question which comprises blanks. Candidates need to choose the most appropriate word from the given options, which can most suitably be placed in the blank.

3. MODULE3:

Certain nouns being a singular form represent plurality and therefore, take a plural verb in a sentence.Certain nouns take the plural verb because of their plural form. When a noun denoting weight, number, money, length or measure is following a number, the noun form does not change as long as another noun or pronoun .

4. MODULE 4:

There are multiple mistakes that a candidate can make while answering questions from the sentence rearrangement topic. So, solving the questions with the correct approach shall help candidates answer the parajumbles without making errors.

5. MODULE 5:

One word substitution is the use of one word in place of a wordy phrase in order to make the sentence structure clearer. The meaning, with the replacement of the phrase remains identical while the sentence becomes shorter.

6. MODULE 6:

One Word Substitution is the use of Understand the concept of one word substitution and its relevance for the competitive examination, it is important to know the types of questions asked in exams, based on the same.

7. MODULE 7:

Before learning various words of synonyms and antonyms, let us first understand the meaning of both the words.A synonym is a word/phrase, the meaning of which is the same or nearly the same as another word or phrase. Words that are synonyms are described as synonymous.

8. MODULE 8:

To understand the usage of Idioms and Phrases and how to deal with the questions based on this topicIdioms and Phrases.

9. MODULE 9:

Learning root words in English is not only helpful to fetch good marks in the verbal ability section of competitive exams but also help to hone up the English vocabulary skills in general.

10. MODULE 10:

A root word is a word that forms the basis of new words by adding affixes (prefixes or suffixes). It is the most basic part of any word.

11. MODULE 11:

The basic structure of roots are either affixed or suffixed and then they become a new word. An understanding of the usual root words will help make a good guess about the meaning of newly known words and will, in turn, strengthen your vocabulary.

12. MODULE 12:

Understanding the importance of new words by their relevant use is the most normal method for adopting new words and is the motivation behind why these lines of learning are the best. Candidates can also check the English Root Words page to understand the formation of new words and improve their vocab base.

.13. MODULE 13:

Having a good English vocabulary is very essential, although in examination candidates are not tested on their knowledge of difficult words directly. The reason is the Verbal Ability questions that are based on vocabulary words may have some arduous words.

14. MODULE 14:

Understand the passages in reading comprehension and answer the related questions effectively. Check the Reading Comprehension page to learn a better way to understand English RC's – reading comprehension.

15. MODULE 15:

English Vocabulary words are majorly covered in the form of Reading Comprehension questions or Sentence completion questions or sometimes it is asked in the form of One-word substitution, Synonyms and Antonyms or Homophones.

COURSE OBJECTIVES

Reasoning as a subject has been growing in significance across competitive examinations in India. This is the only assessment area where conventional question types are evolving inclusively and new types of questions are emerging. Students are always on the lookout for resources that provide them a balanced approach to study the ever-growing types of reasoning questions, as well as give them ample practice material to hone their skills while preparing for success. This objective reasoning series, structured in three books—Objective Verbal Reasoning, ObjectiveNon-VerbalReasoning, and Objective Logical Reasoning—is an attempt to provide the candidates a resource to attain conceptual clarity needed to comprehend reasoning questions in a simple way and solve the questions accurately.

Specifically, the course has the following objectives:

Students will learn

- Understand the crux of the passage
- Answer questions based on the text provided
- Work on stronger vocabulary
- Increase readability by reading newspapers and paragraphs
- Read all the given statements carefully and analyse the common point between them and then start rearranging them.
- The vocabulary skills that will help them in descriptive sections such as Essay/Letter writing or précis writing.

COURSE COORDINATOR **HEAD OF THE DEPARTMENT**

HEAD OF DEPARTMENT
Department of Computer Sci... & 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 SOLVING VERBAL ABILITY

Date of Introduction of the Course: 9.07.2018

COURSE SYLLABUS

1. MODULE 1:

Reading Comprehension (RC) is the ability to actively read the information (mostly passages) provided and assimilate the information to answer.

2. MODULE 2:

A Cloze test is an amalgamation of comprehension and fills in the blanks where you're reading, analysing and vocabulary skills are all tested at once. A comprehension or a passage is given in the question which comprises blanks. Candidates need to choose the most appropriate word from the given options, which can most suitably be placed in the blank.

3. MODULE3:

Certain nouns being a singular form represent plurality and therefore, take a plural verb in a sentence.Certain nouns take the plural verb because of their plural form. When a noun denoting weight, number, money, length or measure is following a number, the noun form does not change as long as another noun or pronoun .

4. MODULE 4:

There are multiple mistakes that a candidate can make while answering questions from the sentence rearrangement topic. So, solving the questions with the correct approach shall help candidates answer the parajumbles without making errors.

5. MODULE 5:

One word substitution is the use of one word in place of a wordy phrase in order to make the sentence structure clearer. The meaning, with the replacement of the phrase remains identical while the sentence becomes shorter.

6. MODULE 6:

One Word Substitution is the use of Understand the concept of one word substitution and its relevance for the competitive examination, it is important to know the types of questions asked in exams, based on the same.

7. MODULE 7:

Before learning various words of synonyms and antonyms, let us first understand the meaning of both the words.A synonym is a word/phrase, the meaning of which is the same or nearly the same as another word or phrase. Words that are synonyms are described as synonymous.

8. MODULE 8:

To understand the usage of Idioms and Phrases and how to deal with the questions based on this topicIdioms and Phrases.

9. MODULE 9:

Learning root words in English is not only helpful to fetch good marks in the verbal ability section of competitive exams but also help to hone up the English vocabulary skills in general.

10. MODULE 10:

A root word is a word that forms the basis of new words by adding affixes (prefixes or suffixes). It is the most basic part of any word.

11. MODULE 11:

The basic structure of roots are either affixed or suffixed and then they become a new word. An understanding of the usual root words will help make a good guess about the meaning of newly known words and will, in turn, strengthen your vocabulary.

12. MODULE 12:

Understanding the importance of new words by their relevant use is the most normal method for adopting new words and is the motivation behind why these lines of learning are the best. Candidates can also check the English Root Words page to understand the formation of new words and improve their vocab base.

.13. MODULE 13:

Having a good English vocabulary is very essential, although in examination candidates are not tested on their knowledge of difficult words directly. The reason is the Verbal Ability questions that are based on vocabulary words may have some arduous words.

14. MODULE 14:

Understand the passages in reading comprehension and answer the related questions effectively. Check the Reading Comprehension page to learn a better way to understand English RC's – reading comprehension.

15. MODULE 15:

English Vocabulary words are majorly covered in the form of Reading Comprehension questions or Sentence completion questions or sometimes it is asked in the form of One-word substitution, Synonyms and Antonyms or Homophones.

COURSE OBJECTIVES

Reasoning as a subject has been growing in significance across competitive examinations in India. This is the only assessment area where conventional question types are evolving inclusively and new types of questions are emerging. Students are always on the lookout for resources that provide them a balanced approach to study the ever-growing types of reasoning questions, as well as give them ample practice material to hone their skills while preparing for success. This objective reasoning series, structured in three books—Objective Verbal Reasoning, ObjectiveNon-VerbalReasoning, and Objective Logical Reasoning—is an attempt to provide the candidates a resource to attain conceptual clarity needed to comprehend reasoning questions in a simple way and solve the questions accurately.

Specifically, the course has the following objectives:

Students will learn

- Understand the crux of the passage
- Answer questions based on the text provided
- Work on stronger vocabulary
- Increase readability by reading newspapers and paragraphs
- Read all the given statements carefully and analyse the common point between them and then start rearranging them.
- The exercise on One Word Substitution Questions and Answers for practice and revision.
- The vocabulary skills that will help them in descriptive sections such as Essay/Letter writing or précis writing.

COURSE COORDINATOR **HEAD OF THE DEPARTMENT**

HEAD OF DEPARTMENT
Department of Computer Sci... & 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 SOLVING VERBAL ABILITY
Date of Introduction of the Course: 09.07.2018

School of Computing
Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U17CS001	YALAMADDI BHARGAV
2	U17CS002	MAMDARAPU SARTHIK
3	U17CS076	BANDARI RANJITH REDDY
4	U17CS077	REKAPALLISASAANK
5	U17CS152	JAMMULADINNE RANGA REDDY
6	U17CS153	BANDARU JANARDHAN
7	U17CS227	SHAIK KHADARVALI
8	U17CS228	MURIKIPUDI ALEX
9	U16CS701	PRADEEP SURIYA
10	U16CS702	MOHANRAJ
11	U16CS100	GALLA BHUCHANDRA
12	U16CS101	NITHISHVAR S
13	U16CS151	PODAPATI ASMITHA
14	U16CS152	NALLAPU RAJESH
15	U16CS707	HANUMANTHU RAO
16	U16CS708	SIMRAN ALIZA NISAR
17	U15CS034	CHIDIPOTHU PRATHYUSHA
18	U15CS035	CHINTAGINJALA VENKATA SRI SAI SRAVYA
19	U15CS087	KARTHEESWARAN P
20	U15CS088	KARTHICK S
21	U15CS180	RAVURI SRIKANTH
22	U15CS182	RICHARD WUMBRAND J
23	U15CS183	S. PUNITHA
24	U15CS184	S. SAI SHRUTHI
25	U15CS185	SADHOLLA PRANAY REDDY

26	U15CS241	RUPESH KUMAR ROY
27	U15CS242	KOTAGIRI SAI CHAND
28	U15CS243	RANDHIR KUMAR
29	U15CS244	RAJESH.D
30	U15CS246	J.SAI RAM MADHAV
31	U15CS704	Karam
32	U15CS010	Divya
33	U15CS505	C.koushik
34	U15CS149	P.Khaja khan
35	U15CS122	MAHAMOD SHAJEEN
36	U15CS509	S.AJAY PERUMAL
37	U15CS511	PUJARI DOLIKASREE
38	U15CS512	KATTA PARDHU CHANDRAKANTH
39	U15CS513	KOMARA VENKATESH
40	U15CS188	SANDANAMUDI CHANDRA TEJA
41	U15CS189	SANTHOSH RAJ M
42	U15CS190	SATHISH S
43	U15CS707	ARVING.S.PINTO
44	U15CS708	C.A.AJISH MON
45	U15CS710	JAYANTHI..S

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

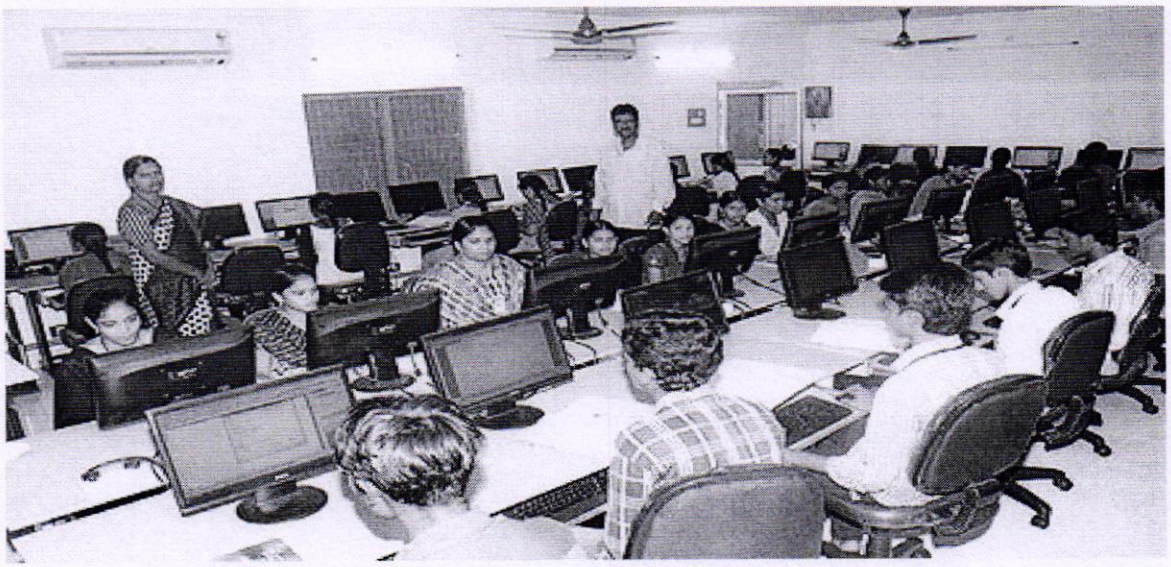
HEAD OF DEPARTMENT
Department of Computer Sci[illegible] Engg.,
Bharath Institute of Higher Education & Research
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Chennai-600 073. INDIA

Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

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CERTIFICATE COURSE ON SOLVING VERBAL ABILITY



COURSE COORDINATOR

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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 OF PARTICIPATION

This certificate is presented to

KARTHICK S(REG NO:U15CS088)

For actively participating in the value added course **"SOLVING VERBAL ABILITY "**

Conducted by School of Computing, BIHER from 09.07.2018 to 20.08.2018.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2018 – 2019					
Term							
Course Number							
Course Title		Solving Verbal ability					
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	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	

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 Sci... & Engg.,
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Chennai-600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2018 - 2019					
Term		1					
Course Number							
Course Title		Solving verbal ability					
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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(i)	Have done part of this course earlier	yes
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(a)	Enhance by skill base in the area of specializations	yes
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(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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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:05.09.2018

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 **"Entrepreneur Mind"** -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 **"Entrepreneur Mind"** in our campus premises on **07.09.2018**, students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing: 1:30 PM to 4:30 PM from Monday to Friday(AN)

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

HOD

DEAN ENGINEERING

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

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

CIRCULAR

05.09.2018

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on "Entrepreneur Mind " for the benefit of II, III and IV year students. This course is scheduled from 07.09.2018 for 30 hours which includes theory and practical. The timings are I :30 PM to 4:30 PM from Friday (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

SNo	Name of the Faculty	Designation
1	Mr.K.Sivaraman	Assistant Professor
2	Mr,B.Sundarrajan	Assistant Professor

Head of Department

To

Copy to CSE

Copy to IT

HEAD OF DEPARTMENT
Department of Computer Sci... & Engg.,
Bharath Institute of Higher Education & Research
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INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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CERTIFICATE COURSE ON ENTREPRENEUR MIND

Date of Introduction of the Course 07-09-2018

COURSE SYLLABUS

Module-I: Introduction to Entrepreneurship

Meaning and concept of entrepreneurship, the history of entrepreneurship development, role of entrepreneurship in economic development, Myths about entrepreneurs, agencies in entrepreneurship management and future of entrepreneurship types of entrepreneurs.

Module-II: The Entrepreneur

Why to become entrepreneur, the skills/ traits required to be an entrepreneur, Creative and Design Thinking, the entrepreneurial decision process, skill gap analysis, and role models, mentors and support system, entrepreneurial success stories.

Module-III: E-Cell

Meaning and concept of E-cells, advantages to join E-cell, significance of E-cell, various activities conducted by E-cell

Module-IV: Communication

Importance of communication, barriers and gateways to communication, listening to people, the power of talk, personal selling, risk taking & resilience, negotiation.

Module-V: Introduction to various form of business organization (sole proprietorship, partnership, corporations, Limited Liability company), mission, vision and strategy formulation.

COURSE OBJECTIVES

The goals of this programme are to inspire students and help them imbibe an entrepreneurial mind-set. The students will learn what entrepreneurship is and how it has impacted the world and their country. They will be introduced to key traits and the DNA of an entrepreneur, and be given an opportunity to assess their own strengths and identify gaps that need to be addressed to become a successful entrepreneur.

The programme comprises several short courses, each focusing on a specific entrepreneurial knowledge or skill requirement such as creative thinking, communication, risk taking, and resilience and helping them become career ready, whether it is entrepreneurship or any other career.

Specifically, the course has the following objectives:

Students will learn

1) Develop awareness about entrepreneurship and successful entrepreneurs.

2) Develop an entrepreneurial mind-set by learning key skills such as design, personal selling, and communication.

3) Understand the DNA of an entrepreneur and assess their strengths and weaknesses from an entrepreneurial perspective.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Science & Engg.,
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CERTIFICATE COURSE ON ENTREPRENEUR MIND

Date of Introduction of the Course: 07.09.2018

The timings are 1:30 PM to 4:30 PM from Friday (AN) and Saturday (FN&AN).

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	07-09-2018(AN)	1. Introduction to Entrepreneurship Meaning and concept of entrepreneurship, the history of entrepreneurship development, role of entrepreneurship in economic development.
3,4	08-09-2018(FN)	2. Entrepreneurship Myths about entrepreneurs, agencies in entrepreneurship management and future of entrepreneurship types of entrepreneurs.
5,6	08-09-2018(AN)	**3.** The Entrepreneur Why to become entrepreneur, the skills/ traits required to be an entrepreneur, Creative and Design Thinking, the entrepreneurial decision process,....
7,8	14-09-2018(AN)	**4.** Mentors and Support skill gap analysis, and role models, mentors and support system, entrepreneurial success stories....
9,10	15-09-2018(AN)	**5.** E-Cell Meaning and concept of E-cells, advantages to join E-cell, significance of E-cell, various activities conducted by E-cell
11,12	15-09-2018(FN)	**6.** Communication Importance of communication, barriers and gateways to communication.
13,14	21-09-2018(AN)	**7.** Personal selling listening to people, the power of talk, personal selling, risk taking & resilience, negotiation.
15,16	22-09-2018(AN)	**8.**) Mission, Vision Introduction to various form of business organization (sole proprietorship, partnership, corporations, Limited Liability company), mission, vision and strategy formulation
17,18	22-09-2018(AN)	**9.** Communication

		Importance of communication, barriers and gateways to communication
19,20	**28-09-2018(FN)**	**10.** Personal selling listening to people, the power of talk, personal selling, risk taking & resilience, negotiation
21,22	**29-09-2018(AN)**	**11.** E-Cell Meaning and concept of E-cells, advantages to join E-cell, significance of E-cell, various activities conducted by E-cell
23,24	**29-09-2018(AN)**	**12.** Mentors and Support skill gap analysis, and role models, mentors and support system, entrepreneurial success stories....
25,26	**05-10-2018(AN)**	**13.** The Entrepreneur Why to become entrepreneur, the skills/ traits required to be an entrepreneur, Creative and Design Thinking, the entrepreneurial decision process,.... .
27,28	**06-10-2018(FN)**	**14. .** Personal selling listening to people, the power of talk, personal selling, risk taking & resilience, negotiation
29,30	**06-10-2018(AN)**	**15.** Introduction to various form of business organization (sole proprietorship, partnership, corporations, Limited Liability company), mission, vision and strategy formulation.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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CERTIFICATE COURSE ON ENTREPRENEUR MIND
Date of Introduction of the Course: 07.09.2018

School of Computing

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U14CS001	AADHITYA MALLIKA ARJUN
2	U14CS002	AAVULA DIXITH REDDY
3	U14CS003	ABDUL RAHIM.M
4	U14CS004	ABDUL RAZVI .M.K
5	U14CS005	ABDUR RASEED
6	U14CS006	ABHIKAMALI .A
7	U14CS007	ABHISHEK MANDURI
8	U14CS008	AJAY.D
9	U14CS009	AKASH CHANDRA AMBASTHA
10	U14CS010	AKHIL REDDY.G
11	U14CS011	AKSHAY.R
12	U14CS012	AMAR BASUMATARY
13	U14CS013	ANDREW JOSEPH.V
14	U14CS015	ANKITA
15	U14CS016	ANNILKRISHNAN .K
16	U14CS017	ASHUTOSH SRIVASTAVA
17	U14CS019	ARAMBAKAM,YASWANTH
18	U14CS021	AREEF SYED
19	U14CS022	ARUN KUMAR SINGH
20	U14CS023	ASIF NAZIR WANI
21	U14CS024	ATUL ANAND
22	U14CS025	BACHU HARISH
23	U14CS027	BALAJI SINGH. T
24	U14CS029	BALAKRISHNAN.T
25	U14CS031	BISHAL BANIK

26	U14CS033	BOORAGADDA VAMSI KRISHNA
27	U14CS034	BOYAPATI VINAY
28	U14CS035	BYSANI VENKAT SANDEEP
29	U14CS038	CHIDIRALA.SAI SHANKAR
30	U14CS040	CHINTAPANTI SRIKANTH
31	U14CS041	CHINTLA VENKATESH
32	U14CS042	CHUDAAMANI.V
33	U14CS045	DEEPAKSANKAR REDDY.M
34	U14CS047	DEVULAPALLY NAGARAJU
35	U14CS048	DIVYA RUPINI.B

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 OF PARTICIPATION

This certificate is presented to

DIVYA RUPINI.B

For actively participating in the value added course on **"Entrepreneur Mind"**
Conducted by School of Computing, BIHER from 07.09.2018 to.06-10-2018

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2018-2019					
Term		-					
Course Number		-					
Course Title		ENTrepreneur min					
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

HEAD OF DEPARTMENT
Department of Computer Sci... & 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		2018-2019					
Term							
Course Number							
Course Title		Entrepreneur mind					
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

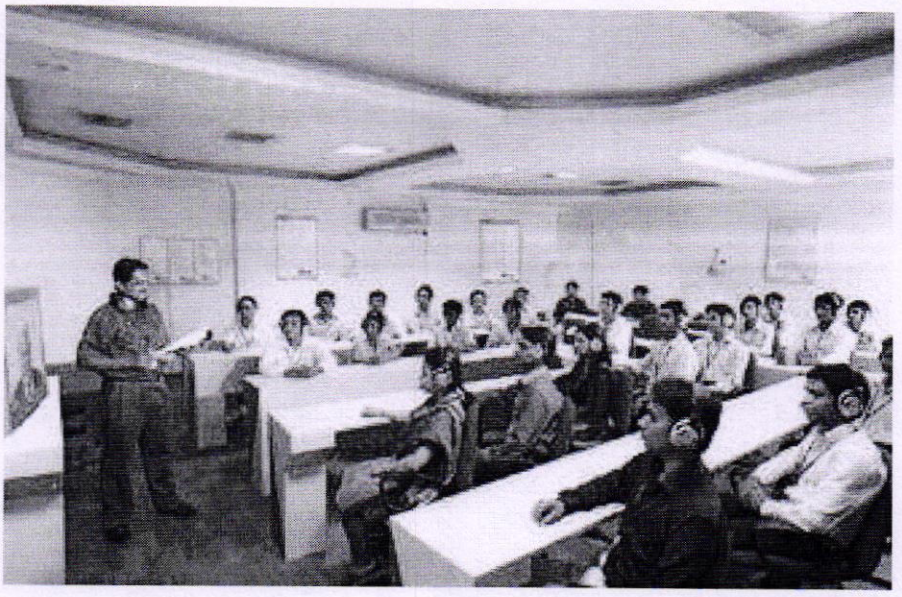
About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

		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

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



Chennai-600 073. INDIA

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: 18.1.2019

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 **"Comprehensive Understanding Of Deep Learning"** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organizevalue added course on **"Comprehensive Understanding Of Deep Learning"** in our campus premises on **30.1.2019**, studentswould be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing 4:00 PM to 5:00 PM.Monday to Friday

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

HOD

DEAN ENGINEERING

HEAD OF DEPARTMENT
Department of Computer Sci & 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)

CIRCULAR

25.1.2019

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Comprehensive Understanding Of Deep Learning**for the benefit of II, III and IV year students. This course is scheduled from 30.1.2019 for 30hours which includes theory and practical. The timings are 4 p.m-5 p.m from Monday –Friday.

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	Dr.C.Rajabhushanam	Professor

Head of Department

To

Copy to CSE

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HEAD OF DEPARTMENT
Department of Computer Sci & Engg.,
Bharath Institute of Higher Education & Research
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CERTIFICATE COURSE ON COMPREHENSIVE UNDERSTANDING OF DEEP LEARNING

Date of Introduction of the Course: 30.1.2019

COURSE SYLLABUS

1. Inauguration of value Added course on Comprehensive Understanding of Deep Learning
2. Introduction: Various paradigms of earning Problems
3. Perspectives and Issues in Deep Learning Framework:
    1. Provide a brief overview of deep learning, and highlight current research efforts and the challenges to Deep Learning, as well as the future trends.
4. Review of Fundamental Learning techniques:
    a. Classic **Neural Networks**. ...
    b. Convolutional **Neural Networks**. ...
    c. Recurrent **Neural Networks** (RNNs) ...
    d. Generative Adversarial Networks. ...
    e. Self-Organizing Maps.
5. Feedforward neural network
6. Artificial Neural Network
7. Activation Function, Multi-layer neural network
8. Training Neural Network
9. Risk minimization, loss function
10. Back propagation
11. Regularization, Model selection
12. Optimization
13. Conditional Random Fields
14. Linear Chain, Partition function
15. Markov network, Belief propagation
16. Training CRFs, Hidden Markov model, Entropy
17. Deep Learning:
    i. Deep Feed Forward network, Regularizations

18. Recurrent Neural Network , Deep Belief Network

19. Probalistic Neural Network, Hopfield Net, Boltzman machine, RBMs

20. Sigmoid net, Autoencoders, Deep Learning research:Object recognition

21. Object recognition
22. Sparse coding,Computer vision
23. Natural Language Processing
24. Deep Learning Tools: Caffe, Theano, Torch

COURSE OBJECTIVES

In this course we plan to give students an overview of the field of Deep Learning, and an in-depth study into its enabling technologies and main building blocks. Students will gain hands-on experience solving relevant problems through projects that will utilize existing algorithms. It is our objective that students will develop the skills needed to become a practitioner or carry out research projects in this domain.

Specifically, the course has the following objectives:

Students will learn

1) The fundamental ideas behind Deep Learning, the evolution of the paradigm, its applicability; Benefits, as well as current and future challenges;
2) This topics course aims to present the mathematical, statistical and computational challenges of building stable representations for high-dimensional data, such as images, text and data.
3) We will delve into selected topics of Deep Learning, discussing recent models from both supervised and unsupervised learning.
4) Special emphasis will be on convolutional architectures, invariance learning, unsupervised learning and non-convex optimization.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci... & Engg.
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CERTIFICATE COURSE ON COMPREHENSIVE UNDERSTANDING OF DEEP LEARNING

Date of Introduction of the Course:30.1.2019

The timings are

Time Table& Lesson plan

CLASS(Timing 4-5p.m)	DATE	TOPIC
class 1	30/1/2019	Inauguration of value Added course on Comprehensive Understanding of Deep Learning Introduction: Various paradigms of earning Problems
Class2	31/2/2019	Perspectives and Issues in Deep Learning Framework Review of Fundamental Learning techniques
Class 3	3/2/2019	Feedforward neural network Artificial Neural Network
Class 4	4/2/2019	Activation Function, Multi-layer neural network Training Neural Network
Class 5	5/2/2019	Risk minimization, loss function Back propagation
Class 6	6/2/2019	Regularization, Model selection Optimization
Class 7	7/2/2019	Conditional Random Fields Linear Chain, Partition function
Class 8	8/2/2019	Markov network, Belief propagation

Class 9	**11/2/2019**	Training CRFs, Hidden Markov model, Entropy
Class 10	**12/2/2019**	Deep Learning: Deep Feed Forward network, Regularizations
Class 11	**13/2/2019**	Recurrent Neural Network , Deep Belief Network
Class 12	**14/2/2019**	Probalistic Neural Network, Hopfield Net, Boltzman machine, RBMs
Class 13	**15/2/2019**	Sigmoid net, Autoencoders, Deep Learning research:Object recognition
Class 14	**18/2/2019**	Object recognition
Class 15	**19/2/2019**	Sparse coding,Computer vision Natural Language Processing Deep Learning Tools: Caffe, Theano, Torch

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Sci... Engg.,
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CERTIFICATE COURSE ON COMPREHENSIVE UNDERSTANDING OF DEEP LEARNING

Date of Introduction of the Course: 30.01.2019

School of Computing
Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U17CS001	YALAMADDI BHARGAV
2	U17CS002	MAMDARAPU SARTHIK
3	U17CS003	BHUVANESHWARI P
4	U17CS004	PRASANNAKUMAR E
5	U17CS005	MUGUNTHAN A L
6	U17CS081	SHAIK AFREED
7	U17CS082	NIRMALA DEVI S
8	U17CS083	SODUM BHARATH SHIVA REDDY
9	U17CS084	OGUBOINA KIRAN
10	U17CS085	Y BHAVYA
11	U17CS152	JAMMULADINNE RANGA REDDY
12	U17CS153	BANDARU JANARDHAN
13	U17CS154	PASAM ANIL KRISHNA
14	U16CS701	PRADEEP SURIYA
15	U16CS702	MOHANRAJ
16	U16CS100	GALLA BHUCHANDRA
17	U16CS101	NITHISHVAR S
18	U16CS151	PODAPATI ASMITHA
19	U16CS152	NALLAPU RAJESH
20	U16CS707	HANUMANTHU RAO
21	U16CS708	SIMRAN ALIZA NISAR
22	U15CS034	CHIDIPOTHU PRATHYUSHA
23	U15CS035	CHINTAGINJALA VENKATA SRI SAI SRAVYA

24	U15CS087	KARTHEESWARAN P
25	U15CS088	KARTHICK S
26	U15CS180	RAVURI SRIKANTH
27	U15CS182	RICHARD WUMBRAND J
28	U15CS183	S. PUNITHA
29	U15CS184	S. SAI SHRUTHI
30	U15CS185	SADHOLLA PRANAY REDDY

COURSE COORD

HEAD OF THE DEPARTMENT

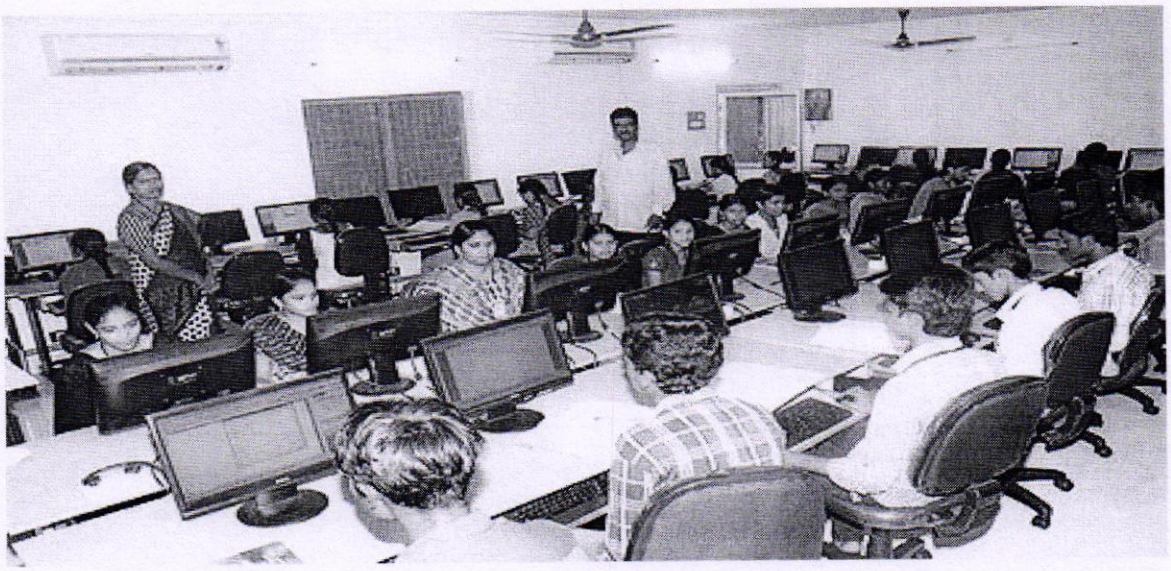
HEAD OF DEPARTMENT
Department of Computer Sci & Engg.,
Bharath Institute of Higher Education & Research
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)
Chennai-600 073. INDIA

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CERTIFICATE COURSE ON CERTIFICATE COMPREHENSIVE UNDERSTANDING OF DEEP LEARNING



COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Sci... & Engg.,
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Chennai-600 073. INDIA

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INSTITUTE OF HIGHER EDUCATION AND RESEARCH

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CERTIFICATE OF PARTICIPATION

This certificate is presented to

MOHANRAJ U16CS702

For actively participating in the value added course **"Comprehensive Understanding Of Deep Learning"** Conducted by School of Computing, BIHER from 30/1/2019 to 19/2/2019.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2019-2020					
Term							
Course Number							
Course Title		Comprehensive Understanding of Deeplearning.					
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	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 Sci... 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		2019-2020					
Term							
Course Number							
Course Title		Comprehensive Understanding of Deep Learning					
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	No
(iv)	Have no exposure to the background material	Yes

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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	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

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

Requisition Letter

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

Date: 03.01.2019

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 "**Reinforcement Learning**" -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 "**Reinforcement Learning**" in our campus premises from 30.01.2019 for 38hours

Ourinternal Professorswould deliver lecture for the above mentioned course. About 50 students would be participating in this course. We request you kindly to give permission to organize this.

Venue: **CSEClass room**

Timing : 1:30 PM to 4:30 PM Friday (AN) and

9.00 PM to 4.00 PM Saturday (FN&AN).

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

HOD/CSE

DEAN ENGINEERING

HEAD OF DEPARTMENT
Department of Computer Sci... & 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)

CIRCULAR

25.01.2019

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Reinforcement Learning**for the benefit of II, III and IV year students. This course is scheduled from30.01.2019 for 38hours which includes theory and practical. The timings are 1:30 PM to 4:30 PM from Friday (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.K.P.Kaliyamurthie	Professor
2	Dr.C.Rajabhushanam	Professor

Head of Department

To

Copy to CSE

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HEAD OF DEPARTMENT
Department of Computer Sci... & Engg.,
Bharath Institute of Higher Education & Research

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CERTIFICATE COURSE ON REINFORCEMENT LEARNING

Date of Introduction of the Course:30.01.2019

COURSE OBJECTIVE

Reinforcement Learning is a subfield of Machine Learning, but is also a general purpose formalism for automated decision-making and AI. This course introduces you to statistical learning techniques where an agent explicitly takes actions and interacts with the world. Understanding the importance and challenges of learning agents that make decisions is of vital importance today, with more and more companies interested in interactive agents and intelligent decision-making. This course introduces you to the fundamentals of Reinforcement Learning.

WHAT TO EXPECT

- ✓ Formalize problems as Markov Decision Processes
- ✓ Understand basic exploration methods and the exploration/exploitation tradeoff
- ✓ Understand value functions, as a general-purpose tool for optimal decision-making
- ✓ Know how to implement dynamic programming as an efficient solution approach to an industrial control problem

COURSE SYLLABUS

1. **Introduction to RL and immediate RL**
    - Introduction to RL
    - RL Framework and applications
    - Introduction to immediate RL
    - Bandit optimalities
    - Value function based methods

2. **Bandit algorithm**
    - UCB 1
    - Concentration bounds
    - UCB 1 theorem
    - PAC bounds
    - median elimination
    - Thompson sampling

3. **Policy gradient methods and introduction to full reinforcement learning**
    - Policy search
    - Reinforce
    - Contextual bandits
    - Full reinforcement learning introduction
    - Returns , value functions and MDP

4. **MDP formulation, bellman equations and optimality proof**
    - MDP modelling
    - Bellman equations
    - Bellman optimality equation
    - Cauchy sequence and green's equation
    - Banach fixed point theorem
    - Convergence proof

5. **Dynamic programming and Monte Carlo methods**
    - Lpi convergence
    - Value iteration
    - Policy iteration
    - Dynamic programming
    - Montu kar lo
    - Control in Monte Carlo

6. **Monte Carlo and temporal difference methods .**
    - Off policy MC
    - UCT
    - TD(0)
    - TD(0) control
    - Q learning
    - After state

7. **Eligibility traces**
    - eligibility traces
    - Backward view of eligibility traces
    - Eligibility trace control
    - Thompson sampling recap

8. **Function approximation**
    - Function approximation
    - Linear parametrization
    - State aggregation methods
    - Function of approximation and eligibility traces
    - LSTD & LSTDQ
    - LSPI & fitted Q

9. DQN , Fitted Q & policy gradient approaches

- DQN and fitted Q Iteration
- Policy gradient approach
- Actor critic and reinforce
- Policy Gradient with function approximation

10. Hierarchical reinforcement learning

- Hierarchical Enforcement learning
- Types of optimality
- Semi Markov decision processes
- Options
- Learning with options
- Hierarchical abstract machines.

11. Hierarchical reinforcement learning - MAXQ

- MAXQ
- MAXQ value function decomposition
- Option Discovery

12. POMDP

- POMDP introduction
- Solving POMDP

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Science & Engg.,
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CERTIFICATE COURSE ON REINFORCEMENT LEARNING

Date of Course Introduction 30/01/2019

School Of Computing

Registered Students 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	U15CS011	ANUMOLU YESWANTH
11	U15CS012	ARAVAPALLI SIVA VINAYA
12	U15CS013	ARAVINDHAN K R
13	U15CS014	ARVIND KUMR YADAV
14	U15CS015	ARYAN SAHU
15	U15CS016	ASHISH AGARWAL
16	U15CS064	INJE RAVI TEJA
17	U15CS065	INNURU SWATHI
18	U15CS066	JAGADEESH K
19	U15CS067	JAGADEESWARA RAO JADDU
20	U15CS068	JAICHAND KUMAR
21	U15CS069	JANAKI RAMAN V
22	U15CS071	JOHN PARAM JYOTHI JYOTHULA
23	U15CS073	K THULASIRAM
24	U15CS074	KADALI VINAYNARASIMHA
25	U15CS075	KADUMU MOUNIKA
26	U15CS076	KAIPU PRANAY REDDY
27	U15CS077	KALYANAM JASWANTH NAIDU
28	U15CS078	KAMBLE NIKHIL KUMAR
29	U15CS079	KANCHARLAPALLI LOKESHWAR RAO
30	U15CS080	KANCHUMARTHI BHUVANESWAR VINAY
31	U15CS127	MUPPALLA SURENDRA
32	U15CS128	MURARI KUMAR CHAUDHARY
33	U15CS129	N SWAPNA RAAGA
34	U15CS130	NAGANNAGARI JAGADISH
35	U15CS133	NALLURI AKHIL BABU
36	U15CS134	NAMBURI VIJAY KUMAR

37	U15CS135	NARENDULA NIREESHA
38	U15CS136	NARESH K
39	U15CS138	NEELA SAI KUMAR
40	U15CS139	NIKHIL KUMAR
41	U15CS140	NIRANJAN S
42	U15CS141	NITIN SINGH
43	U15CS142	NUKALA BHODANANDA CHARAN
44	U15CS143	OLIVER S
45	U15CS144	OMPRAKASH YADAV
46	U15CS191	SEETAPTI HEMA SEKHAR
47	U15CS192	SESHA SRUJAN.B
48	U15CS193	SHAIK AFRIDI
49	U15CS194	SHAIK SABIR
50	U15CS195	SHAIK YASMEEN

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

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CERTIFICATE COURSE ON REINFORCEMENT LEARNING

Date of Introduction of the Course:31.01.2019

The timings are 1:30 PM to 4:30 PM from Friday (AN) and Saturday (FN&AN)

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	30-01-2019	• Introduction to RL • RL Framework and applications
3,4, 5,6	02-02-2019	• Introduction to immediate RL • Bandit optimalities • Value function based methods • UCB 1 • Concentration bounds • UCB 1 theorem
7,8	08-02-2019	• PAC bounds • median elimination • Thompson sampling
9,10, 11,12	09-02-2019	• Policy search • Reinforce • Contextual bandits • Full reinforcement learning introduction • Returns , value functions and MDP
13,14	15-02-2019	• MDP modelling • Bellman equations • Bellman optimality equation • Cauchy sequence and green's equation

15,16, 17,18	**16-02-2019**	• Banach fixed point theorem • Convergence proof • Lpi convergence • Value iteration • Policy iteration
19,20	**22-02-2019**	• Dynamic programming • Montu kar lo • Control in Monte Carlo • Off policy MC
21,22, 23,24	**23-02-2019**	• UCT • TD(0) • TD(0) control • Q learning • After state
25,26	**01-03-2019**	• eligibility traces • Backward view of eligibility traces • Eligibility trace control • Thompson sampling recap
27,28, 29,30	**02-03-2019**	• Function approximation • Linear parametrization • State aggregation methods • Function of approximation and eligibility traces • LSTD & LSTDQ • LSPI & fitted Q
31,32	**08-03-2019**	• DQN and fitted Q Iteration • Policy gradient approach • Actor critic and reinforce • Policy Gradient with function approximation
33,34,35,36	**09-03-2019**	• Hierarchical Enforcement learning • Types of optimality • Semi Markov decision processes • Options • Learning with options • Hierarchical abstract machines.

37,38	**15-03-2019**	• MAXQ • MAXQ value function decomposition • Option Discovery • POMDP introduction • Solving POMDP

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

Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

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

CERTIFICATE OF PARTICIPATION

This is Presented to

Mr . ABHIJEET KUMAR

For actively participating in value added course on "***Reinforcement Learning***" conducted by School Computing , BIHER from 30-01-2019 to 15-03-2019 .

Coordinator **HOD** **DIRECTOR**

COURSE FEEDBACK FORM

Academic Year		2019-20					
Term							
Course Number		–					
Course Title		Reinforcemant Learning					
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**	

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CERTIFICATE COURSE ON REINFORCEMENT LEARNING

Date of Course Introduction 30/01/2019
School of Computing



COURSE COORDINATOR

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Chennai-600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2018 - 2019					
Term							
Course Number							
Course Title		Reinforcement Learning					
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	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	

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

Requisition Letter

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

Date: 03.01.2019

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 "**Natural Language Processing**" -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 "**Natural Language Processing**" in our campus premises from 30.01.2019 for 42hours

Ourinternal Professorswould deliver lecture for the above mentioned course. About 40 students would be participating in this course. We request you kindly to give permission to organize this.

Venue: **CSEClass room**

Timing : 1:30 PM to 4:30 PM Friday (AN) and

9.00 PM to 4.00 PM Saturday (FN&AN).

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

HOD/CSE

DEAN ENGINEERING

HEAD OF DEPARTMENT
Department of Computer Sci... Engg.
Bharath Insti... Higher ...
(Declared ...

Bharath
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CIRCULAR

25.01.2019

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Natural Language Processing**for the benefit of III year students. This course is scheduled from 30.01.2019 for 42hours which includes theory and practical. The timings are 1:30 PM to 4:30 PM from Friday (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	Dr.C.Rajabhushanam	Professor

Head of Department

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

To

Copy to CSE

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CERTIFICATE COURSE ON Natural Language Processing

Date of Introduction of the Course: 30.01.2019

COURSE OBJECTIVE

This course covers a wide range of tasks in Natural Language Processing from basic to advanced: sentiment analysis, summarization, dialogue state tracking, to name a few. Upon completing, you will be able to recognize NLP tasks in your day-to-day work, propose approaches, and judge what techniques are likely to work well. The final project is devoted to one of the most hot topics in today's NLP. You will build your own conversational chat-bot that will assist with search on StackOverflow website.

The project will be based on practical assignments of the course, that will give you hands-on experience with such tasks as text classification, named entities recognition, and duplicates detection.

Throughout the lectures, we will aim at finding a balance between traditional and deep learning techniques in NLP and cover them in parallel.

WHAT TO EXPECT

- ✓ You will work with real databases, real data science tools, and real-world datasets.
- ✓ You will learn how Chatterbot, Tensorflow, Deep Learning, Natural Language Processing working.
- ✓ we will discuss word alignment models in machine translation and see how similar it is to attention mechanism in encoder-decoder neural networks.
- ✓ Core techniques are not treated as black boxes. On the contrary, you will get in-depth understanding of what's happening inside.
- ✓ To succeed in that, we expect your familiarity with the basics of linear algebra and probability theory, machine learning setup, and deep neural networks.
- ✓ Some materials are based on one-month-old papers and introduce you to the very state-of-the-art in NLP research.

COURSE SYLLABUS

1. **Intro and text classification**
   - ✓ Main approaches in NLP
   - ✓ Linguistic knowledge in NLP
   - ✓ Text pre-processing
   - ✓ Feature extraction from text
   - ✓ Linear models for sentiment analysis
   - ✓ Hashing trick in spam filtering
   - ✓ Neural networks for words
   - ✓ Neural networks for characters

2. **Language modeling and sequence tagging**
   - ✓ Count! N-gram language models
   - ✓ Perplexity: is our model surprised with a real text?
   - ✓ Smoothing: what if we see new n-grams?
   - ✓ Hidden Markov Models
   - ✓ Viterbi algorithm: what are the most probable tags?
   - ✓ MEMMs, CRFs and other sequential models for Named Entity Recognition
   - ✓ Neural Language Models
   - ✓ Predict a next word or a label - LSTM

3. **Vector Space Models of Semantics**
   - ✓ Distributional semantics: bee and honey vs. bee an bumblebee
   - ✓ Explicit and implicit matrix factorization
   - ✓ Word2vec and doc2vec (and how to evaluate them)
   - ✓ Word analogies without magic: king – man + woman != queen
   - ✓ Why words? From character to sentence embeddings
   - ✓ Topic modeling: a way to navigate through text collections
   - ✓ How to train PLSA
   - ✓ The zoo of topic models

4. **Introduction to Machine Translation**

- ✓ Noisy channel: said in English, received in French
- ✓ Word Alignment Models
- ✓ Encoder-decoder architecture
- ✓ Attention mechanism
- ✓ How to deal with a vocabulary?
- ✓ How to implement a conversational chat-bot?
- ✓ Sequence to sequence learning: one-size fits all?
- ✓ Get to the point! Summarization with pointer-generator networks

5. **Dialog systems**

- ✓ Task-oriented dialog systems
- ✓ Intent classifier and slot tagger (NLU)
- ✓ Adding context to NLU
- ✓ Adding lexicon to NLU
- ✓ State tracking in DM
- ✓ Policy optimisation in DM
- ✓ Final remarks

COURSE COORDINATOR

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CERTIFICATE COURSE ON NATURAL LANGUAGE PROCESSING

Date of Introduction of the Course: 30.01.2019

The timings are 1:30 PM to 4:30 PM from Friday (AN) and Saturday (FN&AN)

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	30.01.2019	➢ Main approaches in NLP ➢ Linguistic knowledge in NLP
3,4,	01-02-2019	➢ Text pre-processing ➢ Feature extraction from text ➢ Linear models for sentiment analysis ➢ Hashing trick in spam filtering
5,6,7,8	02-02-2019	➢ Neural networks for words ➢ Neural networks for characters ➢ Count! N-gram language models ➢ Perplexity: is our model surprised with a real text?
9,10	08-02-2019	➢ Smoothing: what if we see new n-grams? ➢ Hidden Markov Models
11,12,13,14	09-02-2019	➢ Viterbi algorithm: what are the most probable tags? ➢ MEMMs, CRFs and other sequential models for Named Entity Recognition ➢ Neural Language Models
15,16,	15-02-2019	➢ Predict a next word or a label - LSTM ➢ Distributional semantics: bee and honey vs. bee an bumblebee

		➢ Explicit and implicit matrix factorization
17,18,19,20	**14-02-2019**	➢ Word2vec and doc2vec (and how to evaluate them) ➢ Word analogies without magic: king – man + woman != queen
21,22, 23,24	**22-02-2019**	➢ Why words? From character to sentence embeddings ➢ Topic modelling: a way to navigate through text collections
25,26	**23-02-2019**	➢ How to train PLSA ➢ The zoo of topic models
27,28, 29,30	**01-03-2019**	➢ Noisy channel: said in English, received in French ➢ Word Alignment Models ➢ Encoder-decoder architecture ➢ Attention mechanism
31,32	**02-03-2019**	➢ How to deal with a vocabulary? ➢ How to implement a conversational chat-bot?
33,34,35,36	**08-03-2019**	➢ Sequence to sequence learning: one-size fits all? ➢ Get to the point! Summarization with pointer-generator networks ➢ Task-oriented dialog systems ➢ Intent classifier and slot tagger (NLU)
37,38	**09-03-2019**	➢ Adding context to NLU ➢ Adding lexicon to NLU
39,40,41,42	**15-03-2019**	➢ State tracking in DM ➢ Policy optimisation in DM

COURSE COORDINATOR

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

Course on Natural Language Processing
School of Computing
Date of Introduction of the Course: 31.01.2019

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U16CS185	MD TAJUDDIN HAWARI
2	U16CS186	PERUGU KALYAN CHAKRAVARTHI
3	U16CS187	NALLABOTHU VENKATESH
4	U16CS188	DEBANJAN MANDAL
5	U16CS189	CHAUHAN MAYANK SUNILKUMAR
6	U16CS190	KONDAMURI KIRAN KUMAR
7	U16CS191	SHAIK AFRIDI
8	U16CS192	GANTLA VASU
9	U16CS193	MUNAGANURU SAI ANUDEEP
10	U16CS194	GADDAM AMARA HARSHAVARDHAN REDDY
11	U16CS195	BOLLAM MANINDRA
12	U16CS196	RAMADUGU ANUSHA
13	U16CS197	PRAVEENRAJ R M
14	U16CS198	VEERELLA PRAVEEN
15	U16CS140	TRIPURANENI ROHITH
16	U16CS141	JAGARLAMUDI YESWANTH
17	U16CS142	MADDINENI PRANEETH SAI
18	U16CS143	CHIRUMAMILLA VAMSI KRISHNA
19	U16CS144	NAVEEN BALAJI P
20	U16CS146	MANDALAPU VENGALA REDDY
21	U16CS147	PREM KUMAR MISHRA
22	U16CS148	THANUBUDDI RAJASHEKAR REDDY
23	U16CS149	SUDIREDDY MUKESH REDDY
24	U16CS150	SHAIK NAGUL MEERAVALI
25	U16CS151	PODAPATI ASMITHA

26	U16CS152	NALLAPU RAJESH
27	U16CS153	GANGISETTI MANEESHA
28	U16CS075	BASA RAMANJI NAIDU
29	U16CS076	ARVIND S
30	U16CS077	A VINOOTHINA
31	U16CS078	AISHWARYA KUSHWAHA
32	U16CS079	VEGI BALAJI SATYA SAI GANESH
33	U16CS080	KALAHASTI MUNIJYOSHNA
34	U16CS081	KADIVETI AJAY REDDY
35	U16CS082	ADURI SHYAM SAI KUMAR
36	U16CS083	KOTHAKOTA SAI SIRISHA
37	U16CS084	BAIRISETTI VENTATESH
38	U16CS085	PONDURU JAGADEESH
39	U16CS087	JOGA KANNABABU
40	U16CS088	GAJJI SOMA SREEKAR
41	U16CS089	KARRI SAI KUMAR
42	U16CS090	VEMULA SAI UDAYKUMAR
43	U16CS036	LAKSHMI NARAYANAN A
44	U16CS037	PALLE NAZEER VALI
45	U16CS038	GOLUSULA SAI KUMAR
46	U16CS039	PATTAN FEROZ KHAN
47	U16CS040	MOHAMMAD AHAMAD ALIKHAN
48	U16CS041	LAAVANYA G A
49	U16CS042	MD NOORUL ISLAM
50	U16CS043	RAVI KUMAR

COURSE CO ORDINATOI

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Department of Computer Sci & 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 OF PARTICIPATION

This is Presented to

Mr . Harindra Reddy

For actively participating in value added course on "***Natural Language Processing***" conducted by School Computing , BIHER from 30/01/2019 to 15/03/2019.

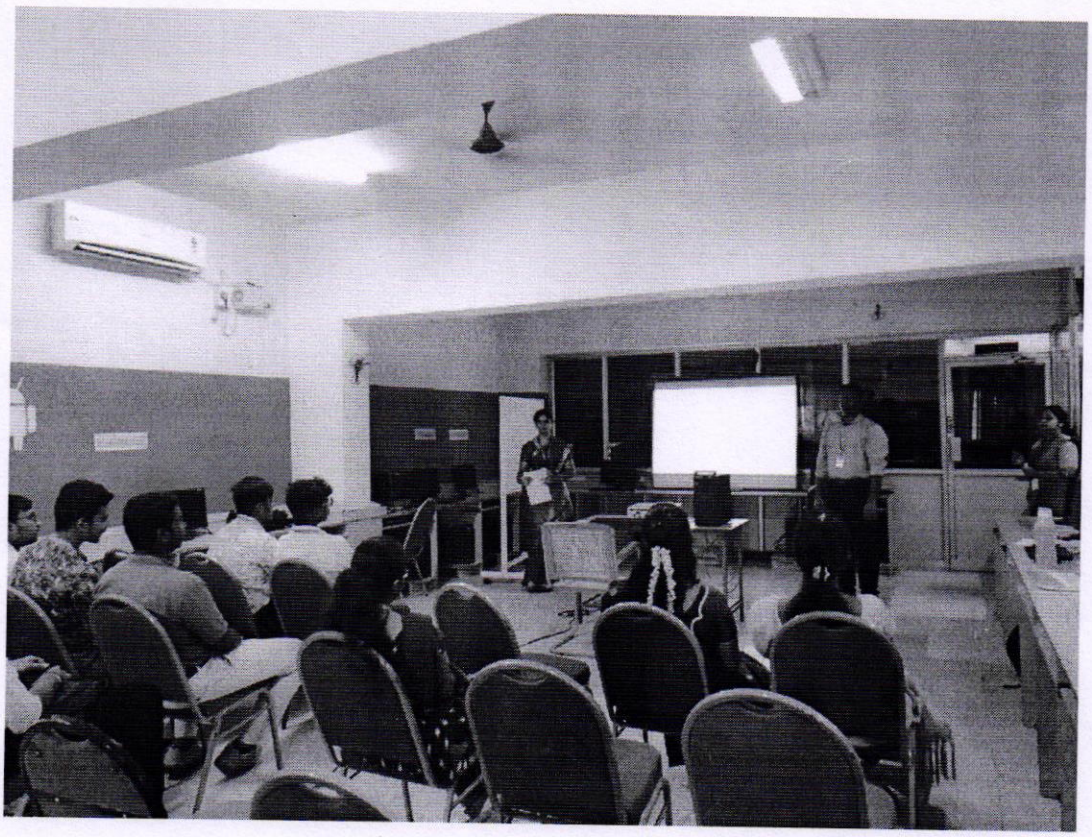
Coordinator **HOD** **Director**

Bharath

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Course on Natural Language Processing
School of Computing
Date of Introduction of the Course: 31.01.2019



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Chennai-600 073, INDIA

COURSE FEEDBACK FORM

Academic Year		2018-2019					
Term							
Course Number							
Course Title		Natural Language Processing					
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	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	

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Chennai-600 073. INDIA

COURSE FEEDBACK FORM

Academic Year		2018 – 2019					
Term							
Course Number							
Course Title		Natural Language Processing					
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	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	

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

Requisition Letter

Date: 10.01.2019

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 **"Applied Natural Language Processing"** -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 **"Applied Natural Language Processing"** in our campus premises on **30.01.2019**, students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing 4:00 PM to 5:00 PM.Monday to Friday

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

HOD

DEAN ENGINEERING

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CIRCULAR

25.01.2019

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Applied Natural Language Processing** for the benefit of II, III and IV year students. This course is scheduled from 30.01.2019 for 25hours which includes theory and practical. The timings are 4:00 PM to 5:00 PM from Monday to Friday.

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	Dr.C.Rajabhushanam	Professor

Head of Department

To

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CERTIFICATE COURSE APPLIED NATURAL LANGUAGE PROCESSING
Date of Introduction of the Course:30.01.2019

The timings are

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	30.01.2019, 31.01.2019	1. MODULE 1: Introduction to language processing – tokens, sentences, paragraphs
3,4	1.02.2019, 4.02.2019	2. MODULE 2: Regular expressions - extraction of information using Regex
5,6	5.02.2019 6.02.2019	3.MODULE 3: Document Similarity measures - Cosine and cluster measures
7.8	7.02.2019 8.02.2019	4.MODULE 4: Spelling correction - Edit distance
9,10	11.02.2019 12.02.2019	5.MODULE 5: Information retrieval, extraction
11,12	13.02.2019 14.02.2019	6.MODULE 6: Document Classification, Clustering, topic modelling techniques
13,14	15.02.2019 18.02.2019	7.MODULE 7: Vector Space Model - word vectors, GloVe/Word2Vec model, word embedding

15,16	**19.02.2019** **20.02.2019**	**8.MODULE 8:** Text Classification, Clustering, and Summarization
17,18	**21.02.2019** **22.02.2019**	**9.MODULE 9:** Machine Learning, Perceptron
19,20	**25.02.2019** **26.02.2019**	**10.MODULE 10:** Back Propagation, Recurrent Neural network relevant to NLP
21,22	**27.02.2019** **28.02.2019**	**11.MODULE 11:** Machine Translation, Language Generation
23,24,25	**1.03.2019** **4.03.2019** **5.03.2019**	**12.MODULE 12:** Applications – Sentiment Analysis, Spam Detection, Resume Mining, AInstein

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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CERTIFICATE COURSE ON APPLIED NATURAL LANGUAGE PROCESSING

Date of Introduction of the Course:30.01.2019

COURSE SYLLABUS

1. **MODULE 1:**
   Introduction to language processing – tokens, sentences, paragraphs
2. **MODULE 2:**
   Regular expressions - extraction of information using Regex
3. **MODULE 3:**
   Document Similarity measures - Cosine and cluster measures
4. **MODULE 4:**
   Spelling correction - Edit distance
5. **MODULE 5:**
   Information retrieval, extraction
6. **MODULE 6:**
   Document Classification, Clustering, topicmodelling techniques
7. **MODULE 7:**
   Vector Space Model - word vectors, GloVe/Word2Vec model, word embedding
8. **MODULE 8:**
   Text Classification, Clustering, and Summarization
9. **MODULE 9:**
   Machine Learning, Perceptron
10. **MODULE 10:**
    Back Propagation, Recurrent Neural network relevant to NLP
11. **MODULE 11:**
    Machine Translation, Language Generation
12. **MODULE 12:**
    Applications – Sentiment Analysis, Spam Detection, Resume Mining, AInstein

COURSE OBJECTIVES

A major portion of communication now is through text and any organization has more than 90% of its content in the unstructured form. Natural Language Processing (NLP), an important part in Artificial Intelligence, is one of the important technologies that would help in activities such as classification, retrieving and extraction of information, identifying important documents, etc. Students will gather knowledge in the fundamentals of NLP, methods and techniques and gain skills to use them in practical situations.

Specifically, the course has the following objectives:

This course will examine the state-of-the-art in applied NLP, with an emphasis on how well the algorithms work and how they can be used (or not) in applications. Today there are many ready-to-use plug-and-play software tools for NLP algorithms. For this reason, this course will emphasize getting facile with quick programs using existing tools. The intended **learning outcomes** are for students to:

- Learn about major NLP issues and solutions
- Become agile with NLP programming
- Be able to asses NLP problems
- Be able to get the gist of relevant research papers

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 APPLIED NATURAL LANGUAGE PROCESSING

Date of Introduction of the Course: 30.01.2019

School of Computing

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U17CS001	YALAMADDI BHARGAV
2	U17CS002	MAMDARAPU SARTHIK
3	U17CS003	BHUVANESHWARI P
4	U17CS004	PRASANNAKUMAR E
5	U17CS005	MUGUNTHAN A L
6	U17CS081	SHAIK AFREED
7	U17CS082	NIRMALA DEVI S
8	U17CS083	SODUM BHARATH SHIVA REDDY
9	U17CS084	OGUBOINA KIRAN
10	U17CS085	Y BHAVYA
11	U17CS152	JAMMULADINNE RANGA REDDY
12	U17CS153	BANDARU JANARDHAN
13	U17CS154	PASAM ANIL KRISHNA
14	U16CS701	PRADEEP SURIYA
15	U16CS702	MOHANRAJ
16	U16CS100	GALLA BHUCHANDRA
17	U16CS101	NITHISHVAR S
18	U16CS151	PODAPATI ASMITHA
19	U16CS152	NALLAPU RAJESH
20	U16CS707	HANUMANTHU RAO
21	U16CS708	SIMRAN ALIZA NISAR
22	U15CS034	CHIDIPOTHU PRATHYUSHA
23	U15CS035	CHINTAGINJALA VENKATA SRI SAI SRAVYA
24	U15CS087	KARTHEESWARAN P
25	U15CS088	KARTHICK S
26	U15CS180	RAVURI SRIKANTH
27	U15CS182	RICHARD WUMBRAND J
28	U15CS183	S. PUNITHA
29	U15CS184	S. SAI SHRUTHI

30	U15CS185	SADHOLLA PRANAY REDDY
31	U15CS241	RUPESH KUMAR ROY
32	U15CS242	KOTAGIRI SAI CHAND
33	U15CS243	RANDHIR KUMAR
34	U15CS244	RAJESH.D
35	U15CS246	J.SAI RAM MADHAV

COURSE COORDINATOR

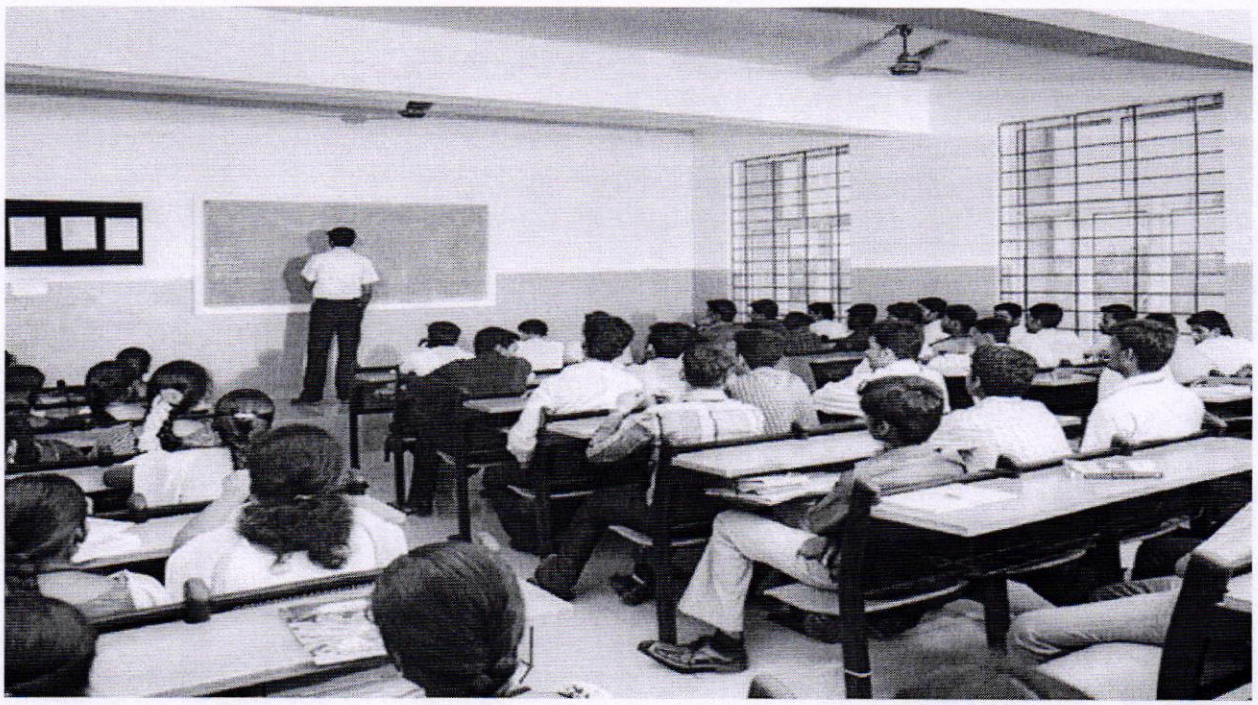
HEAD OF THE DEPARTMENT

Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

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

CERTIFICATE COURSE ON APPLIED NATURAL LANGUAGE PROCESSING



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 OF PARTICIPATION

This certificate is presented to

S.PUNITHA(REG NO:U15CS183)

For actively participating in the value added course **"APPLIED NATURAL LANGUAGE PROCESSING"** Conducted by School of Computing, BIHER from 30.01.2019 to 05.03.2019.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2019- 2020					
Term							
Course Number							
Course Title		Applied Natural Language Processing					
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	

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		2019 - 2020					
Term							
Course Number							
Course Title		Applied Natural Language Processing					
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	Nt
(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	

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
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: 20.**02.2019**

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 "**Computer Vision for Image Processing "** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course "**Computer Vision for Image Processing**" -Reg in our campus premises on **22.02.2016**, students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing: 2:00 PM to 4:00 PM(AN) and Saturday (FN&AN).

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

HOD

DEAN ENGINEERING

HEAD OF DEPARTMENT
Department of Computer Sci... & 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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CIRCULAR

20.02.2019

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Computer vision for Image processing** for the benefit of II, III and IV year students. This course is scheduled from 22.02.2019 for 28hours which includes theory and practical. The timings are 2:00 PM to 4:00 PM from Friday (AN) and Tuesday (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	D.Jeya Priya	Assistant Professor
2	C.Geetha	Assistant Professor

Head of Department

HEAD OF DEPARTMENT
Department of Computer Sci... & Eng
Bharath Institute of Higher Educatio... & Resea
(Declared as Deemed to be University U/S 3 of UGC Act, 19
Chennai-600 073. INDIA

To

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INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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CERTIFICATE COURSE ON COMPUTER VISION FOR IMAGE PROCESSING

Date of Introduction of the Course: 22.02.2019

COURSE SYLLABUS

1. Image Formation and Coordinate Transformations
Camera Matrix, Motion/Stereo Pin-hole model,Human eye / cognitive aspects of colour / 3D space; illumination;

2. Sampling and Quantization:
Coordinate transformations and camera parameters, HW Jan3-10: 3D transformations problem (theory);

3. Introduction to OpenCV:
Image Data Structure, Coding format

4. Image Processing

Noise Removal, Blurring, Edge Detection:
Canny,Gaussian,Gabor,Texture,Edges,Curvature,Corner Detection.

5.MotionEstimation:Horn-SchunkOptical Flow Formulation,Euler-Lagrange formulation : Calculus of variations theory,Structure Recovery from Motion [Kanade]

6.Segmentation :

Concept of Figure vs. Ground, Watershed, Change Detection, Background Subtraction, Texture SegmentationGaussian Mixture Models , Applications in Color/Motion based Image Segmentation, Background Modeling and Shape Clustering

7.Machine Learning techniques in Vision:
Bayesian Classification, Maximum Likelihood Methods, Neural Networks; Non-parametric models;

8. Manifold estimation:
Support Vector Machines ; Temporal sequence learning,HW: Classifiers for edges; object categories

9. Introduction to Object Tracking : Exhaustive vs. Stochastic Search Shapes, Contours, and Appearance Models. Mean-shift tracking; Contour-based models

10. Object Modeling and Recognition:

11. Scale Space:

Linear Scale Space,Extrema in scale space , HW: Haar-based modeling of object classes

12. Local Structure

2DTaylorSeries,GaussianDerivatives,Geometrical,Invariants,Histogram of Gradients

13. Camera calibration:
CRF segentation, object modelling,activityrecognition,image manifolds

.

14. Applications:
Surveillance, Object detection,

.

COURSE OBJECTIVES

In this course we plan to give students an overview of the field of Image processing, and an in-depth study into its enabling technologies and main building blocks. Students will gain hands-on experience solving relevant problems through projects that will utilize existing public cloud tools. It is our objective that students will develop the skills needed to become a practitioner or carry out research projects in this domain.

Specifically, the course has the following objectives:

Students will learn

1) The fundamental ideas behind Image processing, the evolution of the paradigm, its applicability; Benefits, as well as current and future challenges;

2) The basic ideas and principles in data centre design; Image processing techniques and computer vision;

3) Different CPU, memory and I/O virtualization techniques that serve in offering software, computation and storage services on the cloud; Software Defined Networks (SDN) and Software Defined Storage (SDS);

4) The variety of programming models and develop working experience in several of them.

1. 2.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci
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CERTIFICATE COURSE ON COMPUTER VISION FOR IMAGE PROCESSING

Date of Introduction of the Course: 22.02.2019

The timings are 2.00 PM to 4: PM from Friday (AN) and Tuesday (AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1,2	22-02-2019(AN)	**1.** Image Formation and Coordinate Transformations Camera Matrix, Motion/Stereo Pin-hole model, Human eye / cognitive aspects of colour / 3D space; illumination;
3,4	25-02-2019 (AN)	**2.** Sampling and Quantization Coordinate transformations and camera parameters HW Jan3-10: 3D transformations problem (theory);
5,6	26-o2-2019(AN)	**3.** Introduction to OpenCV Image Data Structure, Coding format .
7,8	27-02-2019 (AN)	**4.** Image Processing Noise Removal, Blurring, Edge Detection: Canny ,Gaussian,Gabor,Texture,Edges,Curvature,Corner Detection.
9,10	28-02-2019 (AN)	5.Motion Estimation:Horn-Schunk Optical Flow Formulation,Euler-Lagrange formulation : Calculus of variations theory,Structure Recovery from Motion [Kanade]
11,12	01-03-2019 (AN)	**6.** S.egmentation - Concept of Figure vs. Ground, Watershed, Change Detection, Background Subtraction, Texture SegmentationGaussian Mixture Models , Applications in Color/Motion based ImageSegmentation, Background Modeling and Shape Clustering

13,14	**01-03-2019 (AN)**	**7.** Machine Learning techniques in Vision: Bayesian Classification, Maximum Likelihood Methods, Neural Networks; Non-parametric models;
15,16	**04-03-2019 (FN)**	**8.** Manifold estimation Support Vector Machines ; Temporal sequence learning,HW: Classifiers for edges; object categories
17,18	**05-03-2019 (AN)**	**9.** Introduction to Object Tracking: Exhaustive vs.Stochastic Search Shapes, Contours, and Appearance Models. Mean-shift tracking; Contour-based models
19,20	**06-03-2019 (AN)**	**10.** Object Modeling and Recognition Fundamental matrix / Epipolar geometry,Adaboost approaches: Face Detection / Recognition Large Datasets; Attention models.
21,22	**07-03-2019 (AN)**	**11** Scale Space **Linear Scale Space,Extrema in scale space , HW: Haar-based modeling of object classes**
23,24	**08-03-2019 (AN)**	**12. .** Local Structure **2DTaylorSeries,GaussianDerivatives,Geometrical,Invariants,Histogram of Gradients**
25,26	**11-03-2019 (AN)**	**13.** camera calibration: CRF segentation, object modelling,activity recognition,image manifolds
27,28	**12-03-2019 (AN)**	**14.** Applications: Surveillance, Object detection, .

COURSE COORDINATOR

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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 COMPUTER VISION FOR IMAGE PROCESSING

Date of Introduction of the Course: 02.02.2019

School of Computing

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U19CS462	KARRE SAI TEJA GOUD
2	U19CS463	KARRI NIKHIL
3	U19CS464	KARRI SIVA PRASAD
4	U19CS465	KARTHICKRAJA K
5	U19CS466	KARTHIKA SJ
6	U19CS467	KARTHIKEYAN K
7	U19CS484	KATTAMURI ABHISHEK
8	U19CS488	KEESARI SHANKAR REDDY
9	U19CS489	KEETHA DEEPAK
10	U19CS490	KEETHA MANDIDEEP
11	U19CS491	KESHAPALLY NANDEESHWAR REDDY
12	U19CS492	KHISHORTHAR P A
13	U19CS493	KILARI VENKATESHWARLU
14	U19CS494	KIRUTHIK SHARMA K
15	U19CS495	KISHORE S
16	U19CS496	KOCHERLA SAI SIVA SANKAR
17	U19CS497	KODARI SAI CHARAN
18	U19CS498	KODE SAI VARDHAN
19	U19CN023	KONDA SRINIVASA REDDY
20	U19CN024	KONDAVEETI BALAJI
21	U19CN025	KONDAVETI SARVAN NAGA PAVAN
22	U19CN026	KONDIBOINA MADHU KUMAR
23	U19CN027	KONDU CHARITHA REDDY
24	U19CN028	KONDUPALLI GREESHMANTH KUMAR R
25	U19CN029	KONDURU KALYAN VARMA
26	U19CN030	KONETI SAI ANVITHA

27	U19CN031	KOPANATHI SIVAJI
28	U19CN032	KORRAPATI BHUVANESWARA CHARI
29	U19CN033	KORUKONDA LOKESH SATYA VEERASAI
30	U19CN380	SAREDDY SRIKANTH REDDY
31	U19CN381	SAREDDY VENKATA SUBBA REDDY
32	U19CN385	SATHI VAMSI KRISHNA REDDY
33	U19CN386	SATHISH KUMAR M
34	U19CN387	SATRAM DINESH BABU
35	U19CN388	SATTI BHAVYA SRI

1. 2.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci & 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 OF PARTICIPATION

This certificate is presented to

K KARTHICK RAJ

For actively participating in the value added course **"COMPUTER VISION FOR IMAGE PROCESSING"** Conducted by School of Computing, BIHER from 22.02.2019 to 12.03.2019.

COURSE COORDINATORS
DIRECTOR

HEAD OF THE DEPARTMENT

COURSE FEEDBACK FORM

Academic Year		2018-2019					
Term		Even Sem					
Course Number							
Course Title		Computer Vision for Image Processing					
Number of Credits		4					
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:** 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 OF DEPARTMENT
Department of Computer Scie... & 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		2018-2019					
Term		Even Sem					
Course Number							
Course Title		Computer Vision for Image processing					
Number of Credits		4					
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	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		✓			

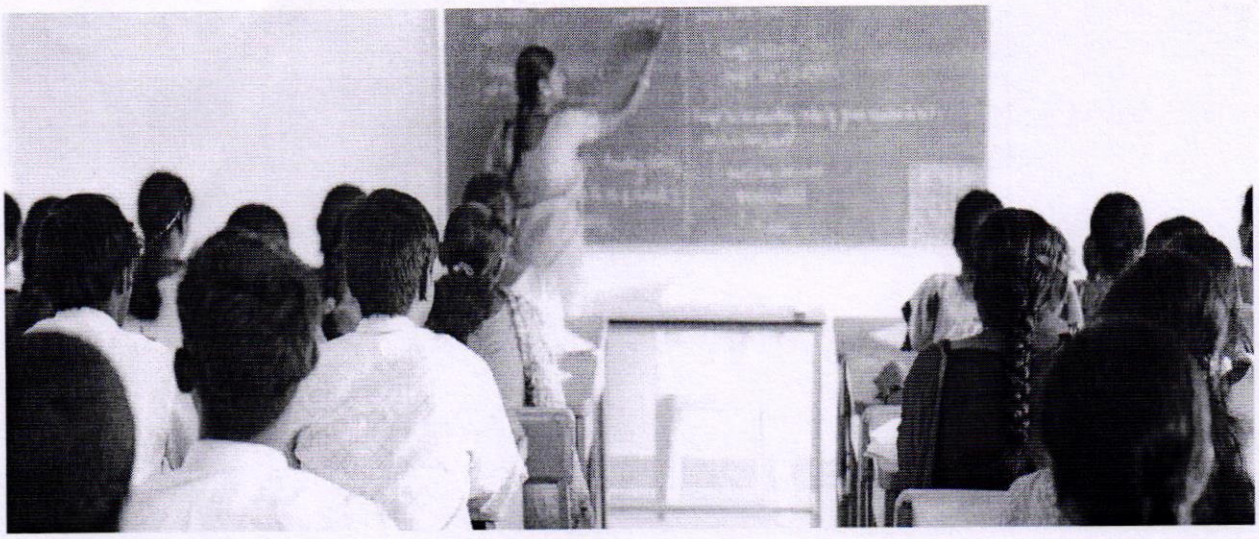
A: Excellent		**B: Very Good**		**C: Good**		**D: Satisfactory**		**E: Poor**	

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci & Eng
Bharath Institute of Higher Education & Reser
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Chennai-600 073. INDIA

COMPUTER VISION FOR IMAGE PROCESSING





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: 18.**02.2019**

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 Python for Data science"** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course "**Certificate Course on Python for Data science**" - Reg in our campus premises on **08.08.2016**, students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing: 4:00 PM to 5:00 PM(AN) and Saturday (FN&AN).

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

HOD

HEAD OF DEPARTMENT
Department of Computer Sci & 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

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

CIRCULAR

18.02.2019

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Certificate Course on Python for Data Science** for the benefit of II, III and IV year students. This course is scheduled from **22.02.2019** for 30 hours which includes theory and practical. The timings are 4:00 PM to 5:00 PM from Monday to Saturday.

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	Mrs.C.Geetha	Assistant Professor
2	Mrs.Anuradha	Assistant Professor

Head of Department

To

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HEAD OF DEPARTMENT
Department of Computer Sci... & 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 OBJECTIVES

In this course we plan to give students an overview of the field of Python with Data Science, AI and in-depth study into its enabling technologies and main building blocks. Students will gain hands-on experience in solving relevant problems through projects that will utilize existing Python tools. It is our objective that students will develop the skills needed to become a practitioner or carry out research projects in this domain.

Specifically, the course has the following objectives:

Students will learn

1) Basic process of data science
2) Python and Jupyter notebooks
3) An applied understanding of how to manipulate and analyse inaccurate datasets
4) Basic statistical analysis and machine learning methods
5) How to effectively visualize results

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci & 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 PYTHON FOR DATA SCIENCE

Date of Introduction of the Course: 22.02.2019

COURSE SYLLABUS

1. **Introduction**:

   Introduction to the data science- Process and value of data science-statistical concepts- basic techniques-machine learning and modelling.

2. **Python Basics**:

   Basics of Python (Installation, Control structures), Arrays, Strings, Lists, Tuples, Dictionary, Sets, Range Control structures, Scripts and Functions, Graphs in python.

3. **Jupyter**:

   Jupyter notebooks opensource -data cleaning- data transformation, numerical simulation, statistical modelling, data visualization and machine learning.

4. **Numpy:**

   Numpy opensource, data manipulation, data processing in arrays, numpy machine learning concepts and standard library.

5. **Pandas:**

   Introduction to Pandas, import data into spyder, creating copy of original data, attributes of data, indexing and selecting data, pandas with data -csv, excel, sql or even a webpage.

6. **Visualization:**

   Data pre-processing and analysis, data exploration and visualization, parallel and distributed computing in case of bigdata.

7. **Exploring Data Analysis:**

   Frequency table, Two way table, two way table- joint probability, marginal probability and conditional probability.

8. **Machine Learning**:

   Basics of machine learning, Supervised and unsupervised algorithms, K- mean clustering, sci-kit library for machine learning.

9. **Working with Text and Databases:**

   Sequence data methods, sequence data operations, Natural Language Processing and how to apply those ideas using the Natural Language Processing Toolkit (NLTK) library.

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CERTIFICATE COURSE ON PYTHON FOR DATA SCIENCE

Date of Introduction of the Course: 22.02.2019

The timings are 4:00 PM to 5:00 PM from Monday to Saturday.

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	22.02.19	**1.Introduction:** Introduction to the data science- process and value of data science
2	23.02.19	Statistical Concepts
3	25.02.19	Basic Techniques
4	26.02.19	Machine Learning and Modelling
5	27.02.19	**2. Python Basics**: Basics of Python(Installation, Control structures)
6	28.02.19	Arrays
7	01.03.19	Strings
8	02.03.19	Lists
9	04.03.19	Tuples
10	05.03.19	Dictionary, Sets
11	06.03.19	Range Control structures
12	07.03.19	Scripts and Functions
13	08.03.19	Graphs in python
14	09.03.19	**3. Jupyter:** Jupyter notebooks opensource -data cleaning- data transformation
15	11.03.19	Numerical simulation, statistical modelling
16	12.03.19	Data visualization and machine learning
17	13.03.19	**4.Numpy:** Numpy opensource, data manipulation,
18	14.03.19	Data processing in arrays,
19	15.03.19	numpy machine learning concepts and standard library
20	16.03.19	**5.Pandas:** Introduction to Pandas, import data into spyder,
21	18.03.19	Creating copy of original data, attributes of data, indexing and selecting data
22	19.03.19	Pandas with data -csv, excel, sql or even a webpage
23	20.03.19	**6.Visualization:** Data pre-processing and analysis, data exploration and visualization

24	21.03.19	Parallel and distributed computing in case of bigdata
25	22.03.19	**7.Exploring Data Analysis:** Frequency table, Two way table, two way table-joint probability
26	23.03.19	Marginal probability and conditional probability
27	25.03.19	**8. Machine Learning**: Basics of machine learning, Supervised and unsupervised algorithms
28	26.03.19	K- mean clustering, sci-kit library for machine learning
29	27.03.19	**9.Working with Text and Databases:** Sequence data methods, sequence data operations
30	28.03.19	Natural Language Processing and how to apply those ideas using the Natural Language Processing Toolkit (NLTK) library

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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CERTIFICATE COURSE ON PYHTON FOR DATA SCIENCE

Date of Introduction of the Course: 22.02.2019

School of Computing

Registered Students Name List

S.NO	REG NO	NAME
1	U16CS043	RAVI KUMAR
2	U16CS071	MULINTY PRASHANTH REDDY
3	U16CS075	BASA RAMANJI NAIDU
4	U16CS083	KOTHAKOTA SAI SIRISHA
5	U16CS094	GUGULOTH ANVESHA
6	U16CS102	RAHUL P
7	U16CS109	CHITTALA HARIKA
8	U16CS117	S YUGANDHAR
9	U16CS122	G RAJESH KUMAR
10	U16CS130	NANDALLURI REDDYBASI REDDY
11	U16CS139	SHAIK ABBAS
12	U16CS149	SUDIREDDY MUKESH REDDY
13	U16CS156	RIK ROY
14	U16CS161	BIJJAM THIRUPATHI REDDY
15	U16CS170	GUDDU KUMAR
16	U16CS171	GOGA VAMSI
17	U16CS180	THATI RAGHAVA
18	U16CS187	NALLABOTHU VENKATESH
19	U16CS195	BOLLAM MANINDRA
20	U16CS211	ARUL VIGNESH J
21	U16CS503	MUKESH M
22	U17CS035	SHAIK JAKEER HUSSAIN
23	U17CS071	BELLAMKONDA KRISHNA VIVEK .
24	U17CS109	HEMAKUMAR R
25	U17CS146	DINESH S
26	U17CS183	LANKA VARUN KUMAR .
27	U17CS219	MINPURI SUSHEEL VARDHAN REDDY .
28	U17CS256	ALASYAM PRAJUMNA
29	U17CS292	RAVIPATI HARTHIK CHOWDARY .
30	U17CS328	JALLA MADHU KUMAR .
31	U17CS364	GARAPATI BHARATH KUMAR .
32	U17CN020	VASIMALLA PRINCE
33	U17CN059	NISHITHA M
34	U17CN096	TELAPROLU VENKATA SAI CHANDRADEEP .
35	U17CN135	KARNATI SHARAN KUMAR .
36	U17CN171	PALAPARTHI BENSON MOSES .
37	U17CN209	RAGHUL B
38	U17CN249	KATRAGADDA RAM CHARAN
39	U17CS416	MOTAPOTHULA JHANSI AISWARAYA LAKSHMI

40	U17CS456	GUDISEVA SYAM SIVA VARA PRASAD
41	U17CS493	CHIKKALA SANJAN
42	U15CS008	ANKAM MANJUNATH
43	U15CS013	ARAVINDHAN K R
44	U15CS017	ASHISH RANJAN
45	U15CS083	KANDI MOUNIKA
46	U15CS094	KOLUKULURI ADITHYA RAGHAV VARMA
47	U15CS105	LALJEE
48	U15CS152	PEDDAPALLY SAI VINAY
49	U15CS153	PERABATHULA SUNIL KUMAR
50	U15CS162	PRATHI VENKAT RANJITH KUMAR
51	U15CS171	RAGILLA SANTHOSH KUMAR
52	U15CS710	JAYANTHI..S
53	U15CS712	N VENKAT SUBHASH
54	U15CS194	SHAIK SABIR
55	U15CS206	SUJEET KRISHNA KUMAR K
56	U15CS214	VEERELLA RUPAS CHOWDARY
57	U15CS220	VIGNESH KUMAR R.J
58	U15CS232	NIKITA SHARMA
59	U15CS246	J.SAI RAM MADHAV
60	U15CS506	S.R. ATHISH VISHNU

COURSE COORDINATOR

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CERTIFICATE OF PARTICIPATION

This certificate is presented to

NISHITHA M

For actively participating in the value added course **"CERTIFICATE COURSE ON Python for Data Science"** Conducted by School of Computing, BIHER from 22.02.2019 to 28.03.2019.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2018-2019							
Term									
Course Number		Certificate Course on Python for Data Science							
Course Title									
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	

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		2018 - 2019							
Term									
Course Number		CERTIFICATE COURSE ON PHYTHON FOR DATASCIENCE							
Course Title									
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	

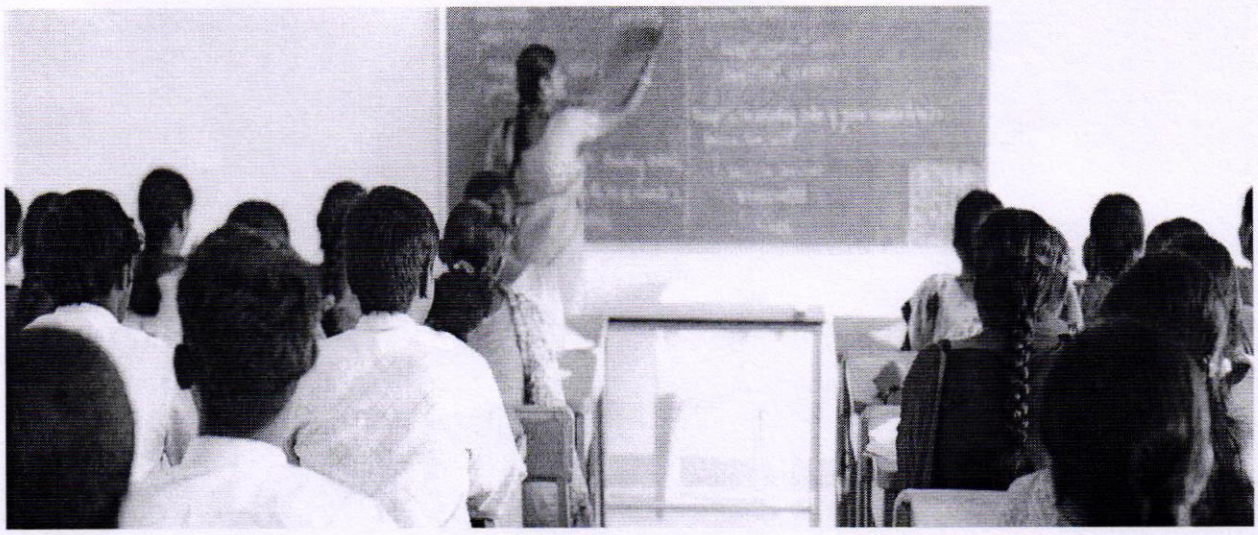
About the Instructor: Information on the Respondent: (Tick (√) Appropriately)

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

Requisition Letter

Date: 21.01.2019

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 Science For Engineers**" -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 "**Data Science For Engineers** " in our campus premises from 22.02.2019 for 30 hours

Ourinternal Professorswould deliver lecture for the above mentioned course.60 students would be participating in this course. We request you kindly to give permission to organize this.

Venue: **CSEClass room**

Timing : 1:30 PM to 4:30 PM Friday (AN) and

9.00 PM to 4.00 PM Saturday (FN&AN).

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

HOD/CSE

DEAN ENGINEERING

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CIRCULAR

18.02.2019

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Data Science for Engineers**for the benefit of IV year students. This course is scheduled from 22.02.2019 for 30hours which includes theory and practical. The timings are 1:30 PM to 4:30 PM from Friday (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	Dr.C.Rajabhushanam	Professor

Head of Department

HEAD OF DEPARTMENT
Department of Computer Sci... & Eng.,
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To

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CERTIFICATE COURSE ON DATA SCIENCE FOR ENGINEERS

Date of Introduction of the Course: 18.02.2019

COURSE OBJECTIVE

- ✓ Introduce Python as a programming language
- ✓ Introduce the mathematical foundations required for data science
- ✓ Introduce the ML supervised data science algorithms
- ✓ Introduce a data analytics problem
- ✓ Introduce a practical capstone case study

WHAT TO EXPECT

- ✓ Describe a flow process for data science problems (Remembering)
- ✓ Classify data science problems into standard typology (Comprehension)
- ✓ Develop Python codes for data science solutions (Application)
- ✓ Correlate results to the solution approach followed (Analysis)
- ✓ Assess the solution approach (Evaluation)
- ✓ Construct use cases to validate approach and identify modifications required (Creating)

COURSE SYLLABUS

I. Basic Statistics for Data Science

- Introduction to data science
- Statistics for Data Science
- Introduction to Data
- Descriptive Statistics

II. Python

1. Introduction

- What is Python?
- Why Data Science requires Python?
- Installation of Anaconda
- Understanding Jupyter Notebook

- Basic commands in Jupyter Notebook
- Understanding Python Syntax

2. Data Types and Data Structures

- Variables
- Strings
- Lists
- Sets
- Tuples
- Dictionaries

3. Control Flow and Conditional Statements

- Conditional Operators, Arithmetic Operators and Logical Operators
- If, Else if and Else Statements
- While Loops
- For Loops
- Nested Loops

4. Functions

- Lambda Functions
- Map, Filter and Reduce
- Modules and Packages

5. File Handling

- Create, Read, Write files
- Operations in File Handling
- Errors and Exception Handling

III. Data Analysis and Visualizations

1.Numpy

- Arrays
- Basic Operations in Numpy
- Indexing
- Array Processing

2. Pandas

- Series
- Data Frames
- Indexing and slicing
- Groupby
- Concatenating
- Merging Joining

- Missing Values
- Operations
- Data Input and Output
- Pivot
- Cross tab

3. Data Visualization

- Introduction to Matplotlib
- Line plots
- Histograms
- Box and Violin Plots
- Scatterplot
- Heatmaps
- Subplots
- Visualization with Seaborn

IV. Advance Statistics

1. Probability Distributions

- Discrete Probability Distributions
- Bernouli Distribution
- Binomial Distribution
- Poisson Distribution
- Continuous Probability Distributions
- Normal Distribution
- Standard Normal Distribution

2. Inferential statistics

- Hypothesis Testing
- Parametric Tests
- t- Test
- Z-Test
- ANOVA
- Non-Parametric Tests
- Chi – Square Test

COURSE COORDINATOR

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CERTIFICATE COURSE ON DATA SCIENCE FOR ENGINEERS

Date of Introduction of the Course:18.02.2019
The timings are 1:30 PM to 4:30 PM from Friday (AN) and Saturday (FN&AN)

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	22.02.2019	**I. Basic Statistics for Data Science** • Introduction to data science • Statistics for Data Science • Introduction to Data • Descriptive Statistics
3,4, 5,6, 7,8, 9,10, 11,12, 13,14, 15,16,	22.02.2019 23.02.2019 1.03.2019 02.03.2019	**II. Python** **1. Introduction** • What is Python? • Why Data Science requires Python? • Installation of Anaconda • Understanding Jupyter Notebook • Basic commands in Jupyter Notebook • Understanding Python Syntax **2. Data Types and Data Structures** • Variables • Strings • Lists • Sets • Tuples • Dictionaries **3. Control Flow and Conditional Statements**

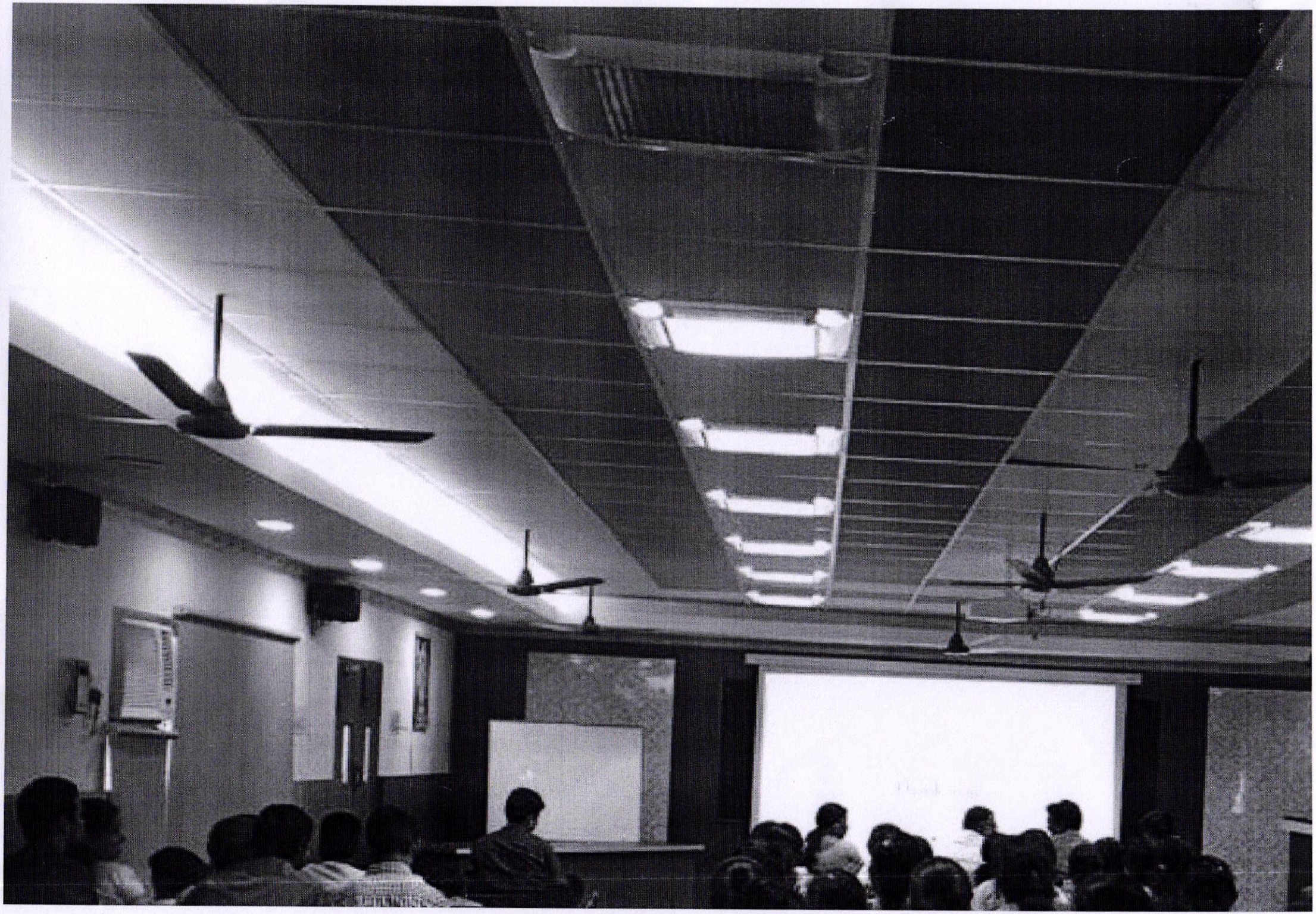
		• Conditional Operators, Arithmetic Operators and Logical Operators • If, Else if and Else Statements • While Loops • For Loops • Nested Loops **4. Functions** • Lambda Functions • Map, Filter and Reduce • Modules and Packages **5. File Handling** • Create, Read, Write files • Operations in File Handling • Errors and Exception Handling
17,18, **19,20,** **21,22,**	**08.03.2019** **09.03.2019**	**III. Data Analysis and Visualizations** **1.Numpy** • Arrays • Basic Operations in Numpy • Indexing • Array Processing **2. Pandas** • Series • Data Frames • Indexing and slicing • Groupby • Concatenating • Merging Joining • Missing Values • Operations • Data Input and Output • Pivot • Cross tab **3. Data Visualization** • Introduction to Matplotlib

		• Line plots • Histograms • Box and Violin Plots • Scatterplot • Heatmaps • Subplots • Visualization with Seaborn
23,24, **25,26,** **27,28,** **29,30**	**09.03.2019** **15.03.2019**	**IV.Advance Statistics** **1.Probability Distributions** • Discrete Probability Distributions • Bernouli Distribution • Binomial Distribution • Poisson Distribution • Continuous Probability Distributions • Normal Distribution • Standard Normal Distribution **2. Inferential statistics** • Hypothesis Testing • Parametric Tests • t- Test • Z-Test • ANOVA • Non-Parametric Tests • Chi – Square Test **USE CASES**

COURSE COORDINATOR

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Course on Data Science for Engineers
School of Computing
Date of Introduction of the Course: 18.02.2019

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U16CS001	SANTOSH B
2	U16CS002	APARNA V M
3	U16CS003	NALAMOTHU SRIKANTH
4	U16CS007	SANAM NAGA VENKATA SAI KRISHNA
5	U16CS008	CHEEMIREDDIGARI ANKITHAREDDY
6	U16CS011	RAVURI MOUNIKA
7	U16CS018	JUPAKA SAIVARUN
8	U16CS019	PYDI VENKATA PRITHEESH NIHAR
9	U16CS030	JEEVAMEDHA M
10	U16CS031	SYED HAFEEZ HUSSAIN
11	U16CS035	RESHMA R
12	U16CS040	MOHAMMAD AHAMAD ALIKHAN
13	U16CS041	LAAVANYA G A
14	U16CS056	PRASANTH G
15	U16CS059	SRAVANI GADIPARTHI
16	U16CS060	PARUCHURU JYOTHI SATYA SIVA NAGA SWAROOP
17	U16CS061	NAGIREDDY GARI SANJUNATH REDDY
18	U16CS066	KOTTE BALAJI
19	U16CS067	ABDUL HASEEB
20	U16CS070	BANDIATMAKUR MADANMOHAN REDDY
21	U16CS072	GAVIREDDY SIVAMOHAN REDDY
22	U16CS073	MASHETTY SOUMITH
23	U16CS076	ARVIND S
24	U16CS077	A VINOOTHINA
25	U16CS079	VEGI BALAJI SATYA SAI GANESH
26	U16CS081	KADIVETI AJAY REDDY
27	U16CS083	KOTHAKOTA SAI SIRISHA
28	U16CS087	JOGA KANNABABU

29	U16CS103	ARUNACHALAM R
30	U16CS107	PRADIP KUMAR MOHANTY
31	U16CS108	PULLAGANTI VISWANADH
32	U16CS119	ARIKATLA PAVITHRA
33	U16CS120	ROSHAN KUMAR RAJ
34	U16CS125	THUMMALA CHALLA MANOJ
35	U16CS127	NULAKA RAJGOPAL REDDY
36	U16CS128	KAKUNURI BRAHMA REDDY
37	U16CS129	MANDIPALLI CHIDANANDA REDDY
38	U16CS130	NANDALLURI REDDYBASI REDDY
39	U16CS133	NAVULURI RAJENDRA MOHAN
40	U16CS134	HEMA S
41	U16CS136	MACHUNURU SYAM KUMAR REDDY
42	U16CS152	NALLAPU RAJESH
43	U16CS161	BIJJAM THIRUPATHI REDDY
44	U16CS162	YEMIREDDY SRINIVASA REDDY
45	U16CS165	MEKALA PANDU PREM KUMAR
46	U16CS166	PATIBANDLA SRI NAVEEN
47	U16CS174	GUNTUPALLI AKHILA
48	U16CS175	CHALUVADI KALYAN
49	U16CS177	VAKA MAHENDRA REDDY
50	U16CS178	TIPPAREDDY NARENDRA REDDY
51	U16CS183	ARAVINDASAMY R
52	U16CS185	MD TAJUDDIN HAWARI
53	U16CS189	CHAUHAN MAYANK SUNILKUMAR
54	U16CS196	RAMADUGU ANUSHA
55	U16CS213	TUFAN NARZARI
56	U16CS214	VIGNESH V
57	U16CS215	NIKUNJ KUMAR SINGH
58	U16CS219	HARINDRA REDDY
59	U16CS220	AFREEN
60	U16CS707	HANUMANTHU RAO

COURSE CO ORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Science & Engg.,
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CERTIFICATE OF PARTICIPATION

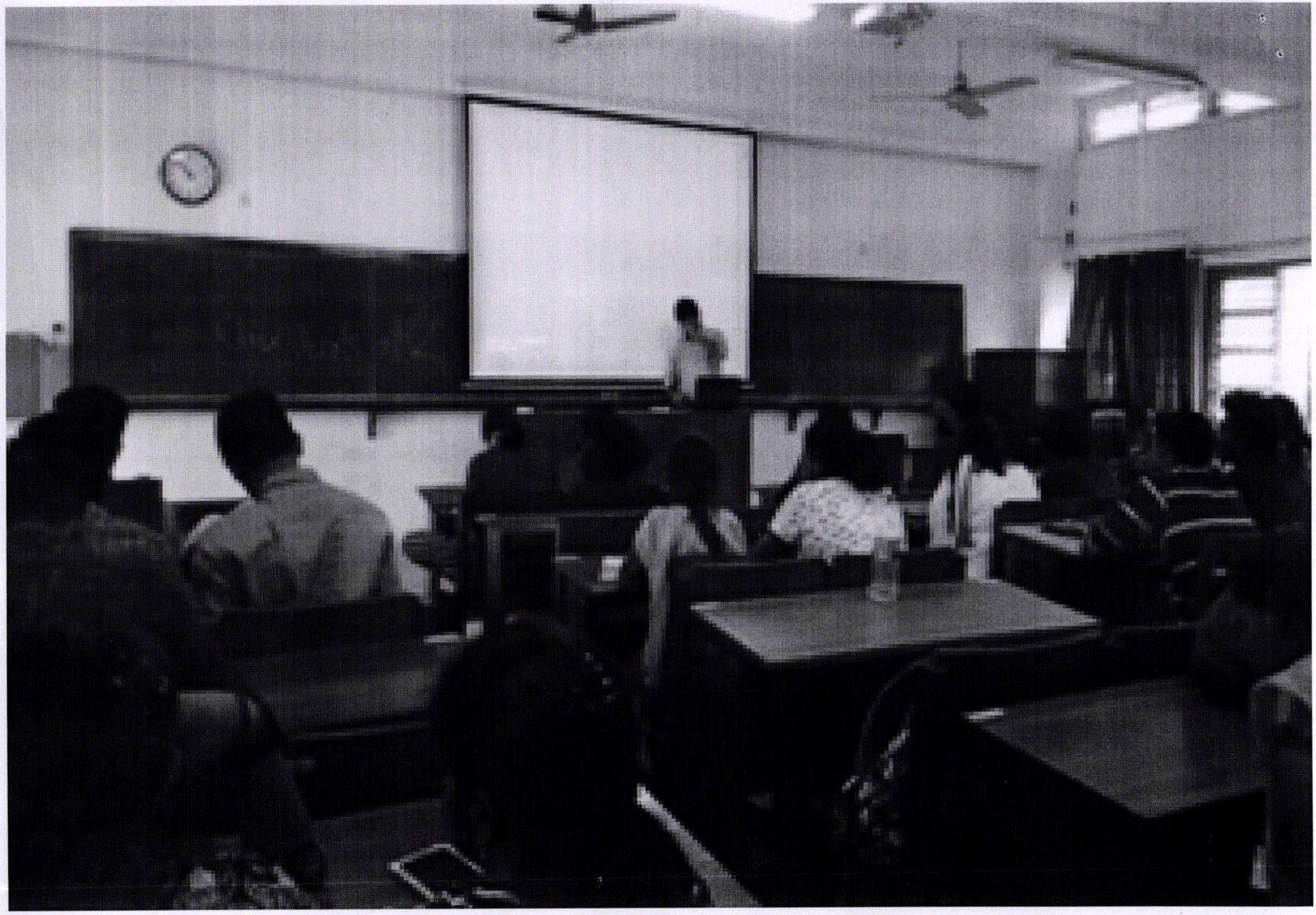
This is Presented to

Mr . VIGNESH V

For actively participating in value added course on

"***DATA SCIENCE FOR ENGINEERS***" conducted by School Computing , BIHER from 22/02/2019 to 15/03/2019.

Coordinator **HOD** **DIRECTOR**



COURSE FEEDBACK FORM

Academic Year		2018 - 2019					
Term							
Course Number							
Course Title		Data Science for Engineers					
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	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 Sci & 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		2018-2019					
Term							
Course Number							
Course Title		Datascience For Engineers					
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	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	

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HEAD OF DEPARTMENT
Department of Computer Sci... & 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)

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

Requisition Letter

Date:13.02.2019

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 **"Scalable Data Science"** - 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 **"Scalable Data Science"** in our campus premises on **22.02.2019**. students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing 1:30 PM to 4:30 PM Friday(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

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CIRCULAR

18.2.2019

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Scalable Data Science** for the benefit of II, III and IV year students. This course is scheduled from 22.2.2019 for 30hours which includes theory and practical. The timings are 1:30 PM to 4:30 PM from Friday (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	Dr.C.Rajabhushanam	Professor

Head of Department

To

Copy to CSE

Copy to IT

CERTIFICATE COURSE ON SCALABLE DATA SCIENCE

Date of Introduction of the Course: 22.02.2019

COURSE SYLLABUS

Module 1

Background: Introduction, Probability: Concentration inequalities, Linear algebra: PCA, SVD , Optimization: Basics, Convex, GD, Machine Learning: Supervised, generalization, feature learning, clustering.

2) **Module 2**

Memory-efficient data structures: Hash functions, universal / perfect

Bloom filters Sketches for distinct count Misra-Gries sketch.

3) **Module 3**

Memory-efficient data structures (contd.): Count Sketch, Count-Min Sk

Approximate near neighbors search: Introduction, kd-trees etc LSH fam

MinHash for Jaccard, SimHash for L2

4) **Module 4**

Approximate near neighbors search: Extensions e.g. multi-probe, b-bit

Data dependent variants,Randomized Numerical Linear Algebra Rando

5) **Module 5**

Randomized Numerical Linear Algebra CUR Decomposition Sparse R

RP, Kitchen Sink

6) **Module 6**

Map-reduce and related paradigms Map reduce - Programming examples - (page rank, k-means, matrix multiplication) Big data: computation goes to data. + Hadoop ecosystem

7) **Module 7**

Map-reduce and related paradigms (Contd.) Scala + Spark Distributed Machine Learning and Optimization: Introduction SGD + Proof

8) **Module 8**

Distributed Machine Learning and Optimization: ADMM + applications, Clustering

9) **Module 9**

Project

COURSE OBJECTIVES

In this course we plan to give students an overview of the field of Scalable data science, and an in-depth study into its enabling technologies and main building blocks. Students will gain hands-on experience solving relevant problems through projects. It is our objective that students will develop the skills needed to become a practitioner or carry out research projects in this domain.

Specifically, the course has the following objectives:

Students will learn

hat data science is, the various activities of a data scientist's job, and methodology to and work like a data scientist.	1) W think
ow various machine learning techniques and Map-Reduce methods	*2)* Kn
derstand Memory-efficient data structures	*3)* Un
ly various data science skills, techniques, and tools.	*4)* Ap

HEAD OF THE DEPARTMENT COURSE COORDINATOR

HEAD OF DEPARTMENT
ent of Computer Scie & Engg.,
stitute of Higher Education & Research
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(Declared as Deemed-to-be University under section 3 of UGC Act 195

CERTIFICATE COURSE ON SCALABLE DATA SCIENCE

Date of Introduction of the Course: 22.02.2019

The timings are 1:30 PM to 4:30 PM from Friday (AN) and Saturday (FN & AN)

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	22.02.2019 (AN)	1. Module 1 Background: Introduction, Probab Concentration inequalities, Linear algebra: E SVD , Optimization: , Basics. Convex.
		Machine Lear feature learning
3,4	23-02-2019] (FN)	2. Module 2 Memory-efficie universal / per Sketches for dis
5,6		

13,14	08-03-2019 (AN)	5.Module 5 Randomized Numerical Linear Algebra CUR Decomposition Sparse RP Subspace RP Kitchen Sink
15,16	09-03-2019 (FN)	6.Module 6 Map-reduce and related paradigms Map reduce - Programming examples - (pagerank, k-means, matrix multiplication) Big data: computation goes to data. + Hadoop ecosystem
17,18	09-03-2019 (AN)	6.Module 6 Map-reduce and related paradigms Map reduce - Programming examples - (pagerank, k-means, matrix multiplication) Big data: computation goes to data. + Hadoop ecosystem
19,20	15-03-2019 (AN)	7.Module 7 Map-reduce and related paradigms (Contd.) Scala + Spark Distributed MachineLearning and Optimization: Introduction SGD + Proof
21,22	16-03-2019 (FN)	7.Module 7 Map-reduce and related paradigms (Contd.) Scala + Spark Distributed MachineLearning and Optimization: Introduction SGD + Proof
23,24	16-03-2019 (AN)	7.Module 7 Map-reduce and related paradigms (Contd.) Scala + Spark Distributed MachineLearning and Optimization: Introduction SGD + Proof
	22-03-2019 (FN)	8.Module 8 Distributed Machine Learning and Optimization: ADMM + applications, Clustering
29,30	23-03-2019 (AN)	9. Module 9 Project

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Science & Engg.,
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CERTIFICATE COURSE ON SCALABLE DATA SCIENCE
Date of Introduction of the Course: 22.02.2019

School of Computing

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U15CS101	KOTNANI KRISHNA VAMSI
2	U15CS102	KRISHNA KUMAR YADAV
3	U15CS104	KUNISETTY JYOTHSNA
4	U15CS105	LALJEE
5	U15CS106	LINGAMPELLY SANNITH REDDY
6	U15CS107	LOHESH WARAN S
7	U15CS108	M SHIVA PRAKASH
8	U15CS109	M UTTEJ
9	U15CS110	M. DINESH REDDY
10	U15CS111	M.YESHWITHA REDDY
11	U15CS204	SUBHAM RAY
12	U15CS205	SUDALAGUNTA GOPI
13	U15CS206	SUJEET KRISHNA KUMAR K
14	U15CS207	SWARNA LAKSHMI PRIYANKA
15	U15CS208	TAGORE S
21	U16CS008	CHELMIREDDIGARI ANKITHAREDDY
22	U16CS009	RITIK RAJ
23	U16CS010	JOHAN KIRUBHAHAR P P
24	U16CS011	RAVURI MOUNIKA

25	U16CS012	FAYAZ AKIL S
26	U16CS013	SURYA SUNDARRAJ SRIRAM
27	U16CS014	SOMA BHARATH KUMAR
28	U16CS015	B J JAISON
29	U16CS016	SARAVANAKUMAR S
30	U16CS017	VARUN KANNA A
31	U16CS704	HARISH KUMAR
32	U16CS705	PRATIKSHA RAJESHPUJARI
33	U16CS706	GANESH SAI
34	U16CS707	HANUMANTHU RAO
35	U16CS708	SIMRAN ALIZA NISAR

COURSE COORDINATOR **HEAD OF THE DEPARTMENT**

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

Bharath

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

This certificate is presented to

COURSE FEEDBACK FORM

Academic Year	2019-2020
Term	Even
Course Number	
Course Title	Scalable Data Science
Number of Credits	

Type of Course	Regular		Elective		Add-on	✓

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

	No
	No
t study	Yes
	No

3.	**Preparation for the course by the student:**	
	(i)	Have done part of this course earlier
	(ii)	Has adequate prior exposure to the prerequisites
	(iii)	Had to pickup relevant additional topics through concurrer
	(iv)	Have no exposure to the background material

	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

4.	**The expectations for taking the course by the student are:**	
	(a)	Enhance by skill base in the area of specializations
	(b)	Get exposed to a relevant subject
	(c)	Curiosity
	(d)	Better Employment Opportunity
	(e)	Complete Course requirements
	(f)	To Improve CGPA

opriately)

	C	D	E

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

		A	B
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		

✓									
✓									

tory | | Poor | | A: Excellent | | B: Very Good | | Good | | Satisfac

DEPARTMENT

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DEPARTMENT
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Higher Education & Research
e University U/S 3 of UGC Act, 1956)
-600 073. INDIA

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Department of C
Bharath Institute of
(Declared as Deemed to b
Chennai

COURSE FEEDBACK FORM

Academic Year	2019-2020
Term	Even

ge of classes attended

	20-40		40-60		60-80	✓	80-100

of hours per week spent on the course (Other than lecture hours)

	2-4		4-6		6-8		8-10

1.	Percenta	
	0-20	
2.	Number	
	0-2	

ration for the course by the student:

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

3.	Prepa
	(i)
	(ii)
	(iii)
	(iv)

ions for taking the course by the student are:

nhance by skill base in the area of specializations	Yes
et exposed to a relevant subject	Yes
uriosity	Yes
etter Employment Opportunity	Yes
	Yes
	Yes

4.	The expecta	
	(a)	E
	(b)	C
	(c)	C
	(d)	E
	(e)	Complete Course requirements
	(f)	To Improve CGPA

x (√) Appropriately)

	B	C	D	E
Subject		✓		
sion		✓		
tion			✓	
on		✓		
side the class			✓	
pecify				

About the Instructor: Information on the Respondent: (Tic

		A
1.	Pace of the Teaching/lecture	✓
2.	Comment of the	
3.	Clarity of expre	
4.	Level of prepara	
5.	Level of interac	
6.	Accessibility ou	
7.	Others (please s	

ry Good		**C: Good**		**D: Satisfactory**		**E: Poor**	

A: Excellent	**B: V**

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Bharath Institute of Higher Education & Research
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RTIFICATE COURSE ON SCALABLE DATA SCIENCE

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

Requisition Letter

Date: 15.02.2019

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 Ethical Hacking**" -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 Ethical Hacking**" in our campus premises on **22/02/2019**.

72 students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing : **9 am to 4.30 pm**

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

HOD/CSE

DEAN ENGINEERING

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

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CIRCULAR

18.02.2019

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Introduction to Ethical Hacking** for the benefit of II, III and IV year students. This course is scheduled from 22.02.2019 for 30 hours which includes theory and practical. The timings are 01:30 PM to 04:30 PM on Friday (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	C.Anuradha	Assistant Professor
2	R.Velvizhi	Assistant Professor

Head of Department

To

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HEAD OF DEPARTMENT
Department of Computer Sci... & Engg.,
Bharath Institute of Higher Education & Research
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CERTIFICATE COURSE ONINTRODUCTION TOETHICAL HACKING

Date of Introduction of the Course: 22.02.2019

COURSE SYLLABUS

1. INTRODUCTION TO ETHICAL HACKING

Cyber Ethics-Hacking Introduction- Information Gathering- Scanning - Google Hacking Database- Social Engineering- System Hacking & Security

2. VULNERABILITIES

Threat, Attack, Vulnerabilities, Exploit, Payload, Zero-day attack, Daisy-chaining, Target of Evaluation, Phases involved in hacking

3. HACKING WINDOWS

Hacking windows – Network hacking – Web hacking – Password hacking. A study on various attacks – Input validation attacks – SQL injection attacks – Buffer overflow attacks – Privacy attacks.

4. TCP/IP

TCP / IP – Checksums – IP Spoofing port scanning, DNS Spoofing. Dos attacks – SYN attacks, Smurf attacks, UDP flooding, DDOS – Models. Firewalls – Packet filter firewalls, Packet Inspection firewalls – Application Proxy Firewalls, Batch File Programming.

5. FUNDAMENTALS OF COMPUTER FRAUD

Fundamentals of Computer Fraud – Threat concepts – Framework for predicting inside attacks – Managing the threat – Strategic Planning Process.

6. ARCHITECTURE

Architecture strategies for computer fraud prevention – Protection of Web sites – Intrusion detection system – NIDS, HIDS – Penetrating testing process – Web Services– Reducing Transaction risks.

7. FOOTPRINTING

Introduction to foot printing, Understanding the information gathering methodology of the hackers,Tools used for the reconnaissance phase

8. PORT SCANNING

Port Scanning - Introduction, using port scanning tools, ping sweeps, Scripting Enumeration-Introduction, Enumerating windows OS & Linux OS

9. SYSTEM HACKING

Aspect of remote password guessing, Role of eavesdropping ,Various methods of password cracking, Keystroke Loggers, Understanding Sniffers ,Comprehending Active and Passive Sniffing

10. HACKING WEB SERVICES

Web application vulnerabilities, application coding errors, SQL injection into Back-end Databases, cross-site scripting, cross-site request forging, authentication bypass, web services and related flaws

11. SESSION HIJACKING

Understanding Session Hijacking, Phases involved in Session Hijacking,Types of Session Hijacking, Session Hijacking Tools

12. HACKING WIRELESS NETWORKS

Introduction to 802.11, Role of WEP, Cracking WEP Keys, Sniffing Traffic,Wireless DOS attacks,WLANScanners,WLANSniffers,HackingTools,Securing Wireless Networks.

13. HACKING WEB APPLICATIONS

Web App Concepts, Web App Threats, Hacking Methodology, Web Application Hacking Tools, Countermeasures.

14. HACKING MOBILE PLATFORMS

Mobile Platform Attack Vectors, Hacking Vector OS, Hacking iOS, Mobile Device Management, Mobile Security Guidelines and Tools.

15. IOT HACKING

IoT Concepts, Iot Attacks, IoT Hacking Methodogy, IoT Hacking Tools, Countermeasures

COURSE OBJECTIVES

This course is designed to introduces the ethical hacking methodologies Covers applying cyber security concepts to discover and report vulnerabilities in a network. Explores legal and ethical issues associated with ethical hacking

Upon completion of the course students should be able to:

- Plan a vulnerability assessment and penetration test for a network.
- Execute a penetration test using standard hacking tools in an ethical manner.
- Report on the strengths and vulnerabilities of the tested network.
- Identify legal and ethical issues related to vulnerability and penetration testing.

COURSE CO-ORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci & Engg.,
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CERTIFICATE COURSE ON INTRODUCTION TO ETHICAL HACKING

Date of Introduction of the Course: 22.02.2019

The timings are 01:30 AM to 04:30 PM Friday (AN) and Saturday (FN&AN).

Time Table & Lesson plan

CLASS	DATE	TOPIC
1,2	22-02-2019(AN)	**1. INTRODUCTION TO ETHICAL HACKING** Cyber Ethics-Hacking Introduction- Information Gathering- Scanning - Google Hacking Database- Social Engineering- System Hacking & Security
3,4	23-02-2019 (FN&AN)	**2. VULNERABILITIES** Threat, Attack, Vulnerabilities, Exploit, Payload, Zero-day attack, Daisy-chaining, Target of Evaluation, Phases involved in hacking
5,6	01-03-2019(AN) 02-03-2019(FN)	**3. HACKING WINDOWS** Hacking windows – Network hacking – Web hacking – Password hacking. A study on various attacks – Input validation attacks – SQL injection attacks – Buffer overflow attacks – Privacy attacks.
7,8	02-03-2019(AN) 08-03-2017(AN)	**4. TCP/IP** TCP / IP – Checksums – IP Spoofing port scanning, DNS Spoofing. Dos attacks – SYN attacks, Smurf attacks, UDP flooding, DDOS – Models. Firewalls – Packet filter firewalls, Packet Inspection firewalls – Application Proxy Firewalls, Batch File Programming.
9,10	09-03-2017 (FN&AN)	**5. FUNDAMENTALS OF COMPUTER FRAUD** Fundamentals of Computer Fraud – Threat concepts – Framework for predicting inside attacks – Managing the threat – Strategic Planning Process.
11,12	15-03-2019(AN)	**6. ARCHITECTURE** Architecture strategies for computer fraud prevention – Protection of Web sites – Intrusion detection system – NIDS, HIDS – Penetrating testing process – Web Services– Reducing Transaction risks.
13,14	16-03-2019 (FN&AN)	**7. FOOTPRINTING** Introduction to foot printing, Understanding the information gathering methodology of the hackers, Tools used for the reconnaissance phase

15,16	**22-03-2019(AN)** **23-03-2019(FN)**	**8. PORT SCANNING** Port Scanning - Introduction, using port scanning tools, ping sweeps, Scripting Enumeration-Introduction, Enumerating windows OS & Linux OS
17,18	**23-03-2019(AN)**	**9. SYSTEM HACKING** Aspect of remote password guessing, Role of eavesdropping ,Various methods of password cracking, Keystroke Loggers, Understanding Sniffers ,Comprehending Active and Passive Sniffing
19,20	**29-03-2019(AN)** **30-03-2019(FN)**	**10. HACKING WEB SERVICES** Web application vulnerabilities, application coding errors, SQL injection into Back-end Databases, cross-site scripting, cross-site request forging, authentication bypass, web services and related flaws
21,22	**30-03-2019(AN)** **05-04-2019(AN)**	**11. SESSION HIJACKING** Understanding Session Hijacking, Phases involved in Session Hijacking, Types of Session Hijacking, Session Hijacking Tools
23,24	**06-04-2019(FN)**	**12. HACKING WIRELESS NETWORKS** Introduction to 802.11, Role of WEP, Cracking WEP Keys, Sniffing Traffic, Wireless DOS attacks, WLAN Scanners, WLAN Sniffers, Hacking Tools, Securing Wireless Networks.
25,26	**06-04-2019(AN)** **12-04-2019(AN)**	**13. HACKING WEB APPLICATIONS** Web App Concepts, Web App Threats, Hacking Methodology, Web Application Hacking Tools, Countermeasures.
27,28	**13-04-2019(FN)**	**14. HACKING MOBILE PLATFORMS** Mobile Platform Attack Vectors, Hacking Vector OS, Hacking iOS, Mobile Device Management, Mobile Security Guidelines and Tools.
29,30	**13-04-2019(AN)**	**15. IOT HACKING** IoT Concepts, Iot Attacks, IoT Hacking Methodogy, IoT Hacking Tools, Countermeasures

R. velmurugi

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Sci... & Engg.,
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(Declared as Deemed-to-be University under section 3 of UGC Act 1956)

CERTIFICATE COURSE ON INTRODUCTION TO ETHICAL HACKING

Date of Introduction of the Course: 22.02.2019

School of Computing

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U15CS198	SINGALA VENKATA SAI RAM TEJESHWAR AR REDDY
2	U15CS199	SIRI GIRI HAREESH
3	U15CS200	SITAROJ SRIKANTH
4	U15CS201	SMITHA C.S
5	U15CS202	SODISETTY SANDEEP
6	U15CS203	SUBASH CHANDRAN.V
7	U15CS204	SUBHAM RAY
8	U15CS205	SUDALAGUNTA GOPI
9	U15CS206	SUJEET KRISHNA KUMAR K
10	U15CS207	SWARNA LAKSHMI PRIYANKA
11	U15CS208	TAGORE S
12	U15CS209	TAKKELLA AJITH CHOWDARY
13	U15CS210	TANGELLAPALLY KRANTHIKUMAR CHARY
14	U15CS214	VEERELLA RUPAS CHOWDARY
15	U15CS215	VEESA SUDDEP
16	U15CS216	VEMSETTY ARUN SAHADEV
17	U15CS217	VERISETTY SUBBARAO
18	U15CS218	VETCHA VENKATA KRISHNA TEJA
19	U15CS219	VISNESH.B
20	U15CS220	VIGNESH KUMAR R.J
21	U15CS221	VIGNESHWARAN.M
22	U15CS225	VINOTHKUMAR.J
23	U15CS226	VUNDAVELLI VEERA VENKATA SATYANARAYANA
24	U15CS250	MUTHULAKSHMI.M
25	U15CS252	PAVANI M.J
26	U15CS253	JOEL PRAKASH.J
27	U15CS254	JAGATH RAJAH.R
28	U15CS255	ADITYA
29	U15CS701	PRAVEEN RAJ.V
30	U15CS134	NAMBURI VIJAY KUMAR
31	U15CS135	NARENDULA NIREESHA

32	U15CS136	NARESH K
33	U15CS138	NEELA SAI KUMAR
34	U15CS139	NIKHIL KUMAR
35	U15CS154	PERAM ANTONY
36	U15CS155	PERAM VENKATA KRISHNA REDDY
37	U15CS156	PERURI V S V KRISHNA MOHAN
38	U15CS157	POORVISHA M
39	U15CS159	PRADEEP YADAV
40	U15CS172	RAJULA SREEVANI
41	U15CS173	RAKESH RATHI
42	U15CS174	RAMACHANDRAN J
43	U15CS175	RAMIREDDY LAKSHMAN AJAY
44	U15CS176	RAMIREDDY SURENDRA REDDY
45	U15CS068	JAICHAND KUMAR
46	U15CS069	JANAKI RAMAN V
47	U15CS071	JOHN PARAM JYOTHI JYOTHULA
48	U15CS073	K THULASIRAM
49	U15CS074	KADALI VINAYNARASIMHA
50	U15CS075	KADUMU MOUNIKA
51	U15CS093	KM AYUSHI JAISWAL
52	U15CS094	KOLUKULURI ADITHYA RAGHAV VARMA
53	U15CS095	KONATALA PUSHPA
54	U15CS096	KONDURU PREM KUMAR
55	U15CS097	KONGARA KIRAN KUMAR
56	U15CS098	KOPPA SEKHAR SAI VISWAM
57	U15CS115	MANCHIKANTI RAJITHA
58	U15CS117	MANOJ KUMAR R
59	U15CS118	MANUGUNTA BHARGAVI
60	U15CS119	MARRIBOYINA GOVARDHAN YADAV
61	U15CS120	MARRIPUDI KRISHNA CHAITANYA
62	U15CS121	MD MINHAZ RAZA HASHMI
63	U15CS123	MOHAMMAD ASLAM SHAREEF
64	U15CS022	BHARATH K
65	U15CS023	BHARATHI V
66	U15CS024	BIKKI KUMAR SHA
67	U15CS025	BINGEWAR SAISHARAN
68	U15CS026	BIRADAVOLU SUCHARITHA
69	U15CS027	BODA AKHIL WESLEY
70	U15CS028	BONALA SRIDHAR RAO
71	U15CS029	BRYAN STEVE PUSHPARAJ I
72	U15CS030	CHAKKA KSHITHIJA

R. Velumghi

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci & 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 INTRODUCTION TO ETHICAL HACKING



R. Velumani

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Sci... & Engg.,
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CERTIFICATE OF PARTICIPATION

This certificate is presented to

NIKHIL KUMAR

For actively participating in the value added course **"Introduction to Ethical Hacking"** Conducted by School of Computing, BIHER from 22.02.2019 to 13.04.2019.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2019 - 2020					
Term		Even Sem					
Course Number							
Course Title		Introduction to Ethical Hacking					
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	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	

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COURSE FEEDBACK FORM

Academic Year		2019-2020					
Term		Even Sem					
Course Number							
Course Title		Introduction to Ethical Hacking					
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	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
Engg.,
Bharath Institute of Higher Education & Research
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Chennai-600 073. INDIA

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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

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

Date: 22.03.19

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

Respected sir

Subject: Request of Permission to conduct a value added course o
Management" -Reg

With reference to above subject, I would like to bring
department interested to organize value added course on "Software
our campus premises on **28/03/2019.**

40 students would be participating in this course. We request you ki
organize this event.

Venue: **CSE Smart Room**

Timing : **9 am to 4.30 pm**

Submitted to Principal for approval to organize this value a

n "**Software Project**

to your kind notice that, our
Project Management" in

ndly to give permission to

dded course.

EAN ENGINEERING

HOD/CSE

D

HEAD OF DEPARTMENT
Department of Computer Scie & Engg.,
Bharath Institute of Higher Education & Research

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CIRCULAR

26.03.2019

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **SOFTWARE PROJECT MANAGEMENT** for the benefit of II, III and IV year students. This course is scheduled from 28.03.2019 which includes 30 hours theory. The timings are 1:30 PM to 4:30 PM from Friday (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	Mr.Michael.G	Professor
2	Mr.Allin Geo	Assistant Professor

Head of Department

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

To

Copy to CSE

Copy to IT



15,16	11.04.19(AN)	8.Objectives of Activity planning – Project schedules – Activities – Sequencing and scheduling -Network Planning models – Formulating Network Model – Forward Pass and Backward Pass techniques.
17,18	17.04.19(AN)	9.Critical path (CRM) method – Risk identification – Assessment – Risk Planning -Risk Management – – PERT technique – Monte Carlo simulation – Resource Allocation – Creation of critical paths – Cost schedules.
19,20	18.04.19(FN)	10.Line-of-Business organizations, Project organizations, Evolution of organizations
21,22	18.04.19(AN)	11.Process automation - Automation building blocks, The project environment.
23,24	24.04.19(AN)	12.Project Control and Process Instrumentation - The Seven-Core metrics, Management indicators, Quality indicators
25.04.19(FN)		13.Life-Cycle expectations, Pragmatic software metrics, Metrics automation, Modern project profiles
25.04.19(AN)		14.Managing people – Organizational behavior – Best methods of staff selection – Motivation – The Oldham – Hackman job characteristic model.
1.05.19(AN)		15.Next generation software economics, Modern process transitions.

25,26	
27,28	
29,30	

ORDINATOR

HEAD OF THE DEPARTMENT

COURSE COO

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Department of Computer Sci & Engg.,
Bharath Institute of Higher Education & Research
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Bharath

SOFTWARE PROJECT MANAGEMENT

Date of Introduction of the Course:

15. Next generation software economics, Modern process transitions.

COURSE OBJECTIVES

This course is aimed at introducing the primary important concepts of project management related to managing software development projects. They will also get familiar with the different activities involved in Software Project Management. Further, they will also come to know how to successfully plan and implement a software project management activity, and to complete a specific project in time with the available budget.

Specifically, the course has the following objectives:

Students will learn

1) To understand the Software Project Planning and Evaluation techniques.
2) To plan and manage projects at each stage of the software development life cycle (SDLC).
3) To learn about the activity planning and risk management principles.
4) To manage software projects and control software deliverables.
5) To develop skills to manage the various phases involved in project management and people management.
6) To deliver successful software projects that support organizations strategic goals.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Applications
Bharath Institute of Higher Education and Research
Chennai-600 073, India

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CERTIFICATE COURSE ON SOFTWARE PROJECT MANAGEMENT

Date of Introduction of the Course: 28.03.2019

School of Computing

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U16CS036	LAKSHMI NARAYANAN A
2	U16CS037	PALLE NAZEER VALI
3	U16CS038	GOLUSULA SAI KUMAR
4	U16CS039	PATTAN FEROZ KHAN
5	U16CS040	MOHAMMAD AHAMAD ALIKHAN
6	U16CS041	LAAVANYA G A
7	U16CS042	MD NOORUL ISLAM
8	U16CS043	RAVI KUMAR
9	U16CS044	ADARSH BARANWAL
10	U16CS045	RAHUL TIWARI
11	U16CS046	MARELLA VENKATA
12	U16CS091	KARANAM NAVANEE
13	U16CS092	AKSHAY KOTI CHIMATA
14	U16CS093	GUDELLI SANDHYA RANI
15	U16CS094	GUGULOTH ANVESHA
16	U16CS095	PATNALA VENKATESH
17	U16CS096	SAPPIDI MUKHESH REDDY
18	U16CS097	KISHAN KUMAR
19	U16CS099	GANGU MALLA GA
20	U16CS100	GALLA BHUCHAND

21	U16CS101	NITHISHVAR S
22	U16CS102	RAHUL P
23	U16CS150	SHAIK NAGUL MEERAVALI
24	U16CS151	PODAPATI ASMITHA
25	U16CS152	NALLAPU RAJESH
26	U16CS153	GANGISETTI MANEESHA
27	[illegible]	MANGALURE KISHOR KUMAR
28	U16CS155	JEFFRIN RAJAN M
29	U16CS156	RIK ROY
30	U16CS157	MOKA BALAJI VARMA
31	U16CS158	NIMBAGALLU KURUBA GURUMURTHY
32	U16CS159	JANA ARAVIND KUMAR
33	U16CS160	NARLA RAJESH
34	U16CS204	GADDALA UDAY KIRA
35	U16CS206	PATHAN SALMANKHA
36	U16CS207	YENUGU KASI GOVAR
37	U16CS208	MANIKANTAN
38	U16CS209	DIPANJAN DAS
39	U16CS210	TANIRU SATISH
40	U16CS211	ARUL VIGNESH J

HEAD OF THE DEPARTMENT

COURSE COORDINATOR

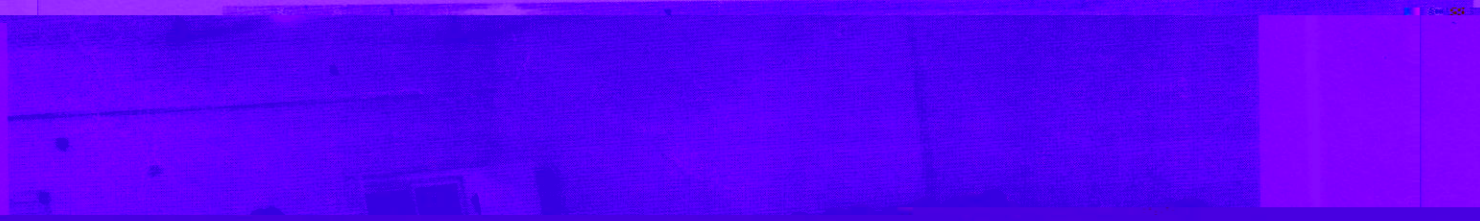
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Department of Computer Sc... & Engg.
Bharath Institute of Higher Education & Research
Chennai-600 073. INDIA

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CERTIFICATE COURSE ON WINDOWS10 APPLICATION DEVELOPMENT AND TRAINING



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CERTIFICATE OF PARTICIPATION

This certificate is presented to

COURSE FEEDBACK FORM

Academic Year	2019-2020
Term	Even SEM
Course Number	
Course Title	Software Project Management
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 — 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
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	

TMENT

HEAD OF THE DEPAR

RTMENT
Sci & Engg.

HEAD OF DEPAR
Department of Computer S
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	2019-2020
Even Sem	
Software Project Management	
Elective	
Add-on	

Term	
Course Number	
Course Title	
Number of Credits	
Type of Course	Regular

ondent: (Tick (√) Appropriately)

nded

20-40		40-60		60-80	✓	80-100	

k spent on the course (Other than lecture hours)

		6-8	✓	8-10	

Yes

Yes

I.	Information on the Respo				
1.	Percentage of classes atte				
	0-20		2		
2.	Number of hours per wee				
	0-2		2-4		4-6
3.	Preparation for the course by the student:				
	(i)	Have done part of this course earlier			
	(ii)	Has adequate prior exposure to the prerequisites			
	(iii)	Had to pickup relevant additional topics through e			

HEAD OF DEPARTMENT
Department of Computer Science
Sheshadripuram College
Seshadripuram, Yelahanka, Bangalore-560 020

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BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY

Requisition Letter

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

Date: 21.03.2019

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 "**Practical Machine Learning with Tensorflow**" -Reg

With reference to above subject, I would like to bring to your kind notice that, our department intended to organize value added course on "**Practical Machine Learning with Tensorflow**" in our campus premises on **28/03/2019**.

30 students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

Timing : **9 am to 4.30 pm**

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CERTIFICATE COURSE ON PRACTICAL MACHINE LEARNING WITH TENSORFLOW

Date of Introduction of the Course: 28.3.2019

COURSE SYLLABUS

1. Getting started with Tensorflow

Overview of tensor flow – machine learning refresher- step
function in machine learning – gradient decent

2. **Overview of Machine Learning**

Explore Machine Learning intuition - Supervised, Unsuper
intuition - Gradient decent variations – model selection a
visualization – deep learning refresher – introduction to tenso

3. **Statistic for Machine learning**

Mathematical foundations of deep learning – building dat
processing with tensorflow

4. **Machine Learning Model Building**

Classify images – regression – classify structured data – t
overfitting – save and restore models

5. **Deep Neural Network**

CNN – transfer learning with pretrained CNN – transfer learning with TF
classification and visualization

6. **Deep Neural models**

Introduction to word embeddings – Recurrent neural network – time series foreca
– text generation with RNN - Estimator API – Logistic Regression – Boosted Tre

7. **Installing TensorFlow Environment**

Install Anaconda Distribution - Restore the environment file
Jupyter Notebook - TensorFlow Basic Syntax - Create Tenso
Create Interactive Session - Matrix Multiplication

8. **TensorFlow Essentials**

ps in machine learning process- loss

vised and Reinforcement Learning
nd evaluation – machine learning
s

a pipeline for tensor flow – text

ext classification- underfitting and

hub – Image

sting with RNN
es

- Write "Hello World" program in
orFlow constant and play with it -

Representing tensors – creating operators – executing operators with sessions – writing code I jupyter – visualizing data using TensorBoard

9. **Data Input and Preprocessing with Tensorflow**

Importing Data - Create an Iterator - Consuming data - Useful Stuff – Map - InstallTheano and Keras Libraries and import the dataset - Encode the Categorical features - Do Train-test split and feature scaling

10. **Prediction with Tensorflow**

Different types of Estimator Model - Split the dataset and train and test the model - Make predictions and visualize.

11. **Monitoring and evaluating models using Tensorboard**

Predict the Test set results - Make confusion matrix and find out Test set accuracy - Compare Test set accuracy with Training set accuracy to validate our model

12. **Advance Tensorflow (Building custom models - CNNs, Scaling up for large datasets)**

Housing Price Prediction Model with Estimator API - Performing Classification Techniques on Pima Indians Diabetes - Predicting Class of Income on Census Data

13. **Optimize and Run Sessions**

Create our Loss function - Build our optimizer with AdamOptimizer - Initialize the variables and create Session

14. **TensorFlow customization**

TensorFlow customization – customizing tf.keras – TensorFlow distributed training

15. **TensorFlow Tools**

CoLab – What-if - ML perf – XLA – TensorFlow playground – MLIR – TensorFlow research cloud

15,16	**19-04-2019(FN)**	**8. TensorFlow Essentials** Representing tensors – creating operators – executing operators with sessions – writing code I jupyter – visualizing data using TensorBoard

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CERTIFICATE COURSE ON PRACTICAL MACHINE LEARNING

Introduction of the Course: 28.03.2019

School of Computing

Registered Students Name List

	NAME OF THE STUDENT
	ANNILKRISHNAN .K
	ASHUTOSH SRIVASTAVA

SL.NO	REG.NO	
1	U14CS016	
2	U14CS017	
8	U14CS148	RAMYA.B
9	U14CS177	K.SIVA SUBRAMANIAN
10	U14CS200	VARSHITH REDDY.T
11	U14CS201	VASI KARTHIK
12	U14CS202	VEMULA ANWAR
13	U14CS203	VENKATA KRISHNAN R

29	U16CS702	MOHANRAJ
30	U16CS703	HARVINDER SINGH

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

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Department of Computer Sci...
Bharath Institute of Higher Education & Rese...
Deemed to be University u/s 3 of UGC Act, 1...
Chennai-600 073, INDIA

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VALUE ADDED COURSE ON PRACTICAL MACHINE LEARNING WITH TENSORFLOW

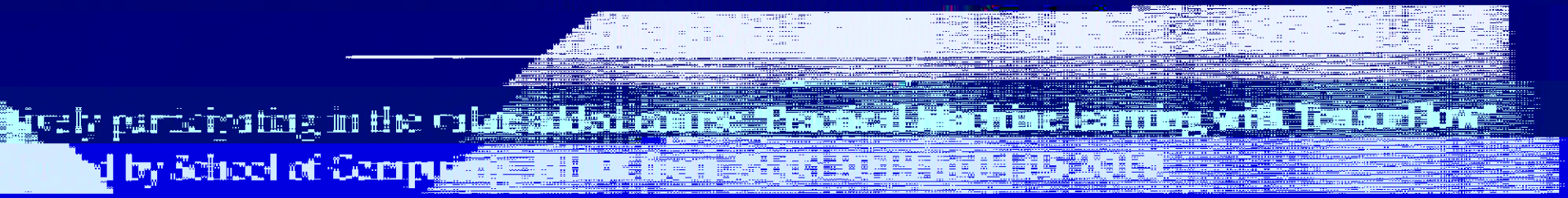




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COURSE FEEDBACK FORM

Academic Year	2018 - 2019
Term	Even Sem.
Course Number	
Course Title	Pratical Machine Learning with TensorFlow
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

(ii) Has adequate prior exposure to the prerequisites

(iii) Had to pick up relevant additional topics through concurrent study

(iv) Have no exposure to the background material

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Bharath Institute of Higher Education & Res
Deemed-to-be University u/s 3 of UGC Act
Chennai-600 073. INDIA



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CERTIFICATE COURSE ON MACHINE LEARNING FOR ENGINEERING AND SCIENCE APPLICATIONS

Date of Introduction of the Course: 28.03.2019

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.

Specifically, the course has the following objectives:

Students will learn

1. Understand why and how machine learning methods may improve engineering problem-solving
2. Quantify risk and clarify salient features from data in complex systems.
3. Learn how researchers make better predictions with missing or sparse data.
4. Transfer machine learning approaches developed in one industry to another industry.
5. Assess conditions when a machine learning approach may not be helpful or worth the extra effort
6. Should be of interest to companies trying to employ engineers familiar with Machine Learning

DINATOR

HEAD OF THE DEPARTMENT

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

COURSE COO

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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 MACHINE LEARNING FOR ENGINEERING AND SCIENCE APPLICATIONS

Date of Introduction of the Course: 28.03.2019

...gs 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,	28-03-2019(FN) Thursday	**1. Mathematical Basics 1** Introduction to Machine Learning, Linear Algebra
2	29-03-2019 (FN) Friday	**2. Mathematical Basics 2** Describes about Probability and its basic
	30-03-2019 (FN) 30-03-2019 (AN) Saturday	**3. Computational Basics** Explains Numerical computation and optimization, Introduction to Machine Learning packages
	01-04-2019(FN) Monday	**4. Linear and Logistic Regression** Describes about Bias/Variance Tradeo, Regularization, Variants of Gradient Descent, MLE, MAP, Applications
6	02-04-2019 (FN) Tuesday	**5. Neural Networks** Describes about Multilayer Perceptron, Backpropagation, Applications
7,8	03-04-2019 (FN) 03-04-2019 (AN) Wednesday	**6. Convolutional Neural Networks 1** Explains CNN Operations, CNN architectures
9	04-04-2019 (FN) Thursday	**7. Convolutional Neural Networks 2** Explains Training, Transfer Learning, Applications
10,11	05-04-2019 (FN) 05-04-2019 (AN) Friday	**8. Recurrent Neural Networks** Explains RNN, LSTM, GRU, Applications
12	06-04-2019 (FN)	**9. Classical Techniques 1**

Bharath Institute of Science and Technology
Department of Computer Science and Engineering

School of Computing

E APPLICATIONS

MACHINE LEARNING FOR ENGINEERING AND SCIENC

List

Registered Students Name

S.No	RegNo	Student Name
1	U18CS001	KICHANAGARI YASHWANTH REDD
2	U18CS002	MUPPARAJU CHIRANJEEVI
3	U18CS003	Katam Mahendra Reddy
4	U18CS004	KOTA VENKATA VISHNU VARDHAN REDDY
5	U18CS005	DARAM SRINIVASAREDDY
6	U18CS006	PEDDIGIRI JALANDHER
7	U18CS007	BURRA PRANAY KUMAR
8	U18CS008	ISWARYA.V
9	U18CS010	PRANAY KUMAR REDDY SAMMIDI
10	U18CS011	NARAYANAM VAMS
11	U18CS012	VIKAS RAJ R
12	U18CS013	JOTHIKA K
13	U18CS014	CALVIN JOSHVUA R
14	U18CS015	DUGGINENI MOUNIK
15	U18CS016	KAKI SIDDHU SRINI
16	U18CS017	NEETU
17	U18CS018	UDAGANDLA HIMAJA
18	U18CS019	POTHIREDDY YOGESWARA REDDY
19	U18CS021	VIKASH KUMAR SINGH
20	U18CS022	UTHAYA A
21	U18CS023	TELLAKULA SAI RAM
22	U18CS024	PEDDI GNANA SURYA
23	U18CS027	SURAPAREDDY MANASA
24	U18CS028	SARAN P T
25	U18CS029	Shiva Dhuru Vel S
26	U18CS030	DEVI CHANDANA D
27	U18CS032	VISHWANATH J
28	U18CS033	KANDULA CHAITANYA SAI
29	U18CS034	SHARAVATI EGIRIDHAR
30	U18CS035	DOMMETI

SARATH KRISHNA

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

COURSE FEEDBACK FORM

Academic Year	2018-2019
Term	
Course Number	
Course Title	Machine Learning for Engineering and Science Applications
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
(ii)	Has adequate prior exposure to the prerequisites
(iii)	Had to pickup relevant additional topics through concurrent study
(iv)	Have no exposure to the background material

4. **The expectations for taking the course by the stude**

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

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

	A	B	C	D	E
1	Pace of the Teaching/lectur				

COURSE FEEDBACK FORM

Academic Year	2018-2019					
Term						
Course Number						
Course Title	Machine Learning for Engineering and Science Applications					
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)**

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

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

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(b)	Get exposed to a relevant subject
(c)	Curiosity
(d)	Better Employment Opportunity
(e)	Complet
(f)	To Impro

Course requirements

ve CGPA

formation on the Respondent: (Tick (√) Appropriately)

About the Instructor: I

	A	B	C	D	E
ng/lecture	✓				
ubject		✓			
sion		✓			
ion	✓				
on	✓				
side the class		✓			
ecify	✓				

1.	Pace of the Teach
2.	Comment of the S
3.	Clarity of expres
4.	Level of prepara
5.	Level of interact
6.	Accessibility ou
7.	Others (please sp

B: Very Good | C: Good | D: Satisfact | A: Excellent

CERTIFICATE COURSE ON MACHINE LEARNING FOR ENGINEERING AND SCIENCE APPLICATIONS

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: 21.03.2019

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 "**Artificial Intelligence Search Methods for Problem Solving**" -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 "**Artificial Intelligence Search Methods for Problem Solving**" in our campus premises from 28.03.2019 for 30 hours

Ourinternal Professorswould deliver lecture for the above mentioned course. About 45 students would be participating in this course. We request you kindly to give permission to organize this.

Venue: **CSEClass room**

Timing : 4:00 PM to 6:00 PM Monday (AN) and

4:00 PM to 6:00 PM Thursday (AN) and

4:00 PM to 6:00 PM Friday (AN)

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

HOD/CSE

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Department of Computer Sci & Engg.,
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Chennai-600 073. INDIA

DEAN ENGINEERING

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CIRCULAR

25.03.2019

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Artificial Intelligence Search Methods for Problem Solving**for the benefit of II, III and IV year students. This course is scheduled from 28.03.2019 for 30hours which includes theory and practical. The timings are 4.00PM to 6.00 PM onMonday, Thursday andFriday.

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.Nalini	Professor
2	Dr. Rajabhushnam	Professor

Head of TheDepartment

To

Copy to CSE

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HEAD OF DEPARTMENT
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CERTIFICATE COURSE ON ARTIFICIAL INTELLIGENCE SEARCH METHODS FOR PROBLEM SOLVING

Date of Introduction of the Course:28.03.2019

COURSE SYLLABUS

1.Introduction

History, Can Machines think?, Turing Test, Winograd Schema Challenge, Language and Thought, Wheels & Gears.

2. Overview

Philosophy, Mind, Reasoning, Computation, Dartmouth Conference, The Chess Saga, Epiphenomena.

3. State Space Search

Depth First Search, Breadth First Search, Depth First Iterative Deepening.

4. Heuristic Search

Best First Search, Hill Climbing, Solution Space.

5. Advanced Heuristic Based methods

TSP, Escaping Local Optima, Stochastic Local Search.

6. Population Based Methods.

Genetic Algorithms, SAT, Emergent Systems, Ant Colony Optimization.

7. Finding Optimal Paths

Branch & Bound, A*, Admissibility of A*, Informed Heuristic Functions.

8. Space Saving Versions of A*

Weighted A*, IDA*, RBFS, Monotone Condition, Sequence Alignment, DCFS, SMGS, Beam Stack Search.

9. Game Playing

Game Theory, Board Games and Game Trees, Algorithm Minimax, AlphaBeta and SSS*.

10. Automated Planning

Domain Independent Planning, Blocks World, Forward Search.

11.More Automated Planning Methods

Backward Search, Goal Stack Planning, Plan Space Planning.

12. Problem Decomposition

Means Ends Analysis, Algorithm Graphplan, Algorithm AO*.

13. Rule Based Expert Systems

Production Systems, Inference Engine, Match-Resolve-Execute, Rete Net.

14. Deduction as Search

Logic, Soundness, Completeness, First Order Logic, Forward Chaining, Backward Chaining.

15. Constraint Processing

CSPs, Consistency Based Diagnosis, Algorithm Backtracking, Arc Consistency, Algorithm Forward Checking.

COURSE OBJECTIVES

In this course we plan to give students an overview of the Artificial Intelligence Search Methods for Problem Solving in the field of Computer Science and Information Technology, and an in-depth study into algorithms and search methods. Students will gain hands-on experience solving relevant problems through projects. It is our objective that students will develop the skills needed to carry out research projects in this domain.

Specifically, the course has the following objectives:

Students will learn

1.The notions of state space representation, heuristic search along with the time and space complexities .

2. The different planning methods.

3.The applications of AI: namely Game Playingand Expert Systems.

COURSE COORDINATOR **HEAD OF THE DEPARTMENT**

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CERTIFICATE COURSE ON ARTIFICIAL INTELLIGENCE SEARCH METHODS FOR PROBLEM SOLVING

Date of Introduction of the Course:28.03.2019

The timings are 4:00 PM to 6:00 PM onMonday, Thursday and Friday

Time Table& Lesson plan

CLASS	DATE	TOPIC
1,2	28-03-2019(AN)	**1.Introduction** History, Can Machines think?, Turing Test, Winograd Schema Challenge, Language and Thought, Wheels & Gears.
3,4	29-03-2019(AN)	**2. Overview** Philosophy, Mind, Reasoning, Computation, Dartmouth Conference, The Chess Saga, Epiphenomena.
5,6	1-04-2019(AN)	**3. State Space Search** Depth First Search, Breadth First Search, Depth First Iterative Deepening.
7,8	4-04-2019(AN)	**4. Heuristic Search** Best First Search, Hill Climbing, Solution Space.
9,10	5-04-2019(AN)	**5. Advanced Heuristic Based methods** TSP, Escaping Local Optima, Stochastic Local Search.
11,12	8-04-2019(AN)	**6. Population Based Methods.** Genetic Algorithms, SAT, Emergent Systems, Ant Colony Optimization.
13,14	11-04-2019(AN)	**7. Finding Optimal Paths** Branch & Bound, A*, Admissibility of A*, Informed Heuristic Functions.
15,16	12-04-2019(AN)	**8. Space Saving Versions of A*** Weighted A*, IDA*, RBFS, Monotone Condition, Sequence Alignment, DCFS, SMGS, Beam Stack Search.
17,18	15-04-2019(AN)	**9. Game Playing** Game Theory, Board Games and Game Trees, Algorithm Minimax, AlphaBeta and SSS*.
19,20	18-04-2019(AN)	**10. Automated Planning** Domain Independent Planning, Blocks World, Forward Search.
21,22	19-04-2019(AN)	**11.More Automated Planning Methods** Backward Search, Goal Stack Planning, Plan Space Planning.

23,24	**22-04-2019(AN)**	**12. Problem Decomposition** Means Ends Analysis, Algorithm Graphplan, Algorithm AO*.
25,26	**25-04-2019(AN)**	**13. Rule Based Expert Systems** Production Systems, Inference Engine, Match-Resolve-Execute, Rete Net.
27,28	**26-04-2019(AN)**	**14. Deduction as Search** Logic, Soundness, Completeness, First Order Logic, Forward Chaining, Backward Chaining.
29,30	**29-04-2019(AN)**	**15. Constraint Processing** CSPs, Consistency Based Diagnosis, Algorithm Backtracking, Arc Consistency, Algorithm Forward Checking.

COURSE COORDINATOR

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CERTIFICATE COURSE ON ARTIFICIAL INTELLIGENCE SEARCH METHODS FOR PROBLEM SOLVING

Date of Introduction of the Course: 28.03.2019

School of Computing

Registered Students Name List

S.NO	REG.NO	NAME OF THE STUDENT
1	U16CS012	FAYAZ AKIL S
2	U16CS013	SURYA SUNDARRAJ SRIRAM
3	U16CS014	SOMA BHARATH KUMAR
4	U16CS015	B J JAISON
5	U16CS016	SARAVANAKUMAR S
6	U16CS017	VARUN KANNA A
7	U16CS018	JUPAKA SAIVARUN
8	U16CS019	PYDI VENKATA PRITHEESH NIHAR
9	U16CS020	R MAHESH
10	U16CS021	DHRUBAJYOTI MAJI
11	U16CS024	SRIMATHI S
12	U16CS025	SANTHOSHKUMAR S
13	U16CS026	AJAY KUMAR R
14	U16CS027	GARLAPATI RAGHURAM
15	U16CS028	PADILAM JAYANTH YADAV
16	U15CS044	DIVYA VANI T
17	U15CS045	DODDI PUJITHA
18	U15CS046	DOOLIGANTI AKHIL REDDY
19	U15CS047	DUPUGUNTLA BHANU SIVA KASINADH
20	U15CS048	GANDLUR REDDY GREESHMA

21	U15CS049	GANESH BAG
22	U15CS050	GANGARAJU RAHUL
23	U15CS051	GANGARAPU UKESH
24	U15CS052	GANGU BHAGYA
25	U15CS053	GLADSON J
26	U15CS054	GOLI SUDEEP KRISHNA
27	U15CS055	GOLLAPUDI KALYAN KUMAR
28	U15CS056	GORRE THIRUPATHI REDDY
29	U15CS057	GUJJETI MAHESH
30	U15CS058	GUNDA VINAY KUMAR
31	U14CS166	SHAFAN HASIM.N
32	U14CS167	SHAIK AATIKA
33	U14CS168	SHAIK MEERA SHARIF
34	U14CS169	SHAIK YASMIN
35	U14CS170	SHANKAR KUMAR GUPTA
36	U14CS171	SHARSHI KANT PRASAD
37	U14CS172	SHASHI BHUSHAN BHAGAT
38	U14CS173	SHEKH ADNAN NIYARIYA
39	U14CS174	SHIVANI GUPTA.M
40	U14CS175	SHUBHAM
41	U14CS176	SIREESHA.M
42	U14CS178	SK MD TAUQEER
43	U14CS179	SNEHA ROY
44	U14CS180	SABUJ BARMAN
45	U14CS181	SOURABH PRIYADARSHI

COURSE COORDINATOR

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Bharath

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

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CERTIFICATE OF PARTICIPATION

This certificate is presented to

SNEHA ROY

For actively participating in the value added course **"Artificial Intelligence Search Methods for Problem Solving"** Conducted by School of Computing, BIHER from 28.03.2019 to 29.04.2019.

COURSE COORDINATORS

HEAD OF THE DEPARTMENT

DIRECTOR

COURSE FEEDBACK FORM

Academic Year		2019					
Term		Even					
Course Number							
Course Title		Artificial Intelligence Search Methods for problem solving					
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	✓
	(ii)	Has adequate prior exposure to the prerequisites	
	(iii)	Had to pickup relevant additional topics through concurrent study	✓
	(iv)	Have no exposure to the background material	
4.	**The expectations for taking the course by the student are:**		
	(a)	Enhance by skill base in the area of specializations	✓
	(b)	Get exposed to a relevant subject	✓
	(c)	Curiosity	
	(d)	Better Employment Opportunity	✓
	(e)	Complete Course requirements	
	(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**	

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COURSE FEEDBACK FORM

Academic Year		2019					
Term		Even					
Course Number							
Course Title		Artificial Intelligence Search Methods for Problem Solving					
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	
	(iii)	Had to pickup relevant additional topics through concurrent study	✓
	(iv)	Have no exposure to the background material	✓
4.	**The expectations for taking the course by the student are:**		
	(a)	Enhance by skill base in the area of specializations	✓
	(b)	Get exposed to a relevant subject	
	(c)	Curiosity	
	(d)	Better Employment Opportunity	✓
	(e)	Complete Course requirements	✓
	(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

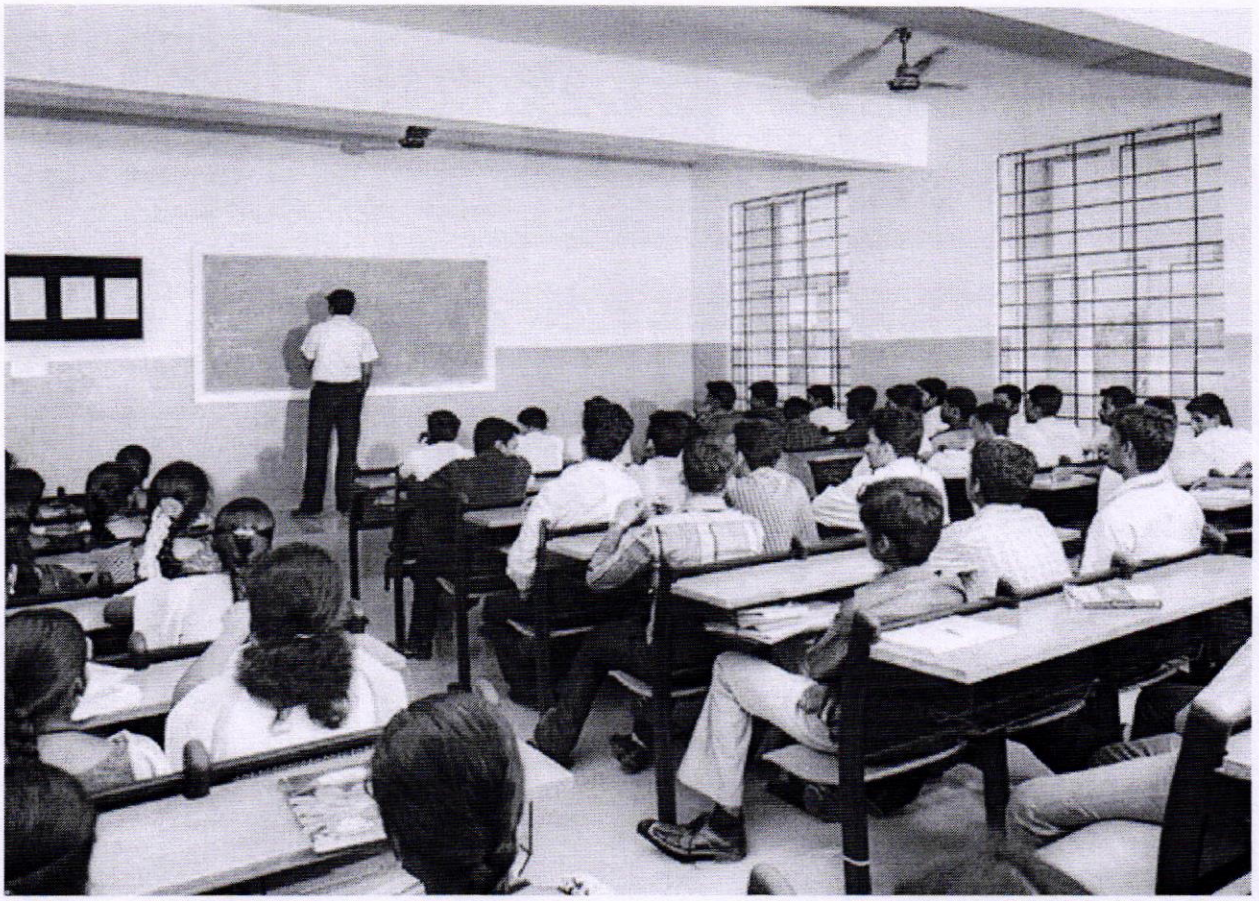
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CERTIFICATE COURSE ON ARTIFICIAL INTELLIGENCE SEARCH METHODS FOR PROBLEM SOLVING



COURSE COORDINATOR

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