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: **14.03.2022**

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 "**Security in Google Cloud Platform**" -Reg

With reference to above subject, I would like to bring to your kind notice that, our department interested to organize value added course "**Security in Google Cloud Platform**" -Reg in our campus premises on **17.03.2022**, students would be participating in this course. We request you kindly to give permission to organize this event.

Venue: **CSE Smart Room**

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

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

HOD

DEAN ENGINEERING

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

14.03.2022

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Security in Google Cloud Platform** for the benefit of students. This course is scheduled from 17.03.2022 which includes theory and practical. The timings are 9:30 AM to 12:30 PM (FN) and 1:30 PM to 4:30 PM (AN) and Saturday (FN&AN).

All Registered Students must attend all the classes without fail. The following faculty members are assigned to handle the course. S.NO	**Name of the Faculty**	**Designation**
1.	Dr.C.Rajabhushanam	Professor.
2.	Mr.M.Rammamorthy	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)
Chennai-600 073, INDIA

To

Copy to CSE

Copy to IT

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

CERTIFICATE COURSE ON SECURITY IN GOOGLE CLOUD PLATFORM

Date of Introduction of the Course: 17.03.2022

COURSE SYLLABUS

1. Google Cloud Platform (GCP) Infrastructure

To manage GCP using console and Command Line tool – Cloud Shell, Gcloud, Gsutil. Also, you will learn how to install and configure Cloud SDK

2. GCP Networking Services

The GCP networking concept and how-to setup network topology, how to connect different GCP resources with each other and isolating them using network policies and firewall.

3. GCP IAM and Security Services

To Identity and Access management with several management tools that GCP offers.

4. GCP Compute Services

To create/manage Virtual machines and work with Compute engine.

5. GCP Storage & Database Services

The different data storage services offered by GCP.

6. Containers

To Deploy, manage, and scale containerized applications on Kubernetes.

7. Cloud Dataflow for Data Processing

To develop and execute a variety of data processing patterns using Dataflow processing and how to manage cluster using Dataproc service.

8. GCP APIs & Development Services

To use GCP for application development, deployment, debugging and monitoring.

9. GCP DevOps Services

To use GCP DevOps service for CI/CD using Jenkins and how to do debugging using Stackdriver in DevOps environment.

10. Designing & Implementing GCP Migration

To check different metrics and take decision to migrate to GCP.

11. GCP Cloud Architect Exam Case Studies

The official case studies provided by Google for GCP Architect exam, and practice on these case studies with sample exam problem statements.

COURSE OBJECTIVES

This course helps to understand about Regions, Zones and Projects that make up the GCP environment. It also helps to understand What is Cloud computing, Overview of different cloud computing services, Understand GCP environment Different Compute, Storage, Big Data and AI resources which GCP offers and Google Network Service Offerings with Setup GCP account.

Specifically, the course has the following objectives:

Students will learn

1. To understand GCP environment and Setup GCP account.
2. To use Cloud Shell to manage GCP environment and Install/Configure cloud SDK.
3. To use VPC, Create/Manage VPN, Work with Routes Configure and Deploy Endpoints.
4. To understand Identity and Access Management, Create and manage permissions for Google Cloud Platform resources.
5. To learn and implement Compute options (vCPU and Memory) specific to workload with Common Compute Engine actions.
6. To understand Cloud Storage Nearline, Coldline and Integration with on premises/multi-cloud environment.

COURSE COORDINATOR

HEAD OF THE DEPARTMENT

HEAD OF DEPARTMENT
Department of Computer Sci & Engg.,
Higher Education & Research
University U/S 3 of UGC Act, 1956)
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 SECURITY IN GOOGLE CLOUD PLATFORM

Date of Introduction of the Course: 17.03.2022

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

Time Table & Lesson plan

CLASS	DATE	TOPIC
1	17-03-2022(FN) Friday	**1. Google Cloud Platform (GCP) Infrastructure** To manage GCP using console and Command Line tool Cloud Shell, Gcloud, Gsutil. Also, you will learn how to install and configure Cloud SDK
2	18-03-2022 (AN) Saturday	**2. GCP Networking Services** The GCP networking concept and how-to setup network topology, how to connect different GCP resources with each other and isolating them using network policies and firewall.
3,4	20-03-2022 (FN) Monday	**3. GCP IAM and Security Services** To Identity and Access management with several management tools that GCP offers
5	21-03-2022(FN) Tuesday	**4. GCP Compute Services** To create/manage Virtual machines and work with Compute engine.
6	22-03-2022 (FN) 22-03-2022 (AN) Wednesday	**5. GCP Storage & Database Services** The different data storage services offered by GCP
7,8	23-03-2022 (FN) Thursday	**6. Containers** To Deploy, manage, and scale containerized applications on Kubernetes.
9	24-03-2022 (FN) 24-03-2022 (AN) Friday	**7. Cloud Dataflow for Data Processing** To develop and execute a variety of data processing patterns using Dataflow processing and how to manage cluster using Dataproc service.

Bharath Institute of Science and Technology

Department of Computer Science and Engineering

School of Computing

SECURITY IN GOOGLE CLOUD PLATFORM

Registered Students Name List

S.No	RegNo	Student Name
1	U16CS001	SANTOSH B
2	U16CS002	APARNA V M
3	U16CS003	NALAMOTHU SRIKANTH
4	U16CS004	ABDUL KHADIR L
5	U16CS006	SARAVANAN R
6	U16CS007	SANAM NAGA VENKATA SAI KRISHNA
7	U16CS008	CHEEMIREDDIGARI ANKITHAREDDY
8	U16CS009	RITIK RAJ
9	U16CS010	JOHAN KIRUBHAHAR P P
10	U16CS011	RAVURI MOUNIKA
11	U16CS012	FAYAZ AKIL S
12	U16CS013	SURYA SUNDARRAJ SRIRAM
13	U16CS014	SOMA BHARATH KUMAR
14	U16CS015	B J JAISON
15	U16CS016	SARAVANAKUMAR S
16	U16CS017	VARUN KANNA A
17	U16CS018	JUPAKA SAIVARUN
18	U16CS019	PYDI VENKATA PRITHEESH NIHAR
19	U16CS020	R MAHESH
20	U16CS021	DHRUBAJYOTI MAJI
21	U16CS024	SRIMATHI S
22	U16CS025	SANTHOSHKUMAR S
23	U16CS026	AJAY KUMAR R
24	U16CS027	GARLAPATI RAGHURAM
25	U16CS028	PADILAM JAYANTH YADAV
26	U16CS029	MOHAMMED KHIZER HUSSAIN N
27	U16CS030	JEEVAMEDHA M
28	U16CS031	SYED HAFEEZ HUSSAIN
29	U16CS032	MUGESH P
30	U16CS033	POOJALAKSHMI N

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 UNIVERSITY

பாரத் பல்கலைக்கழகம்

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

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

34 YEARS OF EXCELLENCE

CERTIFICATE OF PARTICIPATION

Ms. APARNA V M

For actively participating in the value added course **"Security in Google Cloud Platform "**Conducted by School of Computing, BIHER on 17.03.2022.

Course Coordinator

Head of the Department

Director

COURSE FEEDBACK FORM

Academic Year		2021-2022					
Term							
Course Number		-					
Course Title		Security in Google cloud Platform					
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		2021–22					
Term		–					
Course Number		–					
Course Title		Security in google cloud platform					
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					

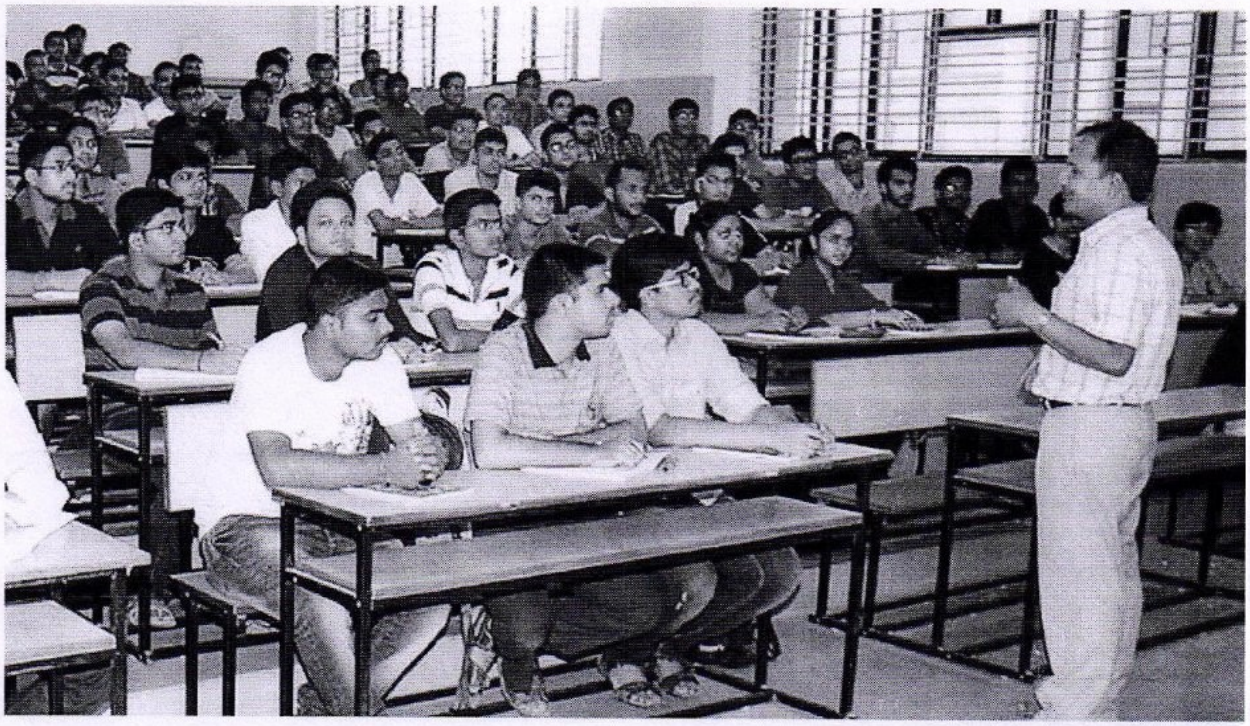
A: Excellent		B: Very Good		C: Good	✓	D: Satisfactory		E: Poor	

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

CERTIFICATE COURSE ON SECURITY IN GOOGLE CLOUD PLATFORM

Introduction of the Course: 17.03.2022



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