



**Requisition Letter**

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

Date: 21.01.2021

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 “**Network Forensics**” -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 “**Network Forensics**” in our campus premises from 08.08.2021 for 30 hours

Our internal Professors would deliver lecture for the above mentioned course. About 60 students would be participating in this course. We request you kindly to give permission to organize this.

Venue: **CSE Class room**

Timing : 1:30 PM to 4:30 PM

9.00 PM to 4.00 PM

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

**HOD/CSE**

**DEAN ENGINEERING**



# Bharath

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


## CIRCULAR

05.08.2021

The School of computing, Bharath Institute of Higher Education and Research is planned to conduct a certification value added course on **Network Forensics** for the benefit of IV year students. This course is scheduled from 08.08.2021 for 30 hours which includes theory and practical. The timings are 1:30 PM to 4:30 PM

**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. G. Michael	Professor

  
**Head of Department**

To

Copy to CSE

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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 NETWORK FORENSICS**

**Date of Introduction of the Course: 08.08.2021**

### **COURSE OBJECTIVE**

Teaches the basics of how computers and networks function, how they can be involved in crimes as well as used as a source of evidence.

### **WHAT TO EXPECT**

Although many concepts of network forensics are similar to those of any other digital forensic investigation, the network in of itself presents many nuances that require special attention. This course will teach digital forensics and incident response to network-based evidence. This course will also acclimate the student to the basic tools and techniques of the trade.

### **COURSE SYLLABUS**

**Introduction:** Investigative Process, Analysis Methodologies, Tools and Techniques, File Systems

**Networking overview:** Windows Networks, Users and Groups, Introduction to Network investigations

**Windows and Linux servers:** Server roles, Server analysis, Windows Registry, Event logs

**IIS and Microsoft Exchange server:** IIS server, Mailserver, Windows rootkits, Compromised server analysis

**SQL server and Data bases:** Microsoft SQL server, SQL server permission and encryption,

**SQL server Forensics Acquisition and analysis:** SQL server forensics and traditional windows forensics, SQL server artifacts, Resident and non-resident artifact's Collecting SQL data bases, Creating an analysis database, Importing evidence, Activity Reconstruction, Data recovery, SQL server rootkits

**Linux Forensics:** Linux File systems, Linux server configurations, Linux artifacts, Apache server forensics, LAMP forensics, SMB and Linux file shares

**Network Traffic Analysis:** Network addressing, DNS poisoning, ARP table analysis, DHCP analysis, Wireshack analysis

**Network Device Forensics:** management of switches and routers, Diagramming physical networks, Securing and isolating physical devices, Collecting Volatile/Non-volatile evidences from the routers, Volatile/Non-volatile.

  
**COURSE COORDINATOR**

  
**HEAD OF THE DEPARTMENT**  
Bharath Institute of Higher Education and Research  
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Chennai-600 073. INDIA



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## CERTIFICATE COURSE ON NETWORK FORENSICS

**Date of Introduction of the Course:08.08.2021**

**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	12.08.2021	<b>Introduction:</b> Investigative Process, Analysis Methodologies, Tools and Techniques, File Systems <b>Networking overview:</b> Windows Networks, Users and Groups, Introduction to Network investigations
3,4,	13.08.2021	<b>Windows and Linux servers:</b> Server roles, Server analysis, Windows Registry, Event logs
5,6,	19.08.2021	<b>IIS and Microsoft Exchange server:</b> IIS server, Mailserver, Windows rootkits, Compromised server analysis
7,8,	20.08.2021	<b>SQL server and Data bases:</b> Microsoft SQL server, SQL server permission and encryption,
9,10,		<b>SQL server Forensics Acquisition and analysis:</b> SQL server forensics and traditional windows forensics, SQL server artifacts, Resident and non-resident artifact's Collecting SQL data bases, Creating an analysis database, Importing evidence, Activity Reconstruction, Data recovery, SQL server rootkits
11,12,		
13,14,		
15,16,17		
18,	26.08.2021	<b>Linux Forensics:</b> Linux File systems, Linux server configurations, Linux artifacts, Apache server
19,20,	27.08.2021	forensics, LAMP forensics, SMB and Linux file shares
21,22,		<b>Network Traffic Analysis:</b> Network addressing, DNS poisoning, ARP table analysis, DHCP analysis, Wireshack analysis
23,24,	02.09.2021	<b>Network Device Forensics:</b> management of switches and routers, Diagramming physical networks, Securing and isolating physical devices, Collecting Volatile/Non-volatile evidences from the routers, Volatile/Non-volatile
25,26,	03.09.2021	
27,28,		
29,30		

*Conid*  
COURSE COORDINATOR

*K. S. S.*  
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



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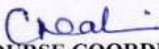
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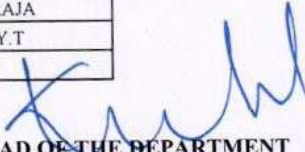
**CERTIFICATE COURSE ON NETWORK FORENSICS**  
**Date of Introduction of the Course: 08.08.2021**

**School of Computing**  
**Registered Students Name List**

S.NO	REG.NO	NAME OF THE STUDENT
1	U14CS003	ABDUL RAHIM.M
2	U14CS004	ABDUL RAZVI .M.K
3	U14CS005	ABDUR RASEED
4	U14CS006	ABHIKAMALI .A
5	U14CS007	ABHISHEK MANDURI
6	U14CS008	AJAY.D
7	U14CS009	AKASH CHANDRA AMBASTHA
8	U14CS010	AKHIL REDDY.G
9	U14CS014	ANGELIN .R
10	U14CS015	ANKITA
11	U14CS016	ANNILKRISHNAN .K
12	U14CS017	ASHUTOSH SRIVASTAVA
13	U14CS107	MUGUNTHANATHAN.G
14	U14CS108	MURALI .S
15	U14CS109	N.UMA VENKATA MAHESHWARA SWAMY
16	U14CS110	NAGA TEJA.K
17	U14CS148	RAMYA.B
18	U14CS177	K.SIVA SUBRAMANIAN
19	U14CS094	MANISH SHARMA
20	U14CS096	MD. ARSHAD
21	U14CS097	MEDARAMETLA BRAHMA RAO
22	U14CS098	MEDIGA UDAYA KUMAR
23	U14CS099	MEKA VIVEK REDDY
24	U14CS113	NALLAJARLA CHAKRADHAR
25	U14CS114	NANDALA SWETHA
26	U14CS115	NANDIPALLI MOUNICA
27	U14CS116	NAYANA.P. BALA CHANDRAN
28	U14CS117	NEERAJAN SAHA
29	U14CS128	PENAGALAPATI MARUTHI RAO
30	U14CS129	PIYALI CHAKRABORTHY.M
31	U14CS130	POOJA KUMARI

32	U14CS131	PRAGYA ADITI
33	U14CS132	PRASHANTH.B
34	U14CS133	PRATEEP ANAND
35	U14CS134	PRINCE RAJ
36	U14CS160	SANDEEP INGUVA
37	U14CS161	SANJAY KUMAR YADAV
38	U14CS162	SANTHOSH KUMAR.N
39	U14CS163	SASHAANK.S
40	U14CS164	SAURAV KUMAR
41	U14CS165	SAURAV SINGH
42	U14CS224	R.SINDHU
43	U14CS169	SHAIK YASMIN
44	U14CS170	SHANKAR KUMAR GUPTA
45	U14CS171	SHARSHI KANT PRASAD
46	U14CS172	SHASHI BHUSHAN BHAGAT
47	U14CS183	SULEKHA KUMARI
48	U14CS184	SUNITA.S
49	U14CS185	SURENDAR.K
50	U14CS186	SURIYA.A.
51	U14CS187	SURYA.A
52	U14CS196	TUMU SRINIKHIL
53	U14CS197	TWINKLE
54	U14CS198	VADLAMUDI KOWSHIK
55	U14CS199	VAMMARVALLI RAJA
56	U14CS200	VARSHITH REDDY.T
57	U14CS201	VASI KARTHIK

  
COURSE COORDINATOR

  
HEAD OF THE DEPARTMENT



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## Certificate of Participation

**Ms . RAMYA.B**

For actively participating in value added course on

“**NETWORK FORENSICS** “ conducted by School Computing ,

BIHER from 08/08/2021 to 03/09/2021

*Cival*  
**Coordinator**

*[Signature]*  
**HOD**

HEAD OF DEPARTMENT  
Department of Computer Sci. & Engg.,  
Bharath Institute of Higher Education & Research  
(Declared as Deemed to be University U.S.A of UGC Act, 1956)  
Chennai-600 023, INDIA

*[Signature]*  
**DIRECTOR**



# Bharath

**INSTITUTE OF HIGHER EDUCATION AND RESEARCH**

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**CERTIFICATE COURSE ON NETWORK FORENSICS**

**Date of Introduction of the Course: 08.08.2021**

**School of Computing**



*Croali*

**COURSE CO ORDINATOR**

*[Handwritten Signature]*


**HEAD OF THE DEPARTMENT**

HEAD OF DEPARTMENT  
Department of  
Engineering  
(Deemed to be University)  
Bharath Institute of Higher Education and Research  
1956



# COURSE FEEDBACK FORM

Academic Year		2021 - 2022							
Term									
Course Number									
Course Title		Network Forensics							
Number of Credits									
Type of Course	Regular		Elective		Add-on	/			
<b>I. Information on the Respondent: (Tick (✓) Appropriately)</b>									
<b>1. Percentage of classes attended</b>									
0-20		20-40		40-60		60-80	80-100		
						/			
<b>2. Number of hours per week spent on the course (Other than lecture hours)</b>									
0-2		2-4		4-6		6-8	8-10		
				/					
<b>3. Preparation for the course by the student:</b>									
(i)	Have done part of this course earlier						NO		
(ii)	Has adequate prior exposure to the prerequisites						yes		
(iii)	Had to pickup relevant additional topics through concurrent study						yes		
(iv)	Have no exposure to the background material						NO		
<b>4. The expectations for taking the course by the student are:</b>									
(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		
<b>About the Instructor: Information on the Respondent: (Tick (✓) Appropriately)</b>									
		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)								
<b>A: Excellent</b>		<b>B: Very Good</b>		<b>C: Good</b>		<b>D: Satisfactory</b>		<b>E: Poor</b>	

  
**HEAD OF THE DEPARTMENT**

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

# COURSE FEEDBACK FORM

Academic Year		2021 - 2022			
Term					
Course Number					
Course Title		Network Forensics			
Number of Credits					
Type of Course	Regular		Elective		Add-on <input checked="" type="checkbox"/>

**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	

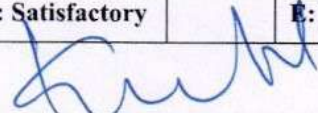
3. Preparation for the course by the student:		
(i)	Have done part of this course earlier	No
(ii)	Has adequate prior exposure to the prerequisites	yes
(iii)	Had to pickup relevant additional topics through concurrent study	yes
(iv)	Have no exposure to the background material	yes

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 THE DEPARTMENT**  
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 Bharathi Institute of Higher Education & Research  
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