



Requisition Letter

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

Date: 15.02.2019

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 **“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



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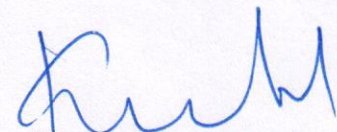
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CIRCULAR

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



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CERTIFICATE COURSE ON INTRODUCTION TO ETHICAL 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

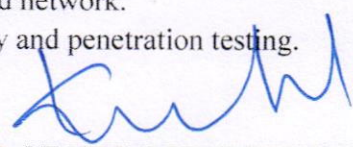
COURSE OBJECTIVES

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

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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 Methodology, IoT Hacking Tools, Countermeasures

R. Velupillai
COURSE COORDINATOR

[Signature]
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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


 COURSE COORDINATOR


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CERTIFICATE COURSE ON INTRODUCTION TO ETHICAL HACKING



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CERTIFICATE OF PARTICIPATION

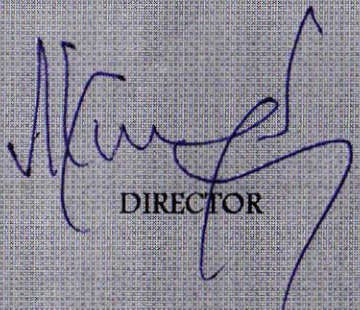
This certificate is presented to

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 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		2019-2020			
Term		Even term			
Course Number					
Course Title		Introduction to Ethical Hacking			
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Type of Course	Regular		Elective		Add-on <input checked="" type="checkbox"/>

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0-20		20-40		40-60	✓	60-80		80-100	
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2. Number of hours per week spent on the course (Other than lecture hours)

0-2		2-4		4-6	✓	6-8		8-10	
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(b)	Get exposed to a relevant subject	yes
(c)	Curiosity	yes
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(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 <input checked="" type="checkbox"/>	E: Poor
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