



E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai
(Accredited by NAAC with 'A' Grade and NBA)

Email: principal@egspec.org

website: www.egspec.org

Ph: 04365-251112

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSES

ACADEMIC YEAR

2020-2021

Name of the value added courses offered	Program	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Virtualization of Cloud Using Python Programming	UG	2	40 Hours	149	149
Develop your career in Python	UG	2	40 Hours	129	129
Introduction to Deep Learning Concepts using MATLAB	PG	1	40 Hours	24	24

Mch
HOD/CSE
E.G.S. PILLAY ENGINEERING COLLEGE
NAGAPATTINAM - 611 002

ATTESTED
[Signature]
Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002,
Nagapattinam (Dt) Tamil Nadu.

**E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS),
NAGAPATTINAM**



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

ORGANIZED

**VALUE ADDED COURSE ON
VIRTUALIZATION OF CLOUD
USING PYTHON**

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)
NAGAPATTINAM
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
VALUE ADDED COURSE
ON
VIRTUALIZATION OF CLOUD USING PYTHON PROGRAMMING

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PERMISSION LETTER

Date: 25.01.2021

From

Mr.A.Baskar,
Assistant Professor/CSE,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.

To

The Principal,
E.G.S.Pillay Engineering College,
Nagapattinam.

Through

The Head of Department,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.




Respected Sir,

Sub: Requisition to conduct Value Added Course – Reg


We are happy to inform you that we have planned to organize one week value added course titled **“Virtualization of Cloud using Python Programming”** for IV & III CSE Students from 01.02.2021 to 06.02.2021 for Batch I and 08.02.2021 to 13.02.21 for Batch II through online mode. Herewith, I have enclosed name list and session details. Kindly give us permission for conducting the value added course.

Thanking you,

yours sincerely,


HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College
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[Mr.A.Baskar]

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Thiruv. ...
Nagapattinam (or) Tamil Nadu.

Convenor

Prof.Dr.M.CHINNADURAI

Professor & Head / CSE

Course Coordinator

Mr.A.Baskar

ASSISTANT PROFESSOR/CSE

&

Mrs.M.Viji

ASSISTANT PROFESSOR / CSE

Resource Person

Dr.Sudhir Shenai ASP/CSE

&

Mr.J.NoorulAmeen

AP/CSE

Beneficiaries

III & IV

UG CSE Students

Course Duration : 40 Hours

Learning Mode: Online

Certificate will be issued to all participants on successful completion of this course

ABOUT THIS COURSE

This course provides an introduction to programming and the Python language. Students are introduced to core programming concepts like data structures, conditionals, loops, variables, and functions. This course includes an overview of the various tools available for writing and running Python, and gets students coding quickly. It also provides hands-on coding exercises using commonly used data structures, writing custom functions, and reading and writing to files. This course may be more robust than some other introductory python courses, as it delves deeper into certain essential programming topics.



One Week Value Added Course ON Virtualization of Cloud using Python

02.02.21-06.02.21

&

08.02.21 - 13.02.21

ATTESTED

(Signature)

RAMABALAKRISHNAN
PRINCIPAL

Organized by
Department of CSE

E.G.S.Pillay Engineering College
(Autonomous)

NAGAPATTINAM



**E. G. S. PILLAY ENGINEERING COLLEGE(AUTONOMOUS),
NAGAPATTINAM.**

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING


EGSPEC/CSE/UG/VAC/2020-21/01

Date: 27.01.2021

CIRCULAR

It is here by informed that Department of CSE is going to organize a Value Added Course on "Virtualization of Cloud using Python Programming" from 01.02.2021 to 06.02.2021 for Batch I and 08.02.2021 to 13.02.21 for Batch II through online mode by, **Dr.SudhirShenai, Associate Professor** and **Mr.J.NoorulAmeen, Assistant Professor**, Department of Computer Science and Engineering, E.G.S. Pillay Engineering College (Autonomous), Nagapattinam for third and final year CSE Students. All the third year and final year students are instructed to attend and complete the course without fail.


CONVENER


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E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS) NAGAPATTINAM

DEPARTMENT OF CSE

**VALUE ADDED COURSE ON
“VIRTUALIZATION OF CLOUD USING PYTHON PROGRAMMING”**

PROGRAM SCHEDULE

Date : Batch I – 01/02/2021 – 06/02/2021

Batch II – 08/02/2021 – 13/02/2021

S. NO	DAY	TOPIC
1	DAY 1	Layers of Cloud Computing- Services in Cloud Computing– Key Features of Python – Python usage in Cloud
2	DAY 2	Virtualization inside an OS – Virtual Machine Monitors – Virtualizing the System ISA- Types of Virtualization
3	DAY 3	Python Introduction – Features and Benefits of Python – Python Libraries – Python Frameworks – Python IDE – Python for Cloud
4	DAY 4	Introduction on Cloud Applications – Quality of Life for Developers
5	DAY 5	Building a Python Application: Shutdown Watcher Challenge, Message Queue challenge
6	DAY 6	Practice Session and Assessment Test

COORDINATORS

1. **Mr.A.Baskar, AP / CSE**
2. **Mrs.M.Viji, AP / CSE**

CONVENOR


1. **DR. M. CHINNADURAI, PROF/HOD - CSE**

RESOURCE PERSONS

1. **Dr.SudhirShenai, ASP / CSE/EGSPEC**
2. **Mr.J.NoorulAmeen, AP/CSE/EGSPEC**

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Nagapattinam - 611 002

SYLLABUS

VIRTUALIZATION OF CLOUD USING PYTHON PROGRAMMING		L	T	P	C
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Course Objectives:					
<ol style="list-style-type: none"> 1. Understand information about current practices in virtualization and cloud computing 2. Provides practical knowledge on designing and implementing virtual and cloud based software systems and major providers of such systems in the market today 					
Unit I	INTRODUCTION				10 Hours
Layers of Cloud Computing- Services in Cloud Computing– Key Features of Python – Python usage in Cloud					
Unit II	VIRTUALIZATION AND CLOUD COMPUTING				10 Hours
Virtualization inside an OS – Virtual Machine Monitors – Virtualizing the System ISA- Types of Virtualization					
Unit III	PYTHON LIBRARIES IN CLOUD				10 Hours
Python Introduction – Features and Benefits of Python – Python Libraries – Python Frameworks – Python IDE – Python for Cloud					
Unit IV	CLOUD APPLICATIONS IN PYTHON				10 Hours
Introduction – Quality of Life for Developers – Building a Python Application: Shutdown Watcher Challenge, Message Queue challenge					
				Total:	40 Hours
Course Outcomes:					
After completion of the course, Student will be able to					
CO1	Understanding service oriented architecture and web services.				
CO2	Understanding and installing virtual operating systems.				
CO3	Being able to develop simple applications programming goals.				
CO4	Understanding the principles and applications of virtualization and cloud computing in enterprise information systems.				
References:					
1. Cloud Computing: Concepts, Technology & Architecture by Thomas Erl, Ricardo Puttini, Zaigham Mahmood					
2. Introduction to Cloud Computing – Cloud Native Python by Manish Sethi					


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DEPARTMENT OF CSE

VALUE ADDED COURSE ON

“VIRTUALIZATION OF CLOUD USING PYTHON PROGRAMMING”

ENROLLMENT LIST


S.NO	REGISTER NUMBER	NAME OF THE STUDENT	BATCH
1.	E17CSR001	AANANI D	I
2.	E17CSR002	AARTHI K	I
3.	E17CSR004	ABINAYA K	I
4.	E17CSR005	ABINAYASRI G	I
5.	E17CSR006	ABINESHA K	I
6.	E17CSR007	ABISHEK J	I
7.	E17CSR008	AJITHA J	I
8.	E17CSR010	AKASHRAJ M	I
9.	E17CSR011	AMRITHA K	I
10.	E17CSR012	AMSAVARDHINI R	I
11.	E17CSR013	ARTHI P	I
12.	E17CSR014	ATCHAYA E	I
13.	E17CSR015	BABIN B	I
14.	E17CSR017	BHARATH KUMAR R	I
15.	E17CSR018	BHAVADHARSHINI B	I
16.	E17CSR019	BHUVANESHWARI R	I
17.	E17CSR021	DEEPA P	I
18.	E17CSR022	DEEPIGA G	I
19.	E17CSR023	DEVADHARSHINI G	I
20.	E17CSR024	DEVIPRIYA R	I
21.	E17CSR025	DHAKSHNASUDHAN R	I
22.	E17CSR026	DHINESH K	I
23.	E17CSR027	DHIVYABHARATHI S	I
24.	E17CSR028	DINESH V	I
25.	E17CSR029	DIVYABHARATHI R	I
26.	E17CSR030	DURGADEVI R	I
27.	E17CSR032	ESWARI T	I
28.	E17CSR033	FAIROSEBANU A	I
29.	E17CSR034	FATHIMA BEEVI M	I
30.	E17CSR035	GANGADEVI T	I
31.	E17CSR036	GAYATHRI S	I
32.	E17CSR037	GEETHA A	I
33.	E17CSR038	HARIHARAN E	I
34.	E17CSR039	HASSIM ASLAM S	I

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35.	E17CSR040	HEMA R	I
36.	E17CSR041	JAISURYA K	I
37.	E17CSR042	JAYADHARANI C	I
38.	E17CSR043	JEEVANANTHAM S	I
39.	E17CSR044	JENITHA M	I
40.	E17CSR045	JINSI S	I
41.	E17CSR046	KAYATHRI V	I
42.	E17CSR047	KEERTHANA R	I
43.	E17CSR048	KEERTHIKA J	I
44.	E17CSR049	KIRUBAKARAN K	I
45.	E17CSR050	KISHORE G	I
46.	E17CSR051	KUMARAN R	I
47.	E17CSR052	MADHURI D	I
48.	E17CSR053	MAHESWARI V	I
49.	E17CSR055	MANOJKUMAR M	I
50.	E17CSR056	MATHANRAJ C	I
51.	E17CSR057	MEENAKSHI J	I
52.	E17CSR058	MEERA R	I
53.	E17CSR059	MOHAMED SALMAN FASITH S	I
54.	E17CSR060	MOHAMED YUSUF M	I
55.	E17CSR061	MONISHA P	I
56.	E17CSR062	MURUGESWARI V	I
57.	E17CSR063	MUTHUKARTHIGA S	I
58.	E17CSR064	NANTHINI BHARATHI R	I
59.	E17CSR065	NIRMAL T	I
60.	E17CSR066	NITHISHKUMAR I	I
61.	E17CSR067	NIVEDHITHA D	I
62.	E17CSR068	PAVITHRA M P	I
63.	E17CSR069	POONTHAMIZH P	I
64.	E17CSR070	PRADEEPA A	I
65.	E17CSR071	PRAVINKUMAR M	I
66.	E17CSR072	PREETHA S	I
67.	E17CSR073	PREETHI V	I
68.	E17CSR074	PRINCE SUJA K	I
69.	E17CSR075	PRIYADHARSHINI J	I
70.	E17CSR076	PRIYADHARSHINI R	I
71.	E17CSR077	PRIYADHARSHINI V	I
72.	E17CSR078	PRIYANKA R	I
73.	E17CSR079	PUNITHA S	I
74.	E17CSR080	RAHUL R	I
75.	E17CSR081	RAJESHWARI M	I
76.	E17CSR082	RAM PRASATH R K	II
77.	E17CSR083	RANJANI DEVI T	II
78.	E17CSR084	RAVIKUMAR P	II
79.	E17CSR085	RAVINA R	II


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80.	E17CSR086	SAMEERABANU M	II
81.	E17CSR087	SAMUVEL R	II
82.	E17CSR089	SANTHOSH M	II
83.	E17CSR090	SATHISWARAN M	II
84.	E17CSR091	SATHYAPRIYA M	II
85.	E17CSR092	SELVAKUMARI R	II
86.	E17CSR093	SELVAMUTHUKUMARAN R	II
87.	E17CSR094	SHAGARBHAN S	II
88.	E17CSR095	SHANMUGARAJAN T	II
89.	E17CSR096	SHANTHINI R	II
90.	E17CSR097	SHOBANA PRIYA S	II
91.	E17CSR098	SHOBIYA J	II
92.	E17CSR099	SHRINIDHI B	II
93.	E17CSR100	SIVAKAMI S	II
94.	E17CSR101	SIVARANJANI I	II
95.	E17CSR102	SOCRATES A	II
96.	E17CSR103	SOWMIYA R	II
97.	E17CSR104	SRIMATHI P	II
98.	E17CSR105	SUBASRI K	II
99.	E17CSR106	SUBRAJA A	II
100.	E17CSR107	SUDHA M	II
101.	E17CSR108	SUGAPRIYA K	II
102.	E17CSR109	SUNDHARAVEL S	II
103.	E17CSR110	SURENDAR D	II
104.	E17CSR111	SURIYA PRABHA J	II
105.	E17CSR112	SURYA R	II
106.	E17CSR113	SUSHMITHA B	II
107.	E17CSR114	SUSUMITHA K	II
108.	E17CSR115	SWATHI R	II
109.	E17CSR116	THAHLEMA BANU S	II
110.	E17CSR117	VARATHA MANIKANDAN S	II
111.	E17CSR118	VEMBU E	II
112.	E17CSR119	VENGATRAMANAN E	II
113.	E17CSR120	VIGNESH A	II
114.	E17CSR122	VIJAYALAKSHMI N	II
115.	E17CSR123	VINODHINI R	II
116.	E17CSR124	VINOTHINI V	II
117.	E17CSR125	YAMUNA S	II
118.	E17CSR126	YOHAPRIYA B	II
119.	E17CSL301	ABINAYA K	II
120.	E18CSR002	ABDUL AZEES A	II
121.	E18CSR003	ABDUL HAMEED M	II
122.	E18CSR004	ABINESH B	II
123.	E18CSR005	AJAYVENGATESH S	II
124.	E18CSR007	AKASH U	II

ATTESTED

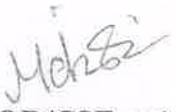
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Nagapattinam (Dt) Tamil Nadu.

125.	E18CSR008	AKILA A	II
126.	E18CSR010	AMEEN MARZOOK S	II
127.	E18CSR011	ANBU DEVI R	II
128.	E18CSR012	ANUSUYA S	II
129.	E18CSR013	ARULRAJ G	II
130.	E18CSR014	ARUNESH D	II
131.	E18CSR015	AYYAPPAN S	II
132.	E18CSR030	HENCYSOWMIYA C	II
133.	E18CSR034	KABILAN G	II
134.	E18CSR048	NAVEEN S	II
135.	E18CSR051	NOORMOHAMED M	II
136.	E18CSR060	SAILAKSHMI S	II
137.	E18CSR066	SELVAMANIKANDAN PR	II
138.	E18CSR067	SHAFEEQ S	II
139.	E18CSR070	SIVASURYA V	II
140.	E18CSR071	SNEKA R	II
141.	E18CSR076	TAMILMATHI S S	II
142.	E18CSR079	UDHAYAPRIYA U	II
143.	E18CSL301	ARAVINTH M	II
144.	E18CSL302	GOKULNATH S	II
145.	E18CSL303	KEERTHIGA K	II
146.	E18CSL305	NESAPRIYA M	II
147.	E18CSL306	PADMASRI G	II
148.	E18CSL307	SANJAYBHARATHI T	II
149.	E18CSL312	VIKNESH M	II


COURSE COORDINATORS


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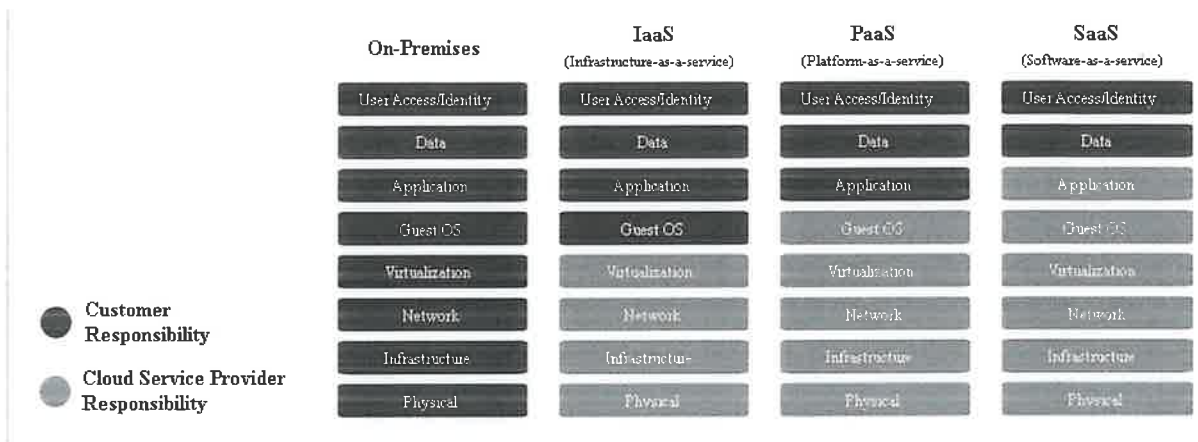
COURSE MATERIAL

LAYERS OF CLOUD COMPUTING

Cloud Computing Layers

To define a cloud strategy, understand the cloud computing layers that are available: infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS). Then, use a decision framework to identify the cloud strategy that fits your organization.

Each cloud computing layer offers services to different segments of the market.



IaaS

IaaS is a cloud computing model in which computing resources are hosted in a public cloud, private cloud, or hybrid cloud. Businesses can use the IaaS model to shift some or all of their use of on-premises or collocated data center infrastructure to the cloud, where the infrastructure is owned and managed by a cloud provider. These cost-effective infrastructure elements can include compute, network, and storage hardware as well as other components and software.

IaaS Examples

Businesses use IaaS in a variety of ways:

- **Test and development:** With IaaS, DevOps teams can set up and take down test and development environments quickly and at low cost, so they can get new applications to market faster.
- **Traditional applications:** IaaS supports both cloud-native applications and traditional enterprise applications, including enterprise resource planning (ERP) and business analytics applications.
- **Website hosting and apps:** Many businesses run their websites on IaaS to optimize costs. IaaS also supports web and mobile apps, which can be quickly deployed and scaled.
- **Storage, backup, and recovery:** Storing and backing up data on-premises, as well as planning for and recovering from disasters, requires a great deal of time and expertise. Moving infrastructure to the cloud helps businesses reduce costs and frees them up to focus on other tasks.
- **High performance computing:** With its pay-as-you-go model, IaaS makes high performance computing (HPC) and other data-intensive, project-oriented tasks more affordable.

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PaaS

The term platform as a service (PaaS) refers to a cloud computing model where a third party delivers hardware and software tools to users over the internet. PaaS providers host the hardware and software on their own infrastructure to assist cloud computing, while also delivering development, management, and security capabilities. PaaS simplifies cloud computing by consolidating existing applications, building new ones, and enabling organizations to realize a faster time to market with a lower cost of ownership.

SaaS

SaaS is a cloud-based software delivery model in which the cloud provider develops and maintains cloud application software, provides automatic software updates, and makes software available to its customers over the internet on a pay-as-you-go basis. The public cloud provider manages all the hardware and traditional software, including middleware, application software, and security. SaaS customers can dramatically lower costs; deploy, scale, and upgrade business solutions more quickly than maintaining on-premises systems and software; and predict the total cost of ownership with greater accuracy.

Cloud services are application and infrastructure resources that exist on the Internet. Third-party providers contract with subscribers for these services, allowing customers to leverage powerful computing resources without having to purchase or maintain hardware and software.

Why use cloud services?

When you use cloud services, you are able to hand off managing infrastructure and focus instead on just using it. The provider you choose will support a wide range of activities that keep your business operating, such as application processing and exchange, storage, and management of your data. Using these services, your authorized users can communicate, collaborate, manage projects, and conduct data analysis, processing, sharing, and storage without needing your IT department to oversee, maintain, or back up the activity.

What are the benefits of cloud services?

Using cloud computing services, subscribers access online resources through workstations, laptops, tablets, and smartphones that are configured to protect the data and assets hosted on the cloud. With a pay-as-you-go model, cloud services offer a low-cost way to accommodate spikes in demand more efficiently than in-house computing services.

How are cloud services used?

The power, flexibility, and agility of cloud services has led to a myriad of uses, with more being invented every day.

Email: Perhaps the first cloud service ever offered, email doesn't require any software to be installed on a local device to be able to use it. The application itself is hosted on the cloud—a SaaS use case.

Big Data Analytics: Big Data refers to the huge amounts of information that businesses such as Amazon and Facebook collect to understand human buying behavior. Now, most companies use their own customer data to make decisions on sales, marketing, R&D, and more. Using cloud services to store, manage, and analyze this data offers a powerful advantage—an IaaS use case.

Software Development: Because of the cloud's flexibility, users can build environments, test them, and tear them down quickly. What previously took months to provision can now take just a few minutes,

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which is a perfect scenario for highly iterative processes, such as software development. With PaaS, developers do not need to bother with maintenance, so they're free to concentrate on development.

Backup and Disaster Recovery: Using IaaS, you can access nearly unlimited storage space with built-in data lifecycle management policies. Using a deep data storage service, you can implement a data backup and archive process for any data that is over 30 days old. Just like that, as long as you have access to the Internet, you have access to the data no matter what happens to your facility.

Web Hosting: Organizations often use IaaS for web hosting so they can balance the traffic load across multiple servers and scale up and down quickly and automatically as traffic fluctuates. The ability to provision and implement automatic scaling simplifies the whole process and takes out much of the administrative input and maintenance required.

What types of cloud services are available?

The following are the three main types of cloud computing services available. In each case, the service providers maintain the underlying cloud infrastructure. Other computing resources can be handled by the provider or not, as required by the subscriber's needs.

Software as a Service (SaaS)

Providers offer subscribers the use of their software running on a cloud infrastructure, which means the application can be widely distributed and accessed. Common types of business technologies hosted by the SaaS vendor include productivity suites, customer relationship management (CRM) software, human resources management (HRM) software, and data management software. Users have the option of accessing the application(s) through a program interface or a thin client interface, such as a web browser. With this service, subscribers are limited to access and use of the software only.

Platform as a Service (PaaS)


With PaaS, users have a bit more control than with SaaS because users gain access to a framework from the operating system up. PaaS allows users to place their own applications onto the cloud infrastructure with programming languages, libraries, services, and tools supported by the provider. The subscriber has control over the deployed applications, data, and possibly configuration settings for the application-hosting environment. But the network, servers, operating systems, and storage are managed and controlled by the provider.

Infrastructure as a Service (IaaS)

Using IaaS, subscribers can architect an entire environment by configuring a virtual network that is segmented from other networks. Within this environment, users run an operating system and provision the processing, storage, networks, and other fundamental computing resources needed to run software on the cloud infrastructure. With IaaS, the subscriber may also have limited control of select networking components (e.g., host firewalls). Some providers will also offer services such as monitoring, automation, security, load balancing, and storage resiliency.

Anything as a Service (XaaS)

There are several other service models defined as XaaS, which do not strictly fit in the above three categories. They are essentially anything as a service and are often limited to narrower offerings. Disaster Recovery as a Service, Communications as a Service, and Monitoring as a Service are good examples.

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E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS, NAGAPATTINAM)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Register Number: E17CSR046

Name : Kayathri .V

Department : CSE

Class: IV – A

Batch: 1

Course Name: Virtualization of cloud using Python Programming

Activity 1:

Creating a Virtual Machine using Python

This creates a virtual machine named vm1. The virtual machine in this example must have 512 MB of memory, expressed in bytes.

```
vm_memory = 512 * 1024 * 1024
```

Must be attached to the Default cluster, and therefore the Default data center.

```
vm_cluster = api.clusters.get(name="Default")
```

Must be based on the default Blank template.

```
vm_template = api.templates.get(name="Blank")
```

Must boot from the virtual hard disk drive.

```
vm_os = params.OperatingSystem(boot=[params.Boot(dev="hd")])
```

These options are combined into a virtual machine parameter object, before using the add method of the vms collection to create the virtual machine itself.

Expand

```
from ovirtsdk.api import API
from ovirtsdk.xml import params
```

try:

```
api = API (url="https://HOST",
          username="USER@DOMAIN",
          password="PASS",
          ca_file="ca.crt")
```

```
vm_name = "vm1"
vm_memory = 512 * 1024 * 1024
vm_cluster = api.clusters.get(name="Default")
vm_template = api.templates.get(name="Blank")
vm_os = params.OperatingSystem(boot=[params.Boot(dev="hd")])
```

```
vm_params = params.VM(name=vm_name,
                      memory=vm_memory,
```

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```
cluster=vm_cluster,  
template=vm_template,  
os=vm_os)
```

```
try:
```

```
    api.vms.add(vm=vm_params)  
    print "Virtual machine '%s' added." % vm_name  
except Exception as ex:  
    print "Adding virtual machine '%s' failed: %s" % (vm_name, ex)
```

```
api.disconnect()
```

```
except Exception as ex:
```

```
    print "Unexpected error: %s" % ex
```

If the add request is successful then the script will output:

Virtual machine 'vm1' added.

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Register Number: E18CSR014

Name : ARUNESH D

Department : CSE

Class: III - B

Course Name: Virtualization of cloud using Python Programming

Batch : II

Activity 1:

Attaching an ISO Image to a Virtual Machine using Python

IDENTIFYING ISO IMAGES

ISO images are found in the files collection attached to the ISO storage domain. This example lists the contents of the files collection on an ISO storage domain.

```
from ovirtsdk.api import API
from ovirtsdk.xml import params
```

try:

```
    api = API(url="https://HOST",
             username="USER@DOMAIN",
             password="PASS",
             ca_file="ca.crt")
```

```
    sd = api.storagedomains.get(name="iso1")
    iso = sd.files.list()
```

```
    for i in iso:
        print "%s" % i.get_name()
```

except Exception as ex:

```
    print "Unexpected error: %s" % ex
```

If successful the script will output an entry like this for each file found in the files collection:

RHEL6.3-Server-x86_64-DVD1.iso

Note that because files on the ISO domain must be uniquely named the id and name attributes of the file are shared.

Attaching An ISO Image To A Virtual Machine Using Python

This Python example attaches the RHEL6.3-Server-x86_64-DVD1.iso ISO image file to the vm1 virtual machine. Once identified the image file is attached using the add method of the virtual machine's cdroms collection.

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```
from ovirtsdk.api import API
from ovirtsdk.xml import params
```

```
try:
```

```
    api = API(url="https://HOST",
              username="USER@DOMAIN",
              password="PASS",
              ca_file="ca.crt")
```

```
    sd = api.storagedomains.get(name="iso1")
```

```
    cd_iso = sd.files.get(name="RHEL6.3-Server-x86_64-DVD1.iso")
```

```
    cd_vm = api.vms.get(name="vm1")
```

```
    cd_params = params.CdRom(file=cd_iso)
```

```
try:
```

```
    cd_vm.cdroms.add(cd_params)
```

```
    print "Attached CD to '%s'." % cd_vm.get_name()
```

```
except Exception as ex:
```

```
    print "Failed to attach CD to '%s': %s" % (cd_vm.get_name(), ex)
```

```
api.disconnect()
```

```
except Exception as ex:
```

```
    print "Unexpected error: %s" % ex
```

```
If the add request is successful then the script will output:
```

```
Attached CD to 'vm1'.
```

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**E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS) – NAGAPATTINAM
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**


VALUE ADDED COURSES ON

“VIRTUALIZATION OF CLOUD USING PYTHON PROGRAMMING”

Assessment Mark Statement

S.NO	REGISTER NUMBER	NAME OF THE STUDENT	ACTIVITY MARKS (20)
1.	E17CSR001	AANANI D	17
2.	E17CSR002	AARTHI K	18
3.	E17CSR004	ABINAYA K	20
4.	E17CSR005	ABINAYASRI G	20
5.	E17CSR006	ABINESHA K	17
6.	E17CSR007	ABISHEK J	20
7.	E17CSR008	AJITHA J	18
8.	E17CSR010	AKASHRAJ M	20
9.	E17CSR011	AMRITHA K	20
10.	E17CSR012	AMSAVARDHINI R	18
11.	E17CSR013	ARTHI P	19
12.	E17CSR014	ATCHAYA E	18
13.	E17CSR015	BABIN B	19
14.	E17CSR017	BHARATH KUMAR R	18
15.	E17CSR018	BHAVADHARSHINI B	20
16.	E17CSR019	BHUVANESHWARI R	19
17.	E17CSR021	DEEPA P	20
18.	E17CSR022	DEEPIGA G	19
19.	E17CSR023	DEVADHARSHINI G	19
20.	E17CSR024	DEVIPRIYA R	18
21.	E17CSR025	DHAKSHNASUDHAN R	19
22.	E17CSR026	DHINESH K	17
23.	E17CSR027	DHIVYABHARATHI S	18
24.	E17CSR028	DINESH V	19
25.	E17CSR029	DIVYABHARATHI R	20
26.	E17CSR030	DURGADEVI R	20
27.	E17CSR032	ESWARI T	19
28.	E17CSR033	FAIROSEBANU A	18
29.	E17CSR034	FATHIMA BEEVI M	19
30.	E17CSR035	GANGADEVI T	18
31.	E17CSR036	GAYATHRI S	19
32.	E17CSR037	GEETHA A	18
33.	E17CSR038	HARIHARAN E	19
34.	E17CSR039	HASSIM ASLAM S	19
35.	E17CSR040	HEMA R	

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36.	E17CSR041	JAISURYA K	20
37.	E17CSR042	JAYADHARANI C	19
38.	E17CSR043	JEEVANANTHAM S	19
39.	E17CSR044	JENITHA M	19
40.	E17CSR045	JINSI S	20
41.	E17CSR046	KAYATHRI V	20
42.	E17CSR047	KEERTHANA R	20
43.	E17CSR048	KEERTHIKA J	20
44.	E17CSR049	KIRUBAKARAN K	19
45.	E17CSR050	KISHORE G	18
46.	E17CSR051	KUMARAN R	18
47.	E17CSR052	MADHURI D	19
48.	E17CSR053	MAHESWARI V	20
49.	E17CSR055	MANOJKUMAR M	19
50.	E17CSR056	MATHANRAJ C	18
51.	E17CSR057	MEENAKSHI J	18
52.	E17CSR058	MEERA R	19
53.	E17CSR059	MOHAMED SALMAN FASITH S	18
54.	E17CSR060	MOHAMED YUSUF M	19
55.	E17CSR061	MONISHA P	19
56.	E17CSR062	MURUGESWARI V	19
57.	E17CSR063	MUTHUKARTHIGA S	20
58.	E17CSR064	NANTHINI BHARATHI R	18
59.	E17CSR065	NIRMAL T	19
60.	E17CSR066	NITHISHKUMAR I	20
61.	E17CSR067	NIVEDHITHA D	19
62.	E17CSR068	PAVITHRA M P	18
63.	E17CSR069	POONTHAMIZH P	18
64.	E17CSR070	PRADEEPA A	19
65.	E17CSR071	PRAVINKUMAR M	20
66.	E17CSR072	PREETHA S	19
67.	E17CSR073	PREETHI V	18
68.	E17CSR074	PRINCE SUJA K	18
69.	E17CSR075	PRIYADHARSHINI J	19
70.	E17CSR076	PRIYADHARSHINI R	18
71.	E17CSR077	PRIYADHARSHINI V	19
72.	E17CSR078	PRIYANKA R	18
73.	E17CSR079	PUNITHA S	19
74.	E17CSR080	RAHUL R	18
75.	E17CSR081	RAJESHWARI M	20
76.	E17CSR082	RAM PRASATH R K	19
77.	E17CSR083	RANJANI DEVI T	20
78.	E17CSR084	RAVIKUMAR P	19
79.	E17CSR085	RAVINA R	19
80.	E17CSR086	SAMEERABANU M	19

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81.	E17CSR087	SAMUVEL R	17
82.	E17CSR089	SANTHOSH M	19
83.	E17CSR090	SATHISWARAN M	20
84.	E17CSR091	SATHYAPRIYA M	19
85.	E17CSR092	SELVAKUMARI R	18
86.	E17CSR093	SELVAMUTHUKUMARAN R	19
87.	E17CSR094	SHAGARBHAN S	18
88.	E17CSR095	SHANMUGARAJAN T	20
89.	E17CSR096	SHANTHINI R	19
90.	E17CSR097	SHOBANA PRIYA S	20
91.	E17CSR098	SHOBIYA J	19
92.	E17CSR099	SHRINIDHI B	19
93.	E17CSR100	SIVAKAMI S	18
94.	E17CSR101	SIVARANJANI I	17
95.	E17CSR102	SOCRATES A	19
96.	E17CSR103	SOWMIYA R	20
97.	E17CSR104	SRIMATHI P	19
98.	E17CSR105	SUBASRI K	20
99.	E17CSR106	SUBRAJA A	19
100.	E17CSR107	SUDHA M	18
101.	E17CSR108	SUGAPRIYA K	18
102.	E17CSR109	SUNDHARAVEL S	19
103.	E17CSR110	SURENDAR D	18
104.	E17CSR111	SURIYA PRABHA J	19
105.	E17CSR112	SURYA R	19
106.	E17CSR113	SUSHMITHA B	19
107.	E17CSR114	SUSUMITHA K	20
108.	E17CSR115	SWATHI R	18
109.	E17CSR116	THAHLEMA BANU S	19
110.	E17CSR117	VARATHA MANIKANDAN S	20
111.	E17CSR118	VENBU E	19
112.	E17CSR119	VENGATRAMANAN E	18
113.	E17CSR120	VIGNESH A	18
114.	E17CSR122	VIJAYALAKSHMI N	19
115.	E17CSR123	VINODHINI R	20
116.	E17CSR124	VINOTHINI V	19
117.	E17CSR125	YAMUNA S	18
118.	E17CSR126	YOHAPRIYA B	18
119.	E17CSL301	ABINAYA K	19
120.	E18CSR002	ABDUL AZEES A	18
121.	E18CSR003	ABDUL HAMEED M	19
122.	E18CSR004	ABINESH B	18
123.	E18CSR005	AJAYVENGATESH S	19
124.	E18CSR007	AKASH U	20
125.	E18CSR008	AKILA A	19

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126.	E18CSR010	AMEEN MARZOOK S	18
127.	E18CSR011	ANBU DEVI R	18
128.	E18CSR012	ANUSUYA S	19
129.	E18CSR013	ARULRAJ G	20
130.	E18CSR014	ARUNESH D	19
131.	E18CSR015	AYYAPPAN S	18
132.	E18CSR030	HENCYSOWMIYA C	18
133.	E18CSR034	KABILAN G	18
134.	E18CSR048	NAVEEN S	17
135.	E18CSR051	NOORMOHAMED M	19
136.	E18CSR060	SAILAKSHMI S	20
137.	E18CSR066	SELVAMANIKANDAN PR	19
138.	E18CSR067	SHAFEEQ S	18
139.	E18CSR070	SIVASURYA V	19
140.	E18CSR071	SNEKA R	18
141.	E18CSR076	TAMILMATHI S S	20
142.	E18CSR079	UDHAYAPRIYA U	19
143.	E18CSL301	ARAVINTH M	19
144.	E18CSL302	GOKULNATH S	18
145.	E18CSL303	KEERTHIGA K	18
146.	E18CSL305	NESAPRIYA M	18
147.	E18CSL306	PADMASRI G	17
148.	E18CSL307	SANJAYBHARATHI T	19
149.	E18CSL312	VIKNESH M	20


Course Coordinators


HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
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E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS) – NAGAPATTINAM
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING


VALUE ADDED COURSES ON
“GETTING STARTED WITH PYTHON”

ANALYSIS REPORT

S.No.	Reg No	Student Name	Activity(20)
1.	E17CSR001	AANANI D	17
2.	E17CSR002	AARTHI K	18
3.	E17CSR004	ABINAYA K	20
4.	E17CSR005	ABINAYASRI G	20
5.	E17CSR006	ABINESHA K	17
6.	E17CSR007	ABISHEK J	20
7.	E17CSR008	AJITHA J	18
8.	E17CSR010	AKASHRAJ M	20
9.	E17CSR011	AMRITHA K	20
10.	E17CSR012	AMSAVARDHINI R	18
11.	E17CSR013	ARTHI P	19
12.	E17CSR014	ATCHAYA E	18
13.	E17CSR015	BABIN B	19
14.	E17CSR017	BHARATH KUMAR R	18
15.	E17CSR018	BHAVADHARSHINI B	20
16.	E17CSR019	BHUVANESHWARI R	19
17.	E17CSR021	DEEPA P	20
18.	E17CSR022	DEEPIGA G	19
19.	E17CSR023	DEVADHARSHINI G	19
20.	E17CSR024	DEVIPRIYA R	18
21.	E17CSR025	DHAKSHNASUDHAN R	19
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35.	E17CSR040	HEMA R	19
36.	E17CSR041	JAISURYA K	20
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45.	E17CSR050	KISHORE G	18
46.	E17CSR051	KUMARAN R	18
47.	E17CSR052	MADHURI D	
48.	E17CSR053	MAHESWARI V	

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49.	E17CSR055	MANOJKUMAR M	19
50.	E17CSR056	MATHANRAJ C	18
51.	E17CSR057	MEENAKSHI J	18
52.	E17CSR058	MEERA R	19
53.	E17CSR059	MOHAMED SALMAN FASITH S	18
54.	E17CSR060	MOHAMED YUSUF M	19
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90.	E17CSR097	SHOBANA PRIYA S	20
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94.	E17CSR101	SIVARANJANI I	17
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96.	E17CSR103	SOWMIYA R	20
97.	E17CSR104	SRIMATHI P	19
98.	E17CSR105	SUBASRI K	20
99.	E17CSR106	SUBRAJA A	19
100.	E17CSR107	SUDHA M	18
101.	E17CSR108	SUGAPRIYA K	18
102.	E17CSR109	SUNDHARAVEL S	19
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104.	E17CSR111	SURIYA PRABHA J	19
105.	E17CSR112	SURYA R	19
106.	E17CSR113	SUSHMITHA B	19
107.	E17CSR114	SUSUMITHA K	20
108.	E17CSR115	SWATHI R	18

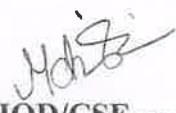
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109.	E17CSR116	THAHLEMA BANU S	19
110.	E17CSR117	VARATHA MANIKANDAN S	20
111.	E17CSR118	VENBU E	19
112.	E17CSR119	VENGATRAMANAN E	18
113.	E17CSR120	VIGNESH A	18
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118.	E17CSR126	YOHAPRIYA B	18
119.	E17CSL301	ABINAYA K	19
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121.	E18CSR003	ABDUL HAMEED M	19
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123.	E18CSR005	AJAYVENGATESH S	19
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125.	E18CSR008	AKILA A	19
126.	E18CSR010	AMEEN MARZOOK S	18
127.	E18CSR011	ANBU DEVI R	18
128.	E18CSR012	ANUSUYA S	19
129.	E18CSR013	ARULRAJ G	20
130.	E18CSR014	ARUNESH D	19
131.	E18CSR015	AYYAPPAN S	18
132.	E18CSR030	HENCYSOWMIYA C	18
133.	E18CSR034	KABILAN G	18
134.	E18CSR048	NAVEEN S	17
135.	E18CSR051	NOORMOHAMED M	19
136.	E18CSR060	SAILAKSHMI S	20
137.	E18CSR066	SELVAMANIKANDAN PR	19
138.	E18CSR067	SHAFEEQ S	18
139.	E18CSR070	SIVASURYA V	19
140.	E18CSR071	SNEKA R	18
141.	E18CSR076	TAMILMATHI S S	20
142.	E18CSR079	UDHAYAPRIYA U	19
143.	E18CSL301	ARAVINTH M	19
144.	E18CSL302	GOKULNATH S	18
145.	E18CSL303	KEERTHIGA K	18
146.	E18CSL305	NESAPRIYA M	18
147.	E18CSL306	PADMASRI G	17
148.	E18CSL307	SANJAYBHARATHI T	19
149.	E18CSL312	VIKNESH M	20
Total			2803
Attainment			94.06
Level of Attainment			3(S)

Attainment level calculation	
>=70%-79%	1 (L)
>=80%-89%	2 (M)
>=90%	3 (S)

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL
 E.G.S. Pillay Engineering College,
 Thottu Nagara - 611 002,
 Nagapattinam (Dt) Tamil Nadu.


HOD/CSE
 HEAD OF THE DEPARTMENT
 DEPARTMENT OF CSE
 F.G.S.P. Engineering College,
 Nagapattinam - 611 002

Mapping of Course Outcomes Vs Program Outcomes

CO Number	Competency	Cognitive level
CO1	Understanding service oriented architecture and web services.	Understand
CO2	Understanding and installing virtual operating systems.	Understand
CO3	Being able to develop simple applications programming goals.	Apply
CO4	Understanding the principles and applications of virtualization and cloud computing in enterprise information systems.	Understand


CO to PO Mapping

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	-	-	-	-	-	-	-	-	1
CO2	3	2	3	-	-	-	-	-	-	-	-	2
CO3	3	3	3	-	-	-	-	-	-	-	-	3

CO to PSO Mapping

Course Outcome	PSO1	PSO2
CO1	3	1
CO2	2	3
CO3	3	3

1. Slight(Low) 2. Moderate(Medium) 3.Substantial(High) “-“ No Correlation


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 Thethi, Nagore - 611 002.
 Nagapattinam (Dt) Tamil Nadu.

Student Feedback Form for Value Added Course

Register Number *

E17CSR047

Name *

R.Keerthana

Class *

IV CSE A

Name of the Course *

VAC - Virtualization of Cloud using Python Programming

Course Instructor Name

Dr.SudhirShenai

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PRINCIPAL

E.G.S. Pillay Engineering College,
Nagapattinam (Dt) Tamil Nadu.

Phone No: 0413 - 611 002.

Dr. S. Ramabalan (Dr) Tamil Nadu.

25

1. Were Objectives of the course clear to you *

- Yes
- No

2. The Course contents met with your expectations *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3. The lecture sequence was well planned *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

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Sri Sankar College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

4. The Contents were illustrated with *

- Too few examples
- adequate examples

5. The course exposed you to new knowledge and practices *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Any other comments/suggestions *

This session was very intresting

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PRINCIPAL

E. G. S. Pillay Engineering College,
Thiruvalluvar Nagar - 611 002.

Nagapattinam (Dt) Tamil Nadu.

Student Feedback Form for Value Added Course

Register Number *

E18CSR004

Name *

Abinesh.B

Class *

III CSE

Name of the Course *

Virtualization of Cloud using Pthon Programming

Course Instructor Name

Mr.J.NoorulAmeen

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Dr. S. RAMABALAN, M.E., Ph.D.
PRINCIPAL
Engineering College,
Thethi, Nagore - 611 002
Nagapattinam (Dt) Tamil Nadu.

1. Were Objectives of the course clear to you *

- Yes
- No

2. The Course contents met with your expectations *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

3. The lecture sequence was well planned *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

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Thiruvalluvar Road, 611 002,
Nagapattinam (Dt) Tamil Nadu

4. The Contents were illustrated with *

- Too few examples
- adequate examples

5. The course exposed you to new knowledge and practices *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Any other comments/suggestions *

This course provide us practical & programming knowledge on cloud

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Thermi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

COURSE SUMMARY REPORT

1. Name of Course Developer: **Mr.A.Baskar**
2. Course Developer Details: **Assistant Professor, CSE**
E.G.S. Pillay Engineering College
3. Date of Course: **01/02/2021 - 06/02/2021 (Batch I)**
08/02/2021 – 13/02/2021 (Batch II)
4. Beneficiary Details: III&IV CSE Students
5. Coordinator: Mr.A.Baskar (Asst. Prof.CSE ,EGSPEC)
Mrs.M.Viji (Asst. Prof.CSE ,EGSPEC)
6. Mode: Online

Title: Virtualization of Cloud Using Python

This course will be helpful to design Cloud-native systems with the fundamental building blocks of Cloud computing. These building blocks include virtual machines and containers. This course is ideal for beginners as well as intermediate students interested in applying Cloud computing to data science, machine learning and data engineering. Students should have beginner level Linux and intermediate level Python skills. For the project in this course, you build a containerized Flask application that is continuously deployed to a Cloud platform: Shutdown Watcher Challenge, Message Queue Challenge, Amazon Web Services (AWS), Azure or Google Cloud Platform (GCP). Students felt that this course was very useful for them and gives an idea towards project and research side.

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Thethi, Nagore - 611 002.
Nagapattinam: (Dt) Tamil Nadu

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

(APPROVED BY AICTE, NEW DELHI & AFFILIATED TO ANNA UNIVERSITY, CHENNAI)
(ACCREDITED BY NAAC WITH 'A' GRADE & NBA)

OLD NAGORE ROAD, THETHI, NAGAPATTINAM - 611002, TAMIL NADU, INDIA

Department of Computer Science and Engineering

Certificate of Completion

Mr.Mrs.Samuvel R

has successfully completed the online value added course on "Virtualization of Cloud using Python Programming" conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 08.02.22 to 24.02.22

A. Rohan

COORDINATOR

[Signature]

HOD/CSE

[Signature]

PRINCIPAL

ATTESTED
[Signature]
Dr.S.RAMABALAJI, M.E., Ph.D.
PRINCIPAL
E.G.S.Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

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(ACCREDITED BY NAAC WITH 'A' GRADE & NBA)

OLD NAGORE ROAD, THETHI, NAGAPATTINAM - 611002, TAMIL NADU, INDIA

Department of Computer Science and Engineering

Certificate of Completion

Mr.Mrs.Deepa .P

has successfully completed the online value added course on "Virtualization of Cloud using Python Programming" conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 01.02.21 to 06.02.21

A . Sathya

COORDINATOR

(Signature)

HOD/CSE

(Signature)

PRINCIPAL

ATTESTED

(Signature)

Dr.S.RAMABALAN, M.Sc., Ph.D.,
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Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

E.G.S. Pillay Engineering College (Autonomous), Nagapattinam

Department Of Computer Science & Engineering

Organized


**VALUE ADDED COURSE ON
DEVELOP YOUR CAREER IN
PYTHON**

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)
NAGAPATTINAM
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
VALUE ADDED COURSE
ON
“DEVELOP YOUR CAREER IN PYTHON”

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Mishi
 HEAD OF THE DEPARTMENT
 DEPARTMENT OF CSE
 E.G.S.P. Engineering College,
 Nagapattinam - 611 002

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 E.G.S. Pillay Engineering College,
 Thethi, Nagore - 611 002,
 Nagapattinam (Dt) Tamil Nadu.

PERMISSION LETTER

Date: 03.02.2021

From

Mr.S.Praveenkumar,
Assistant Professor/CSE,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.

To

The Principal,
E.G.S.Pillay Engineering College,
Nagapattinam.

Through

The Head of Department,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.



Respected Sir,

Sub: Requisition to conduct Value Added Course – Reg

We are happy to inform you that we have planned to organize one week value added course titled “Develop your career in Python” for II CSE Students from 08-02-2021 to 13-02-2021 for Batch I and 15-02-2021 to 20-02-2021 for Batch II through online mode. Herewith, I have enclosed name list and session details. Kindly give permission to conduct this value added course.

Thanking you,

yours sincerely,

[Mr.S.Praveenkumar]

HEAD OF DEPARTMENT
OF DEPARTMENT OF CSE
E.G.S.Pillay Engineering College,
Nagapattinam - 611 002

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Dr. S. RAMABALAN, M.E., Ph.D.,
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E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

Convenor

Prof.Dr.M.CHINNADURAI

Professor & Head / CSE

Course Coordinator

Mr.S.Praveen Kumar

ASSISTANT PROFESSOR/CSE

&

Mrs.P.Subashri

ASSISTANT PROFESSOR / CSE

Resource Person

Mrs.M.Priyadarshini

ASSISTANT PROFESSOR /

CSE



Beneficiaries

2019-23 Batch

UG CSE Students

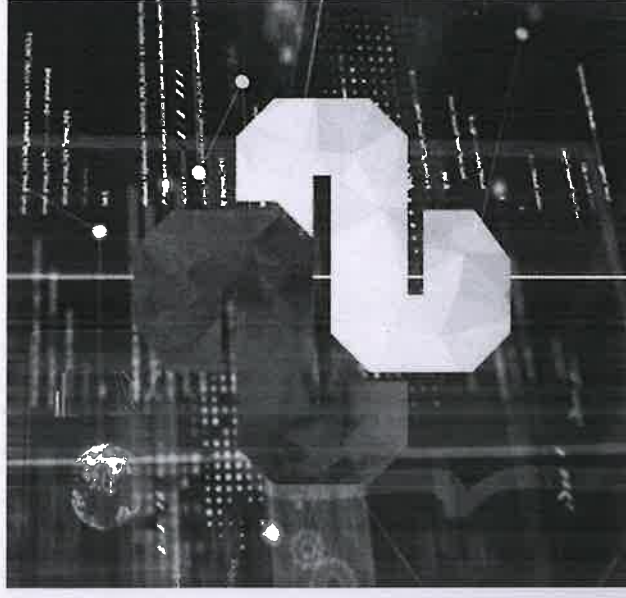
Course Duration : 40 Hours

Learning Mode: Online

Certificate will be issued to all participants on successful completion of this course

ABOUT THIS COURSE

This course provides an introduction to programming and the Python language. Students are introduced to core programming concepts like data structures, conditionals, loops, variables, and functions. This course includes an overview of the various tools available for writing and running Python, and gets students coding quickly. It also provides hands-on coding exercises using commonly used data structures, writing custom functions, and reading and writing to files. This course may be more robust than some other introductory python courses, as it delves deeper into certain essential programming topics.



**One Week
Value Added Course
ON**

**Develop your
career in Python**

08.02.21-13.02.21

&

15.02.21 - 20.02.21

ATTESTED

Organized by

Department of CSE

E.G.S.Pillay Engineering College

(Autonomous)

NAGAPATTINAM



ABOUT THE COLLEGE

EGS Pillay Engineering College was started in the year 1995 under the sponsorship of G. S. Pillay & Sons Educational and Charitable Trust. College has gained the reputation of being most preferred engineering college by the students. College is approved by the AICTE, New Delhi and is affiliated to Anna University from 2002 and the degrees are awarded by Anna University, as per the Government Orders. It is ISO 9001:2008 certified.

The College has earned the reputation of being one of the most preferred colleges by the students and parents all these years. Known for its excellent infrastructure and facilities for learning, the outstanding non-grant engineering college has registered impressive performance consistently. A gate-way to success, the college has now set on long-range planning to enlarge and enrich its programs and activities to empower the youth who aspire to become successful Engineers, Scientists and Managers.

Course Objectives:

1. To read and write simple python programs.
2. To develop python program with loops and functions.
3. To use python data structures- lists, tuples.

This course consist of following modules-

INTRODUCTION:

Python interpreter and interactive mode-values and types: int, float, Boolean, string, and list- variables - expressions - statements -tuple assignment-precedence of operators- comments.

CONTROL FLOW FUNCTIONS :

Conditionals: Boolean values and operators, conditional (if), alternative (if-else), chained conditional (if-elif-else)-iterations: state, while, for, break, continue; pass- strings: string slices, string functions and methods.

LISTS, TUPLES, FILES :

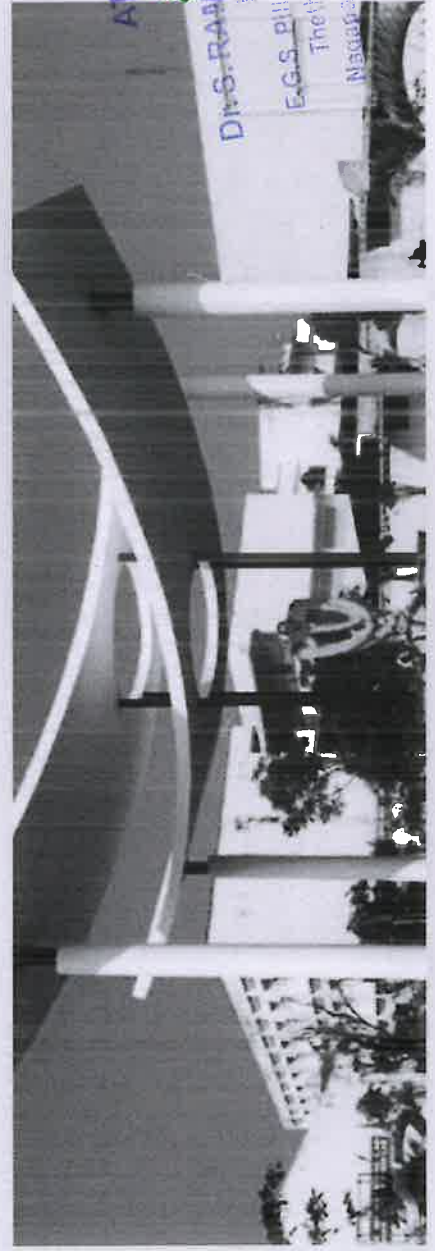
Lists: list operations, list slices, list methods, list loop, aliasing, mutability, cloning lists - Tuples : tuple assignment, tuple as return value - Files and exceptions: text files, reading and writing files.

ABOUT THE DEPARTMENT

Department of Computer Science and Engineering programme was introduced at Edayathangudy G.S.Pillay Engineering College in the Academic Year 1995-1996. The demand for Computer Engineers in software companies, banking sectors and private sectors engaged in developing new trends of software generation is more than the engineers available.

The department has Recognized Research Centre for doing PhD / M.S. (By Research), obtained Permanent Affiliation from Anna University in the year 2014-15. The department has formed student association namely Computer Engineers Association (CEA) to promote talent of the students and their upliftment. The department has highly qualified and experienced faculties. The department has well experienced faculties in the research and more number of publications in reputed Journals and Conferences.

The department has well infrastructural facilities. From 2011 onwards every year, we are conducting International and National conferences. The B.E (CSE) programme was accredited by NBA in the year 2016 and reaccredited in the year 2019 for next three years.



**E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM.
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

EGSPEC/CSE/UG/VAC/2020-21/02

Date: 04.02.2021

CIRCULAR

It is here by informed that Department of CSE is going to organize a Value Added Course on “Develop your career in Python” from 08-02-2021 to 13-02-2021 for Batch I and 15-02-2021 to 20-02-2021 for Batch II through online mode by, **Mrs.M.Priyadarshini, Assistant Professor**, Department of Computer Science and Engineering, E.G.S.Pillay Engineering College (Autonomous), Nagapattinam for second year UG CSE Students. All the second year students are instructed to attend and complete the course without fail.


CONVENER


HOD/CSE

HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
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E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

**E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS)
NAGAPATTINAM**

DEPARTMENT OF CSE

Value Added Course on “Develop your career in Python”

PROGRAM SCHEDULE

Batch I Date: 08.02.21 -13.02.21

Batch II Date: 15.02.21 – 20.02.21

S. NO	DAY	TOPIC
1	DAY 1	Python Introduction- Installing Python – Python Language Syntax – Keywords & Identifiers – Comments – Variables & Data Types
2	DAY 2	Conditionals: Boolean values and operators, conditional(if),alternative(if-else),chained conditional(if-elif-else)- Iterations:state,while,for,break,continue,pass- strings: string slices, string functions and methods
3	DAY 3	Lists: list operations, list slices, list methods, list loop, cloning lists-
4	DAY 4	Tuples: tuple assignment, tuple as return value- Files and exceptions: text files, reading and writing files.
5	DAY 5	Python Classes & Objects – Methods – Constructors – Inheritance
6	DAY 6	Polymorphism – Abstraction-encapsulation –Database Access – GUI Programming. Practice Session

COORDINATOR

1. Mr.S.PRAVEENKUMAR, AP/CSE
2. Mrs.P.SUBASHRI, AP / CSE

CONVENOR

1. DR. M. CHINNADURAI
PROF/HOD - CSE

RESOURCE PERSON

1. Ms.M.PRIYADHARSHINI, AP / CSE


ATTESTED

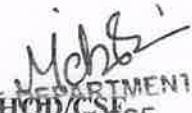
**Dr. S. RAMABALAN, M.E., Ph.D.,
PRINCIPAL**
E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.


**HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002**

SYLLABUS

DEVELOP YOUR CAREER IN PYTHON		L	T	P	C
		0	0	0	1
Course Objectives:					
1. To read and write simple python programs.					
2. To develop python program with loops and functions.					
3. To use python data structures- lists, tuples.					
Unit I	PYTHON INTRODUCTION	10 Hours			
Python Introduction- Installing Python – Python Language Syntax – Keywords & Identifiers – Comments – Variables & Data Types					
Unit II	LOOPS AND ITERATIONS	10 Hours			
Conditionals: Boolean values and operators, conditional(if),alternative(if-else),chained conditional(if-elif-else)-Iterations:state,while,for,break,continue,pass- strings: string slices, string functions and methods.					
Unit III	LISTS, TUPLES, FILES	10 Hours			
Lists: list operations, list slices, list methods, list loop, cloning lists- Tuples: tuple assignment, tuple as return value- Files and exceptions: text files, reading and writing files.					
Unit IV	PYTHON OOPS CONCEPTS	10 Hours			
Python Classes & Objects – Methods – Constructors – Inheritance – Polymorphism – Abstraction-encapsulation –Database Access – GUI Programming.					
				Total:	40 Hours
Course Outcomes:					
After completion of the course, Student will be able to					
CO1	Install Python, Read ,write, execute by hand simple python programs.				
CO2	Describe the basics of Python Programming Language				
CO3	Represent compound data using python lists, tuples and files				
CO4	Apply Object Oriented Programming Skills in Python				
References:					
1.AllenB.Downey,"Think Python: How to Think like a Computer Scientist", 2 nd edition,updated for python 3,Shroff//O' Reilly publishers,2016.					
2. Guido van Rossum and Fred L.DrakeJr,"An Introduction to Python- Revised and updated for python 3.2,Network Theory ltd.,2011.					

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.,
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E.G.S.P Engineering College,
Nagapattinam - 611 002

E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM

DEPARTMENT OF CSE

VALUE ADDED COURSE ON “DEVELOP YOUR CAREER IN PYTHON”

ENROLLMENT LIST

S.NO	REGISTER NUMBER	NAME OF THE STUDENT	BATCH
1.	E19CSR001	AARTHI K	I
2.	E19CSR002	AASHA J	I
3.	E19CSR003	AATHIKESAVAN J	I
4.	E19CSR004	ABARNA R	I
5.	E19CSR005	ABINASH M	I
6.	E19CSR006	ABINAYA K	I
7.	E19CSR007	ABINAYA A	I
8.	E19CSR008	ABINAYA D	I
9.	E19CSR010	AJAYKUMAR K	I
10.	E19CSR011	AJISHIYA R	I
11.	E19CSR012	ANUJA N	I
12.	E19CSR013	ARCHANA .M	I
13.	E19CSR015	ARULSELVAN A	I
14.	E19CSR016	ARUNACHALAM S	I
15.	E19CSR017	ARUNPRIYA C	I
16.	E19CSR019	ASHWIN D	I
17.	E19CSR020	AYYAPPAN S	I
18.	E19CSR021	BHARATH B	I
19.	E19CSR023	BUVANA M	I
20.	E19CSR024	CHARULATHA M	I
21.	E19CSR025	DEEKSHITHA D	I
22.	E19CSR026	DHANRAJ K S	I
23.	E19CSR027	DILAWER HUSSAIN GANAI	I
24.	E19CSR028	DINESH A R	I
25.	E19CSR029	DIVYA K	I
26.	E19CSR030	DURAIVELAN P	I
27.	E19CSR032	GAYATHRI G	I
28.	E19CSR033	GOPALAKIRUSHNAN T	I
29.	E19CSR034	GURUMOORTHY M	I
30.	E19CSR035	HARIAKASH S	I
31.	E19CSR036	HARISH R	I
32.	E19CSR037	INDHUMATHI E	I
33.	E19CSR038	JAISHREE M	I
34.	E19CSR039	JALALIYA SIRAJ M	I

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PRINCIPAL
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Thethi, Nagore - 613 002.
Nagapattinam (Dt) Tamil Nadu.

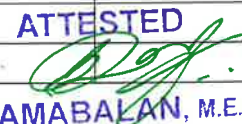
35.	E19CSR040	JANANI R	I
36.	E19CSR041	JAYA VARSHINI R	I
37.	E19CSR042	JEEVALAKSHMI T	I
38.	E19CSR043	JEEVITHA PRIYA M	I
39.	E19CSR044	JENISHA J	I
40.	E19CSR045	JOTHIKA S	I
41.	E19CSR046	KABILAN K	I
42.	E19CSR047	KALAIVANI S	I
43.	E19CSR048	KARTHIK S	I
44.	E19CSR049	KARTHIK B	I
45.	E19CSR050	KATHIRAVAN M	I
46.	E19CSR051	KISHOR J R	I
47.	E19CSR052	KOKILA V	I
48.	E19CSR053	KRISHNARAJ S	I
49.	E19CSR054	KRUPASHINI S	I
50.	E19CSR055	MAGESH A	I
51.	E19CSR056	MAHALAKSHMI P	I
52.	E19CSR057	MAHALAKSHMI P R	I
53.	E19CSR058	MAHESWARAN V	I
54.	E19CSR059	MALARVIZHI A	I
55.	E19CSR060	MATHAN KUMAR M	I
56.	E19CSR061	MOHAMED AFSALUDEEN M K	I
57.	E19CSR062	MOHAMED ASMIN ALI S	I
58.	E19CSR063	MOHAMED IJAS M	I
59.	E19CSR064	MOHAMED IRFAN M	I
60.	E19CSR065	MOHAMED SAKKEEL S	I
61.	E19CSR066	MOHAMED YASEER M	I
62.	E19CSR067	MOHANRAM S	I
63.	E19CSR068	MUBENA M	I
64.	E19CSR069	MUGESHKANNA E	I
65.	E19CSR070	MUKESH K	I
66.	E19CSR071	MULLAIVENTHAN G	II
67.	E19CSR072	MUTHAMIL SELVI S	II
68.	E19CSR073	MUTHU KUMARAN D	II
69.	E19CSR074	NARESH PRASANTH U	II
70.	E19CSR075	NAVEEN KUMAR R R	II
71.	E19CSR076	NAVINKUMAR K R	II
72.	E19CSR077	NITISH SHARMA	II
73.	E19CSR078	NITHYA .C	II
74.	E19CSR079	NITHYASRI M	II
75.	E19CSR080	PAVITHRA S	II
76.	E19CSR081	PRADEEP M	II
77.	E19CSR082	PRASANTH T	II
78.	E19CSR083	PRATHEBA R	II
79.	E19CSR084	PRIYADHARSHINI V	II

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80.	E19CSR085	PUNNIYAMOORTHI R	II
81.	E19CSR086	RADHAKRISHNAN B	II
82.	E19CSR087	RAMESHKANNA S	II
83.	E19CSR088	RESHMA S	II
84.	E19CSR089	ROHITH N	II
85.	E19CSR090	SAKTHI GANESH C	II
86.	E19CSR091	SANGAVI C	II
87.	E19CSR092	SANJAY S	II
88.	E19CSR093	SANJAYNATHAN S	II
89.	E19CSR094	SANTHIYA S	II
90.	E19CSR095	SANTHOSH S	II
91.	E19CSR096	SEETHA K	II
92.	E19CSR097	SENEKA M	II
93.	E19CSR098	SHALINI M	II
94.	E19CSR099	SHANMUGASUNDARAM S	II
95.	E19CSR100	SHANTHIYA M	II
96.	E19CSR101	SIFA THAHASIN F	II
97.	E19CSR102	SINDUJA K	II
98.	E19CSR103	SINEKA S	II
99.	E19CSR104	SIVA GURU NATHAN M	II
100.	E19CSR105	SIVAGANESH S	II
101.	E19CSR106	SOWMIYA M	II
102.	E19CSR107	SOWNDHARYA S	II
103.	E19CSR108	SRIMATHI D	II
104.	E19CSR109	SUBASRI V	II
105.	E19CSR110	SURYA M	II
106.	E19CSR111	SWETHA A	II
107.	E19CSR112	SWETHA B	II
108.	E19CSR113	SWETHA S	II
109.	E19CSR114	TEJAS S	II
110.	E19CSR115	THOBIYAS A	II
111.	E19CSR116	VARSHINI K	II
112.	E19CSR117	VASANTH S	II
113.	E19CSR118	VASANTHAKUMAR S	II
114.	E19CSR119	VIGNESHWARAN .K	II
115.	E19CSR120	VIGNESHWARI V	II
116.	E19CSR121	VIJAYA N	II
117.	E19CSR122	VIJAYASARATHY R	II
118.	E19CSR123	VIKRAM M	II
119.	E19CSR124	VINODHAN G	II
120.	E19CSR125	WASIM JAFFER A	II
121.	E19CSR126	YOGA LAKSHMI B	II
122.	E19CSL301	ARAVINTH S	II
123.	E19CSL302	BASILAHAMED H	II
124.	E19CSL303	JAYASRI S	II

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125.	E19CSL304	KOWTHAM P.R.M	II
126.	E19CSL305	NIVASHKANNA B	II
127.	E19CSL306	SAKTHI SRI DEVI S	II
128.	E19CSL308	VINOTHINI G	II
129.	E19CSL309	YOGESH G	II



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COURSE MATERIAL

UNIT 1

INTRODUCTION TO PYTHON:

- *Python is a general-purpose interpreted, interactive, object-oriented, and high-level programming language.*
- It was created by Guido van Rossum during 1985- 1990.
- Python got its name from “Monty Python’s flying circus”. Python was released in the year 2000.
- **Python is interpreted:** Python is processed at runtime by the interpreter. You do not need to compile your program before executing it.
- **Python is Interactive:** You can actually sit at a Python prompt and interact with the interpreter directly to write your programs.
- **Python is Object-Oriented:** Python supports Object-Oriented style or technique of programming that encapsulates code within objects.
- **Python is a Beginner's Language:** Python is a great language for the beginner- level programmers and supports the development of a wide range of applications.

Python Features:

Easy-to-learn: Python is clearly defined and easily readable. The structure of the program is very simple. It uses few keywords.

Easy-to-maintain: Python's source code is fairly easy-to-maintain.

Portable: Python can run on a wide variety of hardware platforms and has the same interface on all platforms.

Interpreted: Python is processed at runtime by the interpreter. So, there is no need to compile a program before executing it. You can simply run the program.

Extensible: Programmers can embed python within their C,C++,Java script ,ActiveX, etc.

Free and Open Source: Anyone can freely distribute it, read the source code, and edit it.

High Level Language: When writing programs, programmers concentrate on solutions of the current problem, no need to worry about the low level details.

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Scalable: Python provides a better structure and support for large programs than shell scripting.

Applications

- Bit Torrent file sharing
- Google search engine, Youtube
- Intel, Cisco, HP, IBM
- i-Robot
- NASA
- Facebook, Drop box

Python interpreter:

Interpreter: To execute a program in a high-level language by translating it one line at a time.

Compiler: To translate a program written in a high-level language into a low-level language all at once, in preparation for later execution.

Compiler	Interpreter
Compiler Takes Entire program as input	Interpreter Takes Single instruction as input
Intermediate Object Code is Generated	No Intermediate Object Code is Generated
Conditional Control Statements are Executed faster	Conditional Control Statements are Executed slower
Memory Requirement is More (Since Object Code is Generated)	Memory Requirement is Less
Program need not be compiled every time	Every time higher level program is converted into lower level program
Errors are displayed after entire program is checked	Errors are displayed for every instruction interpreted (if any)
Example : C Compiler	Example : PYTHON

MODES OF PYTHON INTERPRETER:

Python Interpreter is a program that reads and executes Python code. It uses 2 modes of Execution.

1. Interactive mode
2. Script mode

1. Interactive mode:

Interactive Mode, as the name suggests, allows us to interact with OS.

When we type Python statement, interpreter displays the result(s) immediately.

Advantages:

Python, in interactive mode, is good enough to learn, experiment or explore.


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Working in interactive mode is convenient for beginners and for testing small pieces of code.

Drawback:

We cannot save the statements and have to retype all the statements once again to re-run them.

In interactive mode, you type Python programs and the interpreter displays the result:

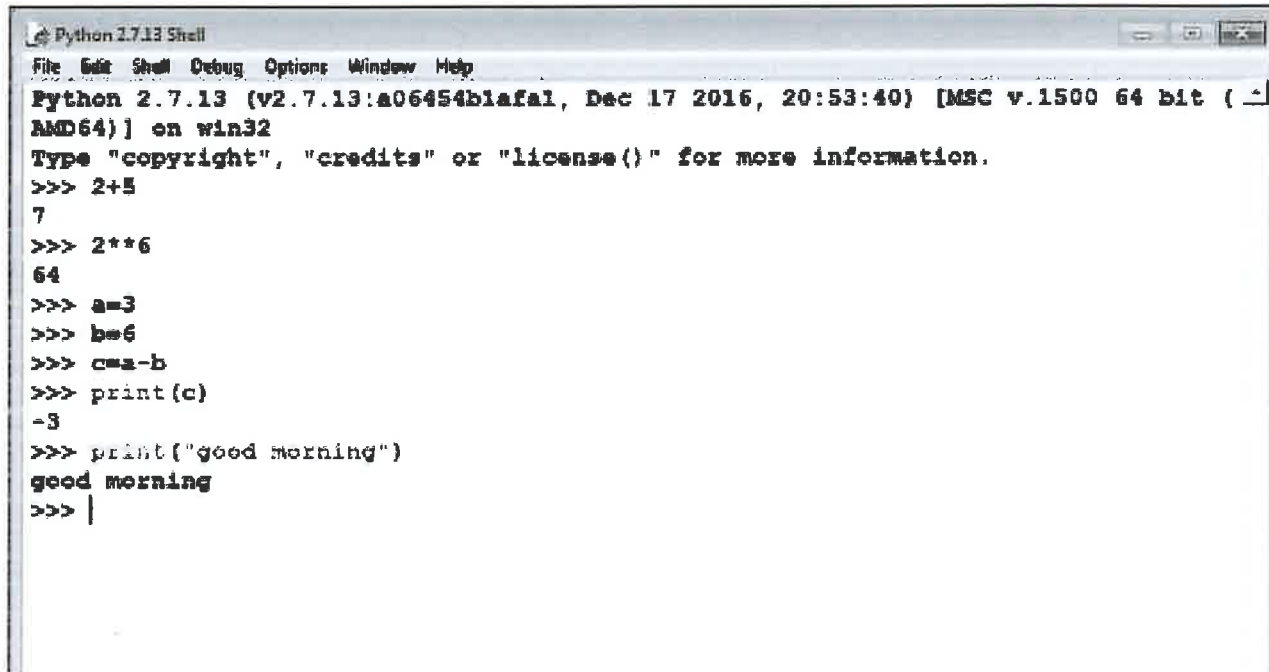
```
>>> 1 + 1
2
```

The chevron, >>>, is the prompt the interpreter uses to indicate that it is ready for you to enter code. If you type 1 + 1, the interpreter replies 2.

```
>>> print('Hello, World!')
```

Hello, World!

This is an example of a print statement. It displays a result on the screen. In this case, the result is the words.



```
Python 2.7.13 Shell
File Edit Shell Debug Options Window Help
Python 2.7.13 (v2.7.13:a06454b1afal, Dec 17 2016, 20:53:40) [MSC v.1500 64 bit (AMD64)] on win32
Type "copyright", "credits" or "license()" for more information.
>>> 2+5
7
>>> 2**6
64
>>> a=3
>>> b=6
>>> c=a-b
>>> print(c)
-3
>>> print("good morning")
good morning
>>> |
```

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VALUE ADDED COURSE ON DEVELOP YOUR CAREER IN PYTHON

FROM 08/02/2021 TO 13/02/2021

Assessment Questions – SET 1

Multiple Choice Questions (10*5 = 50)

1. What is the maximum possible length of an identifier?
 - a. 16
 - b. 32
 - c. 64
 - d. None of these aboveAnswer: d

2. Who developed the Python language?
 - a. Zim Den
 - b. Guido van Rossum
 - c. Niene Stom
 - d. Wick van RossumAnswer: b

3. Which one of the following is the correct extension of the Python file?
 - a. .py
 - b. .python
 - c. .p
 - d. None of theseAnswer: a

4. Which of the following statements is correct regarding the object-oriented programming concept in Python?
 - a. Classes are real-world entities while objects are not real
 - b. Objects are real-world entities while classes are not real
 - c. Both objects and classes are real-world entities
 - d. All of the aboveAnswer: b

5. Which of the following statements is correct in this python code?

```
class Name:  
    def __init__(javatpoint):  
        javajavatpoint = java  
        name1=Name("ABC")  
        name2=name1
```

 - a. It will throw the error as multiple references to the same object is not possible
 - b. id(name1) and id(name2) will have same value
 - c. Both name1 and name2 will have reference to two different objects of class Name
 - d. All of the aboveAnswer: b


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6. Which of the following declarations is incorrect?

- a. `_x = 2`
- b. `__x = 3`
- c. `___xyz__ = 5`
- d. None of these

Answer: d

7. Study the following program:

```
a = 1
while True:
    if a % 7 == 0:
        break
    print(a)
    a += 1
```

Which of the following is correct output of this program?

- a. 1 2 3 4 5
- b. 1 2 3 4 5 6
- c. 1 2 3 4 5 6 7
- d. Invalid syntax

Answer: b

8. Study the following program:

```
z = "xyz"
j = "j"
while j in z:
    print(j, end=" ")
```

What will be the output of this statement?

- a. Xyz
- b. No output
- c. x y z
- d. jjjjjjj..

Answer: b

9. Which of the following is the correct output of this program?

- a. PQRS
- b. Pqrs
- c. Qrs
- d. None of these

Answer: b

10. What error will occur when you execute the following code?

```
MANGO = APPLE
```

- a. NameError
- b. SyntaxError
- c. TypeError
- d. ValueError

Answer: a

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FROM 15/02/2021 TO 20/02/2021

Assessment Questions – SET 2

Multiple Choice Questions (10*5 = 50)

1. Study the following statement

```
z = {"x":0, "y":1}
```

Which of the following is the correct statement?

- a. x dictionary z is created
- b. x and y are the keys of dictionary z
- c. 0 and 1 are the values of dictionary z
- d. All of the above

Answer :d

2. What happens when '2' == 2 is executed?

- a. False
- b. True
- c. ValueError occurs
- d. TypeError occurs

Answer : a

3. Study the following program:

```
def example(a):
```

```
    aa = a + '1'
```

```
    aa = a*1
```

```
    return a
```

```
>>>example("javatpoint")
```

What will be the output of this statement?

- a. hello2hello2
- b. hello2
- c. Cannot perform mathematical operation on strings
- d. indentationError

Answer :d

4. Study the following program:

```
d = {0, 1, 2}
```

```
for x in d:
```

```
    print(x)
```

What will be the output of this statement?

- a. {0, 1, 2} {0, 1, 2} {0, 1, 2}
- b. 0 1 2
- c. Syntax_Error
- d. None of these above

Answer:b

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5. Study the following program:
`print(6 + 5 - 4 * 3 / 2 % 1)`
What will be the output of this program?
- a. 7
 - b. 7.0
 - c. 15
 - d. 0

Answer:d

6. Study the following program:
`i = 2, 10`
`j = 3, 5`
`add = i + j`
`print(add)`
What will be the output of this program?
- a. (5, 10)
 - b. 20
 - c. (2, 10, 3, 5)
 - d. SyntaxError: invalid syntax

Answer :c

7. How many control statements python supports?
- a. Four
 - b. Five
 - c. Three
 - d. None of the these

Answer: c

8. How many keywords present in the python programming language?
- a. 32
 - b. 61
 - c. 33
 - d. 27


Answer: c

9. Study the following program:
`_ = '1 2 3 4 5 6'`
`print(_)`
What will be the output of this program?
- a. SyntaxError: EOL while scanning string literal
 - b. SyntaxError: invalid syntax
 - c. NameError: name '_' is not defined
 - d. 1 2 3 4 5 6

Answer: d

10. Which of the following keywords is not reversed keyword in python?
- a. None
 - b. Class
 - c. Goto
 - d. and

Answer: c

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Develop your career in Python-Assessment Test

Register Number *

E19CSR032

Name *

GAYATHRI G

Class, Branch *

II CSE A

1. What is the maximum possible length of an identifier? *

5 points

- a. 16
- b. 32
- c. 64
- d. None of these above

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2. Who developed the Python language? *

5 points

- a. Zim Den
- b. Guido van Rossum
- c. Niene Stom
- d. Wick van Rossum

3. Which one of the following is the correct extension of the Python file? *

5 points

- a. .py
- b. .python
- c. .p
- d. None of these

4. Which of the following statements is correct regarding the object-oriented programming concept in Python? *

5 points

- a. Classes are real-world entities while objects are not real
- b. Objects are real-world entities while classes are not real
- c. Both objects and classes are real-world entities
- d. All of the above

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5. Which of the following statements is correct in this python code? *

5 points

```
class Name:
```

```
def __init__(javatpoint):
```

```
    javajavatpoint = java
```

```
name1=Name("ABC")
```

```
name2=name1
```

- a. It will throw the error as multiple references to the same object is not possible
- b. id(name1) and id(name2) will have same value
- c. Both name1 and name2 will have reference to two different objects of class Name
- d. All of the above

6. Which of the following declarations is incorrect? *

5 points

- a. `_x = 2`
- b. `__x = 3`
- c. `__xyz__ = 5`
- d. None of these

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7. Study the following program:

*

5 points

```
a = 1
```

```
while True:
```

```
    if a % 7 == 0:
```

```
        break
```

```
    print(a)
```

```
    a += 1
```

Which of the following is correct output of this program?

- a. 1 2 3 4 5
- b. 1 2 3 4 5 6
- c. 1 2 3 4 5 6 7
- d. Invalid syntax

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8. Study the following program:

*

5 points

```
z = "xyz"
```

```
j = "j"
```

```
while j in z:
```

```
    print(j, end=" ")
```

What will be the output of this statement?

- a. Xyz
- b. No output
- c. x y z
- d. jjjjjjj.

9. Which of the following is the correct output of this program? *

5 points

- a. PQRS
- b. Pqrs
- c. Qrs
- d. None of these

10. What error will occur when you execute the following code? *

5 points

```
MANGO = APPLE
```

- a. NameError
- b. SyntaxError
- c. TypeError
- d. ValueError

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22

Develop Your Career in Python - Test 2

Register Number *

E19CSR116

Name *

K.Varshini

Class *

II CSE

1. Study the following statement *

5 points

```
z = {"x":0, "y":1}
```

Which of the following is the correct statement?

- a. x dictionary z is created
- b. x and y are the keys of dictionary z
- c. 0 and 1 are the values of dictionary z
- d. All of the above

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2. What happens when '2' == 2 is executed? *

5 points

- a. False
- b. True
- c. ValueError occurs
- d. TypeError occurs

3. Study the following program: *

5 points

```
def example(a):
```

```
    aa = a + '1'
```

```
    aa = a*1
```

```
    return a
```

```
>>>example("javatpoint")
```

What will be the output of this statement?

- a. hello2hello2
- b. hello2
- c. Cannot perform mathematical operation on strings
- d. indentationError

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4. Study the following program: *

5 points

```
d = {0, 1, 2}
```

```
for x in d:
```

```
    print(x)
```

What will be the output of this statement?

- a. {0, 1, 2} {0, 1, 2} {0, 1, 2}
- b. 0 1 2
- c. Syntax_Error
- d.

5. Study the following program: *

5 points

```
print(6 + 5 - 4 * 3 / 2 % 1)
```

What will be the output of this program?

- a. 7
- b. 7.0
- c. 15
- d. 0

6. Study the following program: *

5 points

```
i = 2, 10
```

```
j = 3, 5
```

```
add = i + j
```

```
print(add)
```

What will be the output of this program?

- a. (5, 10)
- b. 20
- c. (2, 10, 3, 5)
- d. SyntaxError: invalid syntax

7. How many control statements python supports? *

5 points

- a. Four
- b. Five
- c. Three
- d. None of the these

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8. How many keywords present in the python programming language? *

5 points

- a. 32
- b. 61
- c. 33
- d. 27

9. Study the following program: *

5 points

```
__ = '1 2 3 4 5 6'
```

```
print(__)
```

What will be the output of this program?

- a. SyntaxError: EOL while scanning string literal
- b. SyntaxError: invalid syntax
- c. NameError: name '__' is not defined
- d. 1 2 3 4 5 6

10. Which of the following keywords is not reversed keyword in python? *

5 points

- a. None
- b. Class
- c. Goto
- d. and

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**VALUE ADDED COURSES ON
“DEVELOP YOUR CAREER IN PYTHON”**

Assessment Mark Statement


S.NO	REGISTER NUMBER	NAME OF THE STUDENT	TEST MARKS (50)
1.	E19CSR001	AARTHI K	50
2.	E19CSR002	AASHA J	50
3.	E19CSR003	AATHIKESAVAN J	50
4.	E19CSR004	ABARNA R	45
5.	E19CSR005	ABINASH M	40
6.	E19CSR006	ABINAYA K	50
7.	E19CSR007	ABINAYA A	50
8.	E19CSR008	ABINAYA D	50
9.	E19CSR010	AJAYKUMAR K	50
10.	E19CSR011	AJISHIYA R	45
11.	E19CSR012	ANUJA N	50
12.	E19CSR013	ARCHANA .M	50
13.	E19CSR015	ARULSELVAN A	50
14.	E19CSR016	ARUNACHALAM S	50
15.	E19CSR017	ARUNPRIYA C	50
16.	E19CSR019	ASHWIN D	45
17.	E19CSR020	AYYAPPAN S	50
18.	E19CSR021	BHARATH B	50
19.	E19CSR023	BUVANA M	50
20.	E19CSR024	CHARULATHA M	45
21.	E19CSR025	DEEKSHITHA D	50
22.	E19CSR026	DHANRAJ K S	50
23.	E19CSR027	DILAWER HUSSAIN GANAI	50
24.	E19CSR028	DINESH A R	50
25.	E19CSR029	DIVYA K	50
26.	E19CSR030	DURAIVELAN P	40
27.	E19CSR032	GAYATHRI G	50
28.	E19CSR033	GOPALAKIRUSHNAN T	50
29.	E19CSR034	GURUMOORTHY M	50
30.	E19CSR035	HARIAKASH S	50
31.	E19CSR036	HARISH R	40
32.	E19CSR037	INDHUMATHI E	50
33.	E19CSR038	JAISHREE M	50
34.	E19CSR039	JALALIYA SIRAJ M	50
35.	E19CSR040	JANANI R	50

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36.	E19CSR041	JAYA VARSHINI R	50
37.	E19CSR042	JEEVALAKSHMI T	50
38.	E19CSR043	JEEVITHA PRIYA M	50
39.	E19CSR044	JENISHA J	45
40.	E19CSR045	JOTHIKA S	50
41.	E19CSR046	KABILAN K	50
42.	E19CSR047	KALAIVANI S	50
43.	E19CSR048	KARTHIK S	50
44.	E19CSR049	KARTHIK B	45
45.	E19CSR050	KATHIRAVAN M	50
46.	E19CSR051	KISHOR J R	50
47.	E19CSR052	KOKILA V	45
48.	E19CSR053	KRISHNARAJ S	50
49.	E19CSR054	KRUPASHINI S	45
50.	E19CSR055	MAGESH A	45
51.	E19CSR056	MAHALAKSHMI P	50
52.	E19CSR057	MAHALAKSHMI P R	50
53.	E19CSR058	MAHESWARAN V	50
54.	E19CSR059	MALARVIZHI A	45
55.	E19CSR060	MATHAN KUMAR M	50
56.	E19CSR061	MOHAMED AFSALUDEEN M K	50
57.	E19CSR062	MOHAMED ASMIN ALI S	50
58.	E19CSR063	MOHAMED IJAS M	45
59.	E19CSR064	MOHAMED IRFAN M	45
60.	E19CSR065	MOHAMED SAKKEEL S	45
61.	E19CSR066	MOHAMED YASEER M	50
62.	E19CSR067	MOHANRAM S	50
63.	E19CSR068	MUBENA M	45
64.	E19CSR069	MUGESHKANNA E	50
65.	E19CSR070	MUKESH K	45
66.	E19CSR071	MULLAIVENTHAN G	40
67.	E19CSR072	MUTHAMIL SELVI S	50
68.	E19CSR073	MUTHU KUMARAN D	50
69.	E19CSR074	NARESH PRASANTH U	50
70.	E19CSR075	NAVEEN KUMAR R R	45
71.	E19CSR076	NAVINKUMAR K R	45
72.	E19CSR077	NITISH SHARMA	45
73.	E19CSR078	NITHYA .C	50
74.	E19CSR079	NITHYASRI M	50
75.	E19CSR080	PAVITHRA S	50
76.	E19CSR081	PRADEEP M	50
77.	E19CSR082	PRASANTH T	35
78.	E19CSR083	PRATHEBA R	50
79.	E19CSR084	PRIYADHARSHINI V	50
80.	E19CSR085	PUNNIYAMOORTHI R	45

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81.	E19CSR086	RADHAKRISHNAN B	40
82.	E19CSR087	RAMESHKANNA S	40
83.	E19CSR088	RESHMA S	50
84.	E19CSR089	ROHITH N	50
85.	E19CSR090	SAKTHI GANESH C	50
86.	E19CSR091	SANGAVI C	45
87.	E19CSR092	SANJAY S	45
88.	E19CSR093	SANJAYNATHAN S	45
89.	E19CSR094	SANTHIYA S	50
90.	E19CSR095	SANTHOSH S	50
91.	E19CSR096	SEETHA K	45
92.	E19CSR097	SENEKA M	50
93.	E19CSR098	SHALINI M	45
94.	E19CSR099	SHANMUGASUNDARAM S	40
95.	E19CSR100	SHANTHIYA M	50
96.	E19CSR101	SIFA THAHASIN F	50
97.	E19CSR102	SINDUJA K	50
98.	E19CSR103	SINEKA S	40
99.	E19CSR104	SIVA GURU NATHAN M	45
100.	E19CSR105	SIVAGANESH S	45
101.	E19CSR106	SOWMIYA M	50
102.	E19CSR107	SOWNDHARYA S	50
103.	E19CSR108	SRIMATHI D	40
104.	E19CSR109	SUBASRI V	45
105.	E19CSR110	SURYA M	40
106.	E19CSR111	SWETHA A	50
107.	E19CSR112	SWETHA B	50
108.	E19CSR113	SWETHA S	50
109.	E19CSR114	TEJAS S	50
110.	E19CSR115	THOBIYAS A	35
111.	E19CSR116	VARSHINI K	45
112.	E19CSR117	VASANTH S	50
113.	E19CSR118	VASANTHAKUMAR S	45
114.	E19CSR119	VIGNESHWARAN .K	35
115.	E19CSR120	VIGNESHWARI V	35
116.	E19CSR121	VIJAYA N	45
117.	E19CSR122	VIJAYASARATHY R	50
118.	E19CSR123	VIKRAM M	50
119.	E19CSR124	VINODHAN G	45
120.	E19CSR125	WASIM JAFFER A	45
121.	E19CSR126	YOGA LAKSHMI B	45
122.	E19CSL301	ARAVINTH S	50
123.	E19CSL302	BASILAHAMED H	50
124.	E19CSL303	JAYASRI S	40
125.	E19CSL304	KOWTHAM P.R.M	50

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126.	E19CSL305	NIVASHKANNA B	50
127.	E19CSL306	SAKTHI SRI DEVI S	50
128.	E19CSL308	VINOTHINI G	50
129.	E19CSL309	YOGESH G	50


Course Coordinators


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DEPARTMENT OF CSE
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E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS) – NAGAPATTINAM
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

VALUE ADDED COURSES ON
“DEVELOP YOUR CAREER IN PYTHON”

ANALYSIS REPORT

S.No.	Reg No	Student Name	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1.	E19CSR001	AARTHI K	5	5	5	5	5	5	5	5	5	5
2.	E19CSR002	AASHA J	5	5	5	5	5	5	5	5	5	5
3.	E19CSR003	AATHIKESAVAN J	5	5	5	5	5	5	5	5	5	5
4.	E19CSR004	ABARNA R	5	5	5	5	5	5	5	5	0	5
5.	E19CSR005	ABINASH M	5	0	5	0	5	5	5	5	5	5
6.	E19CSR006	ABINAYA K	5	5	5	5	5	5	5	5	5	5
7.	E19CSR007	ABINAYA A	5	5	5	5	5	5	5	5	5	5
8.	E19CSR008	ABINAYA D	5	5	5	5	5	5	5	5	5	5
9.	E19CSR010	AJAYKUMAR K	5	5	5	5	5	5	5	5	5	5
10.	E19CSR011	AJISHIYA R	5	5	5	0	5	5	5	5	5	5
11.	E19CSR012	ANUJA N	5	5	5	5	5	5	5	5	5	5
12.	E19CSR013	ARCHANA .M	5	5	5	5	5	5	5	5	5	5
13.	E19CSR015	ARULSELVAN A	5	5	5	5	5	5	5	5	5	5
14.	E19CSR016	ARUNACHALAM S	5	5	5	5	5	5	5	5	5	5
15.	E19CSR017	ARUNPRIYA C	5	5	5	5	5	5	5	5	5	5
16.	E19CSR019	ASHWIN D	5	5	5	5	5	5	5	0	5	5
17.	E19CSR020	AYYAPPAN S	5	5	5	5	5	5	5	5	5	5
18.	E19CSR021	BHARATH B	5	5	5	5	5	5	5	5	5	5
19.	E19CSR023	BUVANA M	5	5	5	5	5	5	5	5	5	5
20.	E19CSR024	CHARULATHA M	5	5	5	5	5	5	5	5	0	5
21.	E19CSR025	DEEKSHITHA D	5	5	5	5	5	5	5	5	5	5
22.	E19CSR026	DHANRAJ K S	5	5	5	5	5	5	5	5	5	5
23.	E19CSR027	DILAWER HUSSAIN GANAI	5	5	5	5	5	5	5	5	5	5
24.	E19CSR028	DINESH A R	5	5	5	5	5	5	5	5	5	5
25.	E19CSR029	DIVYA K	5	5	5	5	5	5	5	5	5	5
26.	E19CSR030	DURAIVELAN P	5	5	0	5	5	5	5	0	5	5
27.	E19CSR032	GAYATHRI G	5	5	5	5	5	5	5	5	5	5
28.	E19CSR033	GOPALAKIRUSHNAN T	5	5	5	5	5	5	5	5	5	5
29.	E19CSR034	GURUMOORTHY M	5	5	5	5	5	5	5	5	5	5
30.	E19CSR035	HARIAKASH S	5	5	5	5	5	5	5	5	5	5
31.	E19CSR036	HARISH R	5	5	0	5	5	5	5	5	0	5
32.	E19CSR037	INDHUMATHI E	5	5	5	5	5	5	5	5	5	5
33.	E19CSR038	JAISHREE M	5	5	5	5	5	5	5	5	5	5
34.	E19CSR039	JALALIYA SIRAJ M	5	5	5	5	5	5	5	5	5	5
35.	E19CSR040	JANANI R	5	5	5	5	5	5	5	5	5	5
36.	E19CSR041	JAYA VARSHINI R	5	5	5	5	5	5	5	5	5	5
37.	E19CSR042	JEEVALAKSHMI T	5	5	5	5	5	5	5	5	5	5
38.	E19CSR043	JEEVITHA PRIYA M	5	5	5	5	5	5	5	5	5	5
39.	E19CSR044	JENISHA J	5	5	5	5	5	5	0	5	5	5
40.	E19CSR045	JOTHIKA S	5	5	5	5	5	5	5	5	5	5
41.	E19CSR046	KABILAN K	5	5	5	5	5	5	5	5	5	5
42.	E19CSR047	KALAIVANI S	5	5	5	5	5	5	5	5	5	5
43.	E19CSR048	KARTHIK S	5	5	5	5	5	5	5	5	5	5
44.	E19CSR049	KARTHIK B	5	5	5	5	5	0	5	5	5	5
45.	E19CSR050	KATHIRAVAN M	5	5	5	5	5	5	5	5	5	5
46.	E19CSR051	KISHOR J R	5	5	5	5	5	5	5	5	5	5
47.	E19CSR052	KOKILA V	5	5	5	5	5	0	5	5	5	5
48.	E19CSR053	KRISHNARAJ S	5	5	5	5	5	5	5	5	5	5
49.	E19CSR054	KRUPASHINI S	5	5	5	0	5	5	5	5	5	5
50.	E19CSR055	MAGESH A	5	0	5	5	5	5	5	5	5	5
51.	E19CSR056	MAHALAKSHMI P	5	5	5	5	5	5	5	5	5	5
52.	E19CSR057	MAHALAKSHMI P R	5	5	5	5	5	5	5	5	5	5
53.	E19CSR058	MAHESWARAN V	5	5	5	5	5	5	5	5	5	5
54.	E19CSR059	MALARVIZHI A	5	5	5	0	5	5	5	5	5	5
55.	E19CSR060	MATHAN KUMAR M	5	5	5	5	5	5	5	5	5	5

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56.	E19CSR061	MOHAMED AFSALUDEEN M K	5	5	5	5	5	5	5	5	5	5
57.	E19CSR062	MOHAMED ASMIN ALI S	5	5	5	5	5	5	5	5	5	5
58.	E19CSR063	MOHAMED IJAS M	5	0	5	5	5	5	5	5	5	5
59.	E19CSR064	MOHAMED IRFAN M	5	5	5	5	5	5	5	0	5	5
60.	E19CSR065	MOHAMED SAKKEEL S	5	5	5	5	5	0	5	5	5	5
61.	E19CSR066	MOHAMED YASEER M	5	5	5	5	5	5	5	5	5	5
62.	E19CSR067	MOHANRAM S	5	5	5	5	5	5	5	5	5	5
63.	E19CSR068	MUBENA M	5	5	5	5	5	5	0	5	5	5
64.	E19CSR069	MUGESHKANNA E	5	5	5	5	5	5	5	5	5	5
65.	E19CSR070	MUKESH K	5	5	0	5	5	5	5	5	5	5
66.	E19CSR071	MULLAIVENTHAN G	5	0	5	5	5	5	5	5	0	5
67.	E19CSR072	MUTHAMIL SELVI S	5	5	5	5	5	5	5	5	5	5
68.	E19CSR073	MUTHU KUMARAN D	5	5	5	5	5	5	5	5	5	5
69.	E19CSR074	NARESH PRASANTH U	5	5	5	5	5	5	5	5	5	5
70.	E19CSR075	NAVEEN KUMAR R R	5	5	5	5	5	5	5	0	5	5
71.	E19CSR076	NAVINKUMAR K R	5	5	5	5	5	5	5	5	0	5
72.	E19CSR077	NITISH SHARMA	5	5	5	5	5	5	0	5	5	5
73.	E19CSR078	NITHYA .C	5	5	5	5	5	5	5	5	5	5
74.	E19CSR079	NITHYASRI M	5	5	5	5	5	5	5	5	5	5
75.	E19CSR080	PAVITHRA S	5	5	5	5	5	5	5	5	5	5
76.	E19CSR081	PRADEEP M	5	5	5	5	5	5	5	5	5	5
77.	E19CSR082	PRASANTH T	5	5	5	0	5	5	5	0	0	5
78.	E19CSR083	PRATHEBA R	5	5	5	5	5	5	5	5	5	5
79.	E19CSR084	PRIYADHARSHINI V	5	5	5	5	5	5	5	5	5	5
80.	E19CSR085	PUNNIYAMOORTHI R	5	5	5	0	5	5	5	5	5	5
81.	E19CSR086	RADHAKRISHNAN B	5	0	5	0	5	5	5	5	5	5
82.	E19CSR087	RAMESHKANNA S	5	5	5	0	5	5	5	5	0	5
83.	E19CSR088	RESHMA S	5	5	5	5	5	5	5	5	5	5
84.	E19CSR089	ROHITH N	5	5	5	5	5	5	5	5	5	5
85.	E19CSR090	SAKTHI GANESH C	5	5	5	5	5	5	5	5	5	5
86.	E19CSR091	SANGAVI C	5	0	5	5	5	5	5	5	5	5
87.	E19CSR092	SANJAY S	5	5	5	5	5	5	5	5	0	5
88.	E19CSR093	SANJAYNATHAN S	5	5	5	5	5	0	5	5	5	5
89.	E19CSR094	SANTHIYA S	5	5	5	5	5	5	5	5	5	5
90.	E19CSR095	SANTHOSH S	5	5	5	5	5	5	5	5	5	5
91.	E19CSR096	SEETHA K	5	5	5	5	5	5	0	5	5	5
92.	E19CSR097	SENEKA M	5	5	5	5	5	5	5	5	5	5
93.	E19CSR098	SHALINI M	5	5	0	5	5	5	5	5	5	5
94.	E19CSR099	SHANMUGASUNDARAM S	5	0	5	5	5	5	5	5	0	5
95.	E19CSR100	SHANTHIYA M	5	5	5	5	5	5	5	5	5	5
96.	E19CSR101	SIFA THAHASIN F	5	5	5	5	5	5	5	5	5	5
97.	E19CSR102	SINDUJA K	5	5	5	5	5	5	5	5	5	5
98.	E19CSR103	SINEKA S	0	5	5	5	5	5	5	0	5	5
99.	E19CSR104	SIVA GURU NATHAN M	5	5	5	5	5	5	5	5	0	5
100.	E19CSR105	SIVAGANESH S	5	5	5	5	5	5	0	5	5	5
101.	E19CSR106	SOWMIYA M	5	5	5	5	5	5	5	5	5	5
102.	E19CSR107	SOWNDHARYA S	5	5	5	5	5	5	5	5	5	5
103.	E19CSR108	SRIMATHI D	5	5	5	5	0	5	5	0	5	5
104.	E19CSR109	SUBASRI V	5	5	5	5	5	5	5	5	0	5
105.	E19CSR110	SURYA M	0	5	5	5	5	5	0	5	5	5
106.	E19CSR111	SWETHA A	5	5	5	5	5	5	5	5	5	5
107.	E19CSR112	SWETHA B	5	5	5	5	5	5	5	5	5	5
108.	E19CSR113	SWETHA S	5	5	5	5	5	5	5	5	5	5
109.	E19CSR114	TEJAS S	5	5	5	5	5	5	5	5	5	5
110.	E19CSR115	THOBIYAS A	5	5	5	0	5	5	5	0	0	5
111.	E19CSR116	VARSHINI K	0	5	5	5	5	5	5	5	5	5
112.	E19CSR117	VASANTH S	5	5	5	5	5	5	5	5	5	5
113.	E19CSR118	VASANTHAKUMAR S	5	5	5	0	5	5	5	5	5	5
114.	E19CSR119	VIGNESHWARAN .K	5	0	5	0	5	5	5	5	5	0
115.	E19CSR120	VIGNESHWARI V	5	5	5	0	0	5	5	5	0	5
116.	E19CSR121	VIJAYA N	0	5	5	5	5	5	5	5	5	5
117.	E19CSR122	VIJAYASARATHY R	5	5	5	5	5	5	5	5	5	5
118.	E19CSR123	VIKRAM M	5	5	5	5	5	5	5	5	5	5
119.	E19CSR124	VINODHAN G	5	0	5	5	5	5	5	5	5	5
120.	E19CSR125	WASIM JAFFER A	5	5	5	5	5	5	5	5	0	5
121.	E19CSR126	YOGA LAKSHMI B	5	5	5	5	5	0	5	5	5	5
122.	E19CSL301	ARAVINTH S	5	5	5	5	5	5	5	5	5	5
123.	E19CSL302	BASILAHAMED H	5	5	5	5	5	5	5	5	5	5


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124.	E19CSL303	JAYASRI S	5	5	0	5	5	5	5	5	0	5
125.	E19CSL304	KOWTHAM P.R.M	5	5	5	5	5	5	5	5	5	5
126.	E19CSL305	NIVASHKANNA B	5	5	5	5	5	5	5	5	5	5
127.	E19CSL306	SAKTHI SRI DEVI S	5	5	5	5	5	5	5	5	5	5
128.	E19CSL308	VINOTHINI G	5	5	5	5	5	5	5	5	5	5
129.	E19CSL309	YOGESH G	5	5	5	5	5	5	5	5	5	5
Total			625	600	620	585	635	620	615	610	565	640
Attainment			96.9	93.0	96.1	90.7	98.4	96.1	95.3	94.6	87.6	99.2
Level of Attainment			3(S)	3(S)	3 (S)	3(S)	3(S)	3(S)	3(S)	3(S)	2(M)	3(S)

Attainment level calculation	
>=70%-79%	1 (L)
>=80%-89%	2 (M)
>=90%	3 (S)

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Mapping of Course Outcomes Vs Program Outcomes

CO Number	Competency	Cognitive level
CO1	Install Python, Read ,write, execute by hand simple python programs.	Understand
CO2	Describe the basics of Python Programming Language	Analyze
CO3	Represent compound data using python lists, tuples and files	Apply
CO4	Apply Object Oriented Programming Skills in Python	Apply


CO to PO Mapping

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3	-	-	-	-	-	-	-	-	1
CO2	3	2	3	-	-	-	-	-	-	-	-	2
CO3	3	3	3	-	-	-	-	-	-	-	-	3

CO to PSO Mapping

Course Outcome	PSO1	PSO2
CO1	3	1
CO2	2	3
CO3	3	3

1. Slight(Low) 2. Moderate(Medium) 3.Substantial(High) “-“ No Correlation


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Student Feedback Form for Value Added Course

Register Number *

E19CSR098

Name *

M.Shalini

Class *

II CSE

Name of the Course *

Develop our Career in Python

Course Instructor Name

Mrs.M.Priyadarshini

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Nagapattinam (Dt) Tamil Nadu.

1. Were Objectives of the course clear to you *

- Yes
 No

2. The Course contents met with your expectations *

- Strongly disagree
 Disagree
 Neutral
 Agree
 Strongly agree

3. The lecture sequence was well planned *

- Strongly disagree
 Disagree
 Neutral
 Agree
 Strongly agree

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4. The Contents were illustrated with *

- Too few examples
- adequate examples

5. The course exposed you to new knowledge and practices *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Any other comments/suggestions *

This python course was very helpful

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E.G.S. Pillay Engineering College,
Tiruchengode, Tamil Nadu

Nagapattinam (Dt) Tamil Nadu.

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

(APPROVED BY AICTE, NEW DELHI & AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

(ACCREDITED BY NAAC WITH 'A' GRADE & NBA)

OLD NAGORE ROAD, TETHI, NAGAPATTINAM - 611002, TAMIL NADU, INDIA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE OF COMPLETION


THIS IS TO CERTIFY THAT

Mr./Ms.Jenisha J

has successfully completed the online value added course on "Develop your career in Python" conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 08.02.21 to 13.02.21.



COORDINATOR
DR.S.PRAVEENKUMAR



HOD/CSE
DR.M. CHINNADURAI



PRINCIPAL
DR.S. RAMABALAN

ATTESTED

Dr. S. RAMABALAN, M.E., Ph.D.
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E.G.S. Pillay Engineering College
Old Nagore Road, Tethi, Nagapattinam - 611002, Tamil Nadu, India

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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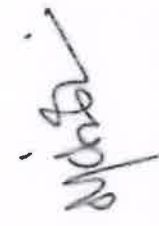
THIS IS TO CERTIFY THAT

Mr./Ms.Swetha B

has successfully completed the online value added course on "Develop your career in Python" conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 15.02.21 to 20.02.21.



COORDINATOR
DR.S.PRAVEENKUMAR



HOD/CSE
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PRINCIPAL
DR.S. RAMABALAN

Dr. S. RAMABALAN, M.E., Ph.D.
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E.G.S. Pillay Engineering College
Thethi, Nagore - 611 002
Nagapattinam (Dt) Tamil Nadu

COURSE SUMMARY REPORT

1. Title: Develop your career in Python
2. Name of Speaker: Ms.M.Priyadarshini
3. Speaker Details: Assistant Professor, CSE Department, EGSPEC.
4. Date of speaker's presentation: 08.02.21 – 13.02.21 & 15.02.21 – 20.02.21
5. Beneficiary Details: UG II CSE Students
6. Coordinator: Mr.S.PraveenKumar (Asst. Prof., CSE,EGSPEC)

Mrs.P.Subashri (Asst. Prof., CSE,EGSPEC)

This One Week value added course on 'Develop your career in Python was organized by Department of Computer Science and Engineering' from 08.02.21 – 13.02.21 for Batch I & 15.02.21 – 20.02.21 for Batch II.

This course was attended by 129 students.

This course resource person initially focused on introduction to python, its features and applications. The students got a chance to learn python data types, operators, control structures, functions, data structures, modules, packages, oops concepts, files, libraries thoroughly. Meanwhile the queries raised by the students were also answered in an efficient way in all the sessions by the resource persons.

The students were able to code successfully and run their programs. This course turned to be a major successful one, imparting a lot of knowledge about python programming and how to solve simple problems with python programming.

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**EGS PILLAY ENGINEERING COLLEGE (AUTONOMOUS)
NAGAPATTINAM**

Department of Computer Science and Engineering

Value Added Course

2020-2021

**INTRODUCTION TO DEEP LEARNING CONCEPTS USING
MATLAB**

Duration

19/04/2021 - 24/04/2021

40 hours

(Online Mode)

Convener

**Dr.M.Chinnadurai
Prof&Head
Department of CSE
EGSPEC**

Coordinator

**Mrs.E.Elakiya
Associate Professor
Department of CSE
EGSPEC**

E.G.S.PILLAY ENGINEERING COLLEGE (AUTONOMOUS)
NAGAPATTINAM
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
VALUE ADDED COURSE
ON
INTRODUCTION TO DEEP LEARNING CONCEPTS USING MATLAB

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Mchibi
HEAD OF HOD/CSE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

PERMISSION LETTER

Date: 13.04.2021

From

Mrs.E.Elakiya,
Associate Professor/CSE,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.

To

The Principal,
E.G.S.Pillay Engineering College,
Nagapattinam.

Through

The Head of Department,
Department of CSE,
E.G.S.Pillay Engineering College,
Nagapattinam.

[Handwritten signature]
13/4/21

Respected Sir,

Sub: Request to conduct Value Added Course – Reg

We are happy to inform you that we have planned to organize one week value added course titled **“Introduction to Deep Learning Concepts using MATLAB”** for PG CSE Students from 19/04/2021 to 24/04/2021 through online mode. Herewith, I have enclosed name list and session details. Kindly give permission for conducting value added course.

Thanking you,

yours sincerely,

[Handwritten signature]
[Mrs.E.Elakiya]

[Handwritten signature]
HEAD OF THE DEPARTMENT
DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

ATTESTED
[Handwritten signature]
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E.G.S. Pillay Engineering College,
Thethi, Nagore - 611 002.
Nagapattinam (Dt) Tamil Nadu.

About the Course

This one week value added course focuses on data analytics and machine learning techniques in MATLAB® using functionality within Statistics and Machine Learning Toolbox. The course demonstrates the use of unsupervised learning to discover features in large data sets and supervised learning to build predictive models. Examples and exercises highlight techniques for visualization and evaluation of results.

In this course, you will build on the skills learned in Exploratory Data Analysis with MATLAB and Data Processing and Feature Engineering with MATLAB to increase your ability to harness the power of MATLAB to analyze data relevant to the work you do.

Convenor:

Prof.Dr.M.CHINNADURAI
Professor & Head
CSE

Course Coordinator:
Mrs. E.Elakiya
Associate Professor
CSE

Resource Person:
Mr.M.NUTHAL SRINIVASAN
Assistant Professor
ECE

Beneficiaries:
PG CSE Students

Course Duration :40 Hours

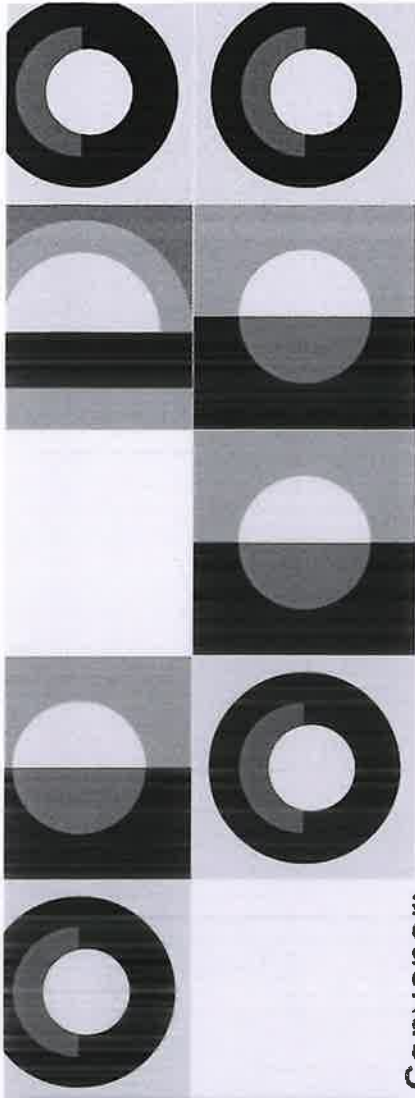
Mode : Online

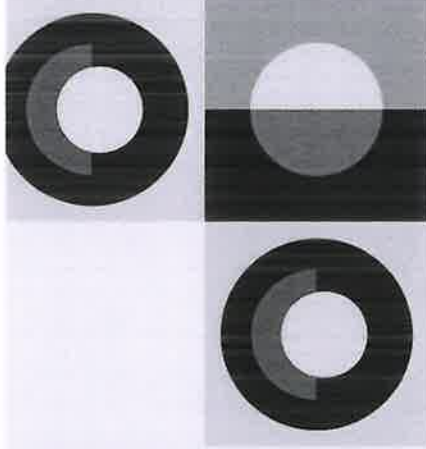
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PRINCIPAL
Pillay Engineering College,
Tirupattur, Madurai - 611 002.
Tamil Nadu.

6 Days Value Added Course on INTRODUCTION TO DEEP LEARNING CONCEPTS USING MATLAB™

Date:

19.04.21 - 24.04.21





Certificate will be issued to all participants on successful completion of this course

ABOUT THE COLLEGE

EGS Pillay Engineering College was started in the year 1995 under the sponsorship of G. S. Pillay & Sons Educational and Charitable Trust. College has gained the reputation of being most preferred engineering college by the students. College is approved by the AICTE, New Delhi and is affiliated to Anna University from 2002 and the degrees are awarded by Anna University, as per the Government Orders. It is ISO 9001:2008 certified.

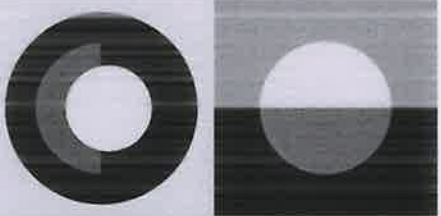
The College has earned the reputation of being one of the most preferred colleges by the students and parents all these years. Known for its excellent infrastructure and facilities for learning, the outstanding non-grant engineering college has registered impressive performance consistently. A gateway to success, the college has now set on long-range planning to enlarge and enrich its programs and activities to empower the youth who aspire to become successful

Vision of the Department

To produce globally competent computer professionals capable of adapting to the ever changing technological trends of Industry and Society.

Mission of the Department

- 1.To build the core competence desirable for a computer professional such as design, development on real world projects and meet the expected standards of industries.
- 2.To train the students to acquire higher order skills of emerging technologies to make them preferable for employers.
- 3.To provide state-of-the-art learning facilities for effective implementation of learner centric teaching-learning process to develop professional skills, self-learning and lifelong learning capabilities.



Learning outcomes

- 1.Understand a wide variety of learning algorithms.
- 2.Understand how to evaluate models generated from data.
- 3.Apply the algorithms to a real problem, optimize the models learned and report on the expected accuracy that can be achieved by applying the models.

ABOUT THE DEPARTMENT

Department of Computer Science and Engineering programme was introduced at Edayathangudy S.S.Pillay Engineering College in the Academic Year 1995-1996. The demand for Computer Engineers in software companies, banking sectors and private sectors engaged in developing new trends of software generation is more than the engineers available.

The department has Recognized Research Centre for doing PhD / M.S. (By Research), obtained Permanent Affiliation from Anna University in the year 2014-15. The department has formed student association namely Computer Engineers Association (CEA) to promote talent of the students and their upliftment.

The department has highly qualified and experienced faculties. The department has well experienced faculties in the research and more number of publications in reputed Journals and Conferences.

The department has well infrastructural facilities. From 2011 onwards every year, we are conducting International and National conferences. The B.E (CSE) programme was accredited by NBA in the year 2016 and reaccredited in the year 2019 for next three years.

**E. G. S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS),
NAGAPATTINAM
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

EGSPEC/CSE/PG/VAC/2020-21/01


Date: 14.04.2021

CIRCULAR

It is here by informed that Department of Computer Science and Engineering is going to organize a Value Added Course on “Introduction to Deep Learning Concepts using MATLAB” through online mode from 19/04/2021 to 24/04/2021 (9.00 am to 5.00 pm) by, **Mr.M.Nuthal Srinivasan N, Assistant Professor, Department of Electronics and Communication Engineering, EGSPEC** for final year PG CSE Students. All the PG final year students are instructed to attend the course without fail.

gmeet link: <https://meet.google.com/agk-mpqb-aqo>


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DEPARTMENT OF CSE
E.G.S.P. Engineering College,
Nagapattinam - 611 002

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E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS) NAGAPATTINAM

DEPARTMENT OF CSE

Value Added Course on

“INTRODUCTION TO DEEP LEARNING CONCEPTS USING MATLAB”

PROGRAM SCHEDULE

Date: 19.04.2021 – 24.04.2021

S.No	Date	Topic
1	19/04/2021	What is Deep Learning – Applications - Weights and Activation functions – Perceptron - Data Preprocessing - Image augmentation in OpenCV. Neural Networks – Applications - Loss function – Backpropagation - MNIST example for Neural Networks
2	20/04/2021	The Basics: Programming, Command Prompt, Expressions – Root Finding: Newton’s Method – The Secant Method – Sub Indexing. Basic Plotting, Vectorization
3	21/04/2021	Introduction to ANN, Perceptron and it’s use, Multi-Layer Perceptron (MLP), Feed-Forward Neural Network, Deep Neural Network , Activation Function, Cost Function, Gradient Descent, Backpropagation, Regularization
4	22/04/2021	CONVOLUTION NEURAL NETWORK (CNN):Introduction to CNN, Important Elements of CNN, Convolution, Max Pooling, Flattening, Full Connection, Hands-On : CNN using Keras.
5	23/04/2021	RECURRENT NEURAL NETWORK (RNN): Introduction to RNN, Training RNNs, Deep RNNs, Sentiment Analysis NLP- Applications of NLP, Techniques used in NLP
6	24/04/2021	Syntactic Analysis, Semantic Analysis Assessment Test

Mohsini
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Nagapattinam - 611 002

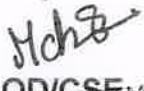
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[Signature]
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SYLLABUS

VALUE ADDED COURSE ON INTRODUCTION TO DEEP LEARNING CONCEPTS USING MATLAB		
COURSE OBJECTIVES:		
	<ol style="list-style-type: none"> 1. Understand the context of neural networks and deep learning 2. Know how to use a neural network 3. Understand the data needs of deep learning 4. Have a working knowledge of neural networks and deep learning 5. Explore the parameters for neural networks 	
MODULE1	FUNDAMENTALS OF DEEP LEARNING & NEURAL NETWORKS	8 Hours
What is Deep Learning – Applications - Weights and Activation functions – Perceptron - Data Preprocessing - Image augmentation in OpenCV. Neural Networks – Applications - Loss function – Backpropagation - MNIST example for Neural Networks		
MODULE2	MATLAB FUNDAMENTALS	8 Hours
The Basics: Programming, Command Prompt, Expressions – Root Finding: Newton’s Method – The Secant Method – Sub Indexing, Basic Plotting, Vectorization		
MODULE3	ARTIFICIAL NEURAL NETWORKS (ANN)	8 Hours
Introduction to ANN, Perceptron and its use, Multi-Layer Perceptron (MLP), Feed-Forward Neural Network, Deep Neural Network, Activation Function, Cost Function, Gradient Descent, Backpropagation, Regularization		
MODULE 4	CNN & RNN	8 Hours
CONVOLUTION NEURAL NETWORK (CNN): Introduction to CNN, Important Elements of CNN Convolution, Max Pooling, Flattening, Full Connection, Hands-On : CNN using Keras. RECURRENT NEURAL NETWORK (RNN): Introduction to RNN, Training RNNs, Deep RNNs, Sentiment Analysis		
MODULE5	NATURAL LANGUAGE PROCESSING (NLP)	8 Hours
NLP- Applications of NLP, Techniques used in NLP, Syntactic Analysis, Semantic Analysis		
		Total: 40 Hours
COURSE OUTCOMES:		
	After completion of the course, Student will be able to	
CO1	Model Neuron and Neural Network, and to analyze ANN learning, and its applications	
CO2	Understand the fundamentals of MATLAB	
CO3	Analyze ANN learning, Error correction learning, Memory-based learning, Hebbian learning, Competitive learning and Boltzmann learning	
CO4	Design of another class of layered networks using deep learning principles	
CO5	Design and develop applications using natural language processing.	
REFERENCES:		
1. Simon Haykins, “Neural Network- A Comprehensive Foundation”, Pearson Prentice Hall, 2nd Edition, 1999. ISBN-13: 978-0-13-147139-9/ISBN-10: 0-13-147139-2		
2. B Yegnanarayana, “Artificial neural networks”, 1st ed., Prentice Hall of India P Ltd, 2005.		

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E.G.S. PILLAY ENGINEERING COLLEGE (AUTONOMOUS), NAGAPATTINAM

DEPARTMENT OF CSE


Value Added Course

“INTRODUCTION TO DEEP LEARNING CONCEPTS USING MATLAB”

ENROLLMENT LIST

S.No	REGISTER NO.	NAME
1.	E19CPF001	Akilandeswari R
2.	E19CPF002	Anbananthan S
3.	E19CPF003	Ayeshwariya K
4.	E19CPF004	Gobinath R
5.	E19CPF005	Mathivanan M
6.	E19CPF007	Pradeepan S
7.	E19CPF008	Pragadeeshwaran S
8.	E19CPF009	Priyadarshini M
9.	E19CPF011	Raja K
10.	E19CPF012	Rajadurai K
11.	E19CPF013	Roja S
12.	E19CPF014	Sajee C
13.	E19CPF015	Sindhu G.K
14.	E19CPF016	Shobiya K
15.	E19CPF017	Sri Dhanalakshmi A.M
16.	E19CPF018	Surya V
17.	E20CPF001	Abinaya M.D
18.	E20CPF002	Abinaya G
19.	E20CPF006	Jayasri S
20.	E20CPF007	Kayalvizhi R
21.	E20CPF008	Mahesh A
22.	E20CPF009	Nivedha K
23.	E20CPF010	Pragathi J
24.	E20CPF012	Sowndharya B


Course Coordinator


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MATERIALS

Module 1 – Fundamentals of Deep Learning & Neural Networks

Deep Learning:

Deep learning is a subset of machine learning, which is essentially a neural network with three or more layers. These neural networks attempt to simulate the behavior of the human brain—albeit far from matching its ability—allowing it to “learn” from large amounts of data.

It is capable of learning complex patterns and relationships within data. In deep learning, we don't need to explicitly program everything. It has become increasingly popular in recent years due to the advances in processing power and the availability of large datasets. Because it is based on artificial neural networks (ANNs) also known as deep neural networks (DNNs). These neural networks are inspired by the structure and function of the human brain's biological neurons, and they are designed to learn from large amounts of data.

1. Deep Learning is a subfield of Machine Learning that involves the use of neural networks to model and solve complex problems. Neural networks are modeled after the structure and function of the human brain and consist of layers of interconnected nodes that process and transform data.
2. The key characteristic of Deep Learning is the use of deep neural networks, which have multiple layers of interconnected nodes. These networks can learn complex representations of data by discovering hierarchical patterns and features in the data. Deep Learning algorithms can automatically learn and improve from data without the need for manual feature engineering.
3. Deep Learning has achieved significant success in various fields, including image recognition, natural language processing, speech recognition, and recommendation systems. Some of the popular Deep Learning architectures include Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), and Deep Belief Networks (DBNs).
4. Training deep neural networks typically requires a large amount of data and computational resources. However, the availability of cloud computing and the development of specialized hardware, such as Graphics Processing Units (GPUs), has made it easier to train deep neural networks.

In summary, Deep Learning is a subfield of Machine Learning that involves the use of deep neural networks to model and solve complex problems. Deep Learning has achieved significant success in various fields, and its use is expected to continue to grow as more data becomes available, and more powerful computing resources become available.

What is Deep Learning?

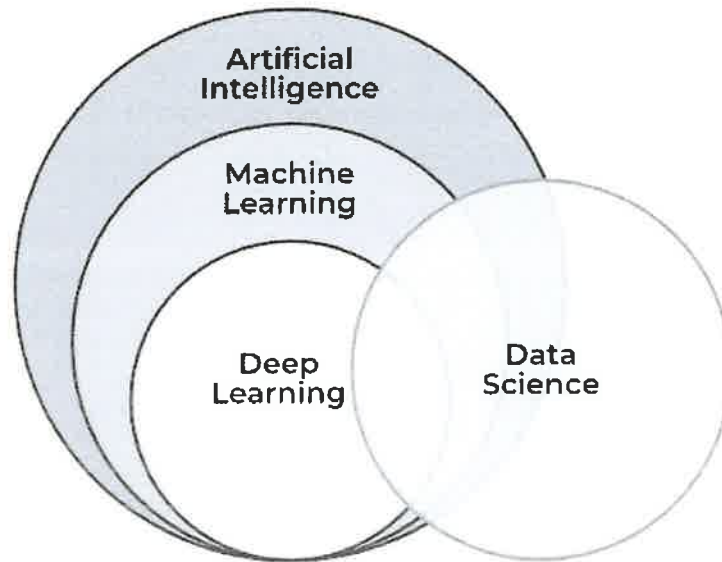
Deep learning is the branch of machine learning which is based on artificial neural network architecture. An artificial neural network or ANN uses layers of interconnected nodes called neurons that work together to process and learn from the input data.

In a fully connected Deep neural network, there is an input layer and one or more hidden layers connected one after the other. Each neuron receives input from the previous layer neurons or the input layer. The output of one neuron becomes the input to other neurons in the next layer of the network, and this process continues until the final layer produces the output of the network. The layers of the neural network transform the input data through a series of nonlinear transformations, allowing the network to learn complex representations of the input data.

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Today Deep learning has become one of the most popular and visible areas of machine learning, due to its success in a variety of applications, such as computer vision, natural language processing, and Reinforcement learning.

Deep learning can be used for supervised, unsupervised as well as reinforcement machine learning. it uses a variety of ways to process these.

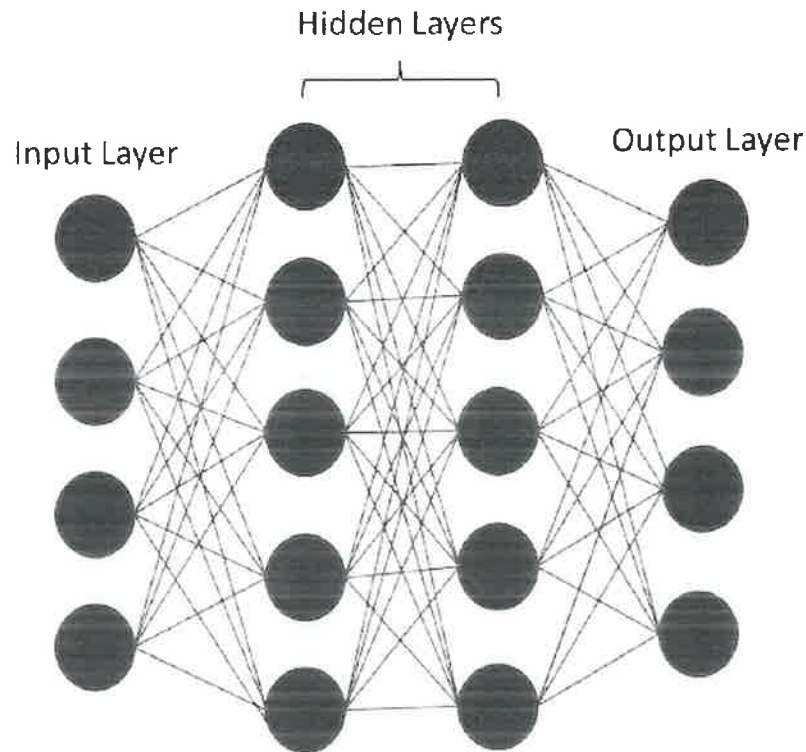
- **Supervised Machine Learning:** Supervised machine learning is the machine learning technique in which the neural network learns to make predictions or classify data based on the labeled datasets. Here we input both input features along with the target variables. the neural network learns to make predictions based on the cost or error that comes from the difference between the predicted and the actual target, this process is known as backpropagation. Deep learning algorithms like Convolutional neural networks, Recurrent neural networks are used for many supervised tasks like image classifications and recognition, sentiment analysis, language translations, etc.
- **Unsupervised Machine Learning:** Unsupervised machine learning is the machine learning technique in which the neural network learns to discover the patterns or to cluster the dataset based on unlabeled datasets. Here there are no target variables. while the machine has to self-determined the hidden patterns or relationships within the datasets. Deep learning algorithms like autoencoders and generative models are used for unsupervised tasks like clustering, dimensionality reduction, and anomaly detection.
- **Reinforcement Machine Learning:** Reinforcement Machine Learning is the machine learning technique in which an agent learns to make decisions in an environment to maximize a reward signal. The agent interacts with the environment by taking action and observing the resulting rewards. Deep learning can be used to learn policies, or a set of actions, that maximizes the cumulative reward over time. Deep reinforcement learning algorithms like Deep Q networks and Deep Deterministic Policy Gradient (DDPG) are used to reinforce tasks like robotics and game playing etc.

Artificial neural networks

Artificial neural networks are built on the principles of the structure and operation of human neurons. It is also known as neural networks or neural nets. An artificial neural network's input layer, which is the first layer, receives input from external sources and passes it on to the hidden layer, which is the second layer. Each neuron in the hidden layer gets information from the neurons in the previous layer, computes the weighted total, and then transfers it to the neurons in the next layer. These connections are weighted, which means that the impacts of the inputs from the preceding layer are more or less optimized by giving each input a distinct weight.

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These weights are then adjusted during the training process to enhance the performance of the model.



Fully Connected Artificial Neural Network

Artificial neurons, also known as units, are found in artificial neural networks. The whole Artificial Neural Network is composed of these artificial neurons, which are arranged in a series of layers. The complexities of neural networks will depend on the complexities of the underlying patterns in the dataset whether a layer has a dozen units or millions of units. Commonly, Artificial Neural Network has an input layer, an output layer as well as hidden layers. The input layer receives data from the outside world which the neural network needs to analyze or learn about.

In a fully connected artificial neural network, there is an input layer and one or more hidden layers connected one after the other. Each neuron receives input from the previous layer neurons or the input layer. The output of one neuron becomes the input to other neurons in the next layer of the network, and this process continues until the final layer produces the output of the network. Then, after passing through one or more hidden layers, this data is transformed into valuable data for the output layer. Finally, the output layer provides an output in the form of an artificial neural network's response to the data that comes in.

Units are linked to one another from one layer to another in the bulk of neural networks. Each of these links has weights that control how much one unit influences another. The neural network learns more and more about the data as it moves from one unit to another, ultimately producing an output from the output layer.

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NAGAPATTINAM**

DEPARTMENT OF CSE

Value Added Course on
“INTRODUCTION TO DEEP LEARNING CONCEPTS USING MATLAB”

TEST QUESTIONS

Multiple Choice Questions(10*2=20 marks)

1. A 3-input neuron is trained to output a zero when the input is 110 and a one when the input is 111. After generalization, the output will be zero when and only when the input is:

- a) 000 or 110 or 011 or 101
- b) 010 or 100 or 110 or 101
- c) 000 or 010 or 110 or 100
- d) 100 or 111 or 101 or 001

Answer :c

2. Activation value is associated with?

- a) potential at synapses
- b) cell membrane potential
- c) all of the mentioned
- d) none of the mentioned

Answer:b

3. Why is the training of basis function is faster than MLFFNN?

- a) because they are developed specifically for pattern approximation
- b) because they are developed specifically for pattern classification
- c) because they are developed specifically for pattern approximation or classification
- d) none of the mentioned

Answer:c

4. What is the output of the following code?

A=[1 2 3]; A^2;

- a)[1 4 9]
- b) A= 1 4 9
- c) A= [1, 4, 9]
- d) Inputs must be a scalar or a square matrix

Answer:d

5. Which of the factors affect the performance of learner system does not include?

- a) Representation scheme used
- b) Training scenario
- c) Type of feedback
- d) Good data structures

Answer : d

6. What is learning in deep learning?

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Thethi Marore - 611 002,
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- a) Learning, in the context of machine learning, describes an automatic search process for better representations
- b) A process that is “learned” from exposure to known examples of inputs and outputs
- c) Learning in school attending 5th grade
- d) Answers A & B

Answers:d

7. What is training loop in deep learning?

- a) With every step in the network processes, the weights are adjusted a little in the correct direction, and the loss score decreases
- b) It is repeated a sufficient number of times (typically tens of iterations over thousands of examples), yields weight values that minimize the loss function
- c) All of the above are true
- d) None of the above are true

Answer:c

8. Which of the following is Morphological Segmentation?

- a)Does Discourse Analysis
- b)Separate words into individual morphemes and recognize the class of the morphemes
- c) Is an extension of propositional logic
- d) None of these

Answer: b

9. Which of the following is the area of Natural Language Processing (NATURAL LANGUAGE PROCESSING)?

- a) Computer Science
- b) Artificial Intelligence
- c) Linguistics
- d) All of these

Answer: d

10. Many words have more than one meaning; we have to select the meaning which makes the most sense in context. This can be resolved by _____

- a) Fuzzy Logic
- b) Word Sense Disambiguation
- c) Shallow Semantic Analysis
- d) All of the mentioned

Answer:b

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Assessment Test-Introduction to Deep Learning Concepts using MATLAB

Register No *

E19CPF007

Name *

Pradeepan S

Class *

Final PG CSE

1. A 3-input neuron is trained to output a zero when the input is 110 and a one when the input is 111. After generalization, the output will be zero when and only when the input is:

* 2 points

- a) 000 or 110 or 011 or 101
- b) 010 or 100 or 110 or 101
- c) 000 or 010 or 110 or 100
- d) 100 or 111 or 101 or 001

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2. Activation value is associated with? *

2 points

- a) potential at synapses
- b) cell membrane potential
- c) all of the mentioned
- d) none of the mentioned

3. Why is the training of basis function is faster than MLFFNN? *

2 points

- a) because they are developed specifically for pattern approximation
- b) because they are developed specifically for pattern classification
- c) because they are developed specifically for pattern approximation or classification
- d) none of the mentioned

4. What is the output of the following code? *

2 points

`A=[1 2 3]; A^2;`

- a) [1 4 9]
- b) A= 1 4 9
- c) A= [1, 4, 9]
- d) Inputs must be a scalar or a square matrix

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N. S. Pattinam (Dr) Thiruvananthapuram

5. Which of the factors affect the performance of learner system does not include? *

2 points

- a) Representation scheme used
- b) Training scenario
- c) Type of feedback
- d) Good data structures

6. What is learning in deep learning? *

2 points

- a) Learning, in the context of machine learning, describes an automatic search process for better representations
- b) A process that is “learned” from exposure to known examples of inputs and outputs
- c) Learning in school attending 5th grade
- d) Answers A & B

7. What is training loop in deep learning?

2 points

- a) With every step in the network processes, the weights are adjusted a little in the correct direction, and the loss score decreases
- b) It is repeated a sufficient number of times (typically tens of iterations over thousands of examples), yields weight values that minimize the loss function
- c) All of the above are true
- d) None of the above are true



8. Which of the following is Morphological Segmentation? *

2 points

- a) Does Discourse Analysis
- b) Separate words into individual morphemes and recognize the class of the morphemes
- c) Is an extension of propositional logic
- d) None of these

9. Which of the following is the area of Natural Language Processing (NATURAL LANGUAGE PROCESSING)?

* 2 points

- a) Computer Science
- b) Artificial Intelligence
- c) Linguistics
- d) All of these

10. Many words have more than one meaning; we have to select the meaning which makes the most sense in context. This can be resolved by _____ * 2 points

- a) Fuzzy Logic
- b) Word Sense Disambiguation
- c) Shallow Semantic Analysis
- d) All of the mentioned

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VALUE ADDED COURSES ON

“INTRODUCTION TO DEEP LEARNING CONCEPTS USING MATLAB”

Assessment Mark Statement

S.NO	REGISTER NUMBER	NAME OF THE STUDENT	Marks
1.	E19CPF001	Akilandeswari R	18
2.	E19CPF002	Anbananthan S	18
3.	E19CPF003	Ayeshwariya K	20
4.	E19CPF004	Gobinath R	20
5.	E19CPF005	Mathivanan M	20
6.	E19CPF007	Pradeepan S	16
7.	E19CPF008	Pragadeeshwaran S	14
8.	E19CPF009	Priyadarshini M	16
9.	E19CPF011	Raja K	16
10.	E19CPF012	Rajadurai K	20
11.	E19CPF013	Roja S	18
12.	E19CPF014	Sajee C	16
13.	E19CPF015	Sindhu G.K	18
14.	E19CPF016	Shobiya K	20
15.	E19CPF017	Sri Dhanalakshmi A.M	16
16.	E19CPF018	Surya V	20
17.	E20CPF001	Abinaya M.D	18
18.	E20CPF002	Abinaya G	20
19.	E20CPF006	Jayasri S	20
20.	E20CPF007	Kavalvizhi R	16
21.	E20CPF008	Mahesh A	16
22.	E20CPF009	Nivedha K	18
23.	E20CPF010	Pragathi J	18
24.	E20CPF012	Sowndharya B	20


Course Coordinator


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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**


VALUE ADDED COURSE ON

“INTRODUCTION TO DEEP LEARNING CONCEPTS USING MATLAB”

IMPACT ANALYSIS REPORT

S.N O	REGISTER NUMBER	NAME OF STUDENT	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1.	E19CPF001	Akilandeswari R	2	2	2	0	2	2	2	2	2	2
2.	E19CPF002	Anbananthan S	2	2	2	2	0	2	2	2	2	2
3.	E19CPF003	Ayeshwariya K	2	2	2	2	2	2	2	2	2	2
4.	E19CPF004	Gobinath R	2	2	2	2	2	2	2	2	2	2
5.	E19CPF005	Mathivanan M	2	2	2	2	2	2	2	2	2	2
6.	E19CPF007	Pradeepan S	2	0	2	2	2	2	0	2	2	2
7.	E19CPF008	Pragadeeshwaran S	2	2	2	2	0	0	2	2	2	0
8.	E19CPF009	Priyadarshini M	2	2	0	2	2	2	2	0	2	2
9.	E19CPF011	Raja K	0	2	2	2	2	0	2	2	2	2
10.	E19CPF012	Rajadurai K	2	2	2	2	2	2	2	2	2	2
11.	E19CPF013	Roja S	2	2	2	2	2	2	0	2	2	2
12.	E19CPF014	Sajee C	2	2	2	2	0	2	2	2	2	0
13.	E19CPF015	Sindhu G.K	2	2	2	2	2	2	2	2	0	2
14.	E19CPF016	Shobiya K	2	2	2	2	2	2	2	2	2	2
15.	E19CPF017	Sri Dhanalakshmi A.M	2	0	2	2	2	2	2	2	2	0
16.	E19CPF018	Surya V	2	2	2	2	2	2	2	2	2	2
17.	E20CPF001	Abinaya M.D	2	2	2	2	2	2	2	2	2	0
18.	E20CPF002	Abinaya G	2	2	2	2	2	2	2	2	2	2
19.	E20CPF006	Jayasri S	2	2	2	2	2	2	2	2	2	2
20.	E20CPF007	Kayalvizhi R	2	0	2	2	2	2	0	2	2	2
21.	E20CPF008	Mahesh A	2	2	2	2	0	2	2	2	2	0
22.	E20CPF009	Nivedha K	2	2	0	2	2	2	2	2	2	2
23.	E20CPF010	Pragathi J	0	2	2	2	2	2	2	2	2	2
24.	E20CPF012	Sowndharya B	2	2	2	2	2	2	2	2	2	2
Total			44	42	44	46	40	44	42	46	46	38
Attainment			91.67	87.50	91.67	95.83	83.33	91.67	87.50	95.83	95.83	79.17
Level of Attainment			3 (S)	2 (M)	3 (S)	3 (S)	2 (M)	3 (S)	2 (M)	3 (S)	3 (S)	1 (L)

Attainment level calculation	
>=70%-79%	1 (L)
>=80%-89%	2 (M)
>=90%	3 (S)


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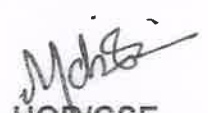
Mapping of Course Outcomes Vs Program Outcomes

	Competency	Cognitive level
CO1	Model Neuron and Neural Network, and to analyze ANN learning, and its applications	APPLY
CO2	Understand the fundamentals of MATLAB	UNDERSTAND
CO3	Analyze ANN learning, Error correction learning, Memory-based learning, Hebbian learning, Competitive learning and Boltzmann learning	ANALYZE
CO4	Design of another class of layered networks using deep learning principles	APPLY
CO5	Design and develop applications using natural language processing.	APPLY

CO Vs PO, PSO MAPPING

Course outcomes	Program Outcomes												Program Specific Outcomes	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO1	PSO 2
CO1	3	2	-	-	-	-	-	-	-	1	-	1	-	3
CO2	3	2	2	-	-	-	-	-	-	1	-	1	-	3
CO3	3	3	2	1	-	-	-	-	-	1	-	1	-	2
CO4	3	3	2	2	2	-	-	-	-	1	-	1	-	3
CO5	3	3	3	3	2	-	-	-	-	1	-	1	-	3

1. Slight(Low) 2. Moderate(Medium) 3.Substantial(High) "--" No Correlation


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Student Feedback Form for Value Added Course

Introduction to ASP.Net Framework

Register Number *

E19CPF004

Name *

gopinath r

Class *

PG/CSE

Name of the Course *

Introduction to Deep Learning Concepts using MATLAB

Course Instructor Name

Mr.M.Nuthal Srinivasan

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1. Were Objectives of the course clear to you *

Yes

No

2. The Course contents met with your expectations *

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

3. The lecture sequence was well planned *

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

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Kanyakumari (Dt) Tamil Nadu.

4. The Contents were illustrated with *

- Too few examples
- adequate examples

5. The course exposed you to new knowledge and practices *

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Any other comments/suggestions *

Need more advance topics

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VALUE ADDED COURSE SUMMARY

1. **Title: Introduction to Deep Learning Concepts using MATLAB**
2. **Name of Speaker: MR.M.NUTHAL SRINIVASAN**
3. **Speaker Details: Assistant Professor, Department of ECE, E.G.S. Pillay Engineering College.**
4. **Date of speaker's presentation: 19.04.2021 – 24.04.2021**
5. **Beneficiary Details: PG CSE Students**
6. **Coordinator: Mrs. E.Elakiya (Assoc. Prof.,CSE ,EGSPEC)**

More about the Course

The main objective of this value added course is to make students comfortable with tools and techniques required in handling large amounts of datasets. They will also uncover various deep learning methods in NLP, Neural Networks etc. Several libraries and datasets publicly available will be used to illustrate the application of these algorithms. This will help students in developing skills required to gain experience of doing independent research and study. On completion of this course the students will be able to expose themselves towards intelligence systems and knowledge based systems. It also provides knowledge of learning networks. Students felt that this course was very interesting to learn and practice. "When engaged in deeper learning, students think critically and communicate and work with others effectively across all subjects. Students learn to self-direct their own education and to adopt what is known as 'academic mindsets' and they learn to be lifelong learners."

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CHENNAI)
(ACCREDITED BY NAAC WITH 'A' GRADE & NBA)
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE OF COMPLETION

Mrs. Abinaya M.D

has successfully completed the online value added course on "**Introduction to Deep Learning Concepts Using MATLAB**" conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 19.04.21 TO 24.04.21.

H. S. P.

Abinaya

Coordinators

HOD/CSE

Dr. S. Ramabalan

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE OF COMPLETION

Mr./Mrs. Pragathi J

has successfully completed the online value added course on "**Introduction to Deep Learning Concepts Using MATLAB**" conducted by Department of Computer Science and Engineering, E.G.S. Pillay Engineering College(Autonomous), Nagapattinam from 19.04.21 TO 24.04.21.

A. Jay

Coordinators

Pragathi

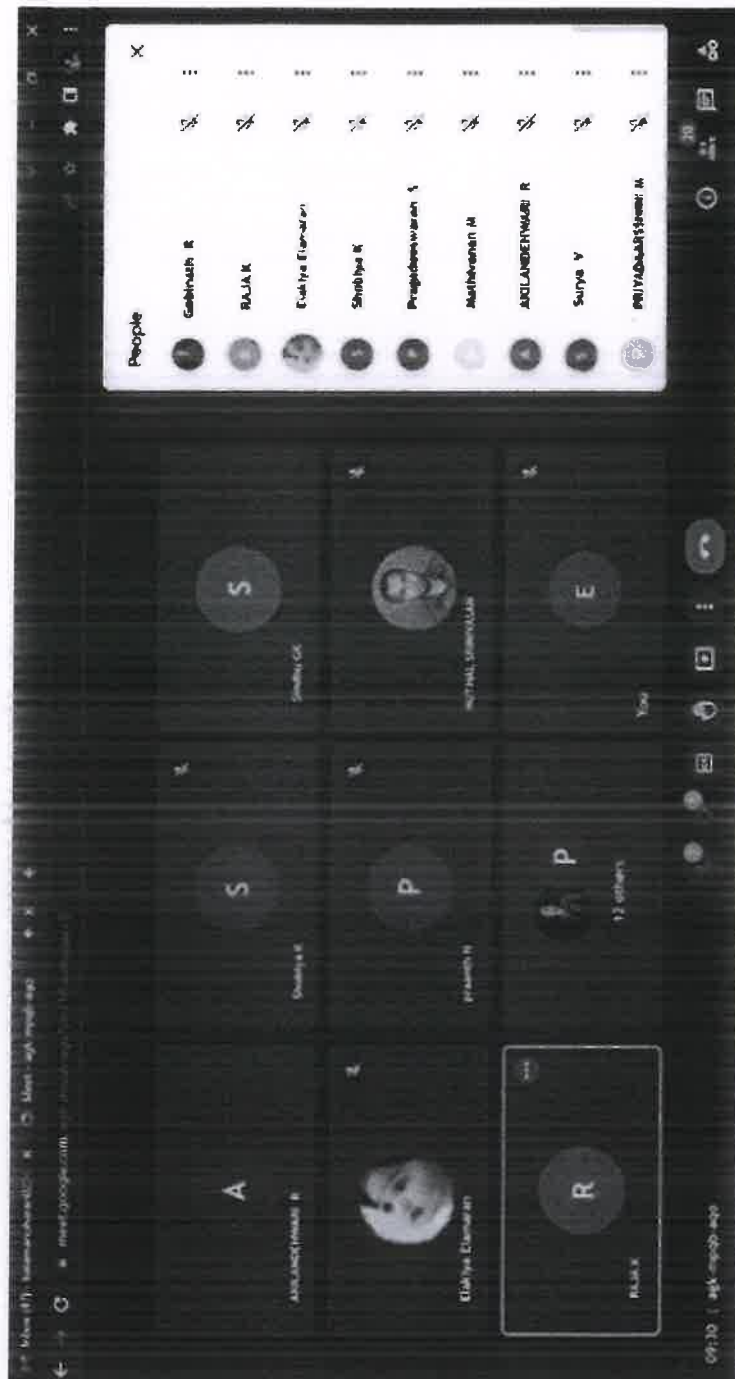
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Pragathi ATTESTED

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