BHARATI VIDYAPEETH'S
COLLEGE OF ENGINEERING, KOLHAPUR

Accredited by NAAC With 'A' Grade
Approved by AICTE, New Delhi & Affiliated to Shivaji University, Kolhapur
Near Chitranagari, Kolhapur - 416013 (MS)
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FOUNDER CHANCELLOR
Dr. Patangrao Kadam
M.A., LL. B., Ph. D.

PRINCIPAL
Dr. Vijay Ghorpade
M.E., Ph. D. (Computer)

NAAC SSR CYCLE- 2

Criterion 1	Curricular Aspects
Key Indicator 1.2	Academic Flexibility
1.2.1 Number of Add on /Certificate/Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. where the students of the institution have benefitted during the last five years	

BHARATI VIDYAPEETH'S
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- **Organizing Department:** Electronics& Telecommunication Engineering.
- **Name of Add-on Course:** Add-on Course "Raspberry Pi"
- **Course Code : ETC192001**
- **Name of Coordinator:** 1. Mr. S.S.Pawar
  2. Mr. M.S.Sonawane
- **Name of Resource Person:** 1. Mr. S.S.Pawar
  2. Mr. M.S.Sonawane
- **Date of Activity:** 03/08/2019 to 12/10/2019.
- **Participant:** E&TC and CSE Students (80 Students)
- **Details of Activity:**

  Raspberry Pi is a series of small single-board computersdeveloped in the United Kingdom by the Raspberry Pi Foundation in association with Broadcom.The Raspberry Pi project originally leaned towards the promotion of teaching basic computer science in schools and in developing countries. It is widely used in many areas, such as for weather monitoring,because of its low cost, modularity, and open design. A good knowledge of Raspberry Pi will help improve the employment potential of your students.
- **Outcome of Activity:**To create awareness about Raspberry pi and use of Raspberry Pi for various applications to electronics engineering student.
- **How it Bridges gap between Industry and Academia:** Raspberry Pi provides a powerful open source Hardware and software for engineering and scientific applications. Knowledge of Raspberry Pi creates industry ready student using open-source software and hardware.

- **Photo:**

Mr. S.S.Pawar/ Mr. M.S.Sonawane
Course In-charge

Dr. K. R. Desai
HOD

Dr. V. R. Ghorpade
Principal

Social Transformation through Dynamic Education

BHARATI VIDYAPEETH'S

COLLEGE OF ENGINEERING KOLHAPUR

DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

Add-on Course "Raspberry Pi"

- **Course Code : ETC192001**

Course Objectives:

To create awareness about Raspberry pi and use of Raspberry Pi for various application to electronics engineering student.

Course Outcomes:

On successful completion of the course, the students should be able to

1. Understand the features of the Raspberry pi.
2. Understand the peripheral resources of Raspberry pi.
3. Implement python programming for application of Raspberry pi.
4. Build simple application projects using Raspberry pi board.

COURSE CONTENTS

Session	Contents	Hours
1.	Introduction of Raspberry Pi.	01
2.	Familiar with Raspberry Pi hardware.	03
3.	Study of input/ output ports.	02
4.	Study of different resources/blocks/ peripherals of Raspberry Pi.	04
5.	Study of Operating system of Raspberry Pi.	02
6.	Hands on: Installation of Operating System on Raspberry Pi.	03
7.	Hands on: Programming with Raspberry Pi.	03
8.	Hands on: Various Sensors used with Raspberry Pi.	03
9.	Hands on: Interfacing Sensors to Raspberry Pi.	03
10.	Hands on: Programming for various sensors.	04
11.	Hands on: Building projects using Raspberry Pi.	04

Hardware Requirement:

- ✓ Raspberry Pi Hardware KIT.
- ✓ Various Sensors, Ethernet cable, power supply adaptor.
- ✓ Desktop PC/Laptop, keyboard, monitor, SD card.
- ✓ LCD Projector with screen

Resource Person:

1. Mr. Sanjay S. Pawar
2. Mr. Manik S. Sonawane

Mr. S.S.Pawar/ Mr. M.S.Sonawane
Course In-charge

Dr. K. R. Desai
HOD

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COLLEGE OF ENGINEERING, KOLHAPUR
DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

CERTIFICATE

"Raspberry pi"

This is to certify that **Mr. / Ms. Anikita M. Patil** has successfully completed the add-on course on **"Raspberry Pi "in** an online mode, organized from 03/08/2019 to 12/10/2019 by the Department of **Electronics & Telecommunication Engineering of Bharati Vidyapeeth's College of Engineering, Kolhapur.**

Mr. S.S.Pawar/ Mr. M.S.Sonawane	**Dr. K. R. Desai**	**Dr. V. R. Ghorpade**
Course In-charge	**HOD**	**Principal**

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DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

CERTIFICATE

"Raspberry pi"

This is to certify that **Mr. / Ms. Siddhi S. Patole** has successfully completed the add-on course on **"Raspberry Pi "in** an online mode, organized from 03/08/2019 to 12/10/2019 by the Department of **Electronics & Telecommunication Engineering of Bharati Vidyapeeth's College of Engineering, Kolhapur.**

Mr. S.S.Pawar/ Mr. M.S.Sonawane	**Dr. K. R. Desai**	**Dr. V. R. Ghorpade**
Course In-charge	**HOD**	**Principal**

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DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

CERTIFICATE

"Raspberry pi"

This is to certify that **Mr. / Ms. *Patil Priti J.*** has successfully completed the add-on course on **"Raspberry Pi "in** an online mode, organized from 03/08/2019 to 12/10/2019 by the Department of **Electronics & Telecommunication Engineering of Bharati Vidyapeeth's College of Engineering, Kolhapur.**

Mr. S.S.Pawar/ Mr. M.S.Sonawane	**Dr. K. R. Desai**	**Dr. V. R. Ghorpade**
Course In-charge	**HOD**	**Principal**

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CERTIFICATE

"Raspberry pi"

This is to certify that Mr. / Ms. ***Dharmaraj Renge*** has successfully completed the add-on course on **"Raspberry pi "in** an online mode, organized from 03/08/2019 to 12/10/2019 by the Department of **Electronics & Telecommunication Engineering of Bharati Vidyapeeth's College of Engineering, Kolhapur.**

Mr. S.S.Pawar/ Mr. M.S.Sonawane	**Dr. K. R. Desai**	**Dr. V. R. Ghorpade**
Course In-charge	**HOD**	**Principal**

BHARATI VIDYAPEETH'S

COLLEGE OF ENGINEERING KOLHAPUR

Department of Electronics & Telecommunication Engineering

- **Program Title:** Add-on Course "Raspberry Pi"
- **Name of Instructor/ Resource Person:** Mr. Sanjay S. Pawar
- **Date of Activity:** 03/08/2019 to 12/10/2019.

Attendance Sheet

Sr. No.	Name of Student	03/08 Sign	04/08 Sign	05/08 Sign	06/08 Sign	07/08 Sign	08/08 Sign	09/08 Sign	10/08 Sign	11/08 Sign	12/08 Sign
1.	Prathamesh Virappa Vadar										
2.	Vishwaraj Sunil Patil										
3.	Rohit Dinkar Khade										
4.	Ketan Vinodkumar Chandrekar										
5.	Anuj Ravindra Shiutre										
6.	Sanket Sayaji Patil										
7.	Siddhesh Parshram Kogale										
8.	Siddhi Sambhaji Patole.										
9.	Pratiksha Shivajirao Patil										
10.	Shradha. Santosh. Rabade										

11.	Shruti S. Mane										
12.	Amate Sharvari Sunil										
13.	Hatkar Surekha Tanaji										
14.	Vaishnavi Dnyanu lavate										
15.	Aishwarya R Taravdekar										
16.	Yogita S. Sutar										
17.	Sharwari S. Dongale										
18.	Shweta J. Khade										
19.	Nikita M. Mulik										
20.	Kailas B. Shinde										
21.	Abhishek P. Koli										
22.	Omkar P. Chavan										
23.	Gavali Hatesh A.										
24.	Kadam Pratikraj										
25.	Grishma Maruti chavan										
26.	Pranali Ruturaj Desai										
27.	Omkar Suresh Gandhi										
28.	DOIPHODE SURESH HARIBHAO										
29.	Chavan sanika anandrao										

30.	Dalavi Parth Sagar										
31.	Pisal Yash										
32.	Dongale Jaydeep Ulhas										
33.	Shubham Sadanand Kamble										
34.	Prathik Yuvraj Dawant										
35.	Kaushik Nilesh Parab										
36.	Ashish Uttam Mokashi										
37.	Abhijit Bhagat Choudhari										
38.	Ruturaj Dhananjay Patil										
39.	Shubham Bharat Somwanshi										
40.	Sayali Suresh Chavan										
41.	Swarupa Bajirao Faralkate										
42.	Shantanu Shrikant Tilkole										
43.	Mali Sanket Vasant										
44.	Divate Yash Shivkant										
45.	Salokhe Chaitanya Rajendra										
46	Abhishek Yogesh Mane										
47	Vijaya Sanjay Shinde										
48	Swarupa Hari Telavekar										

49	Dhanraj Laxman Shinde											
50	Poonam Bedge											
51	Harshada Patil											
52	Navnath Abaso Bandgar											
53	Nitin Ramesh Bhosale											
54	Vaishnav Sanjay Gaikwad.											
55	KHADE SAMARTH SANJAY											
56	Shubham laxman Lokhande											
57	Dhirajkumar Babasaheb Sabale											
58	Omkar Bhimrao Patil											
59	Yugant Vilas Patil											
60	Mahadev Vitthal Patil											
61	Siddik Sattar Mulani											
62	Rohan Shivanand Salgare											
63	Devang Dilip Kotkar											
64	Sandesh Ananda Masale											
65	Anuj Ravindra Shirutre											
66	Sanket Sayaji Patil											
67	Prathamesh. Virappa Vadar											

68	Kailas Balasaheb Shinde	Kailas	Kailas	Kailas	Kailas	Kailas	Kailas	Kailas	Kailas	Kailas	Kailas
69	Chandradip suresh patil										
70	Ranjeet Dhanaji Ghotane										
71	Pratham Jayprakash Khivansara										
72	Prathamesh suresh Kaddli										
73	Pratik R. Chougale										
74	Sarthak S. Jadhav										
75	Harish R. Pareek										
76	Atik I. mulla.										
77	Shamrao V. Desai										
78	Karan D. Kumbhar										
79	Viraj R. Patil										
80	Manish R. Jadhav										

Mr. S.S.Pawar

Instructor

Vijay Ram Ghorpade

Digitally signed by Vijay Ram Ghorpade
Date: 2023.04.17 10:48:14 +05'30'