

Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

Harpur Nagar, Umred Road (Near Bada Tajbagh), Nagpur-24 (Approved by AICTE, New Delhi, Govt. of Maharashtra and affiliated to Rashtrasant Tukdoji Maharaj Nagpur University) Email: principalpbcoe@gmail.com, Website: www.pbcoe.edu.in



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List of Add-on/ Certificate Course offered During 2019-20

Sr.No.	Name of Program / Certificate Program Offered	Course Code
1	Online Certificate Course on "Data Science using Python"	CSE192001
2	Online Certificate Course on "Cyber Security and Forensics"	CSE192002
3	Certificate Course on "Python Programming"	IT192001
4	Certificate Course on "HTML & CSS"	IT192002
5	Certificate Course on "JavaScript"	IT192003
6	Certification course on "Potential Application and used Cases of 5G Technology"	EC192001
7	Certification course on "Machine Learning"	EC192002
8	Certification course on PCB Design and Fabrication	EC192003
9	Certificate Course on "Basics of Mechatronics"	ME192001
10	Certificate Course on "Industry 4.0"	ME192002
11	Certificate Course on "Advances In Concrete Technology"	CV192001
12	Certificate Course on "Advanced Geo technical Engineering"	CV192002
13	Certificate Course on "Basic design and drafting by Auto CAD"	CV192003

Certified Documents From Page Number 2- Page Number 59



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

Harpur Nagar, Umred Road (Near Bada Tajbagh), Nagpur-24 (Approved by AICTE, New Delhi, Govt. of Maharashtra and affiliated to Rashtrasant Tukdoji Maharaj Nagpur University) Email: principalpbcoe@gmail.com, Website: www.pbcoe.edu.in



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Department of Computer Science and Engineering

2019-20

NOTICE

All the students of VI sem B. E. CSE are hereby informed that, Dept of CSE is organizing the Online Certificate Course. The details are as follows.

Name of the course: Data Science using Python

Duration: 04 May 2020 To 21 May 2020

Time: 4.00 pm to 6.00 pm (In Online Mode)

Resource Person: Mr Anurag Edlabadkar, Technology Director, Datalytics, Nagpur.

All are informed to attend the same.

K. N. Hande

Head of Department
Department of Computer Sc. & Engg.
Priyadarshini Bhagwati College of Engg.
Umred Road, Nagpur - 24.



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

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Department of Computer Sc. and Engineering 2019-20

Certificate Course on Data Science using Python Course Module

Sr No	Contents	No. of Hrs.
1.	Introduction to Python	2
2.	Installation Python and PyCharm, Anaconda	2
3.	Data types, Variables, Operators, Keywords of Python	2
4.	Python In-build Functions	2
5.	Namespaces and Scope in Python	2
6.	File Handling	2
7.	Functions and Lambda	2
8.	Exception Handling	2
9.	Introduction to Data Science	2
10.	Mathematical & Statistical Skills	2
11.	Statistical Foundations for Data Science	2
12.	Optimization Techniques	2
13.	Data Visualization	2
14.	Matrix Computations	2
15.	Experimentation, Evaluation and Project Deployment Tools	2

Hand of Daniel

Head of Department
Department of Computer Sc. & Engg.
Priyadarshini Bhagwati College of Engg.
Umred Road, Nagpur - 24.



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

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Department of Computer Science and Engineering Academic session 2019-20

Report of Online Certificate Course on Data Science using Python

1. Event Title

: Online Certificate Course on Data Science using Python

2. Event Date

: 04 May 2020 To 20 May 2020

3. Event conduction duration: 4.00 PM To 6.00 PM

4. Event venue

: In Online Mode through Google Meet

5. Sem/Branch

:VI Sem B. E. CSE (50 students)

6. Event resource person

: Mr Anurag Edlabadkar, Technology Director, Datalytics, Nagpur.

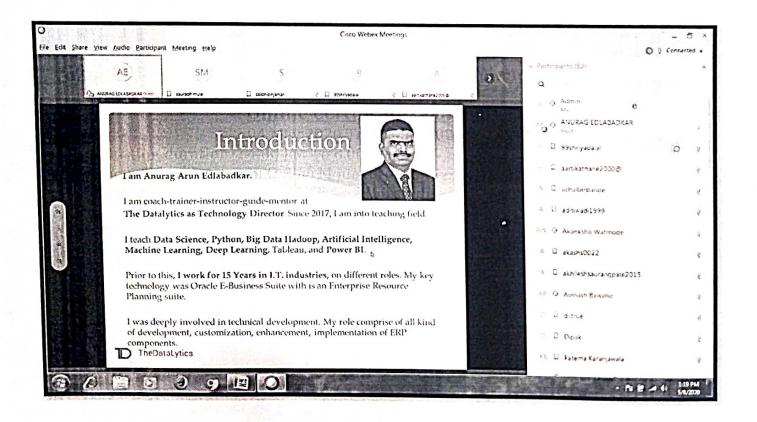
7. Name of Event Coordinator: Prof K N Hande

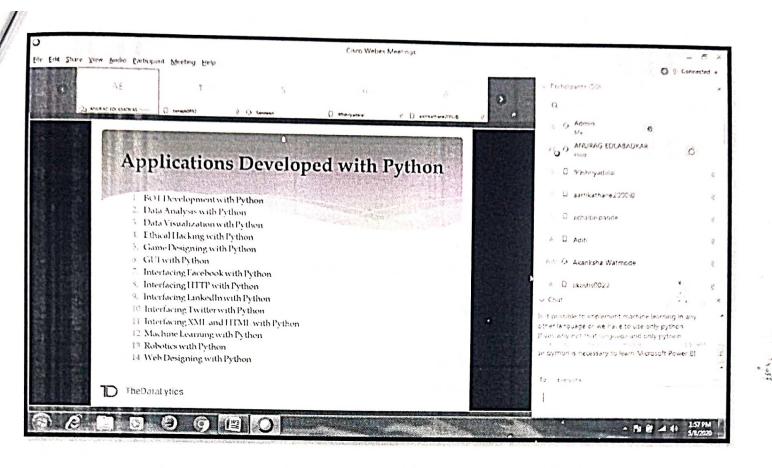
8. Objective

: To make aware students about importance of Data Science

9. Outcome

: Students have been demonstrated the use of Python in Data Science





Prof K N Hande

Head of Department

Department of Computer Sc. & Enga. Priyadarshini Bhagwati College of Engg.

Umred Road, Nagpur - 24.

Dr. Mrs A R Chaudhari **IQAC Coordinator**

IQAC Coordinator Priyadarshini Bhagwati College of Engg. Umred Road, Nagpur. Dr. N. K.Choudhari **Principal**

Principal

Priyadarshini Bhagwati College of Engg. Umrad Road, Naguer.



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Department of Computer Science and Engineering

2019-20

NOTICE

All the students of VIII sem B. E. CSE are hereby informed that, Dept of CSE is organizing the Online Certificate Course. The details are as follows.

Name of the course: Cyber Security and Forensics

Duration: 04 May 2020 To 21 May 2020

Time: 4.00 pm to 6.00 pm (In Online Mode)

Resource Person: Mr Shrikant Ardhapurkar, CEO, Crypto Forensics Technologies, Nagpur.

All are informed to attend the same.

K. N. Hande

Head of Bepartment

Papartment of Computer Sc. & Engg. Priyadarshini Bhagwati College of Engg.

Umred Road, Nagpur - 24,



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Department of Computer Sc. and Engineering 2019-20

Online Certificate Course on Cyber Security and Forensics Course Module

Sr No	Contents	No. of Hrs.
1.	Introduction to Cryptography	2
2.	Symmetric and Asymmetric key cryptography	2
3.	Hash functions	2
4.	Fundamentals of Computer and Cyber Forensics	. 2
5.	Cyber Forensics (Evidence Recovery & Investigation)	2
6.	Cyber Crimes and Cyber Laws	2
7.	Cybercrime and computer crimes	2
8.	Data Acquisition and authentication process	2
9.	Unix and mac File systems	2
10.	Forensic Tools	2
11.	Tools for Disk imaging and data recovery	2
12.	Retrieving information	2
13.	Digital Investigation	2
14.	Hacking and cracking	2
15.	Retrieving deleted data	· 2

Department of Computer Sc. & Eng.
Priyadarshini Bhagwati College of Engg.
Umred Road, Nagpur - 24.



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Department of Computer Science and Engineering Academic session 2019-20

Report of Online Certificate Course on Cyber Security and Forensics

1. Event Title : Online Certificate Course on Cyber Security and

Forensics

2. Event Date : 04 May 2020 To 20 May 2020

3. Event conduction duration: 4.00 PM To 6.00 PM

4. Event venue : In Online Mode through Google Meet

5. Sem/Branch :VIII Sem B. E. CSE (50 students)

6. Event resource person : Mr Shrikant Ardhapurkar, CEO, Crypto Forensics Technologies,

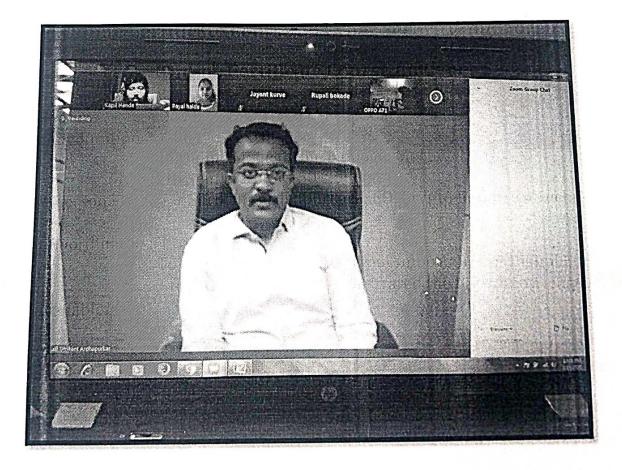
Nagpur.

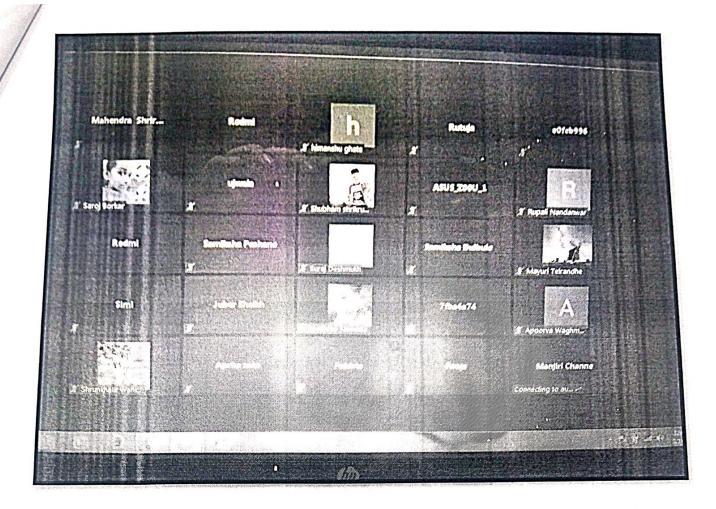
7. Name of Event Coordinator: Prof D V Jamthe

8. Objective : To make aware students about importance of Digital Forensics

9. Outcome : Students have been demonstrated the basic knowledge of forensics

use and tools available.





Prof K N Hande Head of Department Department of Computer Sc. & Engg.
Priyadarshini Bhagwati College of Engg. Umred Road, Nagpur - 24.

Dr. Mrs A R Chaudhari **IQAC** Coordinator

Priyadarshini Bhagwati College of Engg.

Priyadarshini Bhagwati College of Engg.

Umred Road, Nagpur.

Umred Road, Nagpur.

Mungh

Dr. N. K.Choudhari Principal Principal

PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

Department of Information Technology Academic session 2019-20 (Odd semester)



Free Certification Course on **Python Programming**

(30 Hours Duration)

Time: 2 PM to 5 PM (Every Saturday)

Date of Commencement: 10/08/2019 to 28/09/2019

VENUE: IT Department, DBMS Lab

Contact:

Ms.Komal Pawar (Asst. Prof, IT) 8788584094

Seat

Capacity-20 only

Registration:

First Come First Basis

Date: 31/07/2019

NOTICE

All the Heads are hereby informed that Department of Information Technology is organizing free certification Course on **Python Programming**. You are hereby informed to circulate the notice of course attached herewith to the students of your department. Certificate will be issued to the students after successful completion of the course.

The details of the course and other information is attached herewith.

Sr. No	Name of the Course	Date of Commencement	Venue	Seats
1.	Python Programming	10/08/2019	DBMS Lab, II Floor IT Department	20

Dr. N.K. Choudhari

Prinscipal
Privadarshini Bhagwati College of Engg.
Umred College of Engg.

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PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING, NAGPUR

Department of Information Technology Session 2019-20 Certification Course Python Programming

Syllabus

Introduction to Python

Python Introduction, History of Python, Introduction to Python Interpreter and program execution, Python Installation Process in Windows and Linux, Python IDE, Introduction to anaconda, Python variable declaration, Keywords, Indents in Python, Python input/output operations, Python's Built-in Data types String, List, Tuple, Set.

Python Function

Function in python. Introduction to functions, Function definition and calling, Function parameters, Default argument function,

Introduction to Files

Introduction to files and types of files (Text, Binary and CSV file), CSV file: import csv module, open/ close, write

Introduction to Numpy Library

Python for Data Handling-Basic of Numpy Array

Introduction to Pandas Library

Introduction to MatplotLib Library

PYTHON for Data Visualization, Visualization with metplotlib, line plots, scatter plots, Histograms, binning and density, three dimensional plotting, Geographic data.

Course Coordinator
Ms. K. Pawar

PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING, NAGPUR

Department of Information Technology Session 2019-20 Certification Course Python Programming

Day	Date	Contents	
1.	10/8/19	Introduction to Python Python Introduction, Introduction to Python Interpreter and program execution, Python Installation Process in Windows and Linux, Python IDE, Introduction to anaconda	
2.	17/8/19	python variable declaration, Keywords, Indents in Python,Python input/output operations,Python's Built-in Data types String, List, Tuple, Set	
3.	24/8/19	Function in python. Introduction to functions, Function definition and calling, Function parameters, Default argument function, Variable argument function.	
4.	31/8/19	Introduction to files and types of files (Text, Binary and CSV file),CSV file: import csv module, open/ close, write	
5.	7/9/19	Introduction to Numpy Library, Python for Data Handling-Basic of Numpy Array	
6.	14/9/19	Introduction to Pandas Library	
7.	21/9/19	Introduction to MatplotLib Library:PYTHON for Data Visualization,Visualization with metplotlib	
8.	28/9/19	line plots,scatter plots,Histograms,binning and density, three dimensional plotting,Geographic data.	



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Department of Information Technology

Academic session 2019-20

Certification Course On Python Programming

1 Event Title

Python Programming

2 Course Code

IT192001

3 Event Date

10/8/2019 to 28/9/2019

4 Event conduction duration

30 Hrs

5 Event venue

Database Mangement System Lab

6 Course Coordinator

Ms.K.Pawar

7 Number of students

20

8 Objective

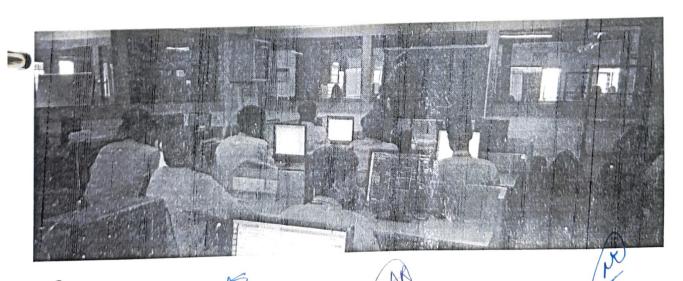
To make students aware about Python programming

language and its application for data analysis.

9 Outcome

The students came to know how to handle large amount of data and to perform statistical analysis, data analysis, draw different types of graphs and implantation of the programs

in Python Language.



Course Co-ordinator

Flead Mr. M. S. Chaudhari IQAC Co-ordinator Dr. Ms. A. R. Chaudhari Principal Dr N. K. Choudhari

Priyadarshini Bhagwati College of Engg Umred Road, Nagpur. Umred Road, Nagpur.

PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING, NAGPUR

Department of Information Technology

2019-20



Free Certification Online Course on HTML & CSS

Time: 9:30 AN	A to 10:30 AM	DATE: 04/11/2019	to 0 9 /12/2019
VENUE- Web Tec	hnology Lab, Do	epartment of Informa	ation Technology

Contacts Mr. M.S. Chaudhari(HOD, IT) 8806011511

Ms. S.H.Chaflekar(Asst. Prof, IT)

Seat Capacity-50 only



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Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

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Department of Information Technology Academic Session 2019-2020

NOTICE

Date -26/10/2019

All the Students are hereby informed that Department of Information Technology is organizing free certification Course on HTML & CSS from dated 04/11/2019. Interested Students can enroll to the course, certificate will be issued after successful completion of the course.

The Details of the course and other information is attached herewith

Sr. No	Name of the Course	Date of Commencement	Venue	Seats
1	HTML & CSS	04/11/2019	Web Technology Lab	50

Mr.M.S.Chaudhari HOD

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PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING, NAGPUR

Department of Information Technology

Session 2019-20

Free Certification Course Course Name -Skill Development on HTML & CSS Syllabus

Coding Basics: Intro to HTML Syntax The HTML,

head, title, & body tags Headings,

paragraphs, & lists.

The strong & em tags

The doctype

The lang attribute

The meta tag & the unicode character set

Coding Links: Absolute & Relative URLs

Anchor tags & hrefs

Linking to other websites

Linking to pages within a website

Opening a link in a new browser window/tab Adding Images

The break tag

The image tag & source attribute

Using the width, height, & alt attributes

Using horizontal rules Intro to Cascading Style Sheets (CSS)

The style tag

Tag selectors

The font-size, font-family, color, & line-height properties

The class attribute

CSS class selectors

The span tag

CSS opacity Div Tags, ID Selectors, & Basic Page Formatting

Dividing up content with the div tag

Assigning IDs to divs

Setting width & max-width
CSS background-color
Adding padding inside a div
Centering content
CSS borders

Course Coordinator
Ms. S.H.Chaflekar

PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING, NAGPUR

Department of Information Technology Session 2019-20

Free Certification Course Course Name -HTML & CSS Syllabus

Day	Date	Topic	
Day-1	4/11/2019	Coding Basics: Intro to HTML Syntax The HTML,	
Day-2	5/11/2019	head, title, & body tags Headings,	
Day-3	6/11/2019	Paragraphs, & lists.	
Day-4	7/11/2019	The strong & em tags	
Day-5	8/11/2019	The doctype	
Day-6	9/11/2019	The lang attribute	
Day-7	11/11/2019	The meta tag & the unicode character set	
Day-8	13/11/2019	Coding Links: Absolute & Relative URLs	
Day-9	14/11/2019	Anchor tags & hrefs	
Day-10	15/11/2019	Linking to other websites	
Day-11	16/11/2019	Linking to pages within a website	
Day-12	18/11/2019	Opening a link in a new browser window/tab Adding Images	
Day-13	19/11/2019	The break tag	
Day-14	20/11/2019	The image tag & source attribute	
Day-15	21/11/2019	Using the width, height, & alt attributes	
Day-16	22/11/2019	Using horizontal rules Intro to Cascading Style Sheets (CSS)	
Day-17	23/11/2019	The style tag	
Day-18	25/11/2019	Tag selectors	
Day-19	26/11/2019	The font-size, font-family, color, & line-height properties	
Day-20	27/11/2019	The class attribute	
Day-21	28/11/2019	CSS class selectors	
Day-22	29/11/2019	The span tag	

Day-23	30/11/2019	CSS opacity Div Tags, ID Selectors, & Basic Page Formatting
Day-24	02/12/2019	Dividing up content with the div tag
Day-25	03/12/2019	Assigning IDs to divs
Day-26	04/12/2019	Setting width & max-width
Day-27	05/12/2019	CSS background-color
Day-28	06/12/2019	Adding padding inside a div
Day-29	07/12/2019	Centering content
Day-30	09/12/2019	CSS borders



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Department of Information Technology Academic session 2019-2020

Report on Certification Course on HTML & CSS

1. Title of the Course

: Certification Course on HTML & CSS

2. Course Code

: IT192002

3. Course Date

: 04-11-19 to 09-12-19

4. Course conduction duration

30 Days

5. Course venue

: Project Lab, IT Department, PBCOE

6. Event resource person/Event Coordinator: Ms. S.H.Chaflekar, PBCOE, Nagpur

7. Number of students

: 55

8. Objective

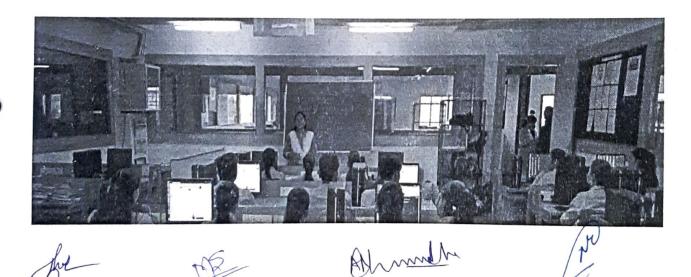
: To provide students knowledge about webpages with wellstructured HTML and correct CSS layout/styling patterns. Personalize web pages using text

formatting, graphics, audio, and video elements.

9. Outcome

: Students will be able to create customized websites using

well structured HTML and CSS formatting.



Program Co-

Prof. M. S. Chaudhari ordinator/Resource

IQAC Co-ordinator

Dr. Ms. A. R. Chaudhari

Principal Dr. N. K. Choudhary

Principal

Person

IQAC Coordinator

Priyagarehini Bhagwati College of EngAriyadarshani Bhagwati College of Enga Umred Read, Nagpur.

Umred Roan Magnur.

PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING, NAGPUR

Department of Information Technology 2019-20



Free Certification Course on

JavaScript

Time: 9:30 AM to 10:30 AM | DATE: 01/02/2020 to 09/03/2020 VENUE- Project Lab, Department of Information Technology

Contacts
Dr. M.S. Chaudhari(HOD, IT)
8806011511

Ms. R. D. Shinganjude(Asst. Prof, 1T) 8983749474

Seat Capacity-50 only



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING Harpur Nagar, Umred Road (Near Bada Tajbagh), Nagpur-24 (Approved by AICTE, New Delhi, Govt. of Maharashtra and affiliated to Pasktrasant Takkeli Makazai Nagara University)



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Department of Information Technology Academic Session 2019-2020

NOTICE

Date -27/01/2020

All the Students are hereby informed that Department of Information Technology is organizing free certification Course on JavaScript from dated 01/02/2020. Interested Students can enroll to the course, certificate will be issued after successful completion of the course.

The Details of the course and other information is attached herewith

Sr. No	Name of the Course	Date of Commencement	Venue	Seats
1	JavaScript	01/02/2020	Project lab, IT Department	50

Prof.M.S.Chaudhari HOD

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PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING, NAGPUR

Department of Information Technology

Session 2019-20

Free Certification Course

Course Name -Skill Development on JavaScript Syllabus

Introduction to JavaScript Language

Using Script Tag

Inserting

Java Script into Tags

Linking Java Script from Separate Files,

JavaScript Expression

Operators

Defining and Naming

Variables, Data Types,

Returning Values from Functions

Function: Advanced Concepts

Function as Data,

Anonymous Function,

Callbacks, Self-invoking

Inner (Private) Functions,

Functions that Return Functions

Function: Rewriting itself,

Variable Scopes,

Function Level,

No Block Level, Global Level

What Are Objects?

Objects and the Dot Syntax,

Creating an Object with a Constructor,

Properties of the Object,

Methods of the Object

Natural languages and communication errors;

Errors vs exceptions;

Errors without exceptions;

Types of errors - SyntaxError;

Types of errors - ReferenceError;

Types of errors - TypeError;

Types of errors - RangeError;

The try-catch statement;

Conditional exception handling;

The finally statement;

The throw statement

Course Coordinator

Ms. R. D. Shinganjude

8983749474



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Department of Information Technology Academic session 2019-20

Report on Certification Course on Java Script

1. Title of the Course

Certification Course on Skill Development on

Java Script

2. Course Code

: IT192003

3. Course Date

01-02-20 to 09-03-20

4. Event conduction duration

30 Days

5. Event venue

Project Lab, IT Department, PBCOE

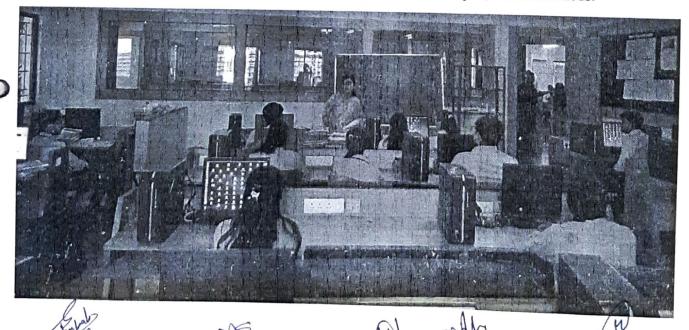
Event resource person/Event Coordinator

Ms. R. D. Shinganjude, PBCOE, Nagpur

7. Number of students

8. Objective : To make students aware about Salesforce CRM Tool. Its Admin and development work with Apex programming knowledge.

9. Outcome The students came to know what is Salesforce, how to create app, fields, object,etc. They also gained Knowledge of workflow, process builder, flow, trigger, Async Apex - Batch Apex, Queueable Apex, Schedule Apex, Future Methods.



Program Coordinator/Resource

Prof. M. S. Chaudhari

IQAC Co-ordinator

Dr. Ms. A. R. Chaudhari

Principal

Dr. Np.K. Chqudhari

IQAC Coordinator Pripaderalkini Bhagwati College of Englyadarshini Bhagwati College of Engg Umred Road, Nagpur.

Umred Road Mannur

Person



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIVADARSHINI BHAGWATI COLLEGE OF ENGINEERING Harpur Nagar, Umred Road (Near Bada Tajbagh), Nagpur-24 (Approved by AICTE, New Delhi, Govt. of Maharashtra and affiliated to Rashtrasant Tukdoji Maharaj Nagpur University) Email: principalpbcoe@gmail.com, Website: www.pbcoe.edu.in NAAC Accredited



Department of Electronic & Communication Engineering

Academic session 2019-20

NOTICE

Date: 20/06/2019

All the students of Electronics and Communication Engineering Department are hereby informed that the department is going to organize free Certification course on "Potential Application and use Cases of 5G Technology". The interested students register their name to the undersigned faculty.

The detail of the course:

Name of Course

: Introduction to Robotics

Course Code

: EC192001

Date of Commencement

: 01/07/2019

Total Hrs

: 30

Seats

: 30

Dr. (Ms.) D. M. Kate HOD, EC De**pte** PRCOE

Electron Communication
Priyadarshini Bhagwati College of Engg
Umrer Road, Nagpur.

Copy to:

Principal Sir for kind information, Dean Academics, For circulation to faculty members, For display on notice board of Deptt.



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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING Academic Session 2019-20

A Certificate Course on "Potential Application & Use cases of 5G Technology" CONTENTS

Sr. No.	Contents	No. of Hours
1	Introduction to 5G technology applications: Overview of 5G technology and potential applications, Applications of 5G technology in different industries: healthcare, gaming, transportation, smart cities, and more, Introduction to AR and VR technologies and how they utilize 5G networks, Hands-on demonstration and experimentation with AR and VR technologies	8 Hours
2	5G and Smart Cities: Understanding smart city technologies and infrastructure, Introduction to Smart City 5G applications, Case studies of smart cities using 5G technology, Discussion on challenges and opportunities for future Smart City infrastructure	2 Hours
3	5G and Healthcare: Overview of telemedicine and remote patient care technologies, Case studies of hospitals leveraging 5G technology to improve patient health, Hands-on demonstration and experimentation with healthcare applications using 5G networks, Implications of 5G healthcare technologies on patient privacy and security	8 Hours
4	5G and Transportation: Overview of autonomous driving technology, Discussion of the necessary infrastructure to support autonomous driving with 5G networks, Investigation of current use cases for 5G-powered autonomous vehicles, Hands-on experimentation with systems designed to leverage 5G communications within the auto-motive industry	8 Hours
5	5G and Manufacturing: Introduction to Industry 4.0 and advanced manufacturing technologies, Application of 5G technologies in smart manufacturing technologies, Overview of modern factory infrastructure using 5G technology, Case studies of 5G industrially connected factories	4 Hours
6	Special topics on 5G use cases: Augmented Reality and Virtual Reality (AR/VR) and 5G applications, 5G deployment challenges and opportunities: Security and privacy, Discussion on the future of 5G technology, including its importance for artificial intelligence, the Internet of things, autonomous systems, and more, Reflections and project presentations	8 Hours
	Total	30 Hours

Dr.(Ms.) D. M. Kate Head of Department

Electronios & Communication Priyadarshini Bhagwati College of Engg. Umrer Road, Nagpur.



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

Harpur Nagar, Umred Road (Near Bada Tajbagh), Nagpur-24
(Approved by AICTE, New Delhi, Govt. of Maharashtra
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Department of Electronics & Communication Engineering Academic session 2019-20

Report of Certification Course

1. Event Title : Certification Course on "Potential Application and Use

Cases of 5G technology".

2. Event Date : From 01/07/2019 to 31/07/2019

3. Event conduction duration : 30 Hours

4. Event venue : Classroom and Laboratory

5. Sem/Branch : V and VII Sem – Electronics and Communication Engg.

6. Event resource person : Ms. Sapna S. Dhanvijay

7. Name of Event Coordinator : Ms. Sapna S. Dhanvijay

8. Objective : The objective of a certification course on "Potential

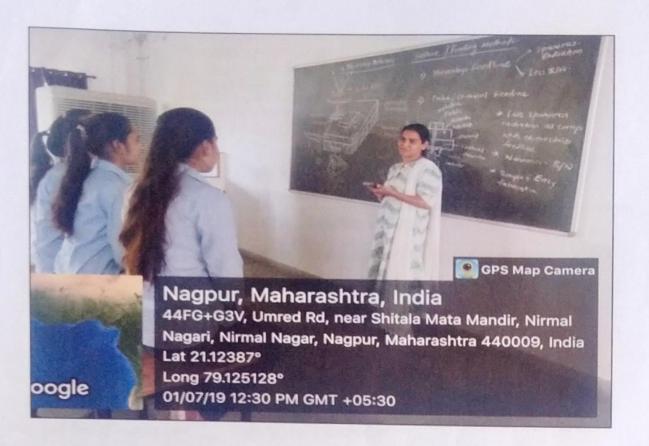
Applications and Use Cases of 5G Technology" is to provide participants with a comprehensive understanding of the potential applications, use cases and implications of 5G technology across various industries. The course aims to equip participants with the knowledge and insights to identify and explore the diverse opportunities and challenges associated with

the deployment

9. Outcome : Upon successful completion of the certificate course,

participants should be equipped with the necessary knowledge, insights, and practical understanding to identify, evaluate and explore the potential applications and use cases of 5G technology across industries. They should be well-prepared to contribute to discussions, planning and decision-making related to the deployment and utilization of 5G in various

professional settings.



Ms. S. S. Dhanvijay Program Coordinator

Dr. D.M.Kate Head of Department Head

Electronies & Communication myadarshini Bhagwati College of Engg. oriyadarshini Bhagwati College of Engy Umrer Road, Nagpur.

Urnred Road, Nagpur.



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Department of Electronic & Communication Engineering

Academic session 2019-20

NOTICE

Date: 20/08/2019

All the students of Electronics and Communication Engineering Department informed that the department is going to organize free Certification course on "Machine Learning". The interested students register their name to the undersigned faculty.

The detail content of the course:

Name of course

Machine Learning

Course Code

: EC192002

Date of commencement : 27/08/2019

Seats

30

Hrs.

30

Dr. (Ms.) D. M. Kate HOD, E Dept.

Electronics & Communication Priyadarshini Bhagwati College of Enge Umrer Road, Nagour.

Copy to:

Principal Sir for kind information, Dean Academics, For circulation to faculty members, For display on notice board of Deptt.



PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING Academic Session 2019-20

A Certificate Course on

"Machine Learning" CONTENTS

Sr. No.	Contents	No. of Hours
1	Basics of Machine Learning, Different types of machine learning algorithms, Supervised learning, unsupervised learning and reinforcement learning	2 Hours
2	Introduction to Python programming for machine learning	4 Hours
3	Data pre-processing and feature engineering: Data cleaning and handling missing values, feature selection and dimensionality reduction techniques, Data scaling and normalization, Handling categories variables and feature encoding	3 Hours
4	Linear regression and logistic regression, Decision Trees and Random Forests, Support vector machines, Naïve bayes Classifiers	5 Hours
5	Model evaluation metrics: Accuracy, Precision, Recall and F-1 score, Cross validation and model selection, Over-fitting and Under-fitting, Bias-variance trade-offs	3 Hours
6	Clustering algorithms: K-means, hierarchical clustering, Dimensionality reduction techniques, Principal Component analysis,	5 Hours
7	Reinforcement Learning and recommender system: Introduction to reinforcement learning, Markov Decision processes and Q-learning, Applications of reinforcement learning	4 Hours
8	Applications of machine learning: Image recognition and computer vision, Fraud detection and anomaly detection, Customer segmentation and personalized marketing, Time series analysis and forecasting	4 Hours
	Total	30 Hours

Dr. (Ms.) D. M. Kate

Head of Department

Electronios & Communication Priyadarshini Bhagwatt College of Engu Umrer Road, Nagpur.



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Department of Electronics & Communication Engineering Academic session 2019-20

Report of Certification Course

Event Title : Certification Course on "Machine Learning".

2. Course Code : EC192002

3. Event Date : From 27/08/2019 to 23/09/2019

4. Event conduction duration :30 Hours

5. Event venue : Computer Lab & Department Library (Third Floor)

6. Sem/Branch : V & VII Sem – Electronics and Communication Engg.

7. Event resource person : Ms. Pooja V. Gawande

8. Name of Event Coordinator : Ms. Pooja V. Gawande

9. Objective :

The objective of a certification course on "Machine Learning" is to provide participants with a comprehensive understanding of machine learning principles, algorithms and applications. This course aims to equip participants with the knowledge and skills to develop and implement machine learning models for various real-world problems.

10. Outcome

By completing a certificate course on "Machine Learning", participants will acquire the knowledge and skills necessary to understand, implement, and apply machine learning algorithms in various domains. They will be prepared to work as machine learning engineers, data scientists, or analysts, utilizing machine learning techniques to solve complex problems and extract insights from data. Additionally, participants will have a strong foundation to further explore advanced topics in machine learning and specialized domains such as natural language processing, computer vision or deep learning.





Ms. P.V. Gawande Program Coordinator

Dr. D.M.Kate Head of Department Head

Electronios & Communication riyadarshini Bhagwati College of Engg.
Priyadarshini Bhagwati College of Eng.
Umrer Road, Nagpur.

Umrer Road, Nagpur.

Dr. N. K. Choudhari Brincipal



PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

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Department of Electronic & Communication Engineering

Academic session 2019-20

NOTICE

Date: 01/01/2020

All the students of Eight semester Electronics and Communication Engineering Department are hereby informed that the department is going to organize free Certification course on "PCB Design and Fabrication". The interested students register their name to the undersigned faculty.

The detail content of the course:

Name of course

: PCB Design and Fabrication

Course Code

: EC192003

Date of commencement

: 06/01/2020

Seats

: 30

Dr. (Ms.) D. M. Kate HOD, EC Dept. PBCOE

Nagputtead

Electronics & Communication
Priyadarshini Bhagwati College of Engg.
Umrer Road, Nagpur.

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For display on notice board of Deptt.



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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING Session 2019-20

A Certificate Course on "PCB Designing and Fabrication" CONTENTS

r. No.	Contents	No. of Hours
1	Introduction to PCB designing: Basics of printed circuit boards	2 Hours
	and their importance, overview of the PCB design process,	
	Introduction to industry standard PCB design software.	
2	PCB Design tools and software: Introduction to PCB design	4 Hours
	software like Eagle, Proteus, KiCad, etc. Exploring the user	
	interface and design features, Creating and managing PCB design	
	projects	
3	Schematic design and component selection : Creating and	3 Hours
	editing schematic symbols, Drawing electrical schematics using	
	software tools, Selecting appropriate components for the design	
4	PCB layout design: Understanding design rules and constraints,	3 Hours
	Placement strategies for components, PCB layout techniques for	
	signal integrity and EMI considerations	
5	PCB routing techniques: Understanding different routing	3 Hours
	techniques, Routing high speed signals and different pairs,	
	Managing signal integrity issues during routing	
6	Design verification and analysis: Performing design rule	3Hours
	check (DRC) and Electrical rule check (ERC), Signal integrity	
	analysis and simulation, Thermal analysis and consideration	
7	PCB manufacturing process: Introduction to PCB	2 Hours
	manufacturing techniques, Understanding fabrication files	
	(Gerber, NC drill etc), Design for manufacturing consideration	
8	PCB Assembly and testing: Introduction to PCB assembly	3 Hours
	process, soldering techniques and considerations, Testing and	
	troubleshooting, PCBs,	
9	Advanced topics in PCB design : Multilayer PCB design	3 Hours
	considerations, High density interconnects, Designing for	
	specific applications	
10	Hands-on PCB Design project	4 Hours
	Total	30 Hours

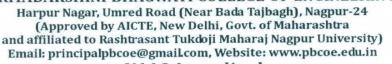
Dr.(Ms.) D. M. Kate Head of Department

Electronios & Communication Priyadarshini Bhagwati College of Engy Umrer Road, Nagpur



Lokmanya Tilak Jankalyan Shikshan Sanstha's

PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING





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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING **Session 2019-20**

A Certificate Course on

"PCB Designing & Fabrication" **SCHEDULE**

S.N.	Topic	Date
1	Introduction to PCB designing: Basics of printed circuit	06/01/2020
	boards and their importance, overview of the PCB design	
	process,	
2	Introduction to industry standard PCB design software.	07/01/2020
3	Introduction to PCB design software : Eagle, Exploring the user	08/01/2020
	interface and design features	
4	Creating and managing PCB design projects	09/01/2020
5	Introduction to PCB design software: Proteus	10/01/2020
6	Introduction to PCB design software: KiCad	13/01/2020
7	Creating and editing schematic symbols	14/01/2020
8	Drawing electrical schematics using software tools	15/01/2020
9	Selecting appropriate components for the design	16/01/2020
10	PCB layout design: Understanding design rules and	17/01/2020
	constraints	
11	Placement strategies for components	18/01/2020
12	PCB layout techniques for signal integrity and EMI	18/01/2020
	considerations	
13	PCB routing techniques: Understanding different routing	20/01/2020
	techniques	
14	Routing high speed signals and different pairs	21/01/2020
15	Managing signal integrity issues during routing	22/01/2020
16	Design verification and analysis: Performing design rule	23/01/2020
	check (DRC) and Electrical rule check (ERC)	
17	Signal integrity analysis and simulation	24/01/2020
18	Thermal analysis and consideration	27/01/2020

19	PCB manufacturing process: Introduction to PCB	28/01/2020
	manufacturing techniques	
20	Understanding fabrication files (Gerber, NC drill etc), Design	28/01/2020
	for manufacturing consideration	
21	PCB Assembly and testing: Introduction to PCB assembly	29/01/2020
	process	
22	soldering techniques and considerations	30/01/2020
23	Testing and troubleshooting PCBs	31/01/2020
24	Advanced topics in PCB design: Multilayer PCB design	01/02/2020
	considerations	
25	High density interconnects	01/02/2020
26	Designing for specific applications	03/02/2020
27	Hands-on PCB Design project	04/02/2020
28	Hands-on PCB Design project	05/02/2020
29	Hands-on PCB Design project	06/02/2020
30	Hands-on PCB Design project	07/02/2020
31	Conclusion	08/02/2020

Mr. A.D. Landge

Course Coordinator

Dr. D.M. Kate

Head of Department

Head

Electronios & Communication Priyadarshini Bhagwati College of Engg. Umrer Road, Nagpur.



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

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Department of Electronics & Communication Engineering Academic session 2019-20

Report of Certification Course

1. Event Title

: Certification Course on "PCB Designing and

Fabrication".

2. Event Date

: 06/01/2020 to 08/02/2020

3. Event conduction duration

:30 Hours

4. Event venue

: Electronic Workshop Lab & Computer Lab

5. Sem/Branch

: IV Sem - Electronics and Communication Engg.

6. Event resource person

: Mr. Amit D. Landge

7. Name of Event Coordinator

: Mr. Amit D. Landge

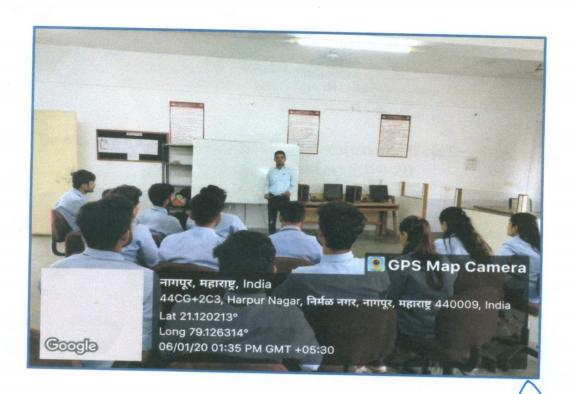
8. Objective

The objective of a certification course on "PCB Designing and Fabrication" is to provide participants with comprehensive knowledge and practical skills in designing and fabricating printed circuit boards (PCBs). The course aims to equip participants with the necessary theoretical foundations, hands on experience, and practical insights to design and fabricate PCBs for various electronic applications.

9. Outcome

Upon successful completion of the certificate course, participants should be equipped with the necessary knowledge, skills and practical experience to confidently design and fabricate PCBs for various electronic applications. They should be well-prepared to apply these skills in various industrial, research, and academic settings requiring PCB design and fabrication expertise.

Page 1 of 2



HOD

Head

· · fel is

Dr. Mrs A R Chaudhari **IQAC Coordinator**

IGAC Coordinator

Electronics & Communication priyadarshini Bhagwati College of Engline Priyadarshini Bhagwati College of Engline Umred Road, Nagpur, Priyadarshini Bhagwati College of Engg

Dr. N. K.Choudhari **Principal**



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

Harpur Nagar, Umred Road (Near Bada Tajbagh), Nagpur-24
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Department of Mechanical Engineering Session 2019-20

Date: 19-11-2019

Notice

All the students of 6th Semester are hereby informed that the department of Mechanical Engineering is organizing the Certification course on "Basics of Mechatronics." Students should enroll for this course on or before 30-11-2019.

The course details are as follows;

Course Name	Certification course on "Basics of Mechatronics."
Course Duration	02-12-2019 to 07-12-2019 (6 Days)
Place	Seminar Room, Department of Mechanical Engineering
Program Coordinator	Mr. M. R. Moroliya- Assistant Professor, Department of Mechanical Engineering
Registration Deadline	30-11-2019

Mr. S.M. Pimpalgaonkar HOD Mechanical

Copy to:

- 1) Principal PBOE
- 2) Dean Academics
- 3) Circulate among students



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

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Department of Mechanical Engineering Session 2019-20

Date: 28-11-2019

Syllabus

Introduction:

The course module outlined below is specifically designed for third-year Mechanical Engineering undergraduate students. It provides a comprehensive introduction to the basics of Mechatronics, focusing on essential concepts and practical applications. The module incorporates a combination of theoretical lectures, hands-on exercises, and Lab Practical to enhance students' understanding and skills in Mechatronics.

Objective:

- 1. Introduce participants to the basic concepts and principles of mechatronics.
- 2. Familiarize participants with the components, sensors, and actuators used in mechatronic systems.
- 3. Provide hands-on experience in designing, implementing, and troubleshooting mechatronic systems.
- 4. Develop participants' understanding of control systems and their role in mechatronics.
- 5. Explore the applications of mechatronics in various industries and domains.
- 6. Foster critical thinking and problem-solving skills in the context of mechatronic systems.

Course Outcomes:

After completion of this Course Student will be able to:

- 1. Understand the interdisciplinary nature of mechatronics and its role in modern engineering systems.
- 2. Identify and explain the key components, sensors, and actuators used in mechatronic systems.
- 3. Apply fundamental principles of electronics and control systems to analyze and design mechatronic systems.
- 4. Demonstrate proficiency in programming microcontrollers and using them for system control and automation.
- 5. Design and implement basic mechatronic systems by integrating mechanical, electronic, and control components.
- 6: Troubleshoot and debug mechatronic systems to identify and resolve issues effectively.



Course Name: "Basics of Mechatronics."

Sr. No.	Module	No. of Hours
1	Introduction to mechatronics	5
2	Mechanical Systems in Mechatronics	5
3	Electrical Systems in Mechatronics	5
4	Control Systems in Mechatronics	5
5	Programming and Software in Mechatronics	.5
6	Sensors and Actuators in Mechatronics	5
	Total	30

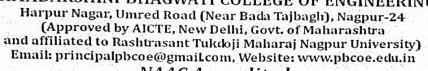
Mr. M. R. Moroliya Program Co-Ordinator

Mr. S.M. Pimpalgaonkar HOD Mechanical Engineering



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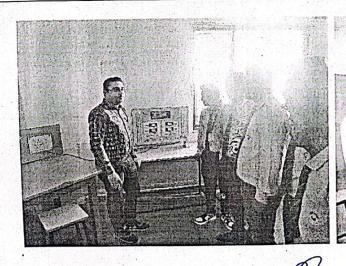


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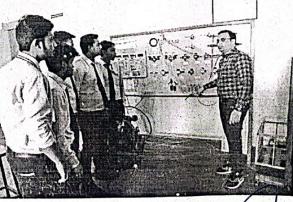
Department of Mechanical Engineering Session 2019-20

Report on Certification course on "Basics of Mechatronics."

1	Course Title	Certification course on "Basics of Mechatronics."
2	Course Code	ME192001
3	Course Schedule	07-12-2019 To 12-12-2019
4	Course Venue	Seminar Room (Fourth Floor), Department of Mechanical Engineering
5	Name of Coordinator	Mr. M. R. Moroliya, Assistant Professor
6	Number of Students Participated	67
7	Summary of the Course	Course Activities: The course was divided in 6 Modules. It began with a series of comprehensive lectures delivered by experienced faculty member. Topics covered included introduction to mechatronics, sensors and actuators, microcontrollers, control systems, and robotics. Practical sessions and hands-on workshops formed a significant part of the course. Students had access to a well-equipped laboratory where they could apply theoretical concepts to real-world scenarios.
		Course Outcome: The Basics of Mechatronics Certification Course successfully provided students with a strong foundation in mechatronics. By the end of the course, students demonstrated improved knowledge and practical skills in designing and implementing mechatronic systems.



Mr. S.M. Pimpalgaonkar **HOD Mechanical Engineering**



Dr. N.K. Choudhari Principal

Mr. M. R. Moroliya **Program Co-Ordinator**



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Department of Mechanical Engineering Academic session 2019-2020

NOTICE

Date: 11/11/2019

All the Students of Mechanical Engineering are hereby informed that our Department is organizing one- month free Certificate courses on "INDUSTRY 4.0". Interested students can enroll their name to Prof. K.D.Ganvir on or before 3 0/11/2019 Certificate will be issued to the students after successful completion of the course. The detail contents of the course and other information is attached herewith.

Sr. No	Name of Course	Date of Commencement	Venue
1.	"INDUSTRY 4.0"	02/12/2019	Automation in Production Lab,4 Floor

Mr. S.M. Pimpalgaonkar

HOD

Mechanical Department
Head
Mechanical Engg. Deptt.
Priyadarshini Bhagwati College of Enga
Umred Road, Nagpur.



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING Harpur Nagar, Umred Road (Near Bada Tajbagh), Nagpur-24 Harpur Nagar, Umred Road (Near Bada Tajbagh), Nagpur-24



PRIYADARSHINI BITA Harpur Nagar, Umred Road (Near Bada Tajbagh), Nagpur-24 (Approved by AICTE, New Delhi, Govt. of Maharashtra (Approved by AICTE, New Delhi, Govt. of Maharashtra and affiliated to Rashtrasant Tukdoji Maharaj Nagpur University) and affiliated to Rashtrasant Tukdoji Meharaj Nagpur University) Email: principalpbcoe@gmail.com, Website: www.pbcoe.edu.in NAAC Accredited

Department of Mechanical Engineering Academic session 2019-2020

Syllabus

Introduction

Mechanical is the core branch of engineering finding its application in every aspect of common as well as technical life. To make aware about some important yet simple technicalities as well as applications, we have designed a certificate course on "INDUSTRY 4.0." This course includes digital manufacturing and smart technology, Students of all semester of Mechanical Engineering will undergo this course followed by test and evaluation and summative assessment. Grade certificate will be given to the students appearing for the assessment.

Objective of the Course:

- 1. To make the student aware about Industry 4.0
- 2. To make the student aware about advancements in Production area, automobile area, Digital Manufacturing and Smart Factorie
- 3. To make the student aware about product Design and Manufacturing, Mechanical Engineering, Electronics Systems Engineering, Materials Engineering, Computer Science and Automation.

Course Outcomes:

After completion of this Course Student will be able to:

- 1. Describe the concept of Industry 4.0 & its application.
- 2. Explain the concept of Digital manufacturing in smart factories
- 3. Explain the concept additive manufacturing, 3Dprinting technolgy
- 4. Explain Artificial intelligence, machine learning, IoT .in collaboration with production

Course Name: "INDUSTRY 4.0"

Sr. No	Contents	No. of Hrs.
1	Introduction to Historical context of Industry 4.0, Introduction to General Framework of Industry 4.0, Additive Manufacturing, 3D Printing, Automisation,	5
2	Drone Technology and It's application, Augmented and Virtual Reality, Financial Literacy and Entrepreneurship Development, Green Engineering, FMS	5
3	Internet of things, Industrial Internet of things, omponents of Internet of Things, Challenges in Internet of Thing. Renewable Energy Sources	5
4	Computer Aided Design and Computer Aided Drafting, CNC MachinesRobotization, Various types of Sensors Artificial Intillegence, Cloud Computing, Virtual Reality	5
5	Electric Vehicles Connectivity, Autonomus Vehicles, vehicle connectivity, influencer Marketing	5
6	Digital Marketing-Content Marketing, Social Marketing, Cyber Security, Intellectual Property Rights	5
	Total	30 hours

Prof.K.D.Ganvir

Course Coordinator

Prof. S. M. Pimpalgaonkar

HOD

Mechanical Department

Head

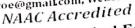
Mechanical Engg. Deptt.

Priyadarshini Bhagwati College of Engg
Umred Road, Nagpur.



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Department of Mechanical Engineering

Academic session 2019-2020

Report on Certificate Course on "INDUSTRY 4.0"

1. Title of Course

: Certificate course on

"INDUSTRY 4.0"

2. Course Code

: ME192002

Course Date

: 2/12/2019 to 07/12/2019

Course conduction duration

: 30Hrs

Venue

: Automation in Production lab

6. Name of Event Coordinator : Prof. K.D.Ganvir

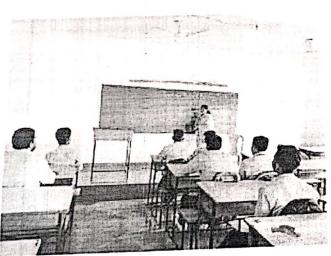
Number of students

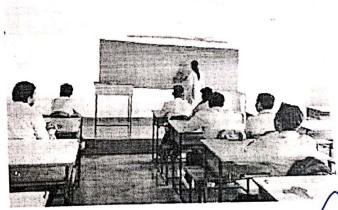
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7. Objective

: To make student aware about

industry 4.0





Prof. N.D.Ganvir

Prof. S. M. Pimpalgaonkar

Prog. Coordinator

HOD

Mechanical Department

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Mecnanical Engg. Deptt. Priyadarshini Bhagwati College of Engo Umred Read, Nagpur.

Dr. N. K. Choudhari

Principal

Principal

Priyadarshini Bhagwati College of Umred Road Maogur



Fokmanya Filak jankaban Shibshar Sansab...

PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING Harpur Nagar, Umred Road (Near Bada Tajbagh), Nagpur-24 (Approved by AICTE, New Delhi, Govt. of Maharashtra

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Ref.Civil/odd sem/2019-20

Date: 12/08/2019

NOTICE

All the students are hereby informed that department is going to organised Add on certificate programme from 24/08/2019 on "Advances in Concrete technology". The duration of programme is 30 hours and the programme will coordinate by Prof T.R.Patil. Asst Professor Civil Engineering Department. Students should enroll their names upto 20/08/2019.

Venue-Tutorial Room, second floor Civil Engineering Department

Time-09 am to 10 am

1000

HOD ,Civil Engg,PBCOE

CIVIL Engg. Deptt.
Priyadarshini Bhagwati College of Engg
Umred Road, Naggur.



Harpur Nagar, Umred Road (Near Bada Tajbagh), Nagpur-24

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Department of Civil Engineering

Academic session 2019-2020 (Odd semester)

Value added Course

on

Subject - Advances in Concrete Technology

Sr No		No.ofHours
	Module I:- Introduction and Scope of diffrent Material	1,000110113
1	Constituents of Concrete, Special Purpose of Cement Binary	6
	cement, ternary cement, Hydration process and hydrated	
	cement, Aggregate cement interface, transition zones in concrete.	
	Module II- Specification and diffrent techniques	
2	Specifications code of practice, concrete with different	6
	cementations properties GGBS,flyash,silica fume,concrete with	
	different aggregates,no fines,high weight,gap graded,auto clave	
	areted concrete, modified properties high density, high	
	performance concrete, fibre reinforced concrete, techniques in	
	RMC under water concrete.	
	Module III- Concrete Mix Design	
3	Shtcrete, nano concrete, concept of design mix concrete,BIS and	6
	American concrete mix design,acceptance criteria,design of	
	high strength and light weight concrete, Design of fly ash	
	concrete.	
	Module-IV- Failure Modes Of Concrete and its factors	(*
4	Design of high density concrete, failure modes in concrete, stress	6
- 1	strain relation in concrete types of deformation, modulus of	
1	elasticity, shrinkage, factors affecting creep and its effects,	
10	compressive strength, fatigue strength, factors affecting strength	
1 -	of congreto	
1	Module-V- Causes and Dteriotion of concrete	6
	the age a group of deteriotion of concrete, permeability of	O .
	ii ii aata waachan am dii eii iidiideii e	
10	esting ,stress wave propagation method, electrical magnetic	
140	rave, nuclear methods	
l W	ave, nuclear methods	

darshini Rhagwati College of Engg Umred Road, Nagpur.

HOHead. CIVIL Engg. Deptt. riyadarshini Bhagwati College of Engg Umred Road, Nagpur.



Lakmanya Tilak Jankalyan Shrieshan Sanstha's

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Department of Civil Engineering Academic session 2019-20

Report of Certificate Course on Advances in Concrete Technology

Event Title

: Certificate Course on Advances in Concrete Technology

2. Event Date

: 24 Aug 2019 To 01 Oct 2019

3. Event conduction duration: 9.00 a.m to 10 a.m

4. Event venue

: Tutorial Room

5. Sem/Branch

:V Sem B. E. CV (53 students)

6. Name of Event Coordinator: Prof T,R,Patil

7. Objective

: To make aware students about importance of Concrete Technology.

8. Outcome

: To understands various aspects and implementation of concrete

technology in the field of civil Engineering



Prof T.R.Patil

Couras Cordinates

CIVIL Engg. Deptt.

Priyadarshini Bhagwati College of Engoriyadarshini Bhagwati College of Engo Umred Road, Nagpur.

CIVIL Engg. Deptt.

Umred Road, Naupur.

Dr. N. K.Choudhari

Tryadarshini Bhagwati College of Engg. Umred Road, Nagpur.



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

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Ref.Civil/odd sem/2019-20

Date: 12/08/2019

NOTICE

All the students are hereby informed that department is going to organised Add on/ certificate programme from 24/08/2019 on "Advanced Geotechnical Engineering". The duration of programme is 30 hours and the programme will coordinate by Prof. Mrs.N.R.Gautam. Asst Professor Civil Engineering Department. Students should enroll their names upto 20/08/2019.

Venue- Drawing Hall, second floor Civil Engineering Department

Time-09 am to 10 am

Dr Ranjeet Patil

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HOD Collient Page Dept COE

Iyadarahan Shagwati College of Engg
Umred Road, Nagpur.



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Department of Civil Engineering

Academic session 2019-2020 (Odd semester)

Value Added Course

On

"Advanced Geotechnical Engineering"

lodule -1 S		No. of Hrs.
	oil composition and soil structure	
1	Soil formation; Types of soils and their characteristics; Particle sizes and shapes; their impact on engineering properties;.	2
2	Soil structure; Clay mineralogy; Soil-air-water interaction; Consistency; Soil compaction; Concept of effective stress	2
lodule-11:	Permeability and Seepage	
3	Permeability; Seepage force and effective stress during seepage.	1
4	Laplace equations of fluid flow for 1-D, 2-D and 3D seepage. Flow nets. Anisotropic and non- homogeneous medium, Confined and Unconfined seepage.	3
Iodule-III:	: Compressibility and Consolidation	
5	Stresses in soil from surface loads:Terzagahi's1- D consolidation theory: Application in different boundary conditions; Ramp loading	3
6	Determination of Coefficient of consolidation cv; Normally and Over consolidated soils; Compression curves; Secondary consolidation. Radial consolidation; Settlement of compressible soil layers and Methods for accelerating consolidation settlements.	6
Module-IV:	Stress-strain relationship and Shear strength of soils	
7	Stress state, Mohr's circle analysis and Pole, Principal stress space. Stress paths in p-q space; Mohr coulomb failure criteria and its limitations, correlation with p-q space; Stress-strain behaviour: Isotropic compression and pressure dependency, confined compression, large stress compression. Definition of failure, Interlocking concept and its interpretations, Drainage conditions;	4
	Triaxial behaviour, stress state and analysis of UC, UU, CU, CD, and other special tests. Stress paths in triaxial and octahedral plane: Elastic modulus from triaxial tests.	4
Module-V:	Stability of Slopes	
8	Stability analysis of a slope and finding critical slip surface; Sudden Draw down condition, effective stress and total stress analysis;	3
9	Reliability based design of slopes, Methods for enhancing stability of unstable slopes.	2
	Total Hours	30

150

Prof. N.R.Gautam

Course Co Ordinator See Civil Engg: Deptt.

Priyadarahini Ahagwati College of Engg.

Linred Road, Nagpur.

Dr.R.N. Pagad

FB6LŒngg, Deptt.

Priyadarahini Bhagwati College of Engs
Umred 90art, Nagous.



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NAAC Accredited

Department of Civil Engineering Academic session 2019-20

Report of Certificate Course on Advanced Geotechnical Engineering

1. Event Title

: Certificate Course on Advanced Geotechnical Engineering

2. Event Date

: 24 Aug 2019 to 01 Oct 2019

3. Event conduction duration: 9.00 a.m to 10 a.m

Event venue

: Drawing Hall

5. Sem/Branch

: B.E. CV (46 students)

Name of Event Coordinator: Prof N. R. Gautam

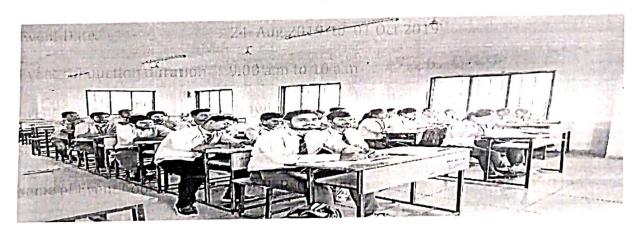
Objective

: To make aware students about importance of Geotechnical Engg.

8. Outcome

: To understands various aspects and implementation of

Geotechnology in the field of civil Engineering



Prof N.R.Gautam Coarse Co-Ordinator

CIVIL ENGY - 4-DIA Priyadarshini shagwali College of Engg Umred Assu, Nagpur.

Head, Civil Engineering Priyadarahini Bhagwati College of Engo Umred Road, Nagpur.

'riyadarshiri Biragwati College of Eng

Umred Road, Nagpur.



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

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Ref. Civil / Even Sem /2019-20

Date: 04/01/2020

NOTICE

All the students are hereby informed that department is going to organised Add on/certificate programme from 08/01/2020 on "Basic deseign and drafting by Auto CAD". The duration of programme is 30 Hours and the programme will be coordinate by Prof. N. B. Thikare, Asst. Professor Civil Engineering Department. Students should enroll their names upto 07/01/2020 Venue – Tutorial Room, Second Floor, Civil Engineering Department

Time – 09 am to 10 am

HOD, Civilianingg. PBCOE

CIVIL Engs. Dept.

Impadarshini Bhagwati College of Engg

Dr. Ranjeet Patil

Umred Road, Hagpur.



Lokmanya Tilak Jankalyan Shikshan Sanstha's PRIYADARSHINI BHAGWATI COLLEGE OF ENGINEERING

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NAAC Accredited

Department of Civil Engineering

Academic session 2019-2020 (Even semester)

Value Added Course

On

"BASIC DESIGN AND DRAFTING BY AUTO CAD"

Sr. No.	Content	No. of Hrs.
Module-l	: Introduction of AUTOCAD	
1	Understanding the application of 4 different AutoCAD, Installing the application on the computer, Learning about the user interface of AutoCAD, such as panels, ribbon, model space, etc., Types and structures of drawings in AutoCAD	1
2	Draw commands: Understanding the concept of drawing a toolbar, Learning about line command, polyline command, and circle command, Understanding the concept of other commands, Arc command, Text and rectangle command	1
3	Cartesian coordinate system: Developing different designs, Methods of developing title block, Setting up attributes, Set up layers of industry standards, Development of plans and elevations	1
4	Modify commands: Use of erase commands, Selection of multiple objects, Move and copy command, The distance method, The two points method, Trim and extend	1
5	Text command layers blocks: Understanding the concept of creating, renaming, and removing layers, Specifying the default properties, Sort, filter, and group layers names, Dimension objects, Layers visibility	1
Module-II	:	
6	Dimensions & Dimensions Styles: linear, radial, ordinate, and angular	2
7	2D fundamentals: Understanding the AutoCAD workspace and user interface, Organising drawing objects in layers, Using basic drawing, editing, and viewing tools, Preparing a layout to be plotted	2

8	Geometric constructions: Construction on commands, Point commands, Ray commands, XLINE commands	2
9	Isometrie drawings: How to turn on isograft mode in AutoCAD, How to draw isometric in AutoCAD, How to apply isometric drafting for piping	2
Module-	III : Projects: Creating a Simple Drawing	
10	Create a Simple Drawing	1
11	Create Simple Shapes	1
Module	IV : Projects: Drawing Organization and Information	
14	Architectural Project	2
15	Civil Project	2
Module V	: Setting Up a Layout	
16	Working in Layouts	3 .
17	Creating Layouts	3
18	Creating Layout Viewports	3
19	Guidelines for Layouts	2
	Total Hours	30

Signaftire of Coordinator CIVIL Engg. Deptt. Priyadarshini Bhagwati College of Engg. Umred Road, Nagpur.



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Department of Civil Engineering Academic session 2019-20

Report of Online Certificate Course on "BASIC DESIGN AND DRAFTING BY AUTO CAD"

1. Event Title

: Online Certificate Course on "BASIC Design And Drafting By

Auto CAD"

2. Event Date

: 08 Jan. 2020 To 17 Feb. 2020

3. Event conduction duration

: 9.00 AM To 11.00 PM

4. Event venue

: Class Room, Second Floor, Civil Engineering Department

5. Sem/Branch

: B. E. Civil Engineering (42 students)

6. Event resource person

: Prof. N. B. Thikare, Asst. Professor, Civil Engg. Department,

PBCOE, Nagpur.

7. Name of Event Coordinator

: Prof. N. B. Thikare

8. Course Objective

: To impart the parametric fundamentals to create and manipulate

geometric models using curves, surfaces and solids.

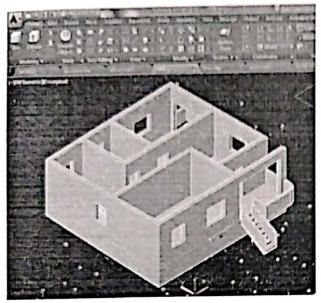
- 1. Demonstrate basic concepts of the AutoCAD software.
- 2. Apply basic concepts to develop construction (drawing) techniques.
- 3. Ability to manipulate drawings through editing and plotting techniques.
- 4. Understand geometric construction
- 5. Produce template drawings
- 6. Produce 2D Orthographic Projections
- 7. Understand and demonstrate dimensioning concepts and techniques

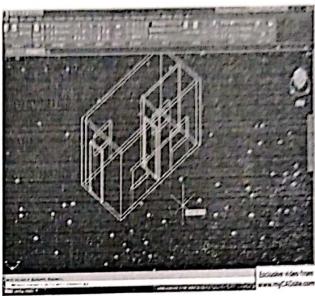
9. Course outcome

- 1. To learn AutoCAD workplace, interface and basic commands.
- 2. To develop basic 2D drawings with editing and viewing tools.

- To organize drawings on layers and inserting blocks.
- To make layouts for publishing drawings.
- 5. To make objects in 3D workspace using basic commands.

Photographs





Event Coordinator

Priyadarshini Bhagwati College of Engg Umred Road, Nagpur.

HOD Civil Engg. Dept.

Umred Ford Nagour

Dr. N. K. Choudhari Principal

Priyadarshini dhagwati College of Engartyadarshini Bhagwati College of Enga Unued Road, Maggaw.