



JAGADAMBHA BAHUUDDESHIYA GRAMIN VIKAS SANSTH'S  
**JAGADAMBHA**  
**COLLEGE OF ENGINEERING & TECHNOLOGY, YAVATMAL**



Approved by A.I.C.T.E. & Government of Maharashtra, Affiliated to S.G.B. Amravati University, Amravati.

**Dr. Hemant M. Baradkar**  
M.Tech. (Electronics), Ph.D. (E & TC, Engg.)  
**Principal**

**Dr. Shital A. Watile**  
M.Sc., Ph.D.  
**Secretary**

Year	Capacity building and skills enhancement initiatives	Name of the capacity development and skills enhancement program	Date of implementation (DD-MM-YYYY)	Number of students enrolled	Name of the agencies/consultants involved with contact details (if any)
2020-21		Workshop on "Python" training for Mechanical Students	2/7/2021	160	Prof. Mangesh Nichat, Assistant Professor & Department of Computer Engineering, Government College of Engineering, Chandrapur, Maharashtra
		Workshop on IOT for final Year Students	19/3/2021	243	Techvegan, Nagpur
		Open Source Tools for IoT Applications for Computer And Electrical Engineering Third Year Engineering students	16/3/2021	119	Prof. Mangesh Nichat, Assistant Professor & Department of Computer Engineering, Government College of Engineering, Chandrapur, Maharashtra
		Workshop on AUTOCAD & CATIA V5 for mechanical Engineering Department Students	20/12/2020	163	Mr. Pravin Jadhao by F6 & Design Solution, Nagpur
		Workshop on "Fundamental of Python Programming" training for Electrical Engineering Students	9/10/2020	180	Prof. Mangesh Nichat, Assistant Professor & Department of Computer Engineering, Government College of Engineering, Chandrapur, Maharashtra
		Workshop on programming with Python for Electronics And Telecommunication Engineering	15/9/2020	90	Prof. Rahul D. Chavhan, Assistant Professor, Department of Electronics & Telecommunication Engineering Department, Sardar Patel College of Engineering, Mumbai,
		Guest Lecture On Latest trends in IT and IoT	30/4/2020	69	Dr.Sachin Sakhare,VIIT,Pune



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2019-20	ICT/Computing Skills	Guest Lecture On ICT Tools in Teaching and learning	28/4/2020	75	Dr.Milind Sarode, Govt Poly , Yavatmal
		Bridge course on Python for IoT	6/4/2020	48	PBR Research, Amravati
		Bridge course on Linux	6/4/2020	60	Star Gate, Nagpur
		Guest Lecture On Recent upcoming trends in IT Sector	24/2/2020	100	Mr.Gandhar Patwardhan, (Director S2P Edutech, Nagpur)
		Guest Lecture On Excel and its Application	24/2/2020	100	Mr.Sachin Nandanwar(Trainer S2P Edutech, Nagpur)
		Bridge course on Matlab & its Application	3/2/2020	87	Prof. Sachin Bharatkar, Washim
		Workshop on "Linux Operating System" training for Computer Engineering department Students	19/1/2020	163	Mr. Ashish Labate, BumbleTech Solutions Private Ltd., Nagpur
		Bridge course on Revit Structure	15/12/2019	102	Prof. Ram Ingalkar, PRMIT&R, Badnera
		Remedial Coaching for First Year Subjects	21/11/2019	120	Internal Faculty Members



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# A Report on

On

**“Workshop on python training  
for  
Mechanical students”**



**JAGADAMBHA**  
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**Jr. Me. nant M. Barad...**  
**Principal**  
Jagadamba College of Engineering &  
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**“ Workshop on Python Training ”**  
**Organized by**  
**Department of Mechanical Engineering**  
**Academic Year :-2020-21**

1	Title of Activity	Workshop on Python
2	Speaker	Prof.Mangesh Nichat, Assistance Professor & dept. of comp engg.gov college of Engg , Chandrapur, Maharastra.
3	Co-Coordinator	Prof. Dr. V. L. Bhambere
4	Co-Coordinator	Prof. A.B. Samarth
5	Date of Activity	02/07/2021
6	Time	11.00 am to1.00 pm & 1.30 pm to 2.30 pm
7	Objective of Activity	To enable the participants, define research problem, developing an approach to research problem and selection of suitable research design.
8	Venue	Online Mode

An important initiative has been taken by Jagadambha College of Engineering & Technology, Yavatmal. To motivate the Students to enhance the research skills and to learn new methodologies & practical concepts. For the fulfillment of this activity Jagadambha College of Engineering & Technology organized One Day Workshop on “Basics of Python” In this workshop total 160 Students participated.



  
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On dated 02/07/2021, The Inaugural Program of online workshop on Python training This Program was organized by Jagadambha College of Engineering & Technology; Yavatmal & The Expert for this program was Prof. Mangesh Nichat Trainer .

The dignitaries for the inauguration of one day online workshop Dr.S.A.Watile Secretary JBGVS Yavatmal, Dr. Prof. V.L. Bhambere, HOD Mech..Engg. department & co-ordinator of this workshop, along with all head of departments, participants and staff members was present. Prof. A.B. Samarth (Workshop Co-coordinator) had given the brief introduction of Keynote Speaker Prof Mangesh Nichat The Inauguration function ended by proposing vote of thanks by the hands of Prof. V.L. Bhambere (Workshop Co-ordinator). After that all faculties and participants proceeded for workshop.

#### Session 1- 11.30 AM to 1 PM

Mr. Prof. Mangesh Nichat delivered the contents on the following topics


- How to Install Python on Windows [Pycharm IDE]
- Create Your First Python Program
- How to Print in Python with Examples
- How to Define/Declare String Variable Types

#### Session 2- 1.30 AM to 2.30 PM

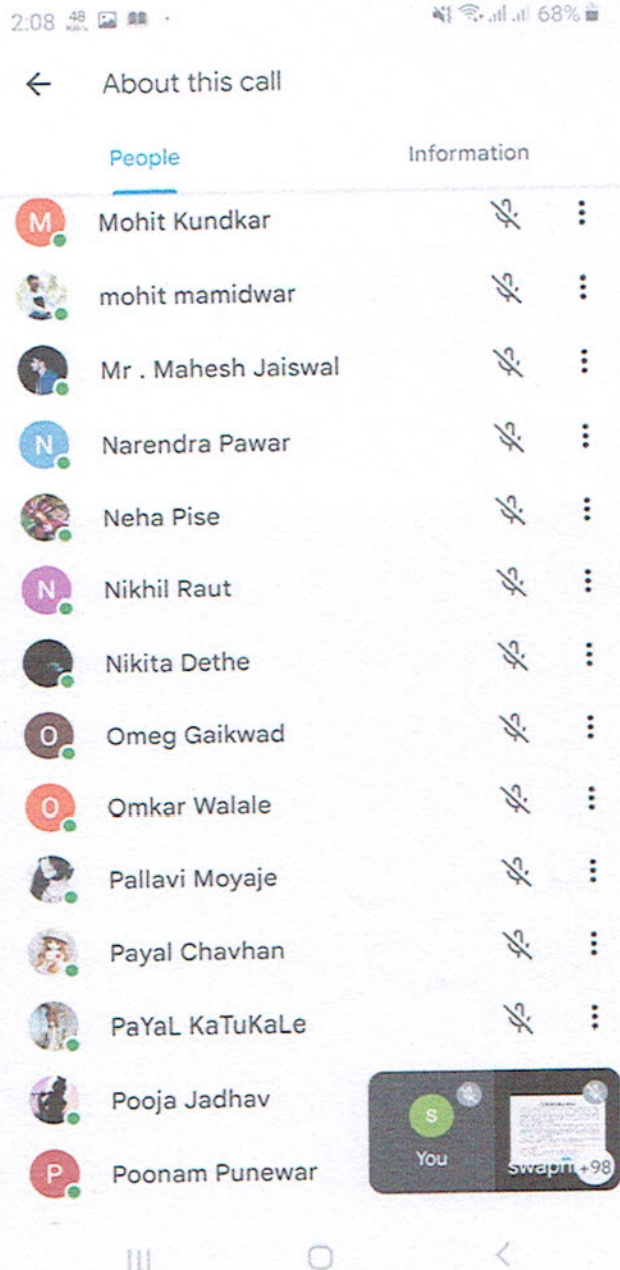
Mr. Prof. Mangesh Nichat delivered the contents on the following topics


- Pack, Unpack, Compare, Slicing, Delete, Key
- Update, Cmp, Len, Sort, Copy, Items, str Example
- How to Add Key/Value Pair
- Arithmetic, Logical, Comparison, Assignment, Bitwise & Precedence
- Python Not Equal (!=) Operator with Examples
- Create, Reverse, Pop with Python Array Examples
- Python 2D Arrays: Two-Dimensional List Examples



  
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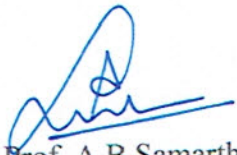
## Participants Attending Session



  
**Dr. Hemant M. Baradkar**  
 Principal  
 Jagadambha College of Engineering &  
 Technology, Arni Road, Kinhi, Yavatmal

For this one day online workshop Dr. V. L. Bhambere (Workshop Co-ordinator) along with Co-coordinators Prof. A. B. Samarth and all the faculty members took lots of efforts for the successful execution of the event.

Participants attending the live lectures conducted on Google Meet Platform. The Coordinators, Teaching Faculty and Non-Teaching Faculty, Students of all Departments worked hard during this workshop. Course material is released under Open Source. The contents can be freely used later by all teachers, Researchers and other learners.



Prof. A.B.Samarth  
(Workshop, Co-coordinator)



Prof. Dr. V. L. Bhambere  
(Workshop coordinator)



Dr. H.M.Baradkar  
( Principal JE, Yavatmal)

**Dr. H.M. Baradkar**  
Principal  
Jagadamba College of Engineering &  
Technology, Arni Road, Kinhi, Yavatmal



# A Report on

## Workshop on “Linux Operating System” Training for Computer Engineering Department Students



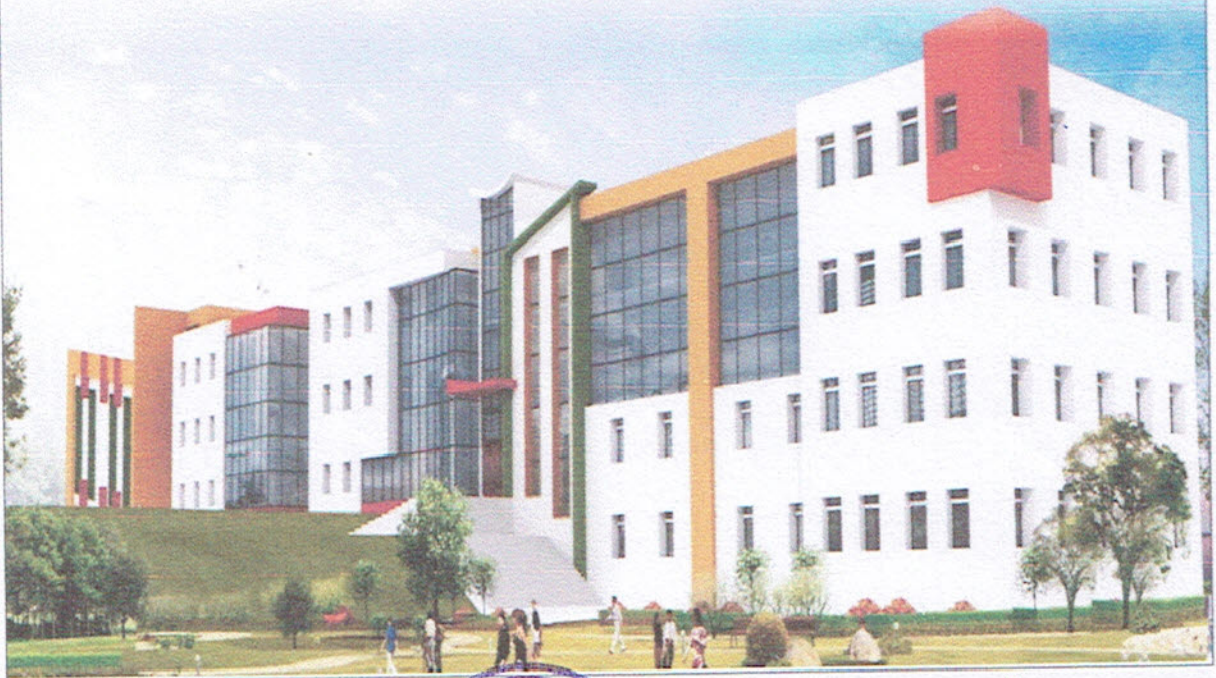
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## Workshop on “Linux Operating System”

Organized by

Department of Computer Engineering

Academic Year:-2020-21

1	<b>Title of Activity</b>	Workshop on “Linux Operating System”
2	<b>Speaker</b>	Mr. Ashish Labate BumbleTech Solutions Private Ltd.,Nagpur
3	<b>Co-Ordinator</b>	Prof. S. A. Murab
4	<b>Co-Cordinator</b>	Prof. A. A. Kolpyakwar
5	<b>Date of Activity</b>	19/01/2020
6	<b>Time</b>	11.00am to 1.00 pm & 1.30 pm to 2.30 pm
7	<b>Objective of Activity</b>	To enable the participants, define research problem, developing an approach to research problem and selection of suitable research design.

An important initiative has been taken by Jagadambha College of Engineering & Technology, Yavatmal. To motivate the Students to enhance the research skills and to learn new methodologies & practical concepts. For the fulfillment of this activity Jagadambha College of Engineering & Technology organized “Linux Operating System,” In this workshop total 163 Students participated.

On dated 19/01/2020, The Inaugural Program of linux course has been organized. This Program was organized by Jagadambha College of The Engineering & Technology; Yavatmal.

Dignitaries for the Inauguration of Dr.S.A.Watile Secretary JBGVS Yavatmal, Prof.S.A.Murab, HOD Comp.Engg. Department & Co-ordinator of this workshop, along with all head of departments, participants and staff members was present. Prof. A. A. Kolpyakwar (Workshop Co-coordinator) had given the brief introduction of Keynote Speaker Mr. Ashish Labate BumbleTech Solutions Private Ltd.,Nagpur. The Inauguration function ended by proposing vote of thanks by the hands of Prof.S.A.Murab(Workshop Co-ordinator). After that all faculties and participants proceeded for workshop.



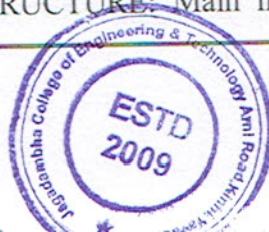
*HMB*  
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## Session 1- 11.30 AM to 1 PM

- File management--analogous to the file cabinet and its use → Working with the Files--analogous to picking up and preparing to use a calculator or some other tool
- → Configuration of your working environment--analogous to shifting your desk around to suit you better. An OS is a program that acts as an intermediary between a user of a computer
- computer hardware Goals: Execute user programs, make the comp. system easy to use, utilize hardware efficiently Computer system: Hardware ↔ OS ↔ Applications ↔ Users (↔ = 'uses') OS is: Resource allocator: decides between conflicting requests for efficient and fair resource use Control program: controls execution of programs to prevent errors
- improper use of computer Kernel: the one program running at all times on the computer • Bootstrap program: loaded at power-up or reboot Stored in ROM or EPROM (known as firmware), Initializes all aspects of system, loads OS kernel and starts execution • I/O and CPU can execute concurrently
- Device controllers inform CPU that it is finished w/ operation by causing an interrupt • Interrupt transfers control to the interrupt service routine generally, through the interrupt vector, which contains the addresses of all the service routines ,Incoming interrupts are disabled

## Session 2- 1.30 AM to 2.30 PM

- Disk controller determines logical interaction between the device and the computer.
- Caching – copying information into faster storage system Multiprocessor Systems: Increased throughput, economy of scale, increased reliability, can be asymmetric or symmetric,
- lustered systems – Linked multiprocessor systems Multiprogramming – Provides efficiency via job scheduling when OS has to wait (ex: for I/O), switches to another job Timesharing – CPU switches jobs so frequently that each user can interact with each job while it is running (interactive computing) • Dual-mode operation allows OS to protect itself and other system components – User mode and kernel mode ,some instructions are only executable in kernel mode, these are privileged
- Single-threaded processes have one program counter, multi-threaded processes
- have one PC per thread • Protection – mechanism for controlling access of processes or users t
- INTERRUPT • STORAGE STRUCTURE: Main memory – random access, volatile •



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Secondary storage – extension of main memory That provides large non-volatile storage  
Disk – divided into tracks which o resources defined by the OS Security – defense of a system against attacks , User IDs (UID), one per user, and Group IDs, determine which users and groups of users have which privileges

## PROCESS SYNCHRONIZATION:

Introduction to process synchronization Process synchronization will be clear with the following example.  
Consider the code for consumer and producer as follows Producer

```
while(1) { while(counter == buffersize); buffer[in]=nextproduced; in = (in+1) % buffersize; counter ++; } Consumer while(1) { while(counter == 0); nextconsumed = buffer[out]; out = (out+1) % buffersize; counter --; } Both the codes are correct separately but will not function correctly when executed concurrently. This is because the counter++ may be executed in machine language as three separate statements as register1 = counter register1 = register1 + 1 counter = register1 and the counter- as register2 = counter register2 = register2 - 1 counter = register2
```

The execution of these statements for the two processes may lead to the following condition

### Participants Attending Session



*Dr. Heena M. Baradkar*  
Principal  
Jagadambha College of Engineering &  
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For this program Prof. S. A. Murab (Workshop Co-ordinator) along with Co-coordinators Prof. A. A. Kolpyakwar and all the faculty members took lots of efforts for the successful execution of the event.

Participants attending lectures The Coordinators, Teaching Faculty and Non-Teaching Faculty, Students of all Departments worked hard during this workshop. Course material is released under Open Source. The contents can be freely used later by all teachers, Researchers and other learners.

Prof.A. A. Kolpyakwar  
(Workshop,Co-coordinator)

Prof.S.A.Murab  
Workshop Co-ordinator)

Dr. H.M.Baradkar  
Principal  
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A  
Report on  
Workshop  
of  
AUTOCAD & CATIA V5



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**Workshop on AUTOCAD & CATIA V5**  
**Organized by**  
**Department of Mechanical Engineering**  
**Academic Year:-2020-21**

1	Title of Activity	Workshop on AUTOCAD & CATIA V5
2	Speaker	Mr. Pravin Jadhao F6 & Design Solution, Nagpur
3	Co-ordinator	Dr. Prof V.L.Bhambere
4	Co-cordinator	Prof. B.K. Chavhan
5	Date of Activity	20/12/2020
6	Time	11.00am to 1.00pm and 1.30 pm to 2.30 pm
7	Objective of Activity	<p>1. To Impart the Knowledge to the students with software. [This enhances technical computing environment. [Themes of data analysis, visualization, and programming knowledge in Research and Development].</p> <p>2. To provide a working introduction to the programming].</p> <p>3. To introduce students the use of a high-level programming language, [scientific problem solving with applications and examples from Engineering]</p>

An important initiative has been taken by Jagadambha College of Engineering & Technology, Yavatmal. To motivate the Students to enhance the research skills and learn new methodologies & practical concepts. For the fulfillment of this activity Jagadambha College of Engineering & Technology organized Workshop on AUTOCAD & CATIA V5” In this course total 163 Students participated.

On dated 20/12/2020, The Inaugural of Workshop on AUTOCAD & CATIA V5 has been organized. This Program was organized by Jagadambha College of The Engineering & Technology; Yavatmal.

Dignitaries for the Inauguration of Dr.S.A.Watile Secretary JBGVS Yavatmal, Dr. Prof V.L.Bhambere, HOD Mech .Engg. Department & Co-ordinator of this workshop, along with all head of departments, participants and staff members was present. Prof. B.K. Chavhan (Workshop Co-coordinator) had given the brief introduction of Speaker. The Inauguration function ended by proposing vote of thanks by the hands of Dr. Prof V.L.Bhambere (Workshop Co-ordinator). After that all faculties and participants proceeded for workshop.



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### Session 1- 11.30 AM to 1 PM

- Workshop on AUTOCAD & CATIA V5
- Working with data types
- Creating matrices and arrays
- Operators and control statements
- Using scripts and functions
- Data import and export
- Using the graphical features

### Session 2- 1.30 AM to 2.30 PM

- 2. Programming with simple examples
- 3. Discussion of Toolboxes with Applications
- Signal Processing
- Image Acquisition Toolbox
- Image Processing
- Neural Network
- Fuzzy Logic Toolbox
- 4. Simulink and Hardware Interfacing (Using Kits: Lego, Raspberry Pi, Mind storms etc.)

**Course outcomes:** By the end of this course, the student will be able to

1. Understand the basics
2. Break a complex task up into smaller, simpler tasks
3. Case Study (Any two Modules)
4. Tabulate results and Analyse

Companies ranging from automotive, banking, and software implement the software. The lists of companies in automotive sector using the Software are:

- Volvo
- Jaguar
- Mercedes
- BMW

A company from the software sector includes:

- Adobe Photoshop All the Banking companies which involve crunches of calculations such as Citi Bank, HDFC

do implement the concepts indirectly.



*M.B.*  
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## Participants Attending Session




*HMB*  
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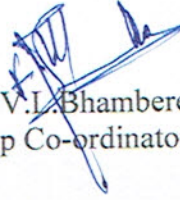


For this program Dr. Prof V.L.Bhambere (Workshop Co-ordinator) along with Co-coordinators. Prof. Shende sir and all the faculty members took lots of efforts for the successful execution of the event.

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Prof. B.K. Chavhan  
(Workshop,Co-coordinator)



Dr. Prof V.L. Bhambere  
Workshop Co-ordinator)



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