

MARATHWADA INSTITUTE OF TECHNOLOGY

Aurangabad

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Founder. Anandraoji Deshmukh (Freedom Fighter)
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Affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad

NOTICE

MIT COLLEGE, CIDCO Date: 04/07/2022

Subject: Course Announcement - Computer Vision and Image Processing

Dear Students,

We are excited to introduce a new and innovative course at MIT College, CIDCO - "Computer Vision and Image Processing." In today's visually driven world, the ability to understand and manipulate images and videos is invaluable. This course is designed to provide you with a comprehensive understanding of computer vision and image processing technologies.

Course Details:

Course Name: Computer Vision and Image Processing

- Duration: 36 Hrs

- Schedule: Saturday, 2:00 pm to 5:00pm

Location: PG-Lab

Course Start Date: [9/07/2022]

Course Overview:

Computer Vision and Image Processing are interdisciplinary fields that focus on how computers can gain high-level understanding from digital images or videos. This course aims to equip you with the knowledge and skills to work with visual data and explore its applications.

Course Highlights:

- Fundamentals of computer vision and image processing.
- Hands-on experience with image analysis and manipulation tools.
- Real-world applications in areas like healthcare, automotive, and more.
- Expert guidance from experienced professionals.

Who Should Attend?

This course is open to students from various academic backgrounds interested in the fields of computer vision, image processing, and data analysis. Whether you aspire to work in computer vision research, image analysis, or simply want to expand your skill set, this course is tailored to meet your needs.

Registration:

To register for the "Computer Vision and Image Processing" course, please visit to P.P.Ubale sir. Seats are limited, so secure your spot today to embark on this visual journey. As the world becomes increasingly reliant on visual data, this course will empower you with the tools and knowledge to excel in a wide range of industries. For any inquiries or further information, please contact on 9730714981.

Sincerely,

Asst. Prof. P.P. Ubale

MIT College, CIDCO



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Session-Wise Syllabus: Computer Vision and Image Processing

Session 1: Introduction to Computer Vision and Image Processing

 Overview of computer vision and image processing. Importance and applications of visual data analysis. Key concepts and terminologies in computer vision.

Session 2: Image Acquisition and Preprocessing

- Image acquisition methods and devices. Basics of digital image representation.
- Image preprocessing techniques (e.g., noise reduction, contrast enhancement).

Session 3: Image Enhancement and Restoration

Image enhancement techniques (e.g., histogram equalization). Image restoration methods (e.g., image deblurring).
 Practical exercises in enhancing and restoring images.

Session 4: Image Segmentation and Object Detection

- Image segmentation algorithms (e.g., thresholding, region-based).
- Object detection techniques (e.g., Haar cascades, contour detection).
- Hands-on practice in segmenting and detecting objects in images.

Session 5: Feature Extraction and Representation

 Feature extraction from images (e.g., texture, color, shape). Feature vector representation and dimensionality reduction. Practical feature extraction exercises.

Session 6: Image Classification and Recognition

 Introduction to image classification and recognition. Supervised and unsupervised learning for image classification. Building and training image classifiers.

Session 7: Deep Learning for Computer Vision

- Deep learning architectures for computer vision (e.g., Convolutional Neural Networks).
- Transfer learning and pre-trained models. Hands-on deep learning projects.

Session 8: Object Tracking and Motion Analysis

- Object tracking algorithms (e.g., Mean-Shift, Kalman Filter).
- Motion analysis and optical flow. Practical tracking and motion analysis exercises.

Session 9: Image and Video Compression

- Basics of image and video compression. Common compression standards (e.g., JPEG, H.264).
- Compression trade-offs and quality considerations.

Session 10: 3D Computer Vision

Introduction to 3D computer vision.

Stereopsis and depth perception.

3D reconstruction from multiple views.

Session 11: Applications of Computer Vision

 Real-world applications of computer vision (e.g., medical imaging, autonomous vehicles, augmented reality). Case studies and industry insights.

Session 12: Ethical Considerations and Bias in Image Processing

- Ethical considerations in image processing and computer vision.
- Addressing bias and fairness in visual data analysis.
- Discussion of ethical case studies.

Course Report: Computer Vision and Image Processing

MIT COLLEGE, CIDCO
Course Duration: 36 Hrs

Instructor: Asst.Prof. P.P. Ubale

Location: PG-Lab

1. Introduction

The "Computer Vision and Image Processing" course at MIT College, CIDCO, was a transformative journey into the world of visual data analysis. In an era dominated by images and videos, the ability to understand, manipulate, and extract insights from visual data is becoming increasingly important. This report provides an in-depth analysis of the course, its objectives, structure, assessment methods, and the overall learning experience.

2. Course Overview

Computer Vision and Image Processing are interdisciplinary fields that explore how computers can gain a high-level understanding from digital images or videos. The "Computer Vision and Image Processing" course aimed to equip students with the knowledge and skills required to work with visual data effectively.

3. Course Objectives

The course had several primary objectives:

- Foundational Knowledge: To provide students with a strong foundation in computer vision and image processing concepts, techniques, and algorithms.
- Practical Skills: To enable students to apply image analysis and manipulation tools effectively.
- Real-world Applications: To explore practical applications of computer vision and image processing in various domains.
- Ethical Considerations: To educate students about ethical considerations and biases in image processing.
- Project Development: To empower students to develop and present projects related to image analysis and processing.

4. Course Structure

The course was structured into 12 sessions, each focusing on specific aspects of computer vision and image processing. Below is an overview of the sessions:

Session 1: Introduction to Computer Vision and Image Processing

- Session Date: 09-07-2022
- Overview of computer vision and image processing.
- Importance and applications of visual data analysis.
- Key concepts and terminology.

Session 2: Image Acquisition and Preprocessing

- Session Date: 16-07-2022
- Methods and devices for image acquisition.
- Digital image representation and formats.
- Image preprocessing techniques (e.g., noise reduction, enhancement).

Session 3: Image Enhancement and Restoration

- Session Date: 23-07-2022
- Image enhancement techniques (e.g., contrast adjustment, filtering).

- Image restoration methods (e.g., deblurring).
- Practical exercises in enhancing and restoring images.

Session 4: Image Segmentation and Object Detection

- Session Date: 30-07-2022
- Image segmentation algorithms (e.g., thresholding, region-based).
- Object detection techniques (e.g., Haar cascades, contour detection).
- Hands-on practice in segmenting and detecting objects in images.

Session 5: Feature Extraction and Representation

- Session Date: 06-08-2022
- Feature extraction from images (e.g., texture, shape).
- Feature vector representation and dimensionality reduction.
- Practical feature extraction exercises.

Session 6: Image Classification and Recognition

- Session Date: 13-08-2022
- Introduction to image classification and recognition.
- Supervised and unsupervised learning for image classification.
- Building and training image classifiers.

Session 7: Deep Learning for Computer Vision

- Session Date: 20-08-2022
- Deep learning architectures for computer vision (e.g., Convolutional Neural Networks).
- Transfer learning and pre-trained models.
- Practical deep learning projects.

Session 8: Object Tracking and Motion Analysis

- Session Date: 27-08-2022
- Object tracking algorithms (e.g., Mean-Shift, Kalman Filter).
- Motion analysis and optical flow.
- Practical tracking and motion analysis exercises.

Session 9: Image and Video Compression

- Session Date: 03-09-2022
- Basics of image and video compression.
- Compression standards (e.g., JPEG, H.264).
- Compression trade-offs and quality considerations.

Session 10: 3D Computer Vision

- Session Date: 10-09-2022
- Introduction to 3D computer vision.
- Depth perception and 3D reconstruction.
- 3D vision applications.

Session 11: Applications of Computer Vision

- Session Date: 17-09-2022
- Real-world applications of computer vision (e.g., medical imaging, autonomous vehicles, facial recognition).
- Case studies and industry insights.

Session 12: Ethical Considerations in Image Processing

- Session Date: 24-09-2022

- Ethical considerations in image processing.

- Addressing bias and fairness in visual data analysis.

Discussion of ethical case studies.

5. Assessment and Evaluation

Throughout the course, students were assessed using various methods to gauge their understanding and progress. The assessment methods included:

- Quizzes: Short quizzes at the end of specific sessions to assess knowledge retention.
- Lab Exercises: Hands-on lab exercises during sessions to evaluate practical skills.
- Projects: Completion of individual and group projects, allowing students to apply image processing techniques to real-world scenarios.

Final Exam: A comprehensive final exam to assess overall knowledge of computer vision and image processing principles.

These assessment methods were thoughtfully chosen to provide a comprehensive evaluation of each student's abilities and grasp of the course material.

6. Student Feedback and Engagement

One of the course's remarkable aspects was the high level of student engagement. Students displayed genuine interest and enthusiasm for visual data analysis. They actively participated in discussions, asked thought-provoking questions, and eagerly embraced hands-on image processing projects and labs.

- Student Feedback: Feedback was collected from students at various points during the course. Here are key takeaways from student feedback:
- Course Content: Students found the course content to be highly relevant and valuable. They
 appreciated the balance between theory and practical application.
- Instructor: The instructor received consistent praise for their expertise in computer vision and image processing. Students commended their ability to explain complex concepts in a clear and understandable manner.
- Hands-on Learning: Students highly valued the hands-on experiences with image analysis and processing tools. They found these practical exercises instrumental in enhancing their understanding.
- Project Opportunities: Many students expressed satisfaction with the opportunity to work on projects that allowed them to apply their knowledge to real-world problems.

7. Achievements and Success Stories

Throughout the course, students achieved significant milestones and showcased their skills in various ways:

 Diverse Backgrounds: Students came from diverse academic backgrounds, including computer science, engineering, and mathematics. Regardless of their initial expertise, they successfully grasped the nuances of computer vision and image processing.

- Impressive Projects: The final project presentations were a highlight of the course. Students presented a wide range of projects, including object recognition, medical image analysis, and video analytics.
- Interest in Research: Several students expressed a keen interest in pursuing research in computer vision and image processing, with some considering postgraduate studies in the field.

8. Recommendations for Improvement

While the course received overwhelmingly positive feedback, there are areas where it can be further enhanced:

- Advanced Courses: Consider offering advanced courses that delve deeper into specialized areas of computer vision and image processing, such as 3D vision or deep learning in vision.
- Guest Lecturers: Inviting experts from the industry to deliver guest lectures can provide students with insights into real-world applications and trends in visual data analysis.
- Collaborative Projects: Explore opportunities for students to collaborate on interdisciplinary projects, working with peers from different fields to tackle complex challenges.
- Industry Partnerships: Establish partnerships with industry organizations to provide students with access to cutting-edge technologies and real-world datasets.

9. Conclusion

The "Computer Vision and Image Processing" course at MIT College, CIDCO, was a resounding success. It equipped students with essential knowledge and practical skills in visual data analysis, enabling them to excel in a variety of fields, including healthcare, automotive, and robotics. The course content, interactive sessions, hands-on projects, and high level of student engagement contributed to a rewarding and enriching learning experience

In a world increasingly reliant on visual data, the skills acquired in this course are invaluable. MIT College, CIDCO, remains committed to providing high-quality education and fostering a culture of innovation. The "Computer Vision and Image Processing" course has played a pivotal role in advancing this commitment.

Feedback Form: Computer Vision and Image Processing Course

We value your participation in the "Computer Vision and Image Processing" course at MIT College, CIDCO. Your feedback is crucial to help us improve our courses and provide you with the best learning experience. Please take a few moments to share your thoughts and suggestions.

	s (s llopt)
Please rate your overall experience in this course on a scale from 1 (Poor) to	to 5 (Excellent).
1. Poor 2. Fair 3. Good 4. Very Good 5.	Excellent
1. The course content was relevant and valuable. - [] Strongly Disagree - [] Disagree - [] Neutral - [] Agree	- [] Strongly Agree
2. The pace of the course was appropriate [] Too Slow - [] Somewhat Slow - [] Just Right - [] Somewhat F	ast -[] Too Fast
3. The course materials (e.g., handouts, presentations) were helpful. - [] Not Helpful - [] Somewhat Helpful - [] Helpful - [] Very - [] Extremely Helpful	, Helpful
4. The instructor was knowledgeable about the subject [] Strongly Disagree - [] Disagree - [] Neutral - [] Agree	- [] Strongly Agree
5. The instructor effectively communicated the course content [] Strongly Disagree - [] Disagree - [] Neutral - [] Agree	- [] Strongly Agree
estions	- [] Strongly Agree
-[] Strongly Disagree -[] Disagree -[] Neutral	-[] Strongly Agree
Least and ing the concepts.	-[] Strongly Agree
11. Overall, I found this course to be: -[] Not Satisfactory -[] Satisfactory -[] Good -[] Very Good	-[]Excellent
Please share any specific comments, suggestions, or areas where you improved:	believe the course can be

Thank you for taking the time to provide your feedback. Your input is essential to us and will help us enhance our courses and continue to provide you with exceptional learning experiences

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Academic Year 2022-23

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Course Co-Ordinator

PRINCIPAL
M.I.T. Cidco, Aurangabad

Marathwada Institute of Technology CIDCO, Aurangabad

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SHORT TERM COURSE ON "COMPUTER VISION AND IMAGE PROCESSING"

This is to certify that KHATING SWAPNIL SUNDARRAO of B.Sc.(IT) S.Y has successfully completed the Computer Vision and Image Processing 2022-2023, Organized by the Department of B.Sc. CS & IT.

Asst. Prof. P. P. Ubale Course Co-ordinator MIT Cidco, A'Bad

Asst.Prof. S.W. Quadri HOD MIT Cidco,A'Bad

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Mr. Ranjay U. Kale IQAC Co-Ordinator MIT Cidco, A'Bad



Dr.Mahendra H. Kondekar Vice Principal MIT Cidco, A'Bad

Marathwada Institute of Technology CIDCO, Aurangabad

NAAC Accredited with Grade 'B'

SHORT TERM COURSE ON "COMPUTER VISION AND IMAGE PROCESSING"

This is to certify that SONAWANE VAISHALI KISAN of B.Sc.(IT) S.Y has successfully completed the Computer Vision and Image Processing 2022-2023, Organized by the Department of B.Sc. CS & IT.

Asst. Prof. P. P. Ubale Course Co-ordinator MIT Cidco, A'Bad



Mr. Ranjay U. Kale IQAC Co-Ordinator MIT Cidco, A'Bad

Asst. Prof. S.W. Quadri

HOD

MIT Cidco, A'Bad



Dr.Mahendra H. Kondekar Vice Principal MIT Cidco, A'Bad

Feedback Form

Course Name: Computer Vision and Image Processing Course

Name of Student: PATIL ARYAN SUNIL (B.5C-CS-2nd Year)

We value your participation in the "Computer Vision and Image Processing" course at MIT College, CIDCO. Your feedback is crucial to help us improve our courses and provide you with the best learning experience. Please take a few moments to share your thoughts and suggestions.

Please rate you 1. Poor	ır overall e 2. Fair	xperience in the 3. Good	s course on a so		r) to 5 (Excellent). 5. Excellent
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11. Overall, I fo -[] Not Satis		urse to be: - [] Satisfactor	/ -[]Good	¹\{ \text{Very Good}	- [] Excellent

Please share any specific comments, suggestions, or areas where you believe the course can be improved:

Lesion was vort good.

Thank you for taking the time to provide your feedback. Your input is essential to us and will help us enhance our courses and continue to provide you with exceptional learning experiences

Feedback Form

Course Name: Computer Vision and Image Processing Course
Name of Student: Waradle Paran Visary (CS-5.7)

We value your participation in the "Computer Vision and Image Processing" course at MIT College, CIDCO. Your feedback is crucial to help us improve our courses and provide you with the best learning experience. Please take a few moments to share your thoughts and suggestions.

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Please share any specific comments, suggestions, or areas where you believe the course can be improved:

Thank you for taking the time to provide your feedback. Your input is essential to us and will help us enhance our courses and continue to provide you with exceptional learning experiences





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NOTICE

MIT COLLEGE, CIDCO Date: 26/12/2022

Subject: Course Announcement - Advanced Python Programming

Dear Students,

We are delighted to announce the launch of our upcoming course, "Advanced Python Programming," at MIT College, CIDCO. Python is a versatile and widely-used programming language known for its simplicity and power. This course is designed to take your Python skills to the next level and equip you with advanced techniques for solving complex problems and building sophisticated applications.

Course Details:

Course Name: Advanced Python Programming

- Duration: 36 Hrs.

Schedule: Saturday[2:00 pm to 5:00pm]

- Location: PG-Lab

-Course Start Date: [07/01/2023]

Course Overview:

Python is not only a beginner-friendly language but also a language of choice for professionals and researchers worldwide. This course will delve into advanced Python concepts, libraries, and best practices. Whether you are an aspiring data scientist, software developer, or researcher, this course will help you master Python for your career.

Course Highlights:

- Advanced Python syntax and features.
- In-depth exploration of Python libraries for data science, web development, and more.
- Building real-world projects to reinforce learning.
- Expert guidance from experienced Python developers.

Who Should Attend?

This course is open to students with prior Python programming experience. It is ideal for those who wish to expand their Python skills and explore its applications in data science, web development, automation, and more. If you are eager to harness the full potential of Python, this course is for you.

Registration:

To register for the "Advanced Python Programming" course, please visit to M.S. Janjire Sir Seats are limited, so secure your spot today and embark on your journey to becoming an advanced Python programmer. Python is a language that continues to evolve, and staying updated with the latest advancements is crucial. This course will ensure you are well-prepared to excel in your Pythonbased projects and career. For any inquiries or further information, please contact on 9762992249.

Sincerely Asst.prof. Mr. M.S.Janjire



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Session-Wise Syllabus: Advanced Python Programming Session 1: Introduction to Advanced Python Concepts

 Overview of advanced Python programming. Understanding Python's philosophy and design principles. Review of Python basics and data types.

Session 2: Python Object-Oriented Programming (OOP)

- Introduction to OOP in Python. Classes and objects.
- Inheritance, encapsulation, and polymorphism. Practical exercises in Python OOP.

Session 3: Advanced Data Structures

- Exploring advanced data structures like sets, dictionaries, and namedtuples.
- Custom data structures and their implementation.
- Memory management and performance considerations.

Session 4: Exception Handling and Debugging

- Exception handling in Python. Debugging techniques and tools.
- Writing robust code with error handling.

Session 5: File Handling and Input/Output (I/O) Operations

- Reading and writing files in Python. Working with CSV, JSON, and other file formats.
- Serializing and deserializing data.

Session 6: Python Decorators and Generators

- Understanding Python decorators. Creating custom decorators.
- Generators and iterators for efficient memory usage.

Session 7: Advanced Python Modules and Libraries

- Exploring popular Python libraries: NumPy for numerical computing.
- pandas for data manipulation. Matplotlib for data visualization.
- Hands-on exercises with these libraries.

Session 8: Web Development with Flask

- Introduction to web development with Flask. Building web applications with Flask.
- Routing, templates, and handling forms.

Session 9: Database Interaction with SQLAlchemy

- Working with databases in Python. Introduction to SQLAlchemy for database access.
- Performing CRUD (Create, Read, Update, Delete) operations.

Session 10: Testing and Test-Driven Development (TDD)

- Importance of testing in software development.
- Writing unit tests in Python. Practicing TDD with Python projects.

Session 11: Python Best Practices and Code Quality

- Writing clean and maintainable Python code.
- Code documentation and docstrings. Version control and collaborative coding.

Session 12: Python for Data Science

 Python's role in data science and machine learning. Introduction to libraries like scikit-learn and TensorFlow. Building a simple data science project. **Course Report: Advanced Python Programming**

MIT COLLEGE, CIDCO Course Duration: 36 Hrs

Instructor: Asst.prof. Mr. M.S. Janjire

Location: PG-Lab

1. Introduction

The "Advanced Python Programming" course at MIT College, CIDCO, offered students an opportunity to dive deep into the world of Python, one of the most versatile and widely-used programming languages. Python's popularity stems from its simplicity, readability, and an extensive library ecosystem that supports various applications, from web development to data science. This report provides a comprehensive overview of the course, its objectives, structure, assessment methods, and the overall learning experience.

2. Course Overview

Python is a programming language renowned for its ease of use and versatility. While it's an excellent choice for beginners, Python's power extends to advanced concepts and complex problem-solving. The "Advanced Python Programming" course was designed to explore Python's advanced features, libraries, and best practices. It aimed to equip students with the skills needed to develop robust applications, analyze data, and excel in various domains.

3. Course Objectives

The course had several primary objectives:

- Advanced Python Proficiency: To deepen students' understanding of Python's advanced features, object-oriented programming, and data structures.
- Library Mastery: To familiarize students with powerful Python libraries such as NumPy, pandas, and Matplotlib for data manipulation and visualization.
- Web Development: To introduce students to web development using the Flask framework.
- Database Interaction: To enable students to interact with databases using SQLAlchemy.
- Testing and Best Practices: To instill best practices in Python development, including testing and code quality.
- Data Science Exposure: To provide an introduction to Python's role in data science and machine learning.

4. Course Structure

The course was structured into 12 sessions, each focusing on specific aspects of advanced Python programming. Below is an overview of the sessions:

Session 1: Introduction to Advanced Python Concepts

- Session Date: 07-01-2023
- Overview of advanced Python programming.
- Review of Python basics and data types.
- Pythonic coding style and idioms.

Session 2: Python Object-Oriented Programming (OOP)

- Session Date: 14-07-2023
- Deep dive into object-oriented programming (OOP) in Python.

- Classes, objects, and inheritance.
- Encapsulation and polymorphism in Python.

Session 3: Advanced Data Structures

- Session Date: 21-01-2023
- Exploring advanced data structures like sets, dictionaries, and namedtuples.
- Custom data structure design and implementation.
- Memory management and performance considerations.

Session 4: Exception Handling and Debugging

- Session Date: 28-01-2023
- · Exception handling in Python.
- Debugging techniques and tools.
- Writing robust code with proper error handling.

Session 5: File Handling and Input/Output (I/O) Operations

- Session Date: 04-01-2023
- Reading and writing files in Python.
- Handling different file formats (e.g., CSV, JSON).
- Serialization and deserialization of data.

Session 6: Python Decorators and Generators

- Session Date: 11-02-2023
- Understanding and creating Python decorators.
- Introduction to generators and iterators.
- Leveraging decorators and generators for efficient code.

Session 7: Advanced Python Modules and Libraries

- Session Date: 18-02-2023
- In-depth exploration of advanced Python libraries:
- NumPy for numerical computing.
- pandas for data manipulation and analysis.
- Matplotlib for data visualization.
- Hands-on exercises with these libraries.

Session 8: Web Development with Flask

- Session Date: 25-02-2023
- Introduction to web development using the Flask framework.
- Building web applications with Flask.
- Routing, templates, and handling forms.

Session 9: Database Interaction with SQLAlchemy

- Session Date: 04-03-2023
- Working with databases in Python.
- Introduction to SQLAlchemy for database access.
- Performing CRUD (Create, Read, Update, Delete) operations on databases.

Session 10: Testing and Test-Driven Development (TDD)

- Session Date: 11-03-2023
- The significance of testing in software development.

- Writing unit tests in Python.
- Practicing Test-Driven Development (TDD) with Python projects.

Session 11: Python Best Practices and Code Quality

- Session Date: 18-03-2023
- Writing clean and maintainable Python code.
- Documenting code with docstrings.
- Version control and collaborative coding practices.

Session 12: Python for Data Science

- Session Date: 25-08-2023
- Python's role in data science and machine learning.
- Introduction to libraries such as scikit-learn and TensorFlow.
- Building a simple data science project.

5. Assessment and Evaluation

The course employed various assessment methods to gauge students' understanding and progress:

- Quizzes: Short quizzes at the end of specific sessions to assess knowledge retention.
- Hands-on Exercises: Practical exercises during sessions to evaluate coding and problem-solving skills.
- Projects: Completion of individual and group projects, allowing students to apply advanced Python concepts to real-world scenarios.
- Final Exam: A comprehensive final exam covering key advanced Python topics.
- These assessment methods were thoughtfully chosen to provide a holistic evaluation of each student's abilities and understanding of the course material.

6. Student Feedback and Engagement

The "Advanced Python Programming" course witnessed a high level of student engagement throughout its duration. Students exhibited genuine enthusiasm for advanced Python concepts and actively participated in discussions, asked insightful questions, and enthusiastically embraced hands-on programming exercises and projects.

- Student Feedback: Regular feedback sessions were conducted to gather students' opinions and insights. Key takeaways from student feedback include:
- Course Content: Students found the course content to be highly valuable and relevant to their career goals. They appreciated the depth of coverage in advanced Python topics.
- Instructor: The instructor received consistent praise for their expertise in Python and their ability to explain complex concepts in an understandable manner. Students commended their dedication to student success.
- Hands-on Learning: Students highly valued the hands-on experience with advanced Python libraries and frameworks. Practical exercises helped reinforce theoretical knowledge.

Project Opportunities: Many students expressed satisfaction with the opportunity to work on Python projects. They found these projects instrumental in gaining realworld experience.

7. Achievements and Success Stories

Throughout the course, students achieved notable milestones and showcased their skills in various ways:

- Diverse Backgrounds: Students came from diverse academic backgrounds, including computer science, engineering, and data analysis. Regardless of their initial expertise, they successfully grasped the intricacies of advanced Python.
- Impressive Projects: The final project presentations were a highlight of the course. Students presented a wide range of projects, including web applications, data analysis tools, and automation scripts.
 - Interest in Further Learning: Several students expressed a keen interest in further exploring advanced Python topics, such as machine learning and deep learning.

While the course received overwhelmingly positive feedback, there are areas where it can 8. Recommendations for Improvement be further enhanced:

- Advanced Courses: Consider offering specialized advanced courses that delve deeper into specific areas of Python development, such as machine learning or web development.
- Guest Lecturers: Inviting industry experts to deliver guest lectures can provide students with insights into real-world Python applications and emerging trends.
- Collaborative Projects: Explore opportunities for students to collaborate on interdisciplinary projects, fostering teamwork and problem-solving skills.
- Certification: Consider offering certification for course completion, as it can enhance students' career prospects.

9. Conclusion

The "Advanced Python Programming" course at MIT College, CIDCO, was a resounding success. It equipped students with advanced Python skills, enabling them to excel in various domains, from web development to data science. The course content, interactive sessions, hands-on projects, and high level of student engagement contributed to a rewarding and enriching learning experience. Python continues to be a language of choice for professionals and researchers across the globe. This course ensured that students are well-prepared to harness Python's power and contribute to the ever-evolving tech landscape.

MIT College, CIDCO, remains committed to providing high-quality education and fostering a culture of innovation. The "Advanced Python Programming" course has played a pivotal role in advancing this commitment.

We look forward to continuing to offer courses that empower students to unlock the full potential of Python and thrive in the dynamic world of technology.

M.I.T. Cidco, Aurangabad

Feedback Form: Advanced Python Programming Course

We value your participation in the "Advanced Python Programming" course at MIT College, CIDCO. Your feedback is crucial to help us improve our courses and provide you with the best learning experience. Please take a few moments to share your thoughts and suggestions.

Please rate your overall experience in this course on a scale from 1 (Poor) to 5 (Excellent). 1. Poor 2. Fair 3. Good 4. Very Good 5. Excellent	
 The course content was relevant and valuable for advancing your Python skills. [] Strongly Disagree - [] Disagree - [] Neutral - [] Agree - [] Strongly Agree 	
2. The pace of the course was appropriate for covering advanced Python topics. - [] Too Slow - [] Somewhat Slow - [] Just Right - [] Somewhat Fast - [] Too Fast	
3. The course materials (e.g., presentations, handouts) were helpful in your learning. - [] Not Helpful - [] Somewhat Helpful - [] Helpful - [] Very Helpful - [] Extremely Helpful	
4. The instructor was knowledgeable about advanced Python topics. - [] Strongly Disagree - [] Disagree - [] Neutral - [] Agree - [] Strongly Agree	
5. The instructor effectively explained complex concepts and provided clear explanations. - [] Strongly Disagree - [] Disagree - [] Neutral - [] Agree - [] Strongly Agree	
6. The instructor was approachable and responsive to your questions and concerns. - [] Strongly Disagree - [] Disagree - [] Neutral - [] Agree - [] Strongly Agree	
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Thank you for taking the time to provide your feedback. Your input is essential to us and will help us enhance our courses and continue to provide you with exceptional learning experiences.

NAAC Accredited by Grade "B", Affiliated to Dr. B. A. M. University, Department of Computer Science and Information Technology Marathwada Institute of Technology Cidco, Aurangabad Academic Year 2022-23

Adv. Python Programming Certificate Course Attendance

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Marathwada Institute of Technology CIDCO, Aurangabad

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SHORT TERM COURSE ON "ADVANCE PYTHON PROGRAMMING"

the Department of B.Sc. CS & IT. completed the Advance Python Programming Course 2022-2023, Organized by This is to certify that Rathod Panjab Ramesh of B.Sc.(CS) S.Y has successfully

28 Janue

Asst. Prof. M.S. Janjire Course Co-ordinator MIT Cidco, A'Bad

Asst.Prof. S.W. Quadri HOD MIT Cidco,A'Bad

Mr. Ranjay U. Kale IQAC Co-Ordinator MIT Cidco, A'Bad

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Dr.Mahendra H. Kondekar Vice Principal MIT Cidco,A'Bad

Marathwada Institute of Technology CIDCO, Aurangabad

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SHORT TERM COURSE ON "ADVANCE PYTHON PROGRAMMING"

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Asst. Prof. M.S. Janjire Course Co-ordinator MIT Cidco, A'Bad

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Mr. Ranjay U. Kale IQAC Co-Ordinator MIT Cidco,A'Bad



Dr.Mahendra H. Kondekar Vice Principal MIT Cidco,A'Bad

Feedback Form

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Name of Student: Rathod Panjab Rameh (BSC. CS-IIYr)
We value your participation in the "Advanced Python Programming" course at MIT College, CIDCO. Your feedback is crucial to help us improve our courses and provide you with the best learning experience. Please take a few moments to share your thoughts and suggestions.
Please rate your overall experience in this course on a scale from 1 (Poor) to 5 (Excellent). 1. Poor 2. Fair 3. Good 5. Excellent
1. The course content was relevant and valuable for advancing your Python skills. - [] Strongly Disagree - [] Disagree - [] Neutral - [] Agree - [] Strongly Agree
2. The pace of the course was appropriate for covering advanced Python topics. -[] Too Slow -[] Somewhat Slow -[] Just Right -4 Somewhat Fast -[] Too Fast
3. The course materials (e.g., presentations, handouts) were helpful in your learning. - [] Not Helpful - [] Somewhat Helpful - [] Helpful - [] Very Helpful - [] Extremely Helpful
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8. The hands-on exercises and projects were valuable for reinforcing advanced Python concepts. -[] Strongly Disagree -[] Disagree -[] Neutral -[] Agree -[] Strongly Agree
9. Overall, I found this course to be: -[] Not Satisfactory -[] Satisfactory -[] Good -[] Very Good[] Excellent
Please share any specific comments, suggestions, or areas where you believe the

Thank you for taking the time to provide your feedback. Your input is essential to us and will help us enhance our courses and continue to provide you with exceptional learning experiences.

course can be improved:

Feedback Form

Course Name: Advanced Python Programming Course Name of Student: Vishwakama Rither Rumesh (B5((5)-1774)
We value your participation in the "Advanced Python Programming" course at with College, CIDCO. Your feedback is crucial to help us improve our courses and provide you with the best learning experience. Please take a few moments to share your thoughts and suggestions.
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Please share any specific comments, suggestions, or areas where you believe the course can be improved:
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Thank you for taking the time to provide your feedback. Your input is essential to us and will help us enhance our courses and continue to provide you with exceptional learning experiences.

G. S. Mandals Marathwada Institute of Technology CIDCO, Aurangabad. List of students of the REDHAT RHCSA Batch 2022-23

Sr. No.	Firstname	Tantunana
1		Lastname
2	Gaurav	Bharne
2	Rupali	Ingle
3	Nikita	Gawali
4	Nandini	Pagare
5	Sukti	Pawar
6	Adesh	Kuber
7	Vedant	Davhare

PRINCIPAL M.I.T. Cidco, Aurangabad

G. S. Mandals Marathwada Institute of Technology CIDCO, Aurangabad. List of students of the Oracle Database Foundation Batch 2022-23

Sr. No.	Firstname	Lastna	tion Batch 2022-23
1	Pavan	Lastname Shinde	Username
2	Harshada		OA809680726
3	Akshay	Patil Ambhore	OA809680778
4	Sominath		OA809680780
5	Omkar	Girnare	OA809680781
6	Vikas	Ingle	OA809680784
7	Tushar	Wagh	OA809680785
8	Krushna	Kolte	OA809680788
9	Yuvraj	Kolte	OA809680789
10	Renuka	Bedwal	OA809680791
11	Rohan	Kale	OA809680793
12	Tushar	Sonwane	OA809680796
13	Abhishek	Dahibhate	OA809680797
14	Abhishek	Bankar	OA809680798
15	Anil	Gaikwad	OA809680801
16	Sandesh	Dakle	OA809680802
17		Gore	OA809680805
18	Sandip	Pawar	OA809680806
19	Dipak	Gayke	OA809680809
20	Akshay	Gayke	OA809680810
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21	Prasad	Panchal	OA809680814
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33	Muhammad	Momin	OA809680835
34	Rohit	Raut	OA809680836
35	Sanjivani	Shinde	OA809680837
36	Rutuja	Thorat	OA809680838
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40	Atharva	Jayfale	OA809680842
41	Yash	Bodre	OA809680909
42	Tanuja	Ghandge	OA809680910
43	Rutuja	Ghandge	OA809680911
44	Arati	Bharati	OA809681280
45	Aditya	Khalse	OA809681281
	Nakul	Rajale	OA809681282
46	Dakshata	Kedare	OA809681283

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50	Robinsingh	Thote	OA809681284 OA809681285
51	Abhijit	Digwa	OA809681286
52	Dhananjay	Jaiswal	OA809681286
53	Pratiksha	Dakle	OA809681288
54	Gopal	Dabhade	OA809681289
55	Rohan	Paighan	OA809681289
56		Surywanshi	OA809681290
57	Saniya	Kade	OA809681337
58	Chetna	Gadekar	OA809681339
59	Aniket	Bhombe	OA809681390
	Pranav	Kakde	OA809681391
50	Sanghpal	Shinde	OA809681391
51	Shital	Gaikwad	OA809681393
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70	Shobha	Kharbal	OA809681420
71	Satwik	Gaykwad	OA809681421
72	Rani	Kale	OA809681422
73	Abhay	Chavan	OA809681423
74	Abhijeet	Didore	OA809681454
75	Akash	Sable	OA809681455
76	Akshay	Misal	OA809681456
77	Akshaykumar	Sharma	OA809681457
78	Altaf	Shaha	OA809681458
	Ankita	Deshmukh	OA809681459
79	Ankita	Khandagale	OA809681460
80		Singh	OA809681461
81	Anurag Rohit	Wagh	OA809681462
82	Ashvini	Doifode	OA809681463
83		Khan	OA809681464
84	Ayan	Pare	OA809681465
85	Bhagwan	Kavle	OA809681466
86	Dnyaneshwar Ganesh	Gonge	OA809681467
87	Ganesh	Shinde	OA809681468
88	Ganesn	Taru	OA809681469
89		Mohammad	OA809681470
90	Huzaifa	Rathod	OA809681471
91	Karan	Korde	OA809681472
92	Lavanya	Ateeque	OA809681473
93	Mahammad Nabil	Syed	OA809681474
94		Shaikh	OA809681475
95	Naveed	Khavane	OA809681476
96	Paval	Somvani	OA809681477
97	Payal Renuka	Mahurkar	OA809681478
98	Rohan	Ganakwar	OA809681479
99	Rohit	Gupta	OA809681480

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Sr. No.	Firstname	Laster Batch 2022-23		
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3	ABHIJIT	NAVLĖ	OA554398130	
4	ABHISHEK	SURVE	OA554397937	
5	ADESH	CHOUDHARI	OA554397962	
6	ADITI	KUBER	OA554398045	
7		KULKARNI	OA554397925	
8	AKASH	GHODKE	OA554398042	
9	AKASH	PURI	OA554397914	
	AKSHAY	GAWANDE	OA554398047	
10	AKSHAY	KHILLARE	OA554397942	
11	AKSHAY	SHINDE	OA554398157	
12	AMIR	KHAN	OA554398142	
13	ANAND	MHASKE	OA554398143	
14	ARYAN	PATIL	OA554398036	
15	DHANANJAY	GADEKAR	OA554398124	
16	DHANRAJ	MANWAR	OA554397947	
17	DHIRAJ	GHAYAL	OA554397943	
18	DIPESH	JAISWAL	OA554398033	
19	DIVYA	SHELKE	OA554397960	
20	GAURAV	BHARANE	OA554398032	
21	GAYATRI	PALDEWAR	OA554398150	
22	HANUMAN	INGALE	OA554398144	
23	HARSHAL	KUMARE	OA554397963	
24	JESICA	GITE	OA554397931	
25	KAJAL	THAKUR	OA554398034	
26	KAMRAN	SHAIKH	OA554398127	
27	KIRAN	WAGH	OA554397929	
	KRUSHNA	BORUDE	OA554397945	
28	LAKHANSING	JARWAL	OA554397941	
29	LALIT	PAWAR	OA554397908	
30	LAXMAN	PATHE	OA554398131	
31	MAHESH	THORAT	OA554397946	
32	MANASI	DHABALE	OA554397927	
33	MAYUR	PATHE	OA554397955	
34	Madhukar	Janjire	OA558071854	
35	Madhuri	Girase	OA558071512	
36	Mahendra	Kondekar	OA558071459	
37	NANDINI	PAGARE	OA554398140	
38	NEELIMA	PAWAR	OA554398148	
39	NIKITA	GAIKWAD	OA554398147	
40	NISHANT	CHAUDHARI	OA554397954 OA558071461	
41	Neha	Sahuji	OA554398039	
42	PARTH	ANJANKAR	OA554398039 OA554398128	
43	PAWAN	WARADE	OA554398120	
44	POOJA	KONDEKAR	OA554398126	
45	PRANAV	GHADGE	OA554397961	
46	PRASAD	KALE	OA554398145	
47	PRATIKSHA	BOBDE	OA554398151	
48	PRITIKUMARI	ROY	OA554398153	
49	PUJA	BEDWAL	Onserve	
50	FOX			

51	Pradeep	Ubale	
	RADHIKA	LIMALKAR	OA558071804
3	RAHUL	UMALKAR	OA554397939
54	RAJNANDINI	JADHAV	OA554398135
55	RAM	SONAWANE	OA554398139
6	RAMESHWAR	JAPE	OA554397953
57	RENUKA	JADHAV	OA554397910
8	RENUKA	BALANDE	OA554397934
59	RITESH	SHELKE	OA554398038
50	RITESH	SOMWANSHI	OA554398155
51		VISHWAKARMA	OA554397950
52	RITIKA	VISHWAKARMA	OA554398044
53	ROHINI	CHAVAN	OA554397959
	ROHIT	CHAVAN	OA554398125
54	ROHIT	DHANAIT	OA554397957
55	RUPALI	KHANDAGALE	OA554398152
66	RUPESH	CHAVAN	OA554398134
57	RUSHIKESH	GHUGE	OA554397923
68	RUSHIKESH	NARAYANKAR	OA554397936
69	Rutuja	Sontakke	OA558071482
70	SACHIN	BARFE	OA554398133
71	SAGAR	DAHIHANDE	OA554397912
72	SAGAR	THORAT	OA554397918
73	SAKSHI	PAWAR	OA554398146
74	SANDHYA	MOTE	OA554398141
75	SANKET	BAHADURE	OA554398043
76	SANKET	KHÜLE	OA554397935
77	SANTOSH	KHILLARI	OA554398041
78	SATISH	SHIMRE	OA554398123
79	SATYAM	SABLE	OA554397940
80	SAURABH	CHIKTE	OA554397916
81	SHANKAR	WAGH	OA554398129
82	SHRADDHA	ABBU	OA554398119
83	SHREYA	KHARAD	OA554398046
84	SHUBHAM	BORDE	OA554398154
85	SOHAM	KHATADE	OA554397952
86	SONALI	WAGHMARE	OA554398149
87	SUDHIR	ADHE	OA554397944
88	SUKTI	PAWAR	OA554398035
89	SUVARNA	WADEKAR	OA554397958
90	Shantanu	Vyavhare	OA558071803 OA558071510
91	Sheetal	Chavan	OA558071463
92	Sonal	Bacchao	OA558071462
93	Surekha	Mengade	OA554398132
94	TEJAS	ATHVANE	OA554397948
95	TEJAS	JADHAV	OA554398136
96	TEJAS	JADHAV	OA554397933
97	TRUPTI	GHODKE KAMBLE	OA554397951
98	TUSHAR	PATHE	OA554397956
99	TUSHAR	SHAIKH	OA554398121
100	USMAN	PATIL	OA568909759
101	KUNAL	GAWALI	OA568910081
102	NIKITA	KESAPURE	OA568910082
103	VAISHNAVI	BHALE	OA568910083
104	PRATIKSHA	DEHADE	OA568910084

106	SWAPNIL		
107	VISHAL	KHATING	
108	PAVAN	MORE	OA568910085
109	PAVAN	IKKAR	OA568910160
110	SANIKA	NAWALE	OA568910161
111	DURGA	KULKARNI	OA568910162
112	SHREYA		OA568910190
113	VAISHALI	KHARAD	OA568910191
	ROHIT	JADHAV	OA568910192
114	HRUTIK	DHANAIT	OA568910193
115	RIZWAN UR RAHMAN	UMBARKAR	OA568910194
116	AARTI	ANSARI	OA568910195
117	PUNJAB	HIWALKAR	OA568910196
118	ROHINI	RATHOD	OA568910197
119	ASHWINI	DHOBLE	OA568910198
120	UMA	KOREWAD	OA568910199
121	PRIYANKA	GAUTAM	OA568910200
122	PRANAV	MUTTHE	OA568910201
123		MORE	OA568910202
124	YOGESH	MANE	OA568910203
125	SHILPA	GAUD	OA568910204
126	MAYANK	WAYAL	OA568910205
127	REHAN	SHAIKH	OA568910206
	SYED QUIZER	ALI	OA568910207
128	NAWAZ	TAMBOLI	OA568910208
129	SHAHABAZ	KHAN	OA568910209
130	NIKITA	BASAIYE	OA568910210
131	VAIBHAV	KUMAVAT	OA554397949
132	VAISHALI	JADHAV	OA554398048
133	VAISHALI	SONAWANE	OA554398138
134	VAISHNAVI	PAWAR	OA554398137
135	VEDANT	DAVHARE	OA554398037
136	VIJAY	BHALERAO	OA554398156
137	VISHAL	KAHAR	OA554398040
138	VISHAL	MANE	OA554398122
139	VISHWAJEET	DUKARE	OA554397921
140	YASHODA	GAUTAM	OA554397932

