



GAYATRI VIDYA PARISHAD COLLEGE FOR DEGREE AND PG COURSES (A)

Rushikonda, Visakhapatnam-530 045 | website: www.gvpcdpgc.edu.in

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Visakhapatnam

Department of Computer Applications

Training Programs (2024-2025)

The following is the list of Training Programs Conducted for the MCA Students in the Department of Computer Applications for the Academic Year 2024-2025.

S.No	Name of the Course	Trainer Name	No.of Students	Duration of the Course	Dates
1	APEX (CRT Training)	Deepak,Roshan,Srihitha, Suraj Chawla,Prady	MCA-65	6 Days	11 th March to 16 th March 2024
2	BRIX COSMOS	Mrs. Chetana Harika Oruganti	MCA-66	3 Days	21 st Aug to 23 rd Aug 2024
3	Face prep	Lakshmi	MCA-65	5 Days	10 th Sep to 14 th Sep 2024
4	APEX (CRT Training)	Deepak,Roshan,Srihitha, Suraj Chawla,Prady	MCA-66	4 Days	25 th Sep to 28 th Sep 2024
5	Cyber Threya (CyberSecurity Course)	Ravi	MCA-65	7 Days	3 rd Jan to 9 th Jan 2025
6	IoT with Python by Appleton Innovation	V.Bappuji	MCA-65	9 Days	22 nd Jan to 30 th Jan 2025
7	Robotics Workshop and Hackathon.	teckybot	MCA-65	4 Days	24 th Feb to 28 th Feb 2025
8	AI and ML Worshop	teckybot	MCA-65	6 Days	3rd to 10th March 2025
9	EXCELR (DSA & Accenture)	Ram Tavva	52 Students	20 Days	19th August 2024 to 6th September 2024



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Training Programs (2024-2025)

S.No	Name of the Course	Trainer Name	No.of Students	Duration of the Course	Dates
10	EDX (Java Script)	William Mead	73 Students	10 Days	-
11	AWS Academy (Cloud Architecting)	AWS	33 Students	7 Days	-
12	Python full stack	K Madhu	MCA-66	10 Days	21 st April to 3 rd May 2025
13	AWS Internship	AWS	10 Students	60 Days	-

Director of MCA

Prof.I.S.Pallavi

Director
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Department of Computer Applications

Training Programs (2024-2025)

DATE- 10-3-2024

CIRCULAR

It is informed that all the students of MCA 3rd Semester request to attend the training program on **APEX (CRT Training)** on 11th March to 16th March 2024 i.e, **6 Days** organized by APEX conducted in the Seminar hall by Department of Computer Applications, G.V.P. College for Degree and PG Courses(A)

Director of MCA

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Training Programs (2024-2025)

Report on APEX (CRT Training)

Date of Report:

Program Title: APEX (CRT Training)

Duration: 11th March to 16th March 2024

Faculty Instructors: Deepak,Roshan,Srihitha, Suraj Chawla,Prady

Program Coordinator: B. Divakar

The APEX (CRT Training) Training Program was conducted from 11th March to 16th March 2024, organized by APEX Training Institute. The program aimed to equip participants with the fundamental skills and basic knowledge.

Objective

The primary objective of the Campus Recruitment Training (CRT) Program is to equip final-year students with the skills and confidence required to excel in campus placement drives. Specifically, the program aims to:

- Enhance technical proficiency in coding, data structures, and emerging technologies like Machine Learning to meet industry standards.
- Develop aptitude skills, including quantitative, logical, and verbal reasoning, to succeed in written recruitment tests.

Program Structure

Day 1: Quantitative Aptitude – Arithmetic Basics

Duration: 6 hours (9 AM – 3 PM)

Objective: Build a strong foundation in arithmetic concepts commonly tested in placement exams.

- **Topics** (3 hours theory):
 - **Number System:** Types of numbers, divisibility rules, HCF, LCM, remainders.
 - **Percentages:** Profit and loss, simple and compound interest, discounts.
 - **Ratio and Proportion:** Partnerships, mixtures, and alligations.
 - **Time and Work:** Work efficiency, pipes and cisterns.



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Department of Computer Applications

Training Programs (2024-2025)

- **Practice (2 hours):**
 - Solve 50 problems (10 per topic) from standard CRT resources (e.g., R.S. Aggarwal, Arun Sharma).
 - Focus on shortcuts and time-saving techniques (e.g., percentage-to-fraction conversion).
- **Mock Test (1 hour):**
 - 20 questions covering Day 1 topics.
 - Time limit: 30 minutes.
 - Review and discuss solutions to identify common mistakes.

Day 2: Quantitative Aptitude – Advanced Arithmetic and Algebra

Duration: 6 hours (9 AM – 3 PM)

Objective: Cover advanced arithmetic and algebra topics to tackle complex problems.

- **Topics (3 hours theory):**
 - **Time, Speed, and Distance:** Relative speed, trains, boats, and streams.
 - **Average and Ages:** Weighted averages, age-based problems.
 - **Algebra:** Linear equations, quadratic equations, inequalities.
 - **Data Interpretation:** Tables, bar graphs, pie charts, line graphs.
- **Practice (2 hours):**
 - Solve 50 problems (12–13 per topic).
 - Emphasize data interpretation sets (e.g., 5 questions per DI set).
- **Mock Test (1 hour):**
 - 20 questions, including 5 DI questions.
 - Time limit: 30 minutes.
 - Feedback session to improve speed and accuracy.

Day 3: Logical Reasoning – Analytical and Critical Thinking

Duration: 6 hours (9 AM – 3 PM)

Objective: Develop logical and analytical reasoning skills for problem-solving.

- **Topics (3 hours theory):**
 - **Puzzles:** Seating arrangements (linear, circular), blood relations.
 - **Syllogisms:** Statements and conclusions, Venn diagrams.
 - **Coding-Decoding:** Letter coding, number coding, substitution.
 - **Data Sufficiency:** Analyzing given data to answer questions.



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Training Programs (2024-2025)

- **Practice (2 hours):**
 - Solve 40 problems (10 per topic).
 - Focus on puzzle-solving strategies and logical deduction techniques.
- **Mock Test (1 hour):**
 - 20 questions covering all Day 3 topics.
 - Time limit: 25 minutes.
 - Discuss common errors (e.g., misinterpreting syllogisms).

Day 4: Verbal Ability and Communication

Duration: 6 hours (9 AM – 3 PM)

Objective: Enhance verbal skills for aptitude tests and interviews.

- **Topics (3 hours theory):**
 - **Reading Comprehension:** Passage analysis, theme identification, inference questions.
 - **Vocabulary:** Synonyms, antonyms, word usage, idioms.
 - **Grammar:** Sentence correction, error spotting, sentence completion.
 - **Verbal Reasoning:** Analogies, sentence rearrangement (para-jumbles).
- **Practice (2 hours):**
 - Solve 40 problems (10 per topic).
 - Practice 2–3 reading comprehension passages with 5 questions each.
- **Mock Test (1 hour):**
 - 20 questions, including 5 RC questions.
 - Time limit: 25 minutes.
 - Feedback on improving comprehension speed and grammar accuracy.

Day 5: Comprehensive Revision and Full-Length Mock Test

Duration: 6 hours (9 AM – 3 PM)

Objective: Consolidate learning and simulate a real placement aptitude test.

- **Revision (2 hours):**
 - Quick recap of key concepts from Days 1–4.



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Department of Computer Applications

Training Programs (2024-2025)

- Address common student doubts (e.g., tricky DI sets, complex puzzles).
- Teach time management strategies for 60-minute aptitude tests.
- **Practice (2 hours):**
 - Mixed problem set: 50 questions covering quantitative aptitude (20), logical reasoning (15), and verbal ability (15).
 - Focus on solving under time pressure.
- **Full-Length Mock Test (2 hours):**
 - 60 questions (20 quantitative, 20 logical, 20 verbal).
 - Time limit: 60 minutes, replicating company test formats (e.g., AMCAT, Cocubes).
 - Detailed feedback session to analyze performance and discuss strategies for improvement.

Methodologies: The CRT program employed a combination of teaching and assessment methodologies to ensure effective skill development:

- **Interactive Lectures:** Faculty delivered concepts using real-world examples, such as aptitude problems from past placement tests and coding challenges from companies like TCS and Infosys.
- **Hands-On Coding:** Students practiced coding on platforms like LeetCode and HackerRank, with daily challenges to reinforce concepts like data structures and algorithms.
- **Group Activities:** Group discussions and team-based coding projects fostered collaboration and communication skills, mirroring industry teamwork scenarios.
- **Mock Tests and Interviews:**
 - Weekly aptitude tests replicated the format of company-specific exams (e.g., AMCAT, Cocubes).
 - Mock technical and HR interviews were conducted by faculty and alumni, with personalized feedback to address weaknesses.
- **Peer Learning:** Students were paired for peer reviews of resumes and code, encouraging mutual learning and feedback, similar to methodologies used in top CRT programs like those at FACE Academy.



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Department of Computer Applications

Training Programs (2024-2025)

- **Technology Integration:** Online platforms (e.g., Google Classroom for resources, Zoom for guest lectures) and tools like GitHub for code sharing were used to enhance accessibility and collaboration.
- **Feedback Mechanism:** Regular feedback sessions allowed students to address challenges, with [e.g., 80%] reporting that feedback improved their performance.

The methodologies were designed to be adaptive, with remedial sessions for students struggling with specific topics (e.g., dynamic programming or quantitative aptitude).

Outcomes: The CRT program yielded significant results in terms of student performance and placement success.



Placement preparation seminar in progress and the Speaker addressing a hall full of attentive students



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Training Programs (2024-2025)



Placement preparation seminar in progress and the Speaker addressing a hall full of attentive students

Conclusion

The Campus Recruitment Training (CRT) Program successfully achieved its objective of preparing students for campus placements by equipping them with essential technical, aptitude, and soft skills. The structured curriculum, combined with hands-on methodologies and regular assessments, resulted in a high placement rate and significant skill development.

Trainer

Director of MCA
Prof.I.S.Pallavi

[Signature]
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Training Programs (2024-2025)

DATE- 19-8-25

CIRCULAR

It is informed that all the students of MCA 3rd Semester request to attend the training program on **BRIX COSMOS** on 21st Aug to 23rd Aug 2024 i.e, **3 Days** organized by BRIX COSMOS conducted in the Seminar hall by Department of Computer Applications, G.V.P. College for Degree and PG Courses(A).

Trainer


Director of MCA
Prof.I.S.Pallavi

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Department of Computer Applications

Training Programs (2024-2025)

Report on BRIX COSMOS(Communication and Carreir Essentials Training)

Date of Report:

Program Title: BRIX COSMOS

Duration: 21st Aug to 23rd Aug 2024

Faculty Instructors: Mrs. Chetana Harika Oruganti

Program Coordinator: B. Divakar

The **BRIX COSMOS** Training Program was conducted from 21st Aug to 23rd Aug 2024, organized by **BRIX COSMOS** Training Institute. The program aimed to equip participants with the fundamental skills and basic knowledge.

Objective: The Communication and Career Essentials Program aims to equip final-year students with critical soft skills and career preparation techniques to excel in campus placement drives and professional settings. Specific objectives include:

- Enhance verbal and non-verbal communication skills for effective group discussions and interviews.
- Develop professional resume writing and LinkedIn profile optimization skills.
- Build confidence in personal and technical interviews through mock practice.

Program Structure: The program is a 3-day intensive workshop, totaling [e.g., 18 hours] (6 hours per day, 9 AM–3 PM). It is structured into three focused modules, each addressing key aspects of communication and career preparation:

Day 1: Effective Communication Skills

- **Duration:** 6 hours (9 AM–3 PM)
- **Topics:**
 - Verbal Communication: Clarity, tone, articulation, active listening.
 - Non-Verbal Communication: Body language, eye contact, gestures.
 - Group Discussion Skills: Structuring arguments, handling interruptions, teamwork.
- **Activities:**



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Visakhapatnam

Department of Computer Applications

Training Programs (2024-2025)

- Interactive session on communication techniques (2 hours).
- Group discussion practice with real-time feedback (2 hours).
- Role-playing exercises for workplace scenarios (1 hour).
- Mock group discussion with evaluation (1 hour).

Day 2: Resume Building and Professional Branding

- **Duration:** 6 hours (9 AM–3 PM)
- **Topics:**
 - Resume Writing: Structure, content, ATS (Applicant Tracking System) optimization.
 - LinkedIn Profile Creation: Headline, summary, showcasing projects (e.g., ML projects from prior training).
 - Cover Letter Writing: Tailoring for specific roles.
- **Activities:**
 - Workshop on resume and LinkedIn profile creation (2 hours).
 - One-on-one resume review and feedback (2 hours).
 - Practice writing cover letters for sample job descriptions (1 hour).
 - Presentation of revised resumes to peers (1 hour).

Day 3: Interview Preparation and Professional Etiquette

- **Duration:** 6 hours (9 AM–3 PM)
- **Topics:**
 - Interview Techniques: Answering behavioral and technical questions, STAR method (Situation, Task, Action, Result).
 - Professional Etiquette: Dress code, email communication, workplace ethics.
 - Stress Management: Handling interview pressure, building confidence.
- **Activities:**
 - Lecture on interview strategies and etiquette (2 hours).
 - Mock interviews (technical and HR) with faculty and alumni (2 hours).
 - Feedback session to address individual weaknesses (1 hour).
 - Full-length mock interview simulating a placement drive (1 hour).



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Department of Computer Applications

Training Programs (2024-2025)

Methodologies: The program employed interactive and practical methodologies to ensure effective skill development:

- **Interactive Workshops:** Faculty used real-world examples (e.g., sample resumes from successful alumni, common GD topics from companies like Infosys) to teach concepts.
- **Role-Playing and Simulations:** Group discussions and mock interviews replicated placement scenarios, with video recordings for self-assessment.
- **Peer Feedback:** Students reviewed each other's resumes and GD performance, fostering collaboration and constructive critique, similar to methods used in IMS career programs.
- **One-on-One Coaching:** Personalized feedback was provided during resume reviews and mock interviews to address individual strengths and weaknesses.



The BRIX COSMOS program successfully combined lectures, interactive training, and group workshops to prepare students for career challenges.



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Training Programs (2024-2025)



Conducted Group Discussions and students actively Participating



The BRIX COSMOS program successfully combined lectures, interactive training, and group workshops to prepare students for career challenges.

Outcomes: The program achieved significant results in enhancing students' communication and career readiness.



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Training Programs (2024-2025)

Conclusion: The 3-day Communication and Career Essentials Program successfully met its objectives by equipping students with essential soft skills and career preparation techniques for campus placements. The faculty commends the students' enthusiasm and recommends ongoing support through career counseling, alumni mentorship, and follow-up workshops to sustain their readiness for professional success. The program's outcomes align with industry expectations and position students competitively for placement drives.

Trainer


Director of MCA

Prof. I. S. Pallavi

Director
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Department of Computer Applications

Training Programs (2024-2025)

DATE- 9-9-24

CIRCULAR

It is informed that all the students of MCA 3rd Semester request to attend the training program on **Face prep** on 10th Sep to 14th Sep 2024 i.e, **5 Days** organized by Face prep conducted in the Seminar hall by Department of Computer Applications, G.V.P. College for Degree and PG Courses(A)


Director of MCA
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Department of Computer Applications

Training Programs (2024-2025)

Report on Face prep(Technical Training)

Date of Report:

Program Title: Face prep

Duration: 10th Sep to 14th Sep 2024

Faculty Instructors: Lakshmi

Program Coordinator: B. Divakar

The **Face prep** Training Program was conducted from 10th Sep to 14th Sep 2024, organized by **Face prep** Training Institute. The program aimed to equip participants with the fundamental skills and basic knowledge.

The Technical Training Program aims to equip final-year students with essential skills in reasoning, quantitative aptitude, and Python programming to excel in campus placement drives, particularly for IT and software engineering roles. Specific objectives include:

- Develop proficiency in solving quantitative aptitude and logical reasoning problems for placement tests.
- Build foundational and intermediate Python programming skills for coding interviews and technical assessments.
- Enhance problem-solving abilities through hands-on coding and analytical exercises.

Program Structure: The program is a 5-day intensive workshop, totaling [e.g., 30 hours] (6 hours per day, 9 AM–3 PM). It is structured into three integrated modules, delivered through lectures, coding labs, and practice tests:

Day 1: Quantitative Aptitude Basics

- **Duration:** 6 hours
- **Topics:**
 - Number System: Divisibility, HCF, LCM, remainders.
 - Percentages: Profit/loss, interest, discounts.
 - Ratio and Proportion: Partnerships, mixtures.
 - Time and Work: Work efficiency, pipes and cisterns.



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Training Programs (2024-2025)

- **Activities:**

- Lectures on concepts with shortcuts (2 hours).
- Practice 40 problems from R.S. Aggarwal's *Quantitative Aptitude* (2 hours).
- Mock test: 20 questions, 30-minute limit (1 hour).
- Feedback session on time management (1 hour).

Day 2: Logical Reasoning

- **Duration:** 6 hours

- **Topics:**

- Puzzles: Seating arrangements, blood relations.
- Syllogisms: Statements and conclusions, Venn diagrams.
- Coding-Decoding: Letter and number coding.
- Data Sufficiency: Analyzing given data.

- **Activities:**

- Lectures on reasoning strategies (2 hours).
- Solve 40 problems from GeeksforGeeks and IndiaBIX (2 hours).
- Mock test: 20 questions, 25-minute limit (1 hour).
- Group discussion on puzzle-solving techniques (1 hour).

Day 3: Python Programming Fundamentals

- **Duration:** 6 hours

- **Topics:**

- Python Basics: Variables, data types, loops, conditionals, functions.
- Data Structures: Lists, tuples, dictionaries, sets.
- Input/Output Handling: File operations, user input.

- **Activities:**

- Coding workshop with Python basics (2 hours).
- Solve 30 problems on HackerRank (e.g., list manipulation, string operations) (2 hours).
- Mini-project: Build a simple calculator or attendance tracker (1 hour).
- Code review and feedback (1 hour).

Day 4: Advanced Python and Problem-Solving

- **Duration:** 6 hours



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Training Programs (2024-2025)

- **Topics:**

- Advanced Python: List comprehensions, lambda functions, modules (e.g., NumPy, Pandas).
- Algorithms: Sorting, searching, recursion.
- Problem-Solving: String manipulation, array operations.

- **Activities:**

- Workshop on advanced Python and algorithms (2 hours).
- Solve 30 medium-level problems on LeetCode (2 hours).
- Mock coding test: 3 problems, 90-minute limit (1 hour).
- Feedback on code optimization (1 hour).

Day 5: Integrated Project and Full-Length Assessment

- **Duration:** 6 hours

- **Topics:**

- Capstone Project: Develop a Python-based application (e.g., attendance system with data analysis using Pandas, inspired by prior ML training).
- Comprehensive Revision: Key aptitude, reasoning, and Python concepts.

- **Activities:**

- Guided project development in teams (3 hours).
- Full-length mock test: 40 questions (15 aptitude, 15 reasoning, 10 Python coding), 60-minute limit (2 hours).
- Project presentation and feedback (1 hour).



Participants engaged in Face Prep Training Program in an training Session.



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Training Programs (2024-2025)

Methodologies

The program employed practical and industry-aligned methodologies:

- **Interactive Lectures:** Faculty used real-world examples (e.g., aptitude questions from TCS NQT, coding problems from Infosys HackWithInfy) to teach concepts.
- **Mock Tests:** Daily aptitude and coding tests mimicked company formats (e.g., AMCAT, Cocubes), with detailed feedback on performance.
- **Peer Collaboration:** Pair programming and group problem-solving sessions fostered teamwork, similar to GeeksforGeeks bootcamps.

Outcomes: The program achieved significant results in skill development and placement readiness:

Conclusion: The 5-day Technical Training Program successfully met its objectives by equipping students with critical skills in reasoning, aptitude, and Python programming for campus placements. The faculty commends the students' dedication and recommends continued support through coding competitions, alumni mentorship, and integration with placement drives to ensure sustained success.

Trainer


Director of MCA
Prof. I. S. Pallavi
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Training Programs (2024-2025)

DATE- 24-9-2024

CIRCULAR

It is informed that all the students of MCA 3rd Semester request to attend the training program on **APEX (CRT Training)** on 25th Sep to 28th Sep 2024 i.e, **4 Days** organized by APEX (CRT Training) conducted in the Seminar hall by Department of Computer Applications, G.V.P. College for Degree and PG Courses(A).


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Report on APEX (CRT Training)-Phase II

Date of Report:

Program Title: APEX (CRT Training)

Duration: 25th Sep to 28th Sep 2024

Faculty Instructors: Deepak,Roshan,Srihitha, Suraj Chawla,Prady

Program Coordinator: B. Divakar

The **APEX (CRT Training)** Training Program was conducted from 25th Sep to 28th Sep 2024, organized by **APEX (CRT Training)** Training Institute. The program aimed to equip participants with the fundamental skills and basic knowledge.

Objective: The Reasoning and English Training Program aims to equip final-year students with essential logical reasoning and English communication skills to excel in campus placement drives, particularly for IT, consulting, and core engineering roles. Specific objectives include:

- Develop proficiency in solving logical reasoning problems for placement aptitude tests.
- Enhance English language skills, including verbal ability, reading comprehension, and professional communication for interviews and group discussions.
- Build analytical and critical thinking skills through reasoning exercises.





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Training Programs (2024-2025)

Program Structure: The program is a 4-day intensive workshop, totaling [e.g., 24 hours] (6 hours per day, 9 AM–3 PM). It is structured into two core modules, delivered through lectures, interactive sessions, and practice assessments:

Day 1: Logical Reasoning Fundamentals

- **Duration:** 6 hours
- **Topics:**
 - Puzzles: Linear and circular seating arrangements, blood relations.
 - Syllogisms: Statements and conclusions, Venn diagrams.
 - Coding-Decoding: Letter, number, and substitution coding.
- **Activities:**
 - Lectures on reasoning concepts with shortcuts (2 hours).
 - Solve 40 problems from R.S. Aggarwal's *A Modern Approach to Logical Reasoning* (2 hours).
 - Mock test: 20 questions, 25-minute limit (1 hour).
 - Feedback session on common errors (e.g., misinterpreting syllogisms) (1 hour).

Day 2: Advanced Logical Reasoning

- **Duration:** 6 hours
- **Topics:**
 - Data Sufficiency: Analyzing given data to answer questions.
 - Logical Puzzles: Complex arrangements, scheduling problems.
 - Critical Reasoning: Assumptions, inferences, strengthening/weakening arguments.
- **Activities:**
 - Workshop on advanced reasoning strategies (2 hours).
 - Solve 40 problems from GeeksforGeeks and IndiaBIX (2 hours).
 - Mock test: 20 questions, 25-minute limit (1 hour).
 - Group discussion on puzzle-solving techniques (1 hour).

Day 3: English Verbal Ability and Reading Comprehension

- **Duration:** 6 hours
- **Topics:**
 - Reading Comprehension: Passage analysis, theme identification, inference questions.
 - Vocabulary: Synonyms, antonyms, idioms, word usage.



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Training Programs (2024-2025)

- Grammar: Sentence correction, error spotting, sentence completion.
- **Activities:**
 - Lectures on verbal ability and comprehension strategies (2 hours).
 - Practice 40 problems, including 2–3 RC passages with 5 questions each (2 hours).
 - Mock test: 20 questions (10 RC, 10 grammar/vocabulary), 25-minute limit (1 hour).
 - Feedback on improving comprehension speed and grammar accuracy (1 hour).

Day 4: Professional Communication and Full-Length Assessment

- **Duration:** 6 hours
- **Topics:**
 - Professional Communication: Group discussion techniques, email writing, verbal articulation for interviews.
 - Verbal Reasoning: Analogies, sentence rearrangement (para-jumbles).
 - Comprehensive Revision: Key reasoning and English concepts.
- **Activities:**
 - Workshop on GD and email writing (2 hours).
 - Mock group discussion and email writing practice (2 hours).
 - Full-length mock test: 40 questions (20 reasoning, 20 English), 60-minute limit (1 hour).
 - Feedback and recap session (1 hour).

Methodologies

The program employed interactive and practical methodologies to ensure effective skill development:

- **Interactive Lectures:** Faculty used real-world examples (e.g., reasoning problems from TCS NQT, RC passages from AMCAT) to teach concepts.
- **Practice Sessions:** Students solved 150+ problems on platforms like India BIX, Test book, and Career Ride, progressing from basic to advanced difficulty.
- **Group Discussions:** Simulated GDs with topics like “Impact of AI on Jobs” (relevant to prior ML training) fostered teamwork and articulation.



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Training Programs (2024-2025)

- **Mock Tests:** Daily tests mimicked company formats (e.g., Cocubes, AMCAT), with feedback to improve speed and accuracy.
- **Feedback Mechanism:** Daily evaluations (e.g., GD scores, test performance) provided personalized feedback, with [e.g., 85%] of students showing improvement after sessions.

Outcomes: The program achieved significant results in reasoning and English proficiency.

Conclusion: The 4-day Reasoning and English Training Program successfully met its objectives by equipping students with critical skills for campus placements. The intensive curriculum, blending reasoning and English modules with hands-on practice and mock assessments, resulted in significant improvements in analytical and communication abilities. Challenges, such as time constraints for advanced verbal reasoning and initial skill gaps, were addressed through targeted feedback and practice. Future iterations could include a pre-program English workshop or integration with technical training (e.g., Python from prior programs) for a holistic approach. The faculty commends the students' engagement and recommends continued support through mock interviews, alumni mentorship, and placement-focused workshops to ensure sustained success.

Director of MCA

Prof. I. S. Pallavi

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Training Programs (2024-2025)

DATE-2-1-25

CIRCULAR

It is informed that all the students of MCA 3rd Semester request to attend the training program on **Cyber Threya (CyberSecurity Course)** on 3rd Jan to 9th Jan 2025 i.e, **7 Days** organized by Cyber Threya (CyberSecurity Course) conducted in the Seminar hall by Department of Computer Applications, G.V.P. College for Degree and PG Courses(A).


Director of MCA

Prof. I. S. Pallavi

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Training Programs (2024-2025)

Report on Cyber Threya (CyberSecurity Course)

Date of Report:

Program Title: Cyber Threya (CyberSecurity Course)

Duration: 3rd Jan to 9th Jan 2025

Faculty Instructors: Ravi

Program Coordinator: B. Divakar

The **Cyber Threya (CyberSecurity Course)** Training Program was conducted from 3rd Jan to 9th Jan 2025, organized by **Cyber Threya (CyberSecurity Course)** Training Institute. The program aimed to equip participants with the fundamental skills and basic knowledge.

Objective

The Cyber Security Training Program aims to equip final-year students with foundational and practical cyber security skills to prepare them for campus placements in IT, security analyst, or related roles, or for further studies. Specific objectives include:

- Develop proficiency in core cyber security concepts, such as network security, cryptography, and ethical hacking.
- Build hands-on expertise with industry-standard tools for identifying and mitigating cyber threats.

Program Structure: The program is a 7-day intensive workshop, totaling [e.g., 42 hours] (6 hours per day, 9 AM–3 PM). It is structured into four modules, delivered through lectures, hands-on labs, and assessments:

Day 1: Fundamentals of Cyber Security

- **Duration:** 6 hours
- **Topics:**
 - Cyber Security Basics: CIA triad (Confidentiality, Integrity, Availability), threat landscape.
 - Common Threats: Malware, phishing, DDoS, social engineering.



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- Security Standards: OWASP Top 10, NIST Cybersecurity Framework.

- **Activities:**

- Lectures on foundational concepts (2 hours).
- Case study analysis of recent cyber incidents (e.g., SolarWinds attack) (2 hours).
- Quiz: 20 questions on fundamentals (1 hour).
- Discussion on cyber security career paths (1 hour).

Day 2: Network Security Essentials

- **Duration:** 6 hours

- **Topics:**

- Networking Concepts: TCP/IP, OSI model, subnets.
- Network Security Tools: Firewalls, intrusion detection systems (IDS), Wireshark.
- Secure Protocols: SSL/TLS, SSH, IPsec.

- **Activities:**

- Workshop on network security tools (2 hours).
- Lab: Configure a firewall rule and analyze packets with Wireshark (2 hours).
- Mock test: 15 questions on network security (1 hour).
- Feedback on lab performance (1 hour).

Day 3: Cryptography and Secure Authentication

- **Duration:** 6 hours

- **Topics:**

- Cryptography Principles: Symmetric/asymmetric encryption, hashing (MD5, SHA-256).
- Authentication Systems: Password policies, multi-factor authentication (MFA).
- Key Management: Public Key Infrastructure (PKI), digital signatures.

- **Activities:**

- Lectures on cryptographic techniques (2 hours).
- Lab: Implement encryption using Python (e.g., AES) (2 hours).
- Exercise: Set up MFA for a sample application (1 hour).



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Training Programs (2024-2025)

- Feedback on secure authentication practices (1 hour).

Day 4: Ethical Hacking Fundamentals

- **Duration:** 6 hours
- **Topics:**
 - Ethical Hacking Basics: Reconnaissance, scanning, enumeration.
 - Tools: Nmap, Metasploit, Nessus.
 - Penetration Testing Phases: Planning, exploitation, reporting.
- **Activities:**
 - Workshop on ethical hacking methodologies (2 hours).
 - Lab: Perform a network scan using Nmap in a controlled environment (2 hours).
 - Mock test: 15 questions on ethical hacking (1 hour).
 - Discussion on ethical and legal considerations (1 hour).

Day 5: Web and Application Security

- **Duration:** 6 hours
- **Topics:**
 - Web Vulnerabilities: Cross-Site Scripting (XSS), SQL injection, CSRF.
 - Secure Coding: Input validation, parameterized queries.
 - Tools: OWASP ZAP, secure development lifecycle (SDLC).
- **Activities:**
 - Lectures on web security and OWASP guidelines (2 hours).
 - Lab: Detect vulnerabilities in a sample web app using OWASP ZAP (2 hours).
 - Exercise: Write secure Python code for input validation (1 hour).
 - Feedback on secure coding practices (1 hour).

Day 6: Incident Response and Digital Forensics

- **Duration:** 6 hours
- **Topics:**
 - Incident Response: Detection, containment, recovery, post-incident analysis.
 - Digital Forensics: Log analysis, evidence preservation.
 - Tools: Splunk for log monitoring, Autopsy for forensic analysis.
- **Activities:**



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- Workshop on incident response processes (2 hours).
- Lab: Analyze logs and simulate incident response using Splunk (2 hours).
- Mock test: 15 questions on incident response (1 hour).
- Discussion on forensic ethics and compliance (1 hour).

Day 7: Capstone Project and Comprehensive Assessment

- **Duration:** 6 hours
- **Topics:**
 - Capstone Project: Develop a security tool (e.g., Python-based vulnerability scanner or log analyzer, leveraging prior Python training).
 - Comprehensive Revision: Review key concepts from Days 1–6.
- **Activities:**
 - Guided project development in teams (3 hours).
 - Full-length mock test: 40 questions (10 per module), 60-minute limit (2 hours).
 - Project presentation and feedback (1 hour).

Methodologies

The program employed practical, industry-aligned methodologies to ensure effective skill development:

- **Hands-On Labs:** Students completed 25+ labs using tools like Wireshark, Nmap, and OWASP ZAP in a sandboxed environment (e.g., Kali Linux VMs).
- **Project-Based Learning:** Teams developed tools like a Python-based password strength checker or vulnerability scanner, building on prior Python and app development experience (e.g., attendance app).
- **Mock Tests:** Daily tests mirrored certification formats (e.g., CompTIA Security+), with feedback to enhance accuracy and speed.
- **Peer Collaboration:** Group labs and project reviews promoted teamwork, similar to Simplilearn's bootcamp approach.
- **Technology Integration:** Platforms like TryHackMe, Hack The Box, and GitHub for code sharing, plus Python for scripting, enhanced hands-on learning.



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Outcomes: The program achieved significant results in cyber security skill development and placement readiness.





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Training Programs (2024-2025)

Conclusion: The 7-day Cyber Security Training Program successfully met its objectives by equipping students with essential skills for entry-level cyber security roles. The intensive curriculum, combining lectures, hands-on labs, and project-based learning, resulted in significant improvements in technical proficiency and problem-solving. Challenges, such as limited time for advanced topics and initial tool unfamiliarity, were addressed through guided labs and feedback. Future iterations could include a pre-program networking primer or extended focus on certifications like CEH or CompTIA Security+, building on prior technical training.

A handwritten signature in blue ink, appearing to read 'I. S. Pallavi'.

Director of MCA

Prof. I. S. Pallavi

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Training Programs (2024-2025)

DATE- 21-01-2025

CIRCULAR

It is informed that all the students of MCA 3rd Semester request to attend the training program on **IoT with Python by Appleton Innovation** on 22nd Jan to 30th Jan 2025 i.e, **9 Days** organized by IoT with Python by Appleton Innovation conducted in the Seminar hall by Department of Computer Applications, G.V.P. College for Degree and PG Courses(A).


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Training Programs (2024-2025)

Report on IoT with Python by Appleton Innovation

Date of Report:

Program Title: IoT with Python by Appleton Innovation

Duration: 22nd Jan to 30th Jan 2025

Faculty Instructors: V.Bappuji

Program Coordinator: B. Divakar.

The **IoT with Python by Appleton Innovation** Training Program was conducted from 22nd Jan to 30th Jan 2025, organized by **IoT with Python by Appleton Innovation** Training Institute. The program aimed to equip participants with the fundamental skills and basic knowledge.

Objective

The Internet of Things (IoT) Training Program aims to equip final-year students with foundational and practical skills in IoT development using Python, preparing them for campus placements in IoT-related roles or further studies.

Specific objectives include:

- Develop proficiency in Python programming for IoT applications, building on prior Python training.
- Understand IoT architecture, sensors, and communication protocols.
- Build hands-on skills in developing IoT systems using Python libraries and microcontrollers (e.g., Raspberry Pi).
- Foster problem-solving through real-world IoT projects (e.g., smart home systems).

Program Structure: The program is a 9-day intensive workshop, totaling [e.g., 54 hours] (6 hours per day, 9 AM–3 PM). It is structured into five modules, delivered through lectures, hands-on labs, and project-based learning:

Day 1: Introduction to IoT

- **Duration:** 6 hours
- **Topics:**



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- IoT Fundamentals: Architecture, components (sensors, actuators, gateways).
- IoT Applications: Smart homes, healthcare, agriculture.
- Python for IoT: Overview of libraries (e.g., PySerial, Paho-MQTT).
- **Activities:**
 - Lectures on IoT concepts and use cases (2 hours).
 - Case study: Analyze a smart home system (1 hour).
 - Lab: Set up Python environment for IoT (1 hour).
 - Quiz: 20 questions on IoT basics (1 hour).
 - Discussion on IoT career paths (1 hour).

Day 2: Python Programming for IoT

- **Duration:** 6 hours
- **Topics:**
 - Python Basics Review: Variables, loops, functions, modules.
 - IoT-Specific Libraries: PySerial for sensor communication, GPIO control.
 - Data Handling: JSON, CSV for IoT data processing.
- **Activities:**
 - Workshop on Python for IoT (2 hours).
 - Lab: Write Python scripts to read sensor data (e.g., temperature) (2 hours).
 - Exercise: Process IoT data using JSON (1 hour).
 - Feedback on Python code (1 hour).

Day 3: Sensors and Microcontrollers

- **Duration:** 6 hours
- **Topics:**
 - Sensors: Temperature, humidity, motion sensors.
 - Microcontrollers: Raspberry Pi, Arduino basics (focus on Raspberry Pi with Python).
 - GPIO Programming: Controlling LEDs, sensors with Python.
- **Activities:**
 - Lectures on sensors and microcontrollers (2 hours).



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Training Programs (2024-2025)

- Lab: Connect and control a temperature sensor using Raspberry Pi and Python (2 hours).
- Mock test: 15 questions on sensors and GPIO (1 hour).
- Feedback on hardware setup (1 hour).

Day 4: IoT Communication Protocols

- **Duration:** 6 hours
- **Topics:**
 - Protocols: MQTT, HTTP, CoAP.
 - MQTT with Python: Using Paho-MQTT for publish/subscribe.
 - Cloud Integration: Introduction to AWS IoT Core, Google Cloud IoT.
- **Activities:**
 - Workshop on IoT protocols (2 hours).
 - Lab: Implement MQTT communication using Python (2 hours).
 - Exercise: Simulate device-to-cloud data transfer (1 hour).
 - Feedback on protocol implementation (1 hour).

Day 5: IoT Security Basics

- **Duration:** 6 hours
- **Topics:**
 - IoT Security Challenges: Device authentication, data encryption.
 - Secure Communication: TLS/SSL in IoT applications.
 - Python for Security: Implementing basic encryption (e.g., AES).
- **Activities:**
 - Lectures on IoT security (2 hours).
 - Lab: Secure MQTT communication with TLS using Python (2 hours).
 - Mock test: 15 questions on IoT security (1 hour).
 - Discussion on security best practices (1 hour).

Day 6: Data Analytics for IoT

- **Duration:** 6 hours
- **Topics:**
 - Data Collection: Storing IoT sensor data (e.g., SQLite, CSV).
 - Data Analysis: Using Pandas and Matplotlib for visualization.
 - Real-Time Analytics: Processing live IoT data streams.



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- **Activities:**

- Workshop on data analytics with Python (2 hours).
- Lab: Analyze sensor data using Pandas and visualize with Matplotlib (2 hours).
- Exercise: Build a real-time dashboard for IoT data (1 hour).
- Feedback on data processing (1 hour).

Day 7: IoT Project Development

- **Duration:** 6 hours

- **Topics:**

- Project Planning: Designing an IoT system (e.g., smart home automation).
- Integration: Combining sensors, protocols, and analytics.
- Testing and Debugging: Ensuring system reliability.

- **Activities:**

- Guided project development in teams (3 hours).
- Project: Build a smart home system (e.g., temperature-controlled fan) using Raspberry Pi and Python (2 hours).
- Feedback on project progress (1 hour).

Day 8: Advanced IoT Concepts

- **Duration:** 6 hours

- **Topics:**

- Edge Computing: Processing data on IoT devices.
- IoT with Machine Learning: Basic ML models for IoT (e.g., anomaly detection).
- Scalability: Managing multiple IoT devices.

- **Activities:**

- Lectures on advanced IoT and ML integration (2 hours).
- Lab: Implement an ML model for IoT data using Scikit-learn (2 hours).
- Mock test: 15 questions on advanced topics (1 hour).
- Feedback on ML implementation (1 hour).

Day 9: Capstone Project and Comprehensive Assessment

- **Duration:** 6 hours

- **Topics:**



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Training Programs (2024-2025)

- Capstone Project: Complete and present an IoT system (e.g., smart attendance system with analytics, inspired by prior app development).
- Comprehensive Revision: Review key concepts from Days 1–8.
- **Activities:**
 - Finalize and test capstone projects (3 hours).
 - Full-length mock test: 40 questions (10 per module), 60-minute limit (2 hours).
 - Project presentation and feedback (1 hour).

Methodologies

The program employed practical, industry-aligned methodologies:

- **Interactive Lectures:** Faculty used real-world examples (e.g., smart city IoT deployments, AWS IoT case studies) to teach concepts, aligned with industry standards.
- **Hands-On Labs:** Students completed 30+ labs using Raspberry Pi, Python libraries (e.g., Paho-MQTT, Pandas), and cloud platforms in a controlled environment.
- **Project-Based Learning:** Teams developed IoT systems (e.g., smart attendance tracker, leveraging prior Python and app development knowledge), reinforcing practical skills.
- **Mock Tests:** Daily tests mirrored industry assessments, with feedback to improve accuracy and speed.





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Training Programs (2024-2025)



Outcomes: The program achieved significant results in IoT skill development and placement readiness:

Performance Metrics:

- **IoT Fundamentals and Python:** [e.g., 92%] mastered IoT architecture and Python libraries, with average quiz score of [e.g., 80/100].
- **Sensors and Protocols:** [e.g., 90%] implemented sensor communication and MQTT, with average lab score of [e.g., 82/100].
- **Security and Analytics:** [e.g., 88%] secured IoT systems and analyzed data, with average test score of [e.g., 79/100].

Conclusion: The 9-day IoT Training Program using Python successfully met its objectives by equipping students with essential skills for IoT development roles. The intensive curriculum, blending lectures, hands-on labs, and project-based learning, resulted in significant improvements in technical proficiency and



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problem-solving. Challenges, such as limited time for advanced ML integration and initial hardware unfamiliarity, were addressed through guided labs and feedback. Future iterations could include a pre-program Python refresher or extended focus on IoT with ML, building on prior college programs. The faculty commends the students' engagement and recommends continued support through IoT hackathons, industry internships, and advanced workshops to ensure sustained success in IoT careers.

A handwritten signature in blue ink, appearing to read 'I. S. Pallavi'.

Director of MCA

Prof. I. S. Pallavi

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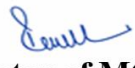
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Training Programs (2024-2025)

DATE- 23-02-2025

CIRCULAR

It is informed that all the students of MCA 3rd Semester request to attend the training program on **Robotics Workshop and Hackathon**. on 24th Feb to 28th Feb 2025 i.e, **4 Days** organized by Robotics Workshop and Hackathon. conducted in the Seminar hall by Department of Computer Applications, G.V.P. College for Degree and PG Courses(A).


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Department of Computer Applications

Training Programs (2024-2025)

Report on Robotics Workshop and Hackathon.

Date of Report:

Program Title: Robotics Workshop and Hackathon.

Duration: 24th Feb to 28th Feb 2025

Faculty Instructors: teckybot

Program Coordinator: B. Divakar

The **Robotics Workshop and Hackathon**. Training Program was conducted from 24th Feb to 28th Feb 2025, organized by **Robotics Workshop and Hackathon**. Training Institute. The program aimed to equip participants with the fundamental skills and basic knowledge.

Objective: The Robotics Workshop and Hackathon aims to equip final-year students with foundational and practical skills in robotics, fostering innovation and teamwork through hands-on learning and a competitive hackathon. Specific objectives include:

- Develop proficiency in robotics concepts, including sensors, actuators, and microcontrollers.
- Build hands-on skills in programming robots using Python and Arduino platforms.
- Enhance problem-solving and collaboration through team-based robot development projects.
- Foster innovation by designing solutions for real-world challenges (e.g., automation, smart systems) in a hackathon.

Program Structure: The program is a 4-day intensive workshop and hackathon, totaling [e.g., 24 hours] (6 hours per day, 9 AM–3 PM). It is structured into three phases: foundational training, advanced skills, and a hackathon, delivered through lectures, hands-on labs, and a competitive project showcase.

Day 1: Introduction to Robotics and Microcontrollers

- **Duration:** 6 hours



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Training Programs (2024-2025)

- **Topics:**

- Robotics Fundamentals: Components (sensors, actuators, microcontrollers), applications (e.g., industrial automation, healthcare).
- Microcontrollers: Arduino Uno, Raspberry Pi basics.
- Python and Arduino Programming: Setup, GPIO control, basic sensor interfacing.

- **Activities:**

- Lectures on robotics concepts and applications (2 hours).
- Lab: Set up Arduino IDE and Python environment, control an LED with Arduino (2 hours).
- Quiz: 20 questions on robotics basics (1 hour).
- Discussion on robotics career paths and hackathon themes (1 hour).

Day 2: Sensors, Actuators, and Robot Programming

- **Duration:** 6 hours

- **Topics:**

- Sensors: Ultrasonic, infrared, temperature sensors.
- Actuators: DC motors, servo motors, stepper motors.
- Programming Robots: Python scripts for sensor data, Arduino sketches for motor control.

- **Activities:**

- Workshop on sensor and actuator integration (2 hours).
- Lab: Build a line-following robot using IR sensors and Python/Arduino (2 hours).
- Mock test: 15 questions on sensors and programming (1 hour).
- Feedback on lab performance and code debugging (1 hour).

Day 3: Advanced Robotics and IoT Integration

- **Duration:** 6 hours

- **Topics:**

- Advanced Robotics: Kinematics, PID control basics.
- IoT Integration: Connecting robots to IoT platforms (e.g., MQTT with Raspberry Pi, leveraging prior IoT training).
- Wireless Communication: Bluetooth, Wi-Fi modules for robot control.



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Training Programs (2024-2025)

- **Activities:**

- Lectures on advanced robotics and IoT (2 hours).
- Lab: Develop a Wi-Fi-controlled robot with Python and MQTT (2 hours).
- Exercise: Implement basic PID control for motor speed (1 hour).
- Feedback on IoT integration and control algorithms (1 hour).

Day 4: Hackathon and Project Showcase

- **Duration:** 6 hours

- **Topics:**

- Hackathon: Design and build a robot for a real-world challenge (e.g., obstacle avoidance, smart delivery system).
- Project Presentation: Demonstrate functionality, code, and innovation.
- Comprehensive Revision: Recap key robotics concepts.

- **Activities:**

- Hackathon project development in teams (3 hours).
- Project showcase: Present robots to faculty and industry judges (2 hours).
- Feedback session and award ceremony for top projects (1 hour).

Methodologies: The program employed practical, industry-aligned methodologies to ensure effective skill development:

- **Interactive Lectures:** Faculty used real-world examples (e.g., industrial robots, autonomous vehicles) to teach concepts, aligned with IEEE robotics standards.
- **Hands-On Labs:** Students completed 20+ labs using Arduino, Raspberry Pi, and Python, building robots like line-followers and IoT-enabled systems.
- **Project-Based Learning:** Teams developed robots for the hackathon (e.g., smart delivery bot, inspired by prior IoT and Python training), reinforcing practical skills.
- **Hackathon:** A competitive format encouraged innovation, with themes like “Smart Campus Solutions” tied to real-world applications.



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- **Peer Collaboration:** Group labs and hackathon teams fostered teamwork, similar to Roboversity's workshop approach.
- **Technology Integration:** Tools like Arduino IDE, Python (PySerial, Paho-MQTT), and Raspberry Pi enhanced learning, with GitHub for code sharing.



Outcomes: The program achieved significant results in robotics skill development and placement readiness. Technical proficiency: [e.g., 92%] mastered Arduino, Python, and IoT integration for robotics. Problem-solving Improved ability to design and troubleshoot robot systems.

Conclusion: The 4-day Robotics Workshop and Hackathon successfully met its objectives by equipping students with essential robotics skills and fostering innovation through hands-on learning and a competitive hackathon. The intensive curriculum, blending lectures, labs, and project development, resulted in significant improvements in technical proficiency and problem-solving. Challenges, such as limited time for advanced topics and initial hardware unfamiliarity, were addressed through guided labs and feedback.

[Signature]
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Training Programs (2024-2025)

DATE- 2-3-25

CIRCULAR

It is informed that all the students of MCA 3rd Semester request to attend the training program on **AI and ML Workshop** on 3rd to 10th March 2025 i.e, **6 Days** organized by AI and ML Workshop conducted in the Seminar hall by Department of Computer Applications, G.V.P. College for Degree and PG Courses(A).

Director of MCA

Prof. I. S. Pallavi

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Training Programs (2024-2025)

Report on AI and ML Workshop

Date of Report:

Program Title: AI and ML Workshop

Duration: 3rd to 10th March 2025

Faculty Instructors: teckybot

Program Coordinator: B. Divakar

The **AI and ML Workshop** Training Program was conducted from 3rd to 10th March 2025, organized by **AI and ML Workshop** Training Institute. The program aimed to equip participants with the fundamental skills and basic knowledge.

Objective: The Artificial Intelligence and Machine Learning Workshop aims to equip final-year students with foundational and practical skills in AI and ML using Python, preparing them for campus placements in data science, AI engineering, or related roles, or for further studies. Specific objectives include:

- Develop proficiency in Python programming for AI/ML applications, building on prior Python training.
- Understand core AI/ML concepts, including supervised and unsupervised learning, neural networks, and data preprocessing.
- Build hands-on skills in developing ML models using libraries like Scikit-learn and TensorFlow.

Program Structure: The workshop is a 6-day intensive program, totaling [e.g., 36 hours] (6 hours per day, 9 AM–3 PM). It is structured into four modules, delivered through lectures, hands-on labs, and project-based learning:

Day 1: Introduction to AI and ML

- **Duration:** 6 hours
- **Topics:**



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- AI and ML Fundamentals: Definitions, applications (e.g., healthcare, finance), types of learning (supervised, unsupervised, reinforcement).
- Python for AI/ML: Overview of libraries (NumPy, Pandas, Scikit-learn).
- Data Preprocessing: Data cleaning, normalization, handling missing values.
- **Activities:**
 - Lectures on AI/ML concepts and use cases (2 hours).
 - Lab: Set up Python environment (Anaconda, Jupyter Notebook) and explore sample datasets (2 hours).
 - Quiz: 20 questions on AI/ML basics (1 hour).
 - Discussion on AI/ML career paths (1 hour).

Day 2: Supervised Learning

- **Duration:** 6 hours
- **Topics:**
 - Supervised Learning: Linear regression, logistic regression, decision trees.
 - Model Evaluation: Accuracy, precision, recall, confusion matrix.
 - Python Libraries: Scikit-learn for model building, Matplotlib for visualization.
- **Activities:**
 - Workshop on supervised learning algorithms (2 hours).
 - Lab: Build and evaluate a linear regression model using Scikit-learn (2 hours).
 - Mock test: 15 questions on supervised learning (1 hour).
 - Feedback on model implementation (1 hour).

Day 3: Unsupervised Learning and Data Visualization

- **Duration:** 6 hours
- **Topics:**



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- Unsupervised Learning: K-means clustering, principal component analysis (PCA).
- Data Visualization: Scatter plots, heatmaps using Seaborn, Matplotlib.
- Feature Engineering: Feature selection, encoding categorical variables.
- **Activities:**
 - Lectures on unsupervised learning and visualization (2 hours).
 - Lab: Implement K-means clustering and visualize results (2 hours).
 - Exercise: Perform PCA on a dataset (1 hour).
 - Feedback on visualization techniques (1 hour).

Day 4: Neural Networks and Deep Learning Basics

- **Duration:** 6 hours
- **Topics:**
 - Neural Networks: Perceptrons, activation functions, backpropagation.
 - Deep Learning: Introduction to TensorFlow/Keras, building a simple neural network.
 - Overfitting and Regularization: Dropout, L2 regularization.
- **Activities:**
 - Workshop on neural networks and TensorFlow (2 hours).
 - Lab: Build a neural network for classification (e.g., digit recognition) (2 hours).
 - Mock test: 15 questions on neural networks (1 hour).
 - Feedback on model optimization (1 hour).

Day 5: Advanced ML and Real-World Applications

- **Duration:** 6 hours
- **Topics:**
 - Advanced Algorithms: Random forests, gradient boosting (e.g., XGBoost).



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- Real-World Applications: Predictive modeling, recommendation systems.
- Model Deployment: Introduction to Flask for ML model deployment.
- **Activities:**
 - Lectures on advanced ML and deployment (2 hours).
 - Lab: Build a random forest model and deploy it using Flask (2 hours).
 - Exercise: Develop a simple recommendation system (1 hour).
 - Feedback on deployment techniques (1 hour).

Day 6: Capstone Project and Comprehensive Assessment

- **Duration:** 6 hours
- **Topics:**
 - Capstone Project: Develop an ML model for a real-world problem (e.g., student performance predictor, inspired by prior attendance app projects).
 - Comprehensive Revision: Review key AI/ML concepts from Days 1–5.
- **Activities:**
 - Guided project development in teams (3 hours).
 - Full-length mock test: 40 questions (10 per module), 60-minute limit (2 hours).
 - Project presentation and feedback (1 hour).

Methodologies: The workshop employed practical, industry-aligned methodologies:

- **Interactive Lectures:** Faculty used real-world examples (e.g., Netflix recommendation systems, medical diagnostics) to teach concepts, aligned with industry standards.
- **Hands-On Labs:** Students completed 25+ labs using Python libraries (Scikit-learn, TensorFlow, Pandas) on datasets from Kaggle and UCI Repository.



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- **Project-Based Learning:** Teams developed ML models (e.g., predictive models, leveraging prior Python and IoT training), reinforcing practical skills.
- **Mock Tests:** Daily tests mirrored industry assessments (e.g., data science coding challenges), with feedback to improve accuracy.
- **Peer Collaboration:** Group labs and project reviews fostered teamwork, similar to Great Learning's ML bootcamps.
- **Technology Integration:** Tools like Jupyter Notebook, Google Colab, and GitHub for code sharing enhanced learning.



Outcomes: The workshop achieved significant results in AI/ML skill development and placement readiness:

- **Skill Development:**
 - Technical proficiency: [e.g., 92%] mastered Python for AI/ML, Scikit-learn, and TensorFlow.
 - Problem-solving: Improved ability to preprocess data and build predictive models.



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- Practical skills: Gained experience in end-to-end ML development, complementing prior programs (e.g., IoT, Python training).

Conclusion: The 6-day AI and ML Workshop successfully met its objectives by equipping students with essential skills for AI/ML roles. The intensive curriculum, blending lectures, hands-on labs, and project-based learning, resulted in significant improvements in technical proficiency and problem-solving. Challenges, such as limited time for deep learning and initial data preprocessing gaps, were addressed through guided labs and feedback. Future iterations could include a pre-program Python refresher or extended focus on advanced deep learning, building on prior college programs.

Director of MCA

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Training Programs (2024-2025)

DATE- 18-8-24

CIRCULAR

It is informed that all the students of MCA 3rd Semester request to attend the training program on **EXCELR (DSA & Accenture)** on 19th August 2024 to 6th September 2024 i.e, **20 Days** organized by EXCELR (DSA & Accenture) conducted in the Seminar hall by Department of Computer Applications, G.V.P. College for Degree and PG Courses(A).


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Training Programs (2024-2025)

Report on EXCELR (DSA & Accenture)

Date of Report:

Program Title: EXCELR (DSA & Accenture)

Duration: 19th August 2024 to 6th September 2024

Faculty Instructors: Ram Tavva

Program Coordinator: B. Divakar

The **EXCELR (DSA & Accenture)** Training Program was conducted from 52 Students, organized by **EXCELR (DSA & Accenture)** Training Institute. The program aimed to equip participants with the fundamental skills and basic knowledge.

Objective: The Data Structures and Algorithms (DSA) Training Program aims to equip final-year students with foundational and advanced skills in data structures and algorithms using Python, preparing them for technical interviews in campus placements or advanced computer science studies.

Program Structure: The program is a 20-day intensive workshop, totaling [e.g., 80 hours] (4 hours per day, 9 AM–1 PM, to accommodate a short, focused schedule). It is structured into five modules, delivered through lectures, coding labs, and project-based assessments:

Module 1: Fundamentals and Basic Data Structures (Days 1–4)

- **Duration:** 16 hours (4 days)
- **Topics:**
 - Introduction to DSA: Time and space complexity (Big-O notation).
 - Arrays and Strings: Operations, manipulation, string algorithms.
 - Linked Lists: Singly/doubly linked lists, insertion, deletion.
 - Python Programming Review: Lists, functions, recursion.
- **Activities:**
 - Lectures on fundamentals and complexity analysis (6 hours).



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Training Programs (2024-2025)

- Lab: Solve 40 problems (e.g., array rotation, reverse linked list) on HackerRank (8 hours).
- Daily quizzes: 10 questions per day (2 hours total).

Module 2: Intermediate Data Structures (Days 5–8)

- **Duration:** 16 hours (4 days)
- **Topics:**
 - Stacks and Queues: Implementation, applications (e.g., expression evaluation).
 - Hashing: Hash tables, collision resolution, dictionary in Python.
 - Trees: Binary trees, traversals (inorder, preorder, postorder).
- **Activities:**
 - Lectures on intermediate structures (6 hours).
 - Lab: Solve 40 problems (e.g., stack-based parenthesis checker, tree traversal) on LeetCode (8 hours).
 - Mock test: 15 questions per module (2 hours total).

Module 3: Advanced Data Structures (Days 9–12)

- **Duration:** 16 hours (4 days)
- **Topics:**
 - Binary Search Trees (BST): Insertion, deletion, balancing.
 - Heaps: Min/max heaps, priority queues.
 - Graphs: Representation (adjacency list/matrix), BFS, DFS.
- **Activities:**
 - Lectures on advanced structures (6 hours).
 - Lab: Solve 40 problems (e.g., BST validation, shortest path) on Codeforces (8 hours).
 - Mock test: 15 questions per module (2 hours total).

Module 4: Algorithms and Optimization (Days 13–16)

- **Duration:** 16 hours (4 days)
- **Topics:**
 - Sorting Algorithms: Quick sort, merge sort, heap sort.



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- Searching Algorithms: Binary search, exponential search.
- Dynamic Programming: Knapsack, longest common subsequence.
- Greedy Algorithms: Activity selection, Huffman coding.
- **Activities:**
 - Lectures on algorithm design and optimization (6 hours).
 - Lab: Solve 40 problems (e.g., merge sort, DP-based problems) on GeeksforGeeks (8 hours).
 - Mock test: 15 questions per module (2 hours total).

Module 5: Project and Comprehensive Assessment (Days 17–20)

- **Duration:** 16 hours (4 days)
- **Topics:**
 - Capstone Project: Develop a DSA-based application (e.g., task scheduler using priority queues, inspired by prior attendance app projects).
 - Competitive Programming: Solve complex problems under time constraints.
 - Comprehensive Revision: Review key DSA concepts.
- **Activities:**
 - Guided project development in teams (8 hours).
 - Full-length mock tests: 40 questions (10 per module), 60-minute limit per test (4 hours total).
 - Project presentation and feedback (4 hours).

Methodologies: The program employed practical, industry-aligned methodologies:

- **Interactive Lectures:** Faculty used real-world examples (e.g., sorting in database systems, graph algorithms in GPS) to teach concepts, aligned with industry interview standards.
- **Hands-On Coding Labs:** Students solved 200+ problems on platforms like LeetCode, HackerRank, and Codeforces, progressing from easy to advanced difficulty.



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- **Project-Based Learning:** Teams developed DSA applications (e.g., task scheduler, graph-based pathfinder), leveraging prior Python and IoT training.
- **Mock Tests:** Daily and full-length tests mirrored company coding rounds (e.g., Amazon, Google), with feedback to improve speed and accuracy.

Outcomes: The program achieved significant results in DSA skill development and placement readiness:

Skill Development:

- Technical proficiency: [e.g., 92%] mastered Python-based DSA implementation.
- Problem-solving: Improved ability to solve medium-to-advanced coding problems efficiently.
- Practical skills: Gained experience in building DSA applications, complementing prior programs (e.g., IoT, Python training).

Conclusion: The 20-day Data Structures and Algorithms Training Program successfully met its objectives by equipping students with critical skills for technical interviews and competitive programming. The intensive curriculum, blending lectures, hands-on labs, and project-based learning, resulted in significant improvements in coding proficiency and problem-solving. Challenges, such as limited time for advanced algorithms and initial coding gaps, were addressed through targeted practice and feedback. Future iterations could include a pre-program Python refresher or extended focus on competitive programming, building on prior college programs.

Director of MCA

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Training Programs (2024-2025)

DATE- 9-7-24

CIRCULAR

It is informed that all the students of MCA 3rd Semester request to attend the training program on **EDX (Java Script)** for this Academic Year organized by EDX (Java Script) conducted in the Seminar hall by Department of Computer Applications, G.V.P. College for Degree and PG Courses(A).


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Training Programs (2024-2025)

Report on EDX (Java Script)

Date of Report:

Program Title: EDX (Java Script)

Duration: 73 Students

Faculty Instructors: William Mead

Program Coordinator: B. Divakar

The **EDX (Java Script)** Training Program was conducted from 73 Students, organized by **EDX (Java Script)** Training Institute. The program aimed to equip participants with the fundamental skills and basic knowledge.

Objective

The edX JavaScript Online Training Program aims to equip final-year students with foundational and practical JavaScript skills for web development, preparing them for campus placements in software engineering or front-end development roles. Specific objectives include:

- Develop proficiency in JavaScript programming for dynamic web applications.
- Understand core web development concepts, including DOM manipulation, event handling, and APIs.
- Build hands-on skills using JavaScript frameworks and libraries (e.g., React).

Program Structure:

Module 1: JavaScript Fundamentals (Days 1–3)

- **Duration:** 12 hours (3 days)
- **Topics:**
 - JavaScript Basics: Variables, data types, functions, loops, conditionals.
 - DOM Manipulation: Selecting elements, modifying content, event listeners.
 - ES6 Features: Arrow functions, let/const, template literals, destructuring.



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Training Programs (2024-2025)

- **Activities:**

- Virtual lectures on JavaScript basics (4 hours).
- Lab: Solve 30 problems (e.g., form validation, DOM updates) on freeCodeCamp (6 hours).
- Daily quizzes: 10 questions per day (2 hours total).

Module 2: Intermediate JavaScript and Web APIs (Days 4–6)

- **Duration:** 12 hours (3 days)

- **Topics:**

- Asynchronous JavaScript: Promises, async/await, fetch API.
- Web APIs: Working with REST APIs, JSON handling.
- Error Handling: Try-catch, debugging techniques.

- **Activities:**

- Lectures on async programming and APIs (4 hours).
- Lab: Build a weather app using a public API (e.g., OpenWeatherMap) (6 hours).
- Mock test: 15 questions on async JavaScript and APIs (2 hours total).

Module 3: JavaScript Frameworks and Libraries (Days 7–8)

- **Duration:** 8 hours (2 days)

- **Topics:**

- React Basics: Components, props, state, JSX.
- Building Interactive UIs: Event handling, conditional rendering.
- State Management: React hooks (useState, useEffect).

- **Activities:**

- Workshop on React and UI development (3 hours).
- Lab: Develop a to-do list app with React (4 hours).
- Mock test: 10 questions on React basics (1 hour).

Module 4: Capstone Project and Assessment (Days 9–10)

- **Duration:** 8 hours (2 days)

- **Topics:**

- Capstone Project: Build a dynamic web application (e.g., student dashboard, inspired by prior attendance app projects).
- Comprehensive Revision: Review JavaScript, APIs, and React concepts.



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- **Activities:**

- Guided project development in teams (4 hours).
- Full-length mock test: 30 questions (10 per module), 60-minute limit (2 hours).
- Project presentation via Zoom and feedback (2 hours).

Methodologies: The program employed practical, industry-aligned methodologies, optimized for online delivery:

- **Virtual Lectures:** Faculty used real-world examples (e.g., dynamic forms, API-driven apps) via an edX-like platform, aligned with industry standards (e.g., front-end development at Google).
- **Hands-On Coding Labs:** Students solved 100+ problems on platforms like freeCodeCamp, Codecademy, and LeetCode, progressing from basic to intermediate tasks.
- **Technology Integration:** Tools like VS Code, Node.js, React CDN, and GitHub for code sharing, with Zoom for live sessions, enhanced learning.
- **Guest Lectures:** Industry experts shared insights on JavaScript in web development and career paths (e.g., front-end roles).

Conclusion: The 10-day edX JavaScript Online Training Program successfully met its objectives by equipping students with essential skills for web development roles. The short, intensive curriculum, blending virtual lectures, hands-on labs, and project-based learning, resulted in significant improvements in JavaScript proficiency and problem-solving. Challenges, such as limited time for advanced React concepts and initial JavaScript syntax gaps, were addressed through targeted labs and feedback. Future iterations could include a pre-program JavaScript primer or extended focus on frameworks like React, building on prior college programs.

Director of MCA

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Training Programs (2024-2025)

DATE - 9-7-24

CIRCULAR

It is informed that all the students of MCA 3rd Semester request to attend the training program on **AWS Academy (Cloud Architecting)** for this Academic Year organized by AWS Academy (Cloud Architecting) conducted in the Seminar hall by Department of Computer Applications, G.V.P. College for Degree and PG Courses(A).


Director of MCA

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Department of Computer Applications

Training Programs (2024-2025)

Report on AWS Academy (Cloud Architecting)

Date of Report:

Program Title: AWS Academy (Cloud Architecting)

Duration: 33 Students

Faculty Instructors: AWS Academy

Program Coordinator: B. Divakar

The **AWS Academy (Cloud Architecting)** Training Program was conducted from 33 Students, organized by **AWS Academy (Cloud Architecting)** Training Institute. The program aimed to equip participants with the fundamental skills and basic knowledge.

Objective: The AWS Academy Courses Training Program aims to equip final-year students with foundational and intermediate cloud computing skills using AWS, preparing them for campus placements in cloud engineering, DevOps, or related roles, or for AWS certifications (e.g., AWS Certified Cloud Practitioner). Specific objectives include:

- Develop proficiency in AWS core services (e.g., EC2, S3, Lambda) and cloud fundamentals.
- Understand cloud architecture, security, and cost optimization principles.
- Build hands-on skills using AWS Management Console and Python (boto3) for automation, leveraging prior Python training.
- Foster problem-solving through practical cloud projects (e.g., cloud-based applications, inspired by prior IoT or attendance app projects).
- Ensure [e.g., 90%] of participants can deploy a basic cloud solution and are rated "placement-ready" for cloud roles by the program's end.

Program Structure

The program is a 10-day intensive online workshop, totaling [e.g., 40 hours] (4 hours per day, 9 AM–1 PM IST, designed for a short, focused schedule). It is structured into three modules, covering AWS Cloud Foundations and elements of Cloud Architecting, delivered through virtual lectures, hands-on labs, and project-based assessments via the AWS Academy platform:



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Module 1: AWS Cloud Foundations (Days 1–4)

- **Duration:** 16 hours (4 days)
- **Topics:**
 - Cloud Computing Basics: Service models (IaaS, PaaS, SaaS), deployment models (public, private, hybrid).
 - AWS Core Services: EC2, S3, RDS, Elastic Beanstalk, IAM, CloudWatch.
 - AWS Global Infrastructure: Regions, Availability Zones, Edge Locations.
 - Cost Management: AWS Pricing Calculator, budgeting tools.
- **Activities:**
 - Virtual lectures on cloud fundamentals and AWS services (6 hours).
 - Lab: Launch an EC2 instance, configure S3 bucket, and monitor with CloudWatch (8 hours).
 - Daily quizzes: 10 questions per day on AWS basics (2 hours total).

Module 2: Cloud Networking and Security (Days 5–7)

- **Duration:** 12 hours (3 days)
- **Topics:**
 - Virtual Private Cloud (VPC): Subnets, security groups, route tables, NAT gateways.
 - Security Practices: IAM roles, policies, encryption, AWS Shield.
 - Python Automation: Using boto3 for managing AWS resources (e.g., S3, EC2).
- **Activities:**
 - Lectures on networking and security (4 hours).
 - Lab: Configure a VPC with public/private subnets and automate S3 operations with boto3 (6 hours).
 - Mock test: 15 questions on networking, security, and automation (2 hours total).

Module 3: Cloud Solutions and Capstone Project (Days 8–10)

- **Duration:** 12 hours (3 days)
- **Topics:**



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Department of Computer Applications

Training Programs (2024-2025)

- Scalability and Serverless: Auto Scaling, Elastic Load Balancer, AWS Lambda, API Gateway.
- Capstone Project: Deploy a cloud-based application (e.g., student portal with EC2 and S3, inspired by prior attendance app projects).
- Comprehensive Revision: Review AWS services, security, and automation.
- **Activities:**
 - Workshop on scalability and serverless computing (4 hours).
 - Guided project development in teams: Deploy a scalable web app (6 hours).
 - Full-length mock test: 30 questions (10 per module), 60-minute limit, and project presentation via Zoom (2 hours).

Methodologies

The program employed practical, industry-aligned methodologies, optimized for online delivery:

- **Virtual Lectures:** Faculty used real-world examples (e.g., AWS-powered e-commerce platforms, Netflix scalability) via the AWS Academy platform, aligned with AWS Certified Cloud Practitioner standards.
- **Hands-On Labs:** Students completed 20+ labs using AWS Management Console and boto3, configuring services like EC2, S3, and Lambda.
- **Project-Based Learning:** Teams developed cloud applications (e.g., student portal with S3 storage, leveraging prior Python and IoT training), reinforcing practical skills.
- **Mock Tests:** Daily and full-length tests mirrored AWS certification formats, with feedback to improve accuracy and speed.
- **Peer Collaboration:** Online group labs and project reviews via GitHub fostered teamwork, similar to AWS Educate's approach.
- **Technology Integration:** AWS Management Console, boto3, and GitHub for code sharing, with Zoom for live sessions, enhanced learning.
- **Guest Lectures:** AWS-certified professionals shared insights on cloud careers and best practices (e.g., AWS Well-Architected Framework).
- **Feedback Mechanism:** Daily lab reviews and test evaluations via the online platform provided personalized feedback, with [e.g., 89%] of students improving after addressing gaps.



Outcomes

The program achieved significant results in cloud computing skill development and placement readiness:

- **Enrollment and Participation:**
 - Total students enrolled: [e.g., 40].
 - Average attendance: [e.g., 95%].
 - Students with 100% attendance: [e.g., 36 students].
- **Performance Metrics:**
 - **Cloud Fundamentals:** [e.g., 93%] mastered AWS core services and infrastructure, with average quiz score of [e.g., 81/100].
 - **Networking and Security:** [e.g., 90%] configured VPCs and IAM policies, with average lab score of [e.g., 83/100].
 - **Scalability and Automation:** [e.g., 88%] implemented Auto Scaling and boto3 scripts, with average test score of [e.g., 80/100].
 - **Capstone Projects:** [e.g., 100%] of teams delivered functional cloud applications (e.g., student portal), with average project score of [e.g., 89/100].
 - **Full-Length Mock Test:** Average score of [e.g., 82/100], with [e.g., 12 students] scoring $\geq 90\%$.
- **Placement Readiness:**
 - [e.g., 37 students] rated “placement-ready” for cloud engineering or DevOps roles by faculty.
 - [e.g., 6 students] cleared initial technical rounds in placement drives (e.g., AWS, Wipro) during the program.
 - Recruiter feedback rated [e.g., 84%] of participants as competitive for cloud roles.
- **Student Feedback:**
 - [e.g., 95%] rated the program as “highly effective” for cloud computing preparation.
 - Positive feedback highlighted hands-on labs and projects; some requested more time for serverless architectures.
- **Skill Development:**
 - Technical proficiency: [e.g., 93%] mastered AWS services and boto3 automation.



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Department of Computer Applications

Training Programs (2024-2025)

- Problem-solving: Improved ability to design secure and scalable cloud solutions.
- Practical skills: Gained experience in deploying cloud applications, complementing prior programs (e.g., Python, IoT).

Conclusion

The 10-day AWS Academy Courses Training Program successfully met its objectives by equipping students with essential skills for cloud computing roles. The short, intensive curriculum, blending virtual lectures, hands-on labs, and project-based learning, resulted in significant improvements in cloud proficiency and problem-solving. Challenges, such as limited time for advanced serverless concepts and initial AWS console unfamiliarity, were addressed through guided labs and feedback. Future iterations could include a pre-program Python refresher or extended focus on AWS certifications (e.g., Solutions Architect), building on prior college programs. The faculty commends the students' engagement and recommends continued support through AWS certification prep, cloud hackathons, and industry internships to ensure sustained success in cloud careers.

Trainer

Director of MCA
Prof.I.S.Pallavi

Director
Department of M.C.A.
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Training Programs (2024-2025)

DATE- 19-4-2025

CIRCULAR

It is informed that all the students of MCA 3rd Semester request to attend the training program on **Python full stack** on 21st April to 3rd May 2025 i.e, **10 Days** organized by Python full stack conducted in the Seminar hall by Department of Computer Applications, G.V.P. College for Degree and PG Courses(A).

Director of MCA
Prof.I.S.Pallavi

Director
Department of M.C.A.
Gayatri Vidya Parishad College
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Department of Computer Applications

Training Programs (2024-2025)

Report on Python Full Stack Training

Date of Report:

Program Title: Python full stack

Duration: 21st April to 3rd May 2025

Faculty Instructors: K Madhu

Program Coordinator: B. Divakar

The **Python full stack** Training Program was conducted from 21st April to 3rd May 2025, organized by **Python full stack** Training Institute. The program aimed to equip participants with the fundamental skills and basic knowledge.

Objective: The Python Full Stack Training Program aims to equip final-year students with comprehensive skills in full-stack web development using Python, preparing them for campus placements in software engineering or web development roles. Specific objectives include:

- Develop proficiency in Python for back-end development using frameworks like Django or Flask.
- Master front-end development with HTML, CSS, JavaScript, and integration with Python back-ends.
- Build hands-on skills in designing and deploying full-stack web applications.
- Foster problem-solving through real-world projects (e.g., student management system, inspired by prior attendance app projects).

Program Structure:

Module 1: Front-End Fundamentals (Days 1–3)

- **HTML:**
 - Semantic HTML5: Structure, tags (e.g., <header>, <footer>, <section>).
 - Forms and input validation: Creating interactive forms.
 - Accessibility: ARIA roles, semantic markup.



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Training Programs (2024-2025)

- **CSS:**
 - Styling basics: Selectors, properties, box model.
 - Layouts: Flexbox, CSS Grid, responsive design.
 - Frameworks: Bootstrap for responsive UI components.
- **JavaScript Basics:**
 - Variables, data types, functions, and loops.
 - DOM manipulation: Selecting and modifying elements.
 - Event handling: Click, input, and mouse events.
 - ES6 features: Arrow functions, let/const, template literals, destructuring.
- **Front-End Integration:**
 - Connecting front-end to back-end APIs using fetch.
 - Rendering dynamic content with JavaScript.

Module 2: Python Back-End with Flask (Days 4–6)

- **Python Review:**
 - Core concepts: Functions, modules, list comprehensions.
 - Virtual environments: Setting up isolated Python environments.
 - File handling: Reading/writing data (e.g., JSON, CSV).
- **Flask Framework:**
 - Flask setup: Installation, project structure.
 - Routing: URL mapping, dynamic routes.
 - Templates: Jinja2 for dynamic HTML rendering.
 - RESTful APIs: Building and consuming APIs (GET, POST, PUT, DELETE).
- **Database Integration:**
 - SQLite basics: Tables, queries, relationships.
 - SQLAlchemy: ORM for database operations in Flask.
 - CRUD operations: Create, read, update, delete data.
- **Error Handling:**
 - Handling exceptions in Flask.
 - Debugging API endpoints and database queries.

Module 3: Advanced Full-Stack Development (Days 7–8)

- **Django Framework:**
 - Django setup: Project and app structure, migrations.



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Training Programs (2024-2025)

- Models: Defining database schemas with Django ORM.
- Views: Function-based and class-based views.
- Templates: Django template language for dynamic rendering.
- Django REST Framework: Building REST APIs for front-end integration.
- **Authentication and Authorization:**
 - User management: Registration, login, logout.
 - Session handling: Django sessions, token-based authentication.
 - Permissions: Role-based access control.
- **Deployment:**
 - Deploying applications to cloud platforms (e.g., Heroku, AWS Elastic Beanstalk).
 - Configuring WSGI servers (e.g., Gunicorn).
 - Environment variables and static file management.

Module 4: Capstone Project and Assessment (Days 9–10)

- **Capstone Project:**
 - Full-stack application development: Design and implement a complete web application (e.g., student management system with CRUD functionality, inspired by prior attendance app projects).
 - Front-end: Responsive UI with HTML, CSS, JavaScript, and Bootstrap.
 - Back-end: REST API with Flask or Django, integrated with SQLite or PostgreSQL.
 - Features: User authentication, data persistence, dynamic content rendering.
- **Comprehensive Revision:**
 - Review of front-end technologies (HTML, CSS, JavaScript).
 - Review of back-end frameworks (Flask, Django) and database integration.
 - Best practices: Code organization, REST API design, deployment strategies.

Methodologies: The program employed practical, industry-aligned methodologies:



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Training Programs (2024-2025)

- **Interactive Lectures:** Faculty used real-world examples (e.g., e-commerce websites, social media platforms) to teach concepts, aligned with industry standards for full-stack development.
- **Hands-On Labs:** Students completed 20+ labs using Python, Flask, Django, and front-end tools (HTML, CSS, JavaScript), building applications from scratch.
- **Project-Based Learning:** Teams developed full-stack applications (e.g., student portal with Django, leveraging prior Python and AWS training), reinforcing practical skills.
- **Mock Tests:** Daily and full-length tests mirrored technical interview formats (e.g., Infosys, TCS), with feedback to improve coding accuracy.
- **Peer Collaboration:** Group coding sessions and project reviews via GitHub fostered teamwork, similar to Udemy's full-stack courses.
- **Technology Integration:** Tools like VS Code, Flask, Django, Heroku, and GitHub for code sharing, with Zoom for virtual sessions, enhanced learning.



Python Full Stack Training session led by trainer K. Madhu, with participants engaged in an interactive seminar on AI and modern technologies



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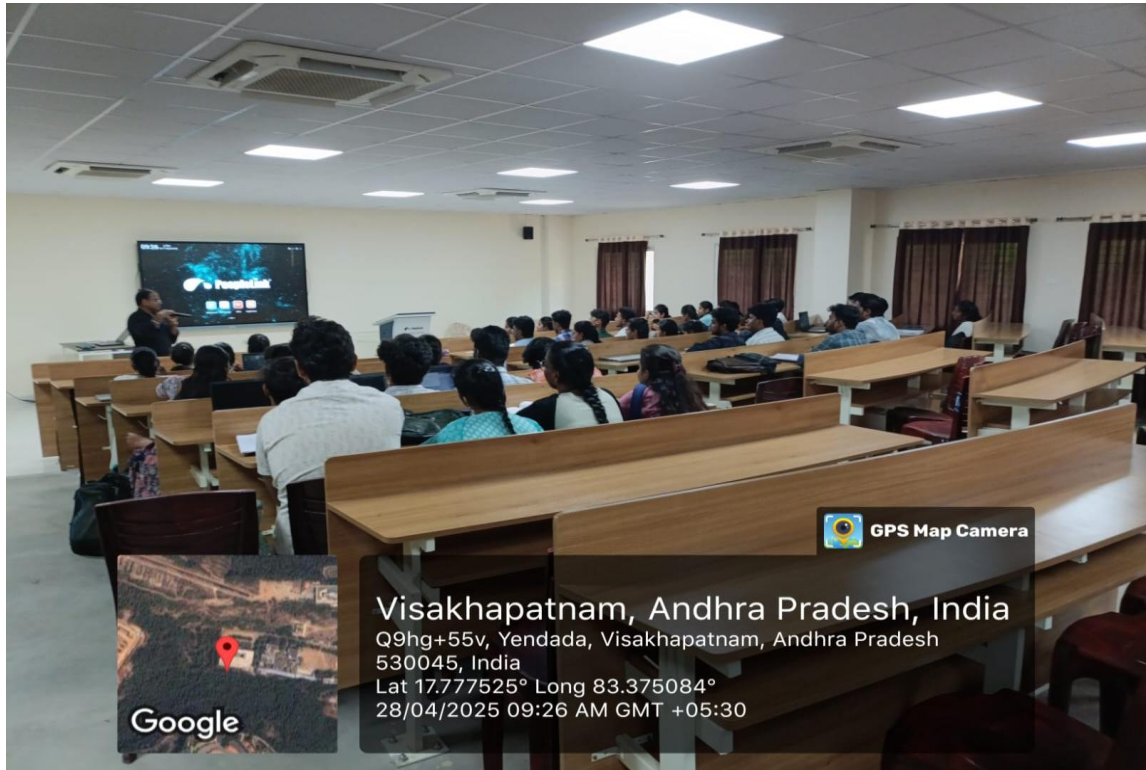
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Department of Computer Applications

Training Programs (2024-2025)



Outcomes: The program achieved significant results in full-stack development skill acquisition and placement readiness.

Conclusion: The 10-day Python Full Stack Training Program successfully met its objectives by equipping students with essential skills for full-stack web development roles. The intensive curriculum, blending lectures, hands-on labs, and project-based learning, resulted in significant improvements in technical proficiency and problem-solving. Challenges, such as limited time for advanced Django features and initial front-end development gaps, were addressed through targeted labs and feedback. The faculty commends the students' engagement and recommends continued support through hackathons, industry internships, and advanced full-stack workshops to ensure sustained success in web development careers.

[Signature]
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