



MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

Madanapalle-517325, Annamayya Dist., Andhra Pradesh, India.

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A Report on Guest Lectures for Classes 9 to 12 on “Information Technology and Emerging Technologies” at P.M. SHRI A.P. Model School and Junior College, Mudivedu, Kurabalakota Mandal, Annamayya District, Andhra Pradesh on 19.09.2026

Mode of conduct: Offline

Time: 1:05 PM to 4:00 PM

Target Group: Students of Classes 9, 10, 11 and 12

Total Number of Students: 249

Title of the Programme: Information Technology and Emerging Technologies

Resource person & report Submitted by: Dr. Vamsi Bandi, Assistant Professor, Department of Computer Science and Engineering (Artificial Intelligence)

Executive Summary:

A series of four class-specific guest lectures was conducted on 19 September 2026 at P.M. SHRI A.P. Model School and Junior College, Mudivedu, for the students of Classes 9, 10, 11 and 12.

The sessions were delivered by **Dr. Vamsi Bandi, Assistant Professor, Department of Computer Science and Engineering Artificial Intelligence**. The programme addressed age-appropriate topics related to computer fundamentals, spreadsheet analysis and automation, computational thinking, and emerging technologies.

The guest lectures reached a total of **249 students** through **165 minutes of direct instructional activity**. The concepts were presented through structured explanations, familiar examples, worked demonstrations, questions and short classroom activities.

The programme followed a progressive learning structure. Class 9 students were introduced to computer fundamentals, keyboard skills and pointing devices. Class 10 students explored spreadsheet analysis, automation, data linking and collaborative review. Class 11 students learned about number systems, algorithms, flowcharts and pseudocode. Class 12 students were introduced to Artificial Intelligence, Machine Learning, the Internet of Things, Blockchain and their social impact.

The programme helped connect the students' academic learning with practical applications and created awareness of contemporary technological developments, responsible technology use and future career opportunities.

Objectives of the Programme:

The guest lecture programme was organised with the following objectives:

1. To strengthen students' understanding of computers and their applications.
2. To introduce Class 9 students to computer fundamentals, keyboard skills and pointing devices.
3. To demonstrate the use of advanced spreadsheet features for analysis, automation, data linking and collaborative review.
4. To develop computational thinking through number systems, algorithms, flowcharts and pseudocode.
5. To introduce students to Artificial Intelligence, Machine Learning, IoT and Blockchain.
6. To explain the practical applications of emerging technologies in different sectors.
7. To create awareness of the social, ethical, privacy and security implications of emerging technologies.
8. To connect classroom concepts with real-world problems and technology-based solutions.

9. To encourage students to develop an interest in computer science, Artificial Intelligence and related fields.
10. To create awareness of higher-education and career opportunities in technology-oriented domains.

Programme Schedule and Participation:

S. No.	Class	Timing	Duration	Number of Students
1	Class 9	1:05 PM-1:45 PM	40 minutes	57
2	Class 11	1:45 PM-2:30 PM	45 minutes	67
3	Class 12	2:40 PM-3:20 PM	40 minutes	72
4	Class 10	3:20 PM-4:00 PM	40 minutes	53
Total Students				249

The programme was conducted from **1:05 PM to 4:00 PM**, including a ten-minute transition interval between the Class 11 and Class 12 sessions. Each session was planned separately according to the students' grade level and the prescribed topics.

Detailed Account of the Guest Lectures:

1. Guest Lecture for Class 9

Topic: Introduction to Computers Keyboard Skills and Pointing Devices

Timing: 1:05 PM-1:45 PM

Duration: 40 minutes

Number of Students: 57

Topics Covered:

1. Introduction to Computers
2. Basic Functions of a Computer
3. Input, Processing, Output and Storage
4. Computer Hardware and Software
5. Input and Output Devices
6. Keyboard Skills
7. Functional Groups of Keys
8. Pointing Devices
9. Common Mouse Operations

2. Guest Lecture for Class 11

Topic: Computers Number Systems Algorithms Flowcharts and Pseudocode

Timing: 1:45 PM-2:30 PM

Duration: 45 minutes

Number of Students: 67

Topics Covered

1. Introduction to Computers
2. Decimal Number System
3. Binary Number System
4. Octal Number System
5. Hexadecimal Number System
6. Number-System Conversions
7. Algorithms
8. Flowcharts
9. Standard Flowchart Symbols
10. Pseudocode
11. Sequence and Decision-Making

3. Guest Lecture for Class 12

Topic: Emerging Trends and Social Impact

Timing: 2:40 PM-3:20 PM

Duration: 40 minutes

Number of Students: 72

Topics Covered

1. Artificial Intelligence
2. Machine Learning
3. Applications of AI and ML
4. Internet of Things
5. Components of an IoT System
6. Applications of IoT
7. Blockchain
8. Blocks, Hashes and Distributed Records
9. Social Impact of Emerging Technologies
10. Ethical and Responsible Technology Use

4. Guest Lecture for Class 10

Topic: Spreadsheet Analysis Automation Linking and Review

Timing: 3:20 PM-4:00 PM

Duration: 40 minutes

Number of Students: 53

Topics Covered

1. What-If Analysis
2. Scenarios
3. Goal Seek
4. Difference Between Scenarios and Goal Seek
5. Macros in Spreadsheets
6. Macro Recording and Execution
7. Macro Security
8. Linking Spreadsheet Data
9. Linking Data Across Worksheets
10. Sharing and Reviewing a Spreadsheet
11. Comments and Change Tracking

Outcomes of the Programme:

The guest lecture programme achieved the following outcomes:

1. Improved Understanding of Computer Fundamentals
2. Enhanced Spreadsheet Knowledge
3. Development of Computational Thinking
4. Awareness of Emerging Technologies
5. Understanding of Social and Ethical Issues
6. Connection Between Theory and Practice
7. Career Awareness
8. Promotion of Responsible Digital Citizenship

SDG Mapping:

The guest lecture programme contributed to the following United Nations Sustainable Development Goals.

1. SDG 4 Quality Education
2. SDG 9 Industry Innovation and Infrastructure
3. Reduced Inequalities

Acknowledgements:

I express my sincere gratitude to the Mrs. Yojana, Principal and management of **P.M. SHRI A.P. Model School and Junior College, Mudivedu, Kurabalakota Mandal, Annamayya District, Andhra Pradesh**, for providing me with the opportunity to conduct class-wise guest lectures for the students of Classes 9-12.

I gratefully acknowledge the support extended by the school teachers, vocational trainers, coordinators and technical staff in arranging the venue, coordinating the students and facilitating the presentation and demonstration sessions.

I also appreciate the students of Classes 9, 10, 11 and 12 for their participation, attention and involvement throughout the programme. Their interest in computer fundamentals, spreadsheet tools, computational thinking and emerging technologies contributed to the effectiveness of the sessions.

I further acknowledge all those who directly or indirectly supported the successful conduct of the guest lecture programme on **19 September 2026**.

Conclusion:

The class-wise guest lecture programme was successfully conducted on **19 September 2026** at **P.M. SHRI A.P. Model School and Junior College, Mudivedu**, according to the planned schedule.

Four separate sessions were delivered for Classes 9, 11, 12 and 10 between **1:05 PM and 4:00 PM**, covering a total of **165 minutes of direct instructional activity**. The programme reached **249 students**.

Class 9 students were introduced to computer fundamentals, keyboard skills and pointing devices. Class 10 students learned about spreadsheet analysis, Scenarios, Goal Seek, macros, linked data, sharing and review. Class 11 students explored number systems, algorithms, flowcharts and pseudocode. Class 12 students were introduced to Artificial Intelligence, Machine Learning, IoT, Blockchain and the social impact of emerging technologies.

The programme connected academic concepts with practical applications through explanations, examples, demonstrations and classroom questions. It also encouraged students to consider the ethical, social and security dimensions of technology use.

Overall, the programme supported digital literacy, computational thinking, spreadsheet competency, technology awareness and career orientation among the participating students. Continued hands-on activities involving typing practice, spreadsheet projects, flowchart development, AI demonstrations and IoT simulations are recommended to reinforce the concepts introduced during the guest lectures.

Photo Gallery:



