NARSIMHA REDDY
ENGINEERING COLLEGE
An Autonomous Institution| Affiliated to JNTUH | Approved by AICTE
Accredited by NBA & NAAC with 'A' Grade

REPORT

On

"Faculty Readiness Program"

On

"FUNDAMENTALS OF AUTO CAD"

From

01.06.2026

To

06.06.2026

Organized By

Department of Mechanical Engineering

NARSIMHA REDDY ENGINEERING COLLEGE (Hyderabad)

(Autonomous)

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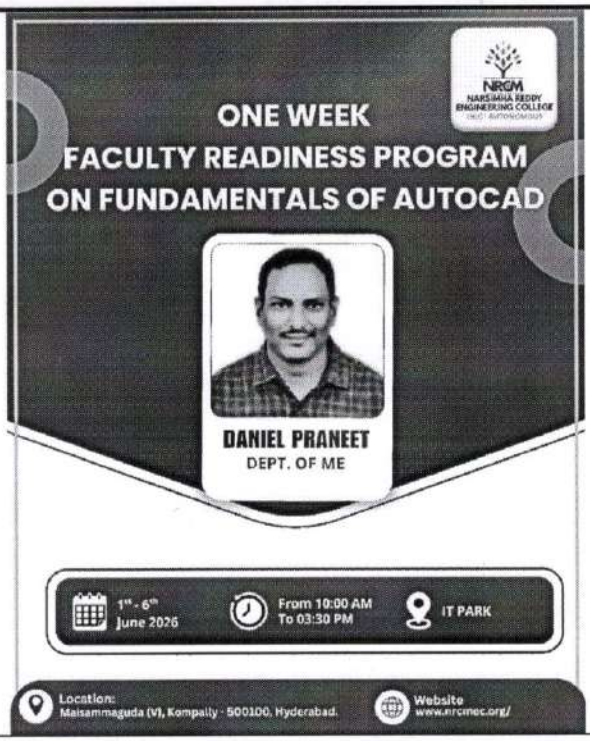
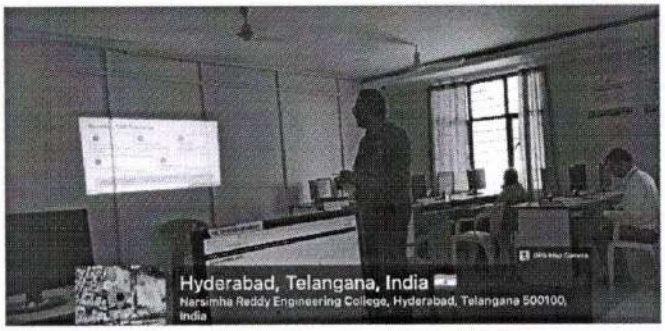
Title of The Event	Faculty Readiness Program on "FUNDAMENTALS OF AUTO CAD"
Event Coordinator Details	Mr. R Sai Syam Assistant Professor, ME Department, Narsimha Reddy Engineering College (Autonomous) Secunderabad, Telangana State, India- 500100.
Program Type*	Faculty Readiness Program
Start Date : **End Date :** **Duration of the activity :**	01.06.2026 06.06.2026 33 Hours
Mode of Session	Offline
Number of Faculty Participants *	15
Objective of the Event	• To familiarize faculty with Computer-Aided Design (CAD) concepts • To provide hands-on training in AutoCAD software • To enable faculty to create professional 2D drafting and basic 3D models • To enhance design-oriented teaching and laboratory practices • To prepare faculty for industry-oriented and outcome-based education methodologies
Outcomes	**Key Outcomes:** • Understand CAD concepts and AutoCAD architecture. • Learn to create accurate 2D engineering drawings. • Develop editing and annotation skills for engineering drafting. • Create professional engineering drafting sheets. • Understand the fundamentals of 3D modeling in AutoCAD. • Demonstrate practical drafting and modeling skills effectively.
Brief Report:	**Day 1:** Covered the basics of Computer-Aided Design (CAD), the importance of CAD in engineering, AutoCAD interface overview, navigation and workspace setup, and coordinate systems. **Day 2:** Covered basic drawing commands including line, circle, arc, rectangle, and polygon; object snap and grid settings; coordinate entry methods; and drawing precision techniques. **Day 3:** Covered editing and annotation tools such as move, copy, rotate, mirror, scale, trim, extend, offset, fillet, and chamfer; text and multiline text; dimensioning techniques; and hatching and annotation. **Day 4:** Covered layer management, line types and properties, creating and using blocks, layouts and viewports, and plotting and printing drawings. **Day 5:** Covered introduction to 3D modeling including extrude, revolve, and sweep commands; solid and surface modeling; viewing and rendering concepts; and basic assembly concepts. **Day 6:** Covered mini CAD project presentation, drawing validation, file management and sharing, best practices in CAD documentation, and a doubt

	clarification session. **<u>The event meets following Program Outcomes and SDG's:</u>** Over the six-day Faculty Readiness Program on AutoCAD Design and Drafting, the topics covered included basics of CAD, importance of CAD in engineering, AutoCAD interface overview, navigation and workspace setup, and coordinate systems **(PO1: Engineering Knowledge, PO5: Modern Tool Usage, PO12: Life-long Learning)**; basic drawing commands such as line, circle, arc, rectangle, and polygon, object snap and grid settings, coordinate entry methods, and drawing precision techniques **(PO1: Engineering Knowledge, PO2: Problem Analysis, PO5: Modern Tool Usage)**; editing and annotation tools including move, copy, rotate, mirror, scale, trim, extend, offset, fillet, and chamfer, along with text, dimensioning, and hatching **(PO2: Problem Analysis, PO3: Design/Development of Solutions, PO5: Modern Tool Usage)**; layer management, line types and properties, creating and using blocks, layouts and viewports, and plotting and printing drawings **(PO3: Design/Development of Solutions, PO5: Modern Tool Usage, PO10: Communication)**; introduction to 3D modeling covering extrude, revolve, and sweep commands, solid and surface modeling, viewing and rendering concepts, and basic assembly concepts **(PO1: Engineering Knowledge, PO3: Design/Development of Solutions, PO5: Modern Tool Usage)**; and finally, mini CAD project presentation, drawing validation, file management and sharing, best practices in CAD documentation, and doubt clarification session **(PO3: Design/Development of Solutions, PO5: Modern Tool Usage, PO10: Communication, PO12: Life-long Learning)**. Over the six-day Faculty Readiness Program on AutoCAD Design and Drafting, the topics covered included basics of CAD, importance of CAD in engineering, AutoCAD interface overview, navigation and workspace setup, and coordinate systems **(SDG 4: Quality Education – enhancing faculty skills for better teaching, SDG 9: Industry, Innovation, and Infrastructure – building modern design competencies)**; basic drawing commands such as line, circle, arc, rectangle, and polygon, object snap and grid settings, coordinate entry methods, and drawing precision techniques **(SDG 4: Quality Education, SDG 9: Industry, Innovation, and Infrastructure)**; editing and annotation tools including move, copy, rotate, mirror, scale, trim, extend, offset, fillet, and chamfer, along with text, dimensioning, and hatching **(SDG 4: Quality Education, SDG 9: Industry, Innovation, and Infrastructure)**; layer management, line types and properties, creating and using blocks, layouts and viewports, and plotting and printing drawings **(SDG 4: Quality Education, SDG 9: Industry, Innovation, and Infrastructure, SDG 8: Decent Work and Economic Growth – preparing faculty for industry-oriented skills)**; introduction to 3D modeling covering extrude, revolve, and sweep commands, solid and surface modeling, viewing and rendering concepts, and basic assembly concepts **(SDG 4: Quality Education, SDG 9: Industry, Innovation, and Infrastructure)**; and finally, mini CAD project presentation, drawing validation, file management and sharing, best practices in CAD documentation, and doubt clarification session **(SDG 4: Quality Education, SDG 8: Decent Work and Economic Growth, SDG 9: Industry, Innovation, and Infrastructure, SDG 17: Partnerships for the Goals – through collaboration, sharing, and documentation best practices)**.

Poster/ Brochure of the Event	
Event Photograph	  

Coordinator

Principal

PRINCIPAL
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*******~End of the Report~*******