



**SIDDHARTHA**  
ACADEMY of HIGHER EDUCATION  
*Deemed to be University*

Kanuru, Vijayawada, AP – 520 007

## **Department of Mechanical Engineering**

V R Siddhartha School of Engineering

### **STUDENT CLUB**



## **CLUB INTRODUCTION**

Mech X Makers Club is the first official hands-on innovation and fabrication club of the Department of Mechanical Engineering at Siddhartha Academy Of Higher Education (Deemed to be University), Vijayawada. The club serves as a bridge between theoretical academic knowledge and real- world practical application, providing students with the opportunity to transform classroom concepts into tangible creations.

At Mech X Makers, students are encouraged to explore, design, and build using modern tools such as CAD software, 3D printers, CNC machines, microcontrollers, and other digital fabrication technologies. The club creates a dynamic learning environment where creativity meets engineering, and where problem-solving happens not just on paper but at the workbench.

Whether you're prototyping a product, automating a system, or experimenting with new materials and techniques, Mech X Makers offers the tools, mentorship, and collaborative space to bring your ideas to life. It's not just about making projects—it's about making engineers ready for the future and serves as a Launchpad for aspiring innovators and entrepreneurs.

## AIM

The **Mech X Makers Club** aims to bridge the gap between academic knowledge and industrial application by encouraging students to experiment, create, and solve problems using modern tools such as CAD software, 3D printers, microcontrollers, and CNC machines. Through structured workshops, open lab hours, team projects, and industry interaction, Mech X Makers cultivates technical proficiency, creativity, and an entrepreneurial mindset.

By nurturing curiosity and providing access to emerging technologies, the club empowers students to become proactive engineers who are not only job-ready but also capable of driving innovation in the rapidly evolving landscape of mechanical and interdisciplinary engineering.

## **OBJECTIVES**

- **Promote Maker Culture:** Encourage a spirit of curiosity, creativity, and self-driven learning by providing students the freedom and tools to bring their ideas to life.
  - **Enable Hands-On Learning:** Provide access to tools such as 3D printers, CNC machines, Welding Robots, and other prototyping tools to complement theoretical knowledge with practical applications.
  - **Bridge Design and Manufacturing:** Guide students from CAD modeling to real-world prototyping and testing.
  - **Foster Interdisciplinary Collaboration:** Encourage interdisciplinary projects merging mechanics, electronics, and coding.
  - **Enhance Technical Competence:** Train members in essential tools and techniques, including CAD software, digital fabrication tools, materials selection, reverse engineering, and project planning.
  - **Encourage Innovation and Entrepreneurship:** Support students in developing innovative solutions that could evolve into startups, academic research, or competition- winning projects.
  - **Organize Events and Workshops:** Conduct regular workshops, boot camps, hackathons, and project showcases to sharpen skills and engage with the broader maker and engineering communities.
  - **Build a Sustainable Maker Space:** Maintain a well-equipped makerspace for future innovators.
- Target Audience / Eligibility

## Expected outcomes

The **expected outcomes** of the MechX Makers Club in concise bullet points:

- **Practical Skills Development**

Members gain hands-on expertise in 3D printing, robotics, mechatronics, and prototyping tools.

- **Innovative Project Portfolio**

Students complete multiple functional projects (robots, automated systems, 3D-printed solutions).

- **Competition Readiness**

Teams prepared to participate in national/international tech challenges and hackathons.

- **Active Maker Community**

Established network of makers collaborating on interdisciplinary projects

- **Knowledge Sharing Hub**

Regular workshops, tutorials and open-source resources created by members

- **Lab Sustainability**

Well-maintained makerspace with upgraded equipment for future student batches

## **Target Audience / Eligibility**

The **Mech X Makers Club** is open to all students currently enrolled in the **B.Tech** from **first year to final year**, at Siddhartha Academy Of Higher Education (Deemed to be University), Vijayawada. Whether you're a beginner eager to explore the basics of design and prototyping or a senior student looking to refine your technical and project management skills, the club welcomes learners at all levels. With a focus on inclusivity and growth, Mech X Makers encourages participation from students who are passionate about hands-on learning, innovation, and applying engineering principles to real-world challenges.

The club provides a supportive environment where students can collaborate on projects, participate in workshops, and gain exposure to modern tools such as CAD software, 3D printers, microcontrollers, and fabrication equipment. Through guided mentorship, peer learning, and access to industry-relevant resources, members are empowered to take their ideas from concept to creation. Whether your goal is to build a strong technical foundation, contribute to impactful innovations, or even launch a startup, Mech X Makers offers the right platform to grow, experiment, and succeed—layer by layer.

## **Functioning Committee Structure (For the Academic Year 2025-2026)**

**To Ensure the Smooth and Effective Functioning of the Club, The Following Committee Structure is proposed:**

**Faculty Coordinator - Dr. G. Dilli Babu, Associate Professor**

- ❖ Provides overall guidance, mentorship, and support to the club.
- ❖ Facilitates communication between the club and the department.
- ❖ Assists in securing resources and approvals for club activities.
- ❖ Oversees the club's activities and ensures alignment with the institution's policies.

**Student Committee (Including key roles and responsibilities)**

● **President - J.Teja Amareswar**

- ❖ Leads and presides over all club meetings and activities.
- ❖ Represents the club in official capacities.
- ❖ Works closely with the Faculty Coordinator and other committee members to set the club's direction.
- ❖ Ensures effective communication within the club.

● **Vice President – Mohammad Fayaz**

- ❖ Assists the President in their duties and assumes responsibilities in their absence.
- ❖ Coordinates specific projects and events as assigned.
- ❖ Plays a key role in member recruitment and engagement.

- **Secretaries** – M. Pravallika and S. Harshitha
  - ❖ Maintains accurate records of club meetings, activities, and decisions.
  - ❖ Handles club correspondence and communication.
  - ❖ Manages membership lists and attendance.
  
- **Treasurer** - B. Aswini Bai
  - ❖ Manages the club's finances, including collecting membership fees and tracking expenditures.
  - ❖ Prepares financial reports and budgets.
  - ❖ Ensures transparency in financial matters.
  
- **Technical Heads** – K. Ramji and Mohammad Adnan
  - ❖ Oversees the maintenance and operation of the machinery and other fabrication equipment.
  - ❖ Organizes technical workshops and training sessions.
  - ❖ Provides technical support to club members for their projects.
  
- **Events/Outreach Coordinators** – M Phani, G.Om Prakash D.Rohit Kumar K.Dileep, M.Mani Kumar S.Sai saranya
  - ❖ Plans and organize club events, competitions, and workshops.
  - ❖ Manages outreach activities, including collaborations with other clubs and community engagement.
  - ❖ Handles publicity and promotion of club events.

## Registration Process

Are you ready to become a **Mech X Makers Club Member** and shape the future of fabrication?

Here's how you can join our dynamic club:

- **Eligibility:** This club is open to all currently enrolled B.Tech Engineering students of Siddhartha Academy of Higher Education (Deemed to be University), Vijayawada.
- **Registration Form:** Obtain the official registration form from Club Coordinator.
- **Fill the Form:** Carefully complete all the required details in the registration form.
- **Payment of Fee:** A nominal registration fee of ₹ 300 (Rupees Three Hundred Only) is applicable to become a member. This fee contributes towards club resources, materials for workshops, and event organization.
- **Submission:** Submit the filled registration form along with the fee payment receipt to club President/Vice President.
- **Confirmation:** Upon successful registration and fee verification, you will receive a confirmation email/message and be added to the official club communication channels.

## Participant Guidelines

To ensure a productive and safe environment for all members, the following guidelines are expected:

- **Respect and Collaboration:** Treat all members, faculty, and equipment with respect. Foster a collaborative and supportive learning environment.
- **Active Participation:** Members are encouraged to actively participate in club meetings, workshops, and projects.
- **Safety First:** Adhere to all safety protocols and guidelines provided during training and while using equipment. Report any safety concerns immediately.
- **Responsible Use of Resources:** Use club equipment and materials responsibly and efficiently. Follow proper operating procedures and report any malfunctions.
- **Cleanliness:** Maintain the cleanliness of the workspace and equipment after use.
- **Project Ownership:** While collaboration is encouraged, members are responsible for the progress and completion of their individual or team projects.
- **Communication:** Stay informed about club activities and announcements through the official communication channels.
- **Feedback and Suggestions:** Members are encouraged to provide constructive feedback and suggestions for improving club activities.
- **Adherence to Institutional Policies:** All club activities and member conduct must adhere to the rules and regulations of Siddhartha Academy of Higher Education (Deemed to be University), Vijayawada.
- **Membership Fee:** Ensure timely payment of the membership fee to remain an active member.

**Dr. G. Dilli Babu**  
Associate Professor

**Dr. N. Ravi Kumar**  
Head of the Department