

# CENTRE OF COMPETENCE RV-CENTER FOR AUTOMATION AND ROBOTICS (Digital Manufacturing)

The RV-Center for Automation and Robotics, established in 2022 at RV College of Engineering, is a pioneering hub that aims to enhance the skill set and knowledge base of students and professionals in the fields of automation and robotics. It serves as a vital resource for innovation, research, and education, bridging the gap between academic learning and industry needs. The center is supported by a highly experienced team of faculty members from the Departments of Mechanical Engineering and Industrial Engineering & Management, and it actively contributes to the skill development of both undergraduate and postgraduate students through workshops, internships, and research opportunities.

**Vision**: To be a pioneering hub in automation and robotics, driving innovation and excellence through cutting-edge training, impactful internships, skill development programs, and transformative research.

**Purpose:** The RV-Center for Automation and Robotics envisions itself as a leading center that fosters innovation and excellence. The center aims to serve as a comprehensive hub for cutting-edge training, skill development, internships, and transformative research in the fields of automation and robotics. Its goal is to enable students and professionals to gain the skills and knowledge necessary to thrive in a rapidly evolving technological landscape.

### **Activities and Achievements**

- Skill Training for UG and PG students: The center offers specialized training in areas like robotics, CNC systems, and advanced manufacturing techniques.
- 2. Internships: It facilitates internships for both undergraduate and postgraduate students, helping them gain practical experience.
- International Workshops: The center organizes international workshops to bring global expertise to students and faculty
- 4. Sector Skill Training: The center collaborates with industry to offer sector-specific skill training under the IASC framework.
- 5. UG and PG Minor Projects: The center serves as a base for hands-on minor projects for students at both the undergraduate and postgraduate levels.
- 6. Industrial Visits: To provide real-world exposure, the center organizes visits to industries involved in automation and robotics.



## **Training and Expert Lectures**

- Robotics and CNC Training: Faculty members received training from Future Robotics, focusing on robots, CNC systems, and rail interface technologies.
- 2. Expert Lectures: The center hosted the RVFAN Workshop, featuring experts from FANUC, which provided valuable insights into robotics and CNC systems.

### Infrastructure and Investment

The center is equipped with state-of-the-art infrastructure, including advanced CNC systems (CNC-T, CNC-M, CNC H/W Kit) and robotics equipment, such as Roboguide software and NC guide software. The total investment by the institution amounts to 1.2 crore, covering both the infrastructure and the equipment.

# **Financial Contributions and Collaborartions**

The center has generated revenue through its skill labs and NSDC programs. With five batches of skill lab courses completed, it has earned approximately 5,00,000, with an additional 2,50,000 expected from NSDC. Collaborations with companies like FANUC India Limited and MENTRIC India Pvt. Limited have been formalized through MoUs, facilitating further industry partnerships and educational advancements.

### **Future Plans**

Looking ahead, the center aims to expand its training and research programs while fostering international collaborations. The RV-Center for Automation and Robotics stands as a beacon of innovation, training, and industry collaboration, contributing significantly to the advancement of automation and robotics education in India. It continues to provide valuable resources for students and professionals.

For further details contact:

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