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ABOUT THE DEPARTMENT

The Department of Robotics and Automation was launched in the silver jubilee year of Sri Ramakrishna Engineering College, Coimbatore, offering:

B.E. (Robotics and Automation)

It is a collaborative programme with Ariel University, Israel, and has Industrial Knowledge Partners including L&T Technologies Services, Chennai, and Craftsman Automation, Coimbatore.

Program Focus:

Design, construction, operation, and use of autonomous and robotic devices

Computer systems for control, sensory feedback, and information processing

Project-based learning, design thinking, and inquiry-based learning

Design of automation systems, mobile robotics, animatronics, and traditional robotic devices

Development of computational thinking and coding skills

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HEAD OF THE DEPARTMENT

Dr. A. Murugarajan, B.E., M.E., Ph.D

Welcome Note:
Welcome to the Department of Robotics and Automation. The department focuses on preparing students for design, interface, installation, and troubleshooting of industrial robots and automation systems. Robotics and automation is a rapidly evolving technology that has become increasingly essential in modern industries.

Quote: “Robotics and other combinations will make the world pretty fantastic compared with today.”

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VISION

To develop robotics and automation engineers with systems and interdisciplinary approach, keeping pace with changing technologies.

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MISSION

Provide quality education through effective teaching-learning processes to meet industry requirements.

Inculcate problem-solving and lifelong learning skills through project-based approaches in collaboration with industries.

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PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Equip graduates with strong foundations in robotics, automation, mathematics, science, and engineering fundamentals.

PEO2: Excel in professional careers by providing engineering solutions and demonstrating technical competence.
PEO3: Design, develop, and program robots for engineering and societal applications using state-of-the-art tools and technologies, ensuring technically superior, economically feasible, environmentally compatible, and socially acceptable solutions.

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PROGRAM OUTCOMES (POs)

PO1: Apply mathematics, science, and engineering knowledge to solve complex engineering problems.
PO2: Identify, formulate, review research literature, and analyze complex engineering problems using first principles.
PO3: Design solutions and system components meeting public health, safety, cultural, societal, and environmental needs.
PO4: Conduct investigations using research-based methods, experiments, and data analysis to provide valid conclusions.
PO5: Apply modern engineering and IT tools, including prediction and modeling, to complex engineering activities.
PO6: Assess societal, health, safety, legal, and cultural responsibilities in professional engineering practice.
PO7: Understand the impact of engineering solutions on society and the environment; promote sustainable development.
PO8: Apply ethical principles and commit to professional ethics and responsibilities.
PO9: Work effectively as an individual and in multidisciplinary teams.
PO10: Communicate effectively through reports, presentations, and instructions.
PO11: Apply project management and finance knowledge in engineering contexts.
PO12: Engage in independent, lifelong learning to adapt to technological change.

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PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Design, develop, and implement automation systems integrating sensors, actuators, simulation tools, and control algorithms to address real-world automation challenges.
PSO2: Program and integrate robotic systems for industrial operations, robotic assembly, and autonomous navigation.
PSO3: Pursue careers in industry, entrepreneurship, and research, contributing to technological advancement and societal well-being.

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LABORATORIES

Automation Control Systems Laboratory

Robot Programming and Simulation Laboratory

Autonomous Mobile Robots Laboratory

Open Innovation Laboratory (Sensors and Actuators Laboratory)

Smart Factory / Industry 4.0 Laboratory

SREC - SMC Center for Pneumatics and Grippers

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FACULTY & STAFF

HEAD OF THE DEPARTMENT

Dr. A. Murugarajan

ASSOCIATE PROFESSORS

Dr. R. Sudhakar

Dr. A. Kishore Kumar

ASSISTANT PROFESSORS (SR./SL. GRADE)

Dr. M.S. Suresh Kumar

Mr. S. Sarveswaran

Mrs. N. Dheerthi

Mrs. G. Hemalatha

Mrs. J.M. Priyadharsheni

Mrs. K. Prashanthini

ASSISTANT PROFESSORS

Mr. A. Peniel Winifred Raj

Mr. S. Krishnakumar

Ms. K. Roobini

Ms. Deeksha R

PROGRAMMERS

Mrs. R. Thenmozhi

Ms. S. Haripriya

LAB ASSISTANTS

C.V. Udayasanker

Mr. P. Boobal

Mrs. J. Annam Arul Shanthi

Mr. M. Manoj

NON-TEACHING STAFF

Mrs. R. Saranya