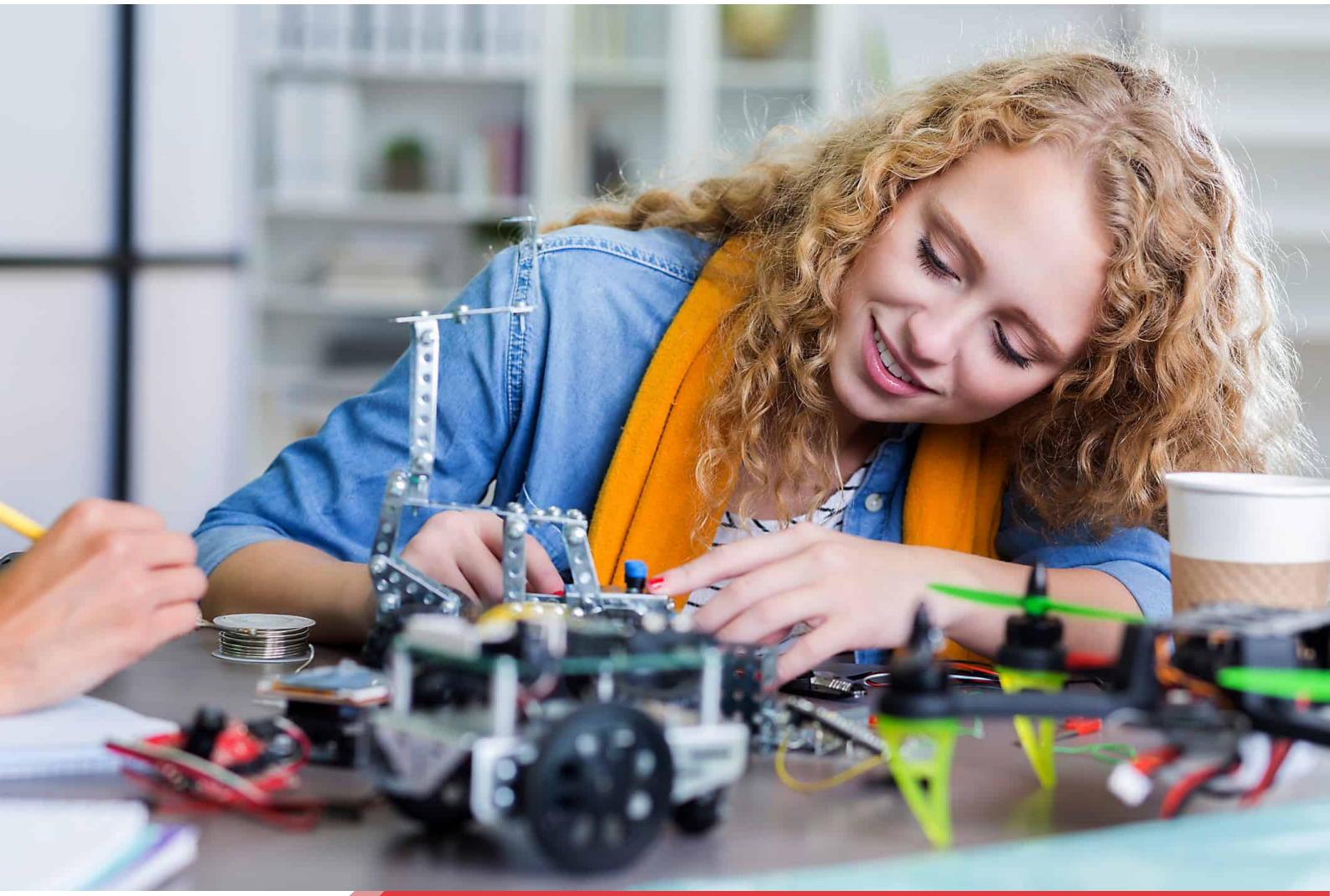
UNIVERSITY OF DR.PSJKUMAR



B.S/B.TECH
ROBOTICS AND AUTOMATION

CURRICULUM 2023-24

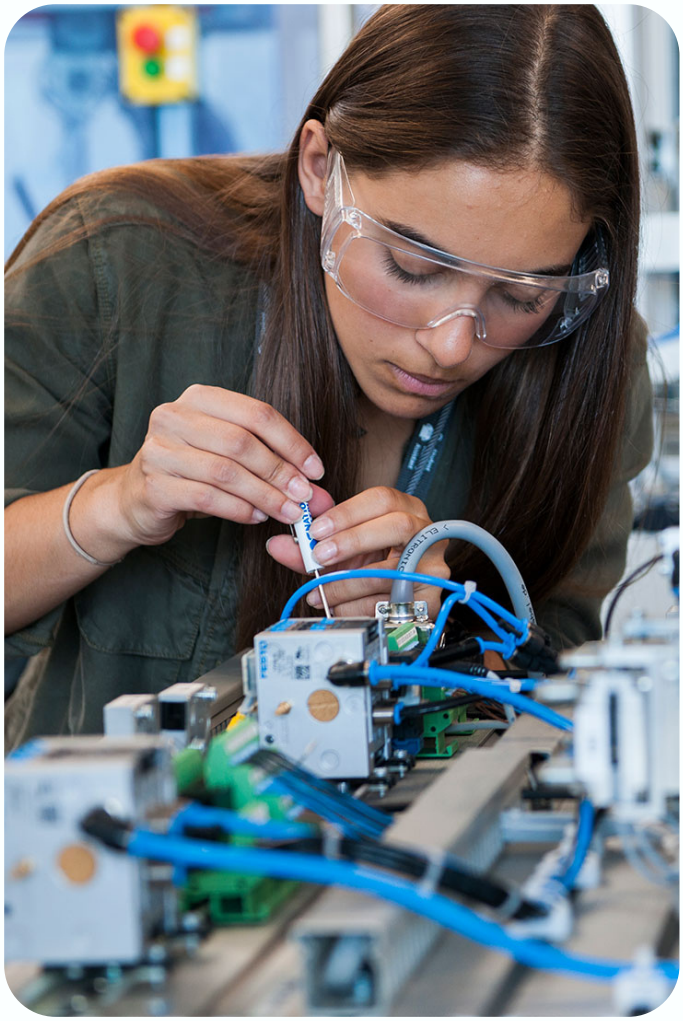
SCHOOL OF SCIENCE AND TECHNOLOGY

ABOUT US

University of Dr.PSJKumar School of Science and Technology has various programs for diplomas, degrees, masters, and doctorates.

Dr.PSJKumar University's School of Science and Technology offers massive exposure to its students in the field of engineering and technology, enriching their skills as well as helping them to take visit several industries and MNC's. The University has several departments scattered all throughout Jacksonville, Florida, United States.

The University is especially popular among International students. The University has franchises around the globe including Queensland, India, Canada, Malaysia, and London.



B.S / B.TECH
ROBOTICS AND AUTOMATION

The completion of the degree of bachelor of science/technology in robotics and automation is accomplished in five academic years including four years of regular curriculum plus six months internship.

FOUR YEARS
REGULAR CURRICULUM

SIX MONTHS
INTERNSHIP

FIRST YEAR

The four year curriculum is based on the departmental as well as interdisciplinary teaching. The first year offer the students an opportunity to develop a strong background in basic sciences and to receive an introduction to electronic devices. Every academic year consists of two semesters.

SEMESTER I

Technical English
Engineering Mathematics I
Engineering Chemistry I
Engineering Physics I
Engineering Graphics
Computer Programming
Computer Practices Laboratory

SEMESTER II

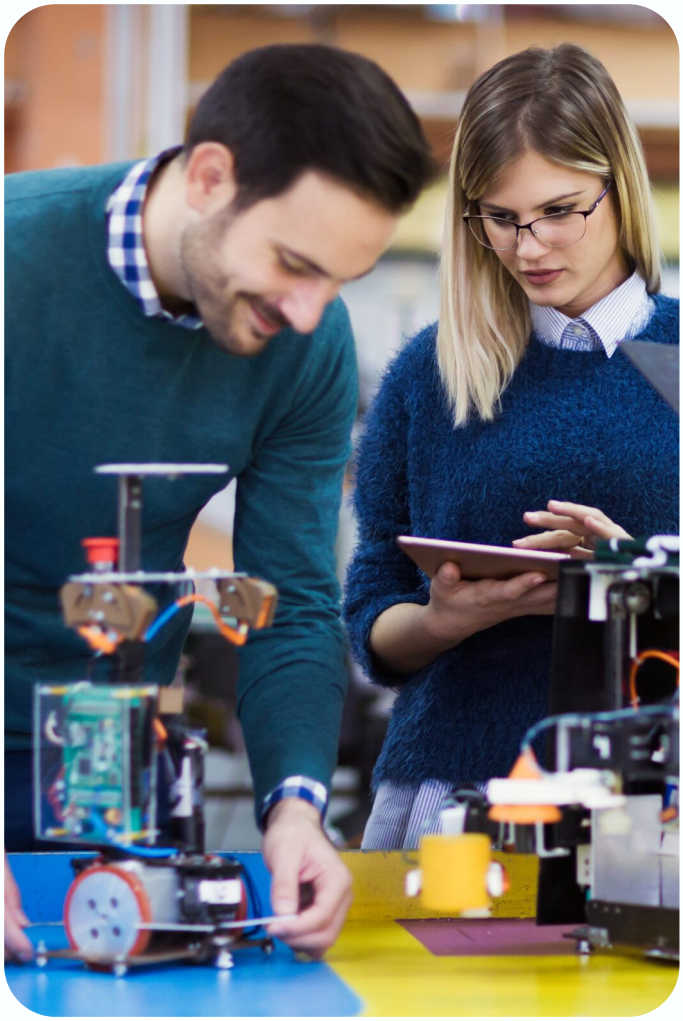
Engineering Mathematics II
Engineering Chemistry II
Engineering Physics II
Basics of Electrical & Electronic Engg.
Basics of Mechanical & Civil Engg.
Electronic Device and Circuit
Circuit and Device Laboratory

SEMESTER I
BASIC SCIENCES

SEMESTER II
ELECTRONIC DEVICES

SECOND YEAR

The second year offer the students an opportunity to develop a strong background in strength of materials and to receive an introduction to automatic control.



SEMESTER III

Transforms & Partial Differential Eqn.
Sensors and Instrumentation
Object Oriented Programming
Elective I
Digital Electronics
Strength of Materials
Strength of Materials Laboratory

SEMESTER IV

Statistics and Numerical Methods
Automatic Control Systems
Linear Integrated Circuits
Elective II
Electrical Machines & Power Systems
Kinematics & Dynamics of Machines
Dynamics Laboratory

The course serves as a transition from basic sciences to theoretical and experiential instrumentation and automatic control systems.

SEMESTER III

SENSORS AND INSTRUMENTATION

SEMESTER IV

KINEMATICS AND DYNAMICS

THIRD YEAR

The third year offer the students an opportunity to develop a strong background in robotics engineering and to receive an introduction to robotic process automation.

SEMESTER V

Principles of Robotics
Power Electronics and Drives
Elective III
Computer Architecture
Microprocessor & Microcontroller
CNC Machine and Metrology
Robotics Laboratory

SEMESTER VI

Machine Vision Systems
Automation System Design
Elective IV
Real time Operating Systems
Hydraulics and Pneumatics
Artificial Intelligence & ML
Automation System Design Lab

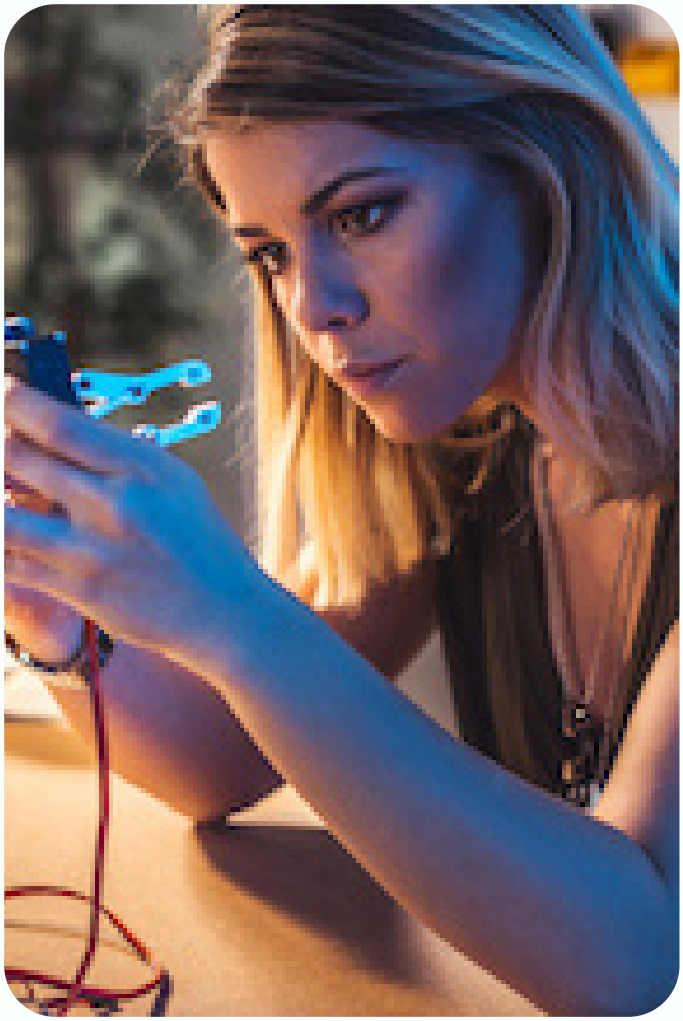
The course serves as a transition from instrumentation and control systems to robotics and process automation.

SEMESTER V
ROBOTICS

SEMESTER VI
AUTOMATION

FOURTH YEAR

The fourth year offer the students an opportunity to develop a strong background in design and fabrication of robots to automation of service and field robots.



SEMESTER VII

Embedded Controllers
Modeling and Simulation
Field and Service Robotics
Elective V
Elective VI
Design and Fabrication of Robots
Mini-Project

SEMESTER VIII

Project and Viva

The elective program has a two fold purpose: 1) to aid the student in an expert career choice and 2) to offer an opportunity to build strengths in related fields. By the end of fourth year, students will be efficient enough in dealing with both design and fabrication of autonomous and service robots.

SEMESTER VII

DESIGN & FABRICATION

SEMESTER VIII

PROJECT

FIFTH YEAR INTERNSHIP

The fifth year internship offer the students to practice their engineering profession under expert guidance and supervision beforehand of becoming a full-fledged robotic engineer.

FOR ADMISSION CONTACT

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Malaysia | India | London

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(+91)-9360-178-718

University of Dr.PSJKumar also offers B.S/B.Tech in;

Computer Science and Engineering
Artificial Intelligence & ML
Data Science and Engineering
Big Data and Cloud Computing
Electrical and Computer Engineering
Electronics & Communication Engg.
Information Technology

FIFTH YEAR SIX MONTHS INTERNSHIP


DR.PSJKUMAR
UNIVERSITY
SCIENCE
TECHNOLOGY