UNIVERSITY OF DR.PSJKUMAR

B.S/B.TECH
BIOMEDICAL INSTRUMENTATION

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
BIOMEDICAL INSTRUMENTATION

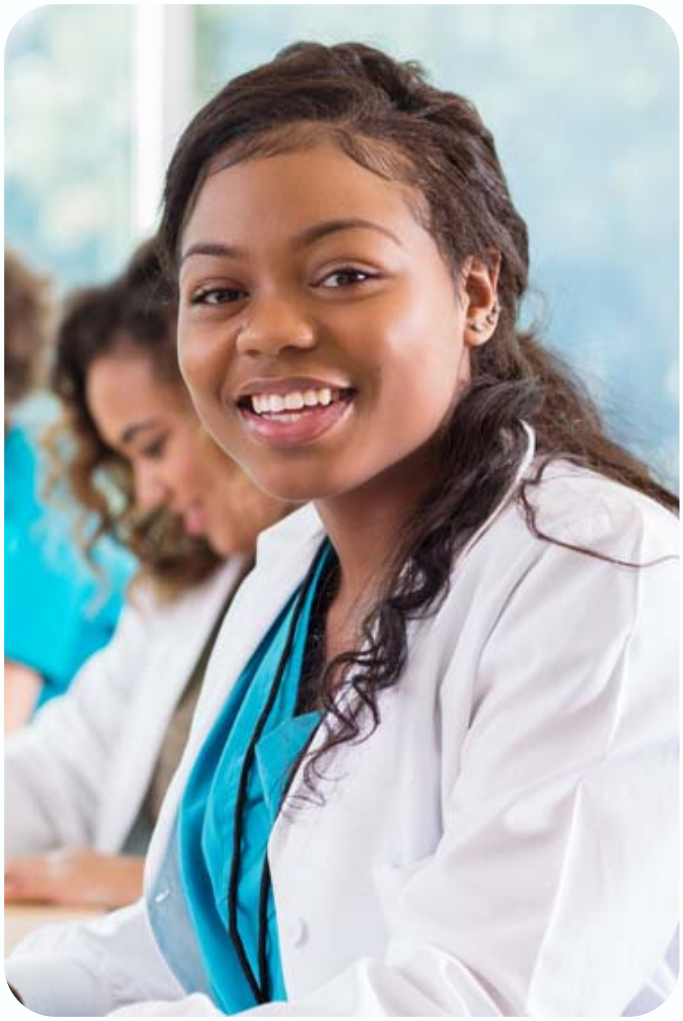
The completion of the degree of bachelor of science/technology in biomedical instrumentation is accomplished in five academic years including four years of regular curriculum plus six months internship.

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

SEMESTER II

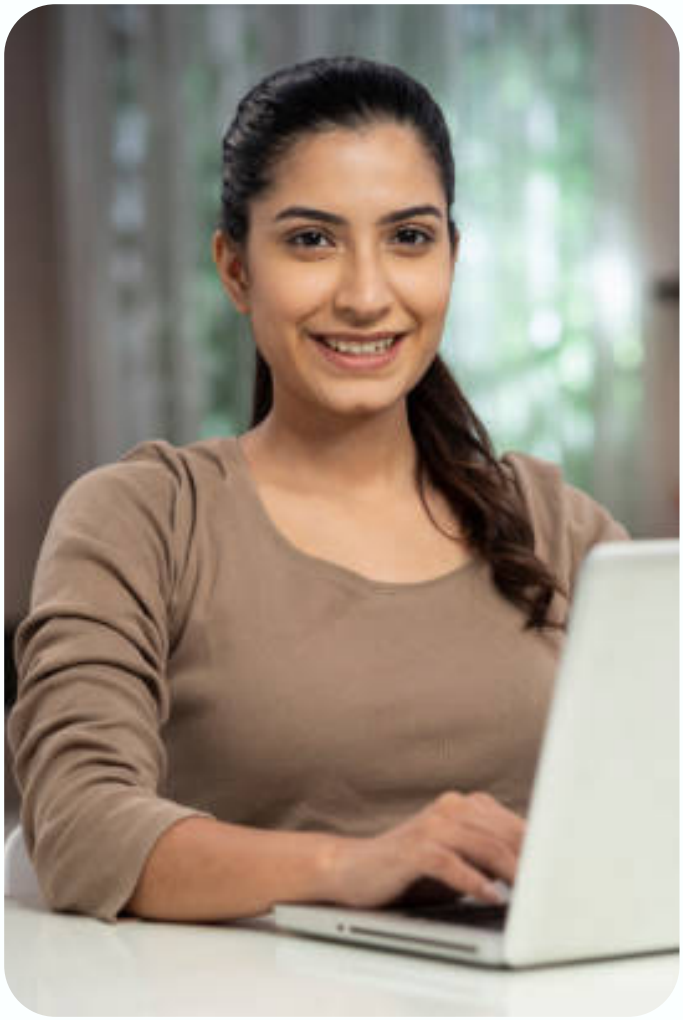
Technical English II
Engineering Mathematics II
Engineering Chemistry II
Engineering Physics II
Basics of Electrical & Electronic Engg.
Electronic Device and Circuit
Circuit and Device Laboratory

SEMESTER I
BASIC SCIENCES

SEMESTER II
ELECTRONIC DEVICES

SECOND YEAR

The second year offer the students an opportunity to develop a strong background in instrumentation and to receive an introduction to switch theory.



SEMESTER III

Differential Equations
Medical Instrumentation
Human Anatomy & Physiology
Elective I
Material Sciences
Electronic Circuits
Medical Instrumentation Laboratory

SEMESTER IV

Microprocessor and Microcontroller
Linear Integrated Circuits
Object-Oriented Programming
Elective II
Switch Theory and Logical Design
Environmental Science and Engg.
Microprocessor & Microcontroller Lab

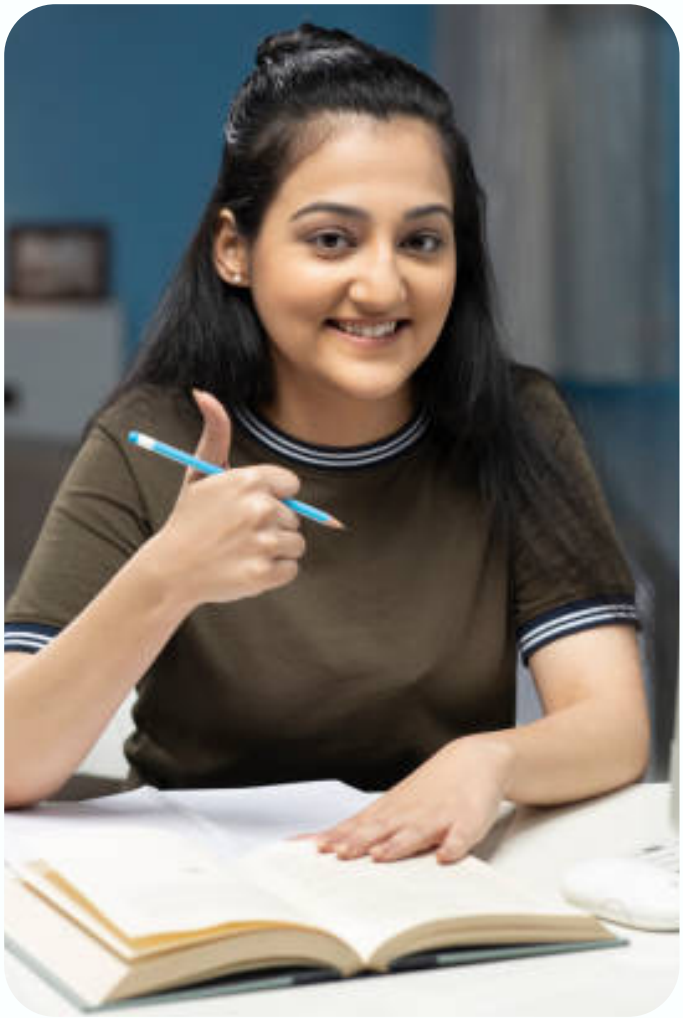
The course serves as a transition from basic sciences to theoretical and experiential electrical and electronic instrumentation.

SEMESTER III
INSTRUMENTATION

SEMESTER IV
SWITCH THEORY

THIRD YEAR

The third year offer the students an opportunity to develop a strong background in medical informatics and to receive an introduction to biomedical equipment.



SEMESTER V

Principles of Digital Signal Processing
Internet and Java Programming
Biomedical Signal Processing
Elective III
Biomechanics
Medical Informatics
Internet and Java Programming Lab

SEMESTER VI

Principles of Radiological Equipment
Prosthetic Equipment
Diagnostic & Therapeutic Equipment
Elective IV
Control System Engineering
Dynamics of Biofluids
Diagnostic Equipment Laboratory

The course serves as a transition from electrical and electronic instrumentation to collaborative biomedical instrumentation.

SEMESTER V
MEDICAL INFORMATICS

SEMESTER VI
BIOMEDICAL EQUIPMENT

FOURTH YEAR

The fourth year offer the students an opportunity to develop a strong background in biomedical instrumentation, embedded systems in medicine and biomedical project.

SEMESTER VII

Artificial Intelligence
Advanced Biomedical Instruments
Medical Imaging Techniques
Elective V
Elective VI
Embedded Systems in Medicine
Medical Imaging Laboratory

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 biomedical instrumentation and project management.

SEMESTER VII

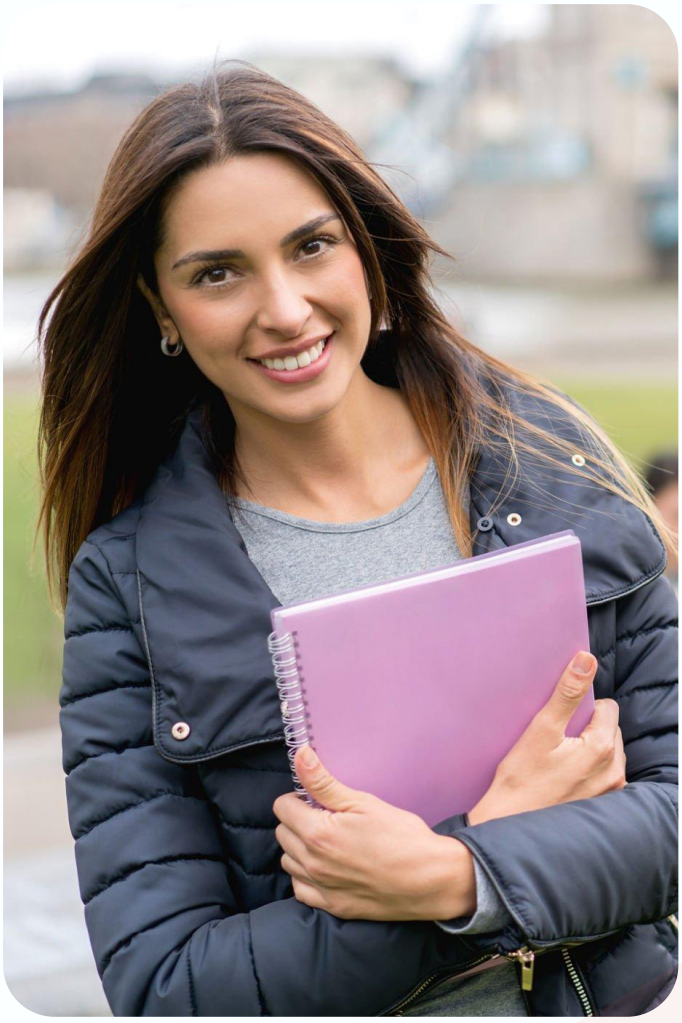
EMBEDDED SYSTEMS

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 biomedical engineer.



FOR ADMISSION CONTACT

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

Medical Electronics
Pharmaceutical Engineering
Clinical Engineering
Genetics Engineering
Bioengineering
Chemical Engineering

FIFTH YEAR SIX MONTHS INTERNSHIP


DR.PSJKUMAR
UNIVERSITY
SCIENCE
TECHNOLOGY