



# **UNIVERSITY OF DR.PSJKUMAR**



## **B.S/B.TECH MEDICAL ELECTRONICS CURRICULUM 2023-24**

**SCHOOL OF SCIENCE AND TECHNOLOGY**

# ABOUT US

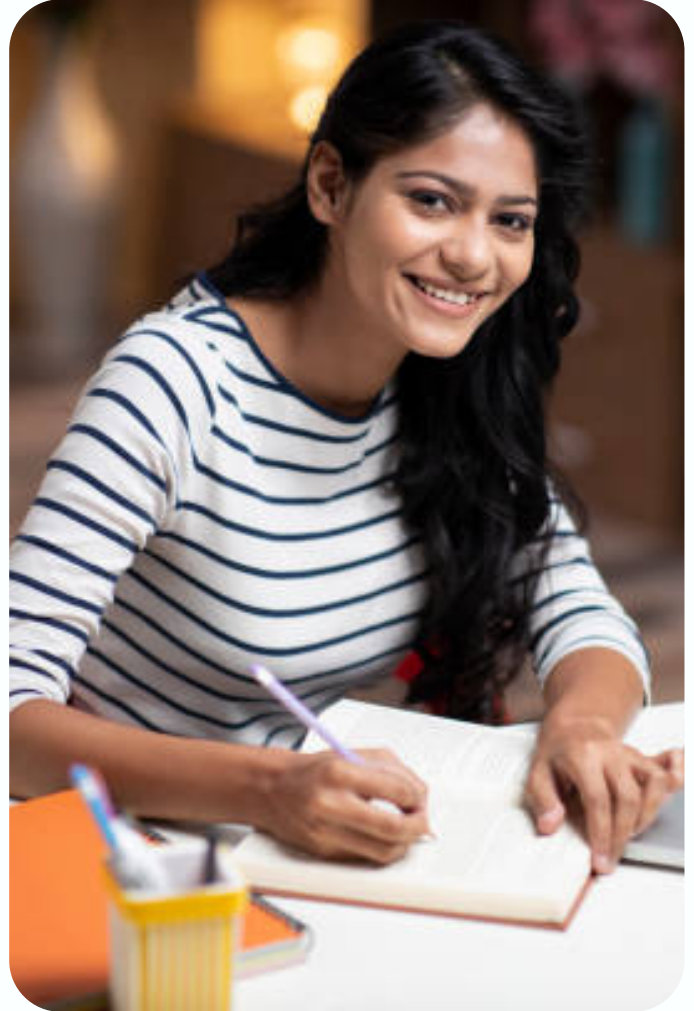
University of Dr.PSJKumar School of Science and Technology has various programs for diplomas, degrees, masters, and doctorates.

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 MEDICAL ELECTRONICS**

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



## **FOUR YEARS**

REGULAR CURRICULUM

## **SIX MONTHS**

INTERSHIP



University of Dr.PSJKumar

# 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
- Circuit Theory
- Electronic Device and Circuit
- Circuit and Device Laboratory



## SEMESTER I

BASIC SCIENCES

## SEMESTER II

ELECTRONIC DEVICES



University of Dr.PSJKumar



# SECOND YEAR

The second year offer the students an opportunity to develop a strong background in electronic circuits and to receive an introduction to integrated circuits.

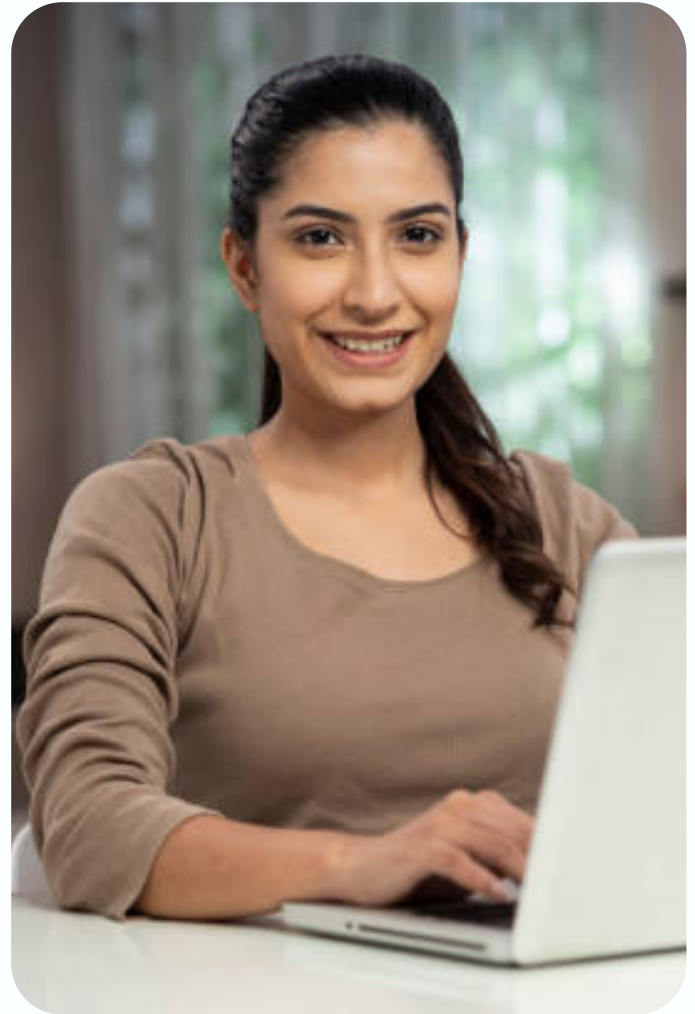
## SEMESTER III

Differential Equations  
Measurement and Instrumentation  
Signals and Systems  
Elective I  
Digital Electronics and System Design  
Electronic Circuits  
Instrumentation Laboratory

## SEMESTER IV

Microprocessor and Microcontroller  
Linear Integrated Circuits  
Object-Oriented Programming  
Elective II  
Control System Engineering  
Environmental Science and Engg.  
Microprocessor & Microcontroller Lab

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



## SEMESTER III ELECTRONIC CIRCUITS

## SEMESTER IV INTEGRATED CIRCUITS



# THIRD YEAR

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

## SEMESTER V

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

## SEMESTER VI

Digital Image Processing  
Prosthetic Equipment  
Diagnostic & Therapeutic Equipment  
Elective IV  
Neural Networks and Applications  
Biomaterials and Artificial Organs  
Diagnostic Equipment Laboratory

The course serves as a transition from electronic sciences to experiential and collaborative medical electronics.



## SEMESTER V MEDICAL INFORMATICS

## SEMESTER VI MEDICAL EQUIPMENT



# FOURTH YEAR

The fourth year offer the students an opportunity to develop a strong background in medical physics, medical imaging, embedded systems and medical project.

## SEMESTER VII

Artificial Intelligence  
Physiological Modeling  
Medical Imaging Techniques  
Elective V  
Elective VI  
Embedded and Real-Time Systems  
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 medical electronics 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 medical engineer.

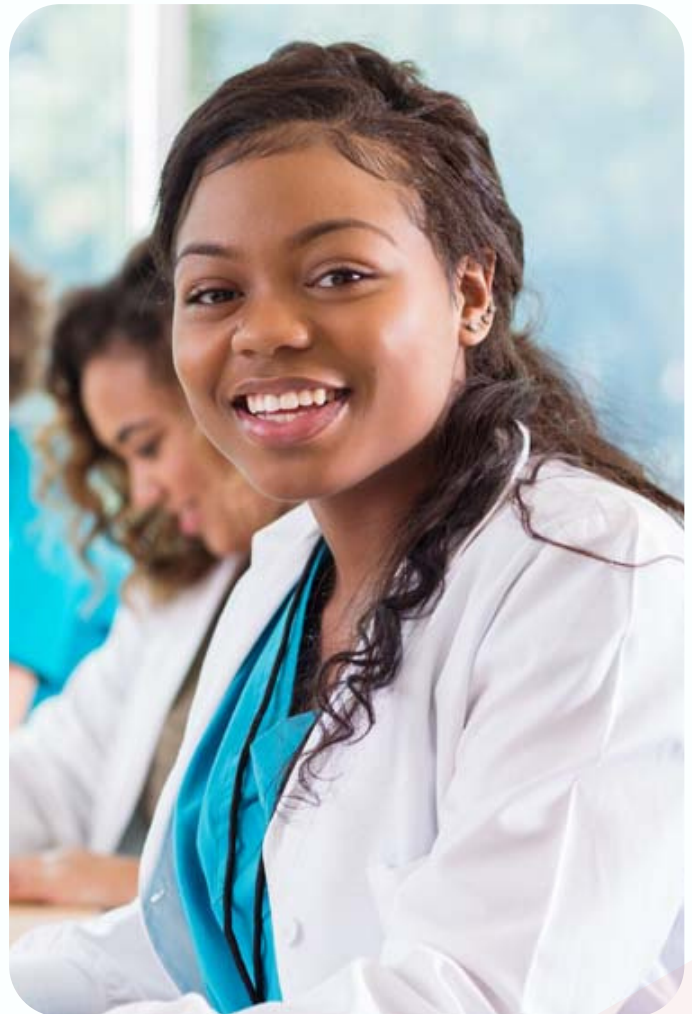
## FOR ADMISSION CONTACT

**Dr.P.S.Jagadeesh Kumar**  
**Chancellor**  
**University of Dr.PSJKumar**  
**Florida | Queensland | Canada**  
**Malaysia | India | London**

**chancellor@drpsjkumaruniversity.net**  
**(+91)-9360-178-718**

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

Biomedical Instrumentation  
Pharmaceutical Engineering  
Clinical Engineering  
Genetics Engineering  
Bioengineering  
Chemical Engineering



## FIFTH YEAR SIX MONTHS INTERNSHIP

Temp metus eros,  
tincidunt sed urna in,  
fringilla metus eros  
sed ncidun u.



**University of Dr.PSJKumar**

