



**KONGUNADU COLLEGE OF ENGINEERING & TECHNOLOGY**  
(AUTONOMOUS)

**NAMAKKAL- TRICHY MAIN ROAD, THOTTIAM**

**(Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai)**

**(Accredited by NBA (CSE, ECE, EEE & MECH), NAAC with B++ Grade,**

**Recognized by UGC with 2(f) & 12 (B) & An ISO 9001:2015 certified Institution)**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

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**Year/ Semester : III/V**

**Batch No: 21**

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**Guide Name : Mr.M.Thangadurai (AP/CSE)**

**Title : Smart bed using health care monitoring system**

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**ABSTRACT**

The integration of Internet of Things (IoT) technology in healthcare has enabled the development of intelligent systems that provide continuous patient monitoring and timely medical assistance. This project, medical health care monitoring System using IoT, aims to monitor the vital health parameters of patients such as body temperature, heart rate, oxygen saturation, and blood pressure using a network of sensors. The system detects whether the patient is lying in bed and collects health data in real time. The sensed data is transmitted to an IoT-enabled microcontroller, for remote access by doctors and nurses through a web or mobile application. If any abnormal condition is detected, such as a sudden drop in oxygen level or irregular heart rate, the system generates an alert notification to healthcare providers, ensuring immediate medical response. This IoT-based monitoring system reduces the dependency on manual supervision, enhances patient safety, and improves the efficiency of healthcare delivery, especially for bedridden and critical patients.