

**“CAMPUS RADIO”**  
**(Sponsored by KSCST, Bangalore)**

**A Project Report**  
**Submitted in partial fulfillment of the requirements**  
**for the award of the Degree of Bachelor of Engineering**  
**in Electronics and Communication Engineering**  
**of the Visvesvaraya Technological University, Belgaum.**

**Submitted by**

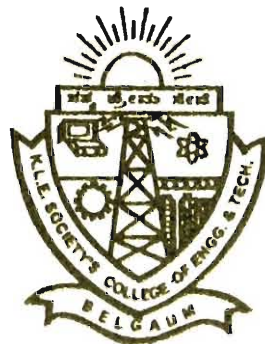
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**2012 - 2013**

## **ABSTRACT**

Campus Radio (also known as college radio, university radio or student radio) is a radio station that is run by the students of a college, university or other educational institution. It comprises of an FM station operated, controlled and maintained exclusively by the students involved in the radio group of a college. It provides an opportunity for the students to exploit their talents in various fields via FM radio to the audience comprising of students and staff of a college. One of the major advantages of having such a communication media is, important information regarding various curricular, co-curricular and extra-curricular activities can be broadcasted and the students as well as the staff can tune in to the FM station, receive notices and hence information can be conveyed in a different style.

Campus Radio consists of a stereo encoding algorithm followed by a line in pre-emphasis along with a microphone pre amplifier. The output of these is then fed to a mixer followed by an FM transmitter which is used for transmitting the RF signals. The stereo encoding is done with the help of MATLAB whereas the rest of the implementation is in hardware implementation. Data from any digital source can be transmitted via the circuit. Apart from that, there is a provision for microphone input to the transmitter which further enhances the features provided by the transmitter.

Campus Radio here is mainly designed to make use of radio, especially FM, in a more realistic and meaningful way to broadcast important college notices. Campus Radio introduces the new aspect of using radio for college audience as well as allows students to showcase their talents during free hours of the college that in turn helps them in exhibiting their skills and get encouraged. If the commercial FM radio band is selected for the radio transmission, any contemporary mobile phones can be used for the reception of the signals thus making it easy for the listeners to tune into the channel without bearing any extra cost.