



# Department of Physics



**Department Profile**  
**2018-2023**

**TELANGANA TRIBAL WELFARE RESIDENTIAL  
DEGREE COLLEGE(G),KOTHAGUDEM**

**Bhadradi Kothagudem dt.**  
**(Affiliated to Kakatiya University)**

## PRINCIPAL MESSAGE:



Department of Physics is striving to provide a healthy academic environment necessary for character construction, creative self-expression and personality development for girl students.

Majority of the students of this college are first generation learners coming from middle class families and also from under privileged / marginalized sections of the society.

Through the regular conduction of various academic extension activities to the students such as Quiz programs, Student seminars, Field and Industrial visits, Guest lectures, students are enriched with the deep understating of Physics principles.

Department of Physics excelled with the commitment of faculty members work in pandemic time with the online zoom classes, Google classroom facilities and video lectures. The initiations and academic plan empowered students to fill the gaps created during pandemic time.

I am appreciating the students and faculty of the department for their active participation in curricula and extracurricular activities of the college. I hope this department will succeed in shaping the student's career with their Mission & Vision.

I am congratulating Initiation of the physics department in collaboration with department of computer science for developing computer based internal examination and evaluation system.

My best wishes to the department to conduct more programs in the forthcoming years.

**B.Rajeswari,M.Tech.NET,TSET(Ph.D),**

**Principal(FAC)**

## ABOUT THE DEPARTMENT

- The dept. of Physics has been established in the year 2017 with a student strength of 18 with Mathematics, Physics & Chemistry and 18 with Mathematics, Physics & Computer Science combinations in E.M
- The dept. was started with Kum B. Shirisha and then added with Smt. G. Sunitha was appointed as Degree Lecturer in Physics in the year 2019. Now a part time lecturer is working from 11.11.2022
- Ms. B. Pooja was appointed as Lab assistant.
- During the years 2018-19 the strength has been raised to 51.
- At present the department is running with 2 teaching staff, 1 administrative staff, and 1 technical staff.

## VISION AND MISSION:

### VISION

Our vision is to develop scientific skills, Scientific reasoning among students that will empower women to successfully move into the society with confidence and build their abilities and skills in creation of developed nation.

### MISSION

Provide high quality education in Physics within an environment committed to excellence in teaching. Provide intellectual challenging environment for the overall development of the students. Introduce wide range of innovative teaching and learning methods. Develop independent thinking, skill and the ability to solve the problems in physics. Develop analytical reasoning and critical thinking through creative assignments. Provide advanced knowledge in Physics to gain excellence in future projects.

## **SWOC ANALYSIS**



### **STRENGTHS:**

- Faculty members are regular in appointment, well qualified and have significant experience not only in teaching, but they are well versed with multi discipline skills.
- Faculty have rich knowledge and skills in online, ICT enabled teaching and digital tools operation.
- Students learning evaluation through online facilities.
- Well equipped laboratories with latest experimental materials and necessary electrification and digital tools.
- Well ventilated lecture halls and ambient college atmosphere.
- Department faculty active participation in extension academic activities and faculty development programs, seminars, webinars cater students learning with updated content.

### **WEAKNESSES:**

- There is lack of classrooms and laboratories.
- Most of the students are economically and socially poor and unable to afford to attain digital technology facilities.
- Lack in research facilities and funding is a constraint.

### **OPPORTUNITIES:**

- This department provides the students to pursue their higher education with PG coaching and guest lectures.
- Research orientation and deep understanding of physics principles through study projects and field trips.
- Exchange of knowledge through guest lectures and MoUs.
- The Choice Based Credit System (CBCS) enables students to learn subjects as per their choice.
- The increase of student enrolment giving opportunity to get more faculties in the department.
- Newly augmented computer lab facility in the campus increases student accessibility of E-learning resources, technology based skills.

## **Challenges:**

- Promoting to higher education because of getting marriages during or immediately after B.Sc.
- In spite of educating them the superstition and blind belief in the tribal and communities forcing girl students to get early marriages. It leads to significant increase in drop puts number.
- Collaboration with reputed organizations and companies to provide immediate employability to the students.
- Difficulty in updating laboratory material with frequently updated syllabus.