

**DEPARTMENT OF PHYSICS (S.F.)**  
**DEVA MATHA COLLEGE, KURAVILANGAD**

**Affiliated to Mahatma Gandhi University, Kottayam**



**Syllabus**

**ADD-ON COURSE**

**In**

**TROUBLESHOOTING AND MAINTENANCE OF ELECTRONIC  
EQUIPMENTS**

**Academic Year: 2021-22**



**DEVA MATHA COLLEGE KURAVILANGAD**

**DEPARTMENT OF PHYSICS SELF FINANCE PG**

*Add on Courses offered for Students:2021-2022*

- **IIPG-Basic latex - for PG Students  
DMCK/ SFPHY/AD 33/2021**
- **IPG-Trouble Shooting Electronic Equipment  
DMCK/ SFPHY /AD 34/2021**

**Department Coordinator: Ms.Roslin George**

Academic Year: 2021-22

Beneficiaries: I PG Physics

Number of teachers coordinated:1

Number of Students participated:16

Total Instructional hours: 30

**Course code: DMCK/ SFPHY /AD 34/2021**

# Syllabus

## Course Objectives

1. Acquire working knowledge in electronic circuits
2. To develop the method for the study of different circuits
3. To familiarize the basic electronic equipment

**Course Syllabus Total hours: 30**

### Module 1

**(15hours)**

Introduction to linear power supplies, Linear Power supplies-troubleshooting of power supply circuit, Analysis, planning, measurement, effect of an open diode in a half wave rectifier, Effect of an open diode in a full wave rectifier, Effects of a faulty filter capacitor, effect of a faulty transformer.

### Module 2

**(15hours)**

SMPS – Working, advantages and disadvantages, comparison of linear regulator vs SMPS, Linear power supplies, working, applications, advantages and disadvantages, how to build a linear power supply- designing (3 types)

### Assessment Procedure:

Test- 80 Marks

Assignment-20 Marks

### Grading:

Above 80%	A
60%-80%	B
Below 60%	C

## Course Outcomes

- Students will demonstrate various electronic circuits
- Solve the errors in various equipment
- Student will demonstrate an ability to identify the components and circuit elements in various electronic devices
- Students will be able to apply the practical knowledge for constructing a circuit



*Anil Mathew*

*Principal*

*Deva Matha College*

*Kuravilangad - 686 633*