



## Sree Krishna College Guruvayur

### Dept. of Physics

#### Syllabus

### Certificate Course on “Data Analysis and Plotting Softwares”

2024-25

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Course Code : CERSKCPHY002/24

#### **R (10 hrs)**

- ❖ Introduction to R,
- ❖ Variables in R,
- ❖ Scalars, Vectors,
- ❖ Matrix,
- ❖ Reading CSV files,
- ❖ Arithmetic operations,
- ❖ Saving R files as word or PDF, Charts

#### **SigmaPlot (10 hrs)**

- ❖ About SigmaPlot,
- ❖ Graph Types and Styles,
- ❖ Graph Style Gallery and Templates,
- ❖ Using Toolbars, Viewing Toolbars,
- ❖ Positioning Toolbars, Graph Defaults,

- ❖ SigmaPlot 10.0 Worksheet,
- ❖ Regression Wizard, Transforms, Drawing Tools

#### Origin (10 hrs)

- ❖ Introduction,
  - ❖ Origin File Types,
  - ❖ Import Data,
  - ❖ Data Selection,
  - ❖ Workbooks Worksheets Columns,
  - ❖ Graphing,
  - ❖ Data Analysis, Curve Fitting
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**Total 30 hrs ( Theory 10 hrs , Practicals 20 hrs)**

**Course Director: Dr. Rajesh.K.R, Head of the Dept. Physics,  
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**Course Co-ordinator: Dr. Devanarayanan V P, Assistant Professor in Physics,  
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