



# **SRI RAAJA RAAJAN**

## **COLLEGE OF ENGINEERING AND TECHNOLOGY**

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

146 /4B1, Amaravathi Village,  
Amaravathipudur (Po.),  
Karaikudi – 630 301.  
Ph : 04565 – 234230 / 326132

Fax : 04565 – 234430  
Mobile : 73737 11322, 73737 11333  
E-mail : srrcet2010@gmail.com  
Website : www.raajaraajan.org

---

## **DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

### **Laboratories List**

<b>Sl.No</b>	<b>Name of the Lab</b>	<b>Page Number</b>
<b>1.</b>	<b>Engineering Practices Lab</b>	<b>1</b>
<b>2.</b>	<b>Power Electronics and Drives Lab</b>	<b>4</b>
<b>3.</b>	<b>Electrical Machines Lab</b>	<b>8</b>
<b>4.</b>	<b>Power System Simulation Lab</b>	<b>11</b>
<b>5.</b>	<b>Control and Instrumentation Lab</b>	<b>13</b>

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### ENGINEERING PRACTICES LABORATORY

Train the students to learn and do Residential house wiring using switches, fuse, indicator, lamp and energy meter. Fluorescent lamp wiring. Stair case wiring.

Measurement of electrical quantities such as voltage, current, power & power factor in RLC circuit, single phase energy meter, resistance to earth of electrical equipment.



  
**PRINCIPAL**  
Sri Raaja Raajan College of Engg. & Tech  
Amaravathipudur, Karaikudi - 630 301  
Sivagangai Dist. Tamil Nadu

## ENGINEERING PRACTICES LABORATORY



  
**PRINCIPAL**  
Sri Raaja Raajan College of Engg. & Tech  
Amaravathipuram, Karaikudi - 630 301  
Sivagangai Dist. Tamil Nadu





# SRI RAAJA RAAJAN COLLEGE OF ENGINEERING AND TECHNOLOGY

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

146 /4B1, Amaravathi Village,  
Amaravathipudur (Po.),  
Karaikudi – 630 301.  
Ph : 04565 – 234230 / 326132

Fax : 04565 – 234430  
Mobile : 73737 11322, 73737 11333  
E-mail : srrcet2010@gmail.com  
Website : www.raajaraajan.org

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### POWER ELECTRONICS AND DRIVES LABORATORY

Ability to practice and understand converter and inverter circuits and apply software for engineering problems. Learn about switching characteristics of various switches. To analyze about AC to DC converter circuits. knowledge on AC to AC converters.

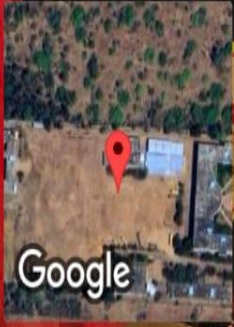


  
**PRINCIPAL**  
Sri Raaja Raajan College of Engg. & Tech  
Amaravathipudur, Karaikudi - 630 301  
Sivagangai Dist. Tamil Nadu

## POWER ELECTRONICS LABORATORY



 GPS Map Camera



Amaravathi, Tamil Nadu, India

2Q56+P4R, Amaravathi, Tamil Nadu 630301, India

Lat 10.009231°

Long 78.760298°

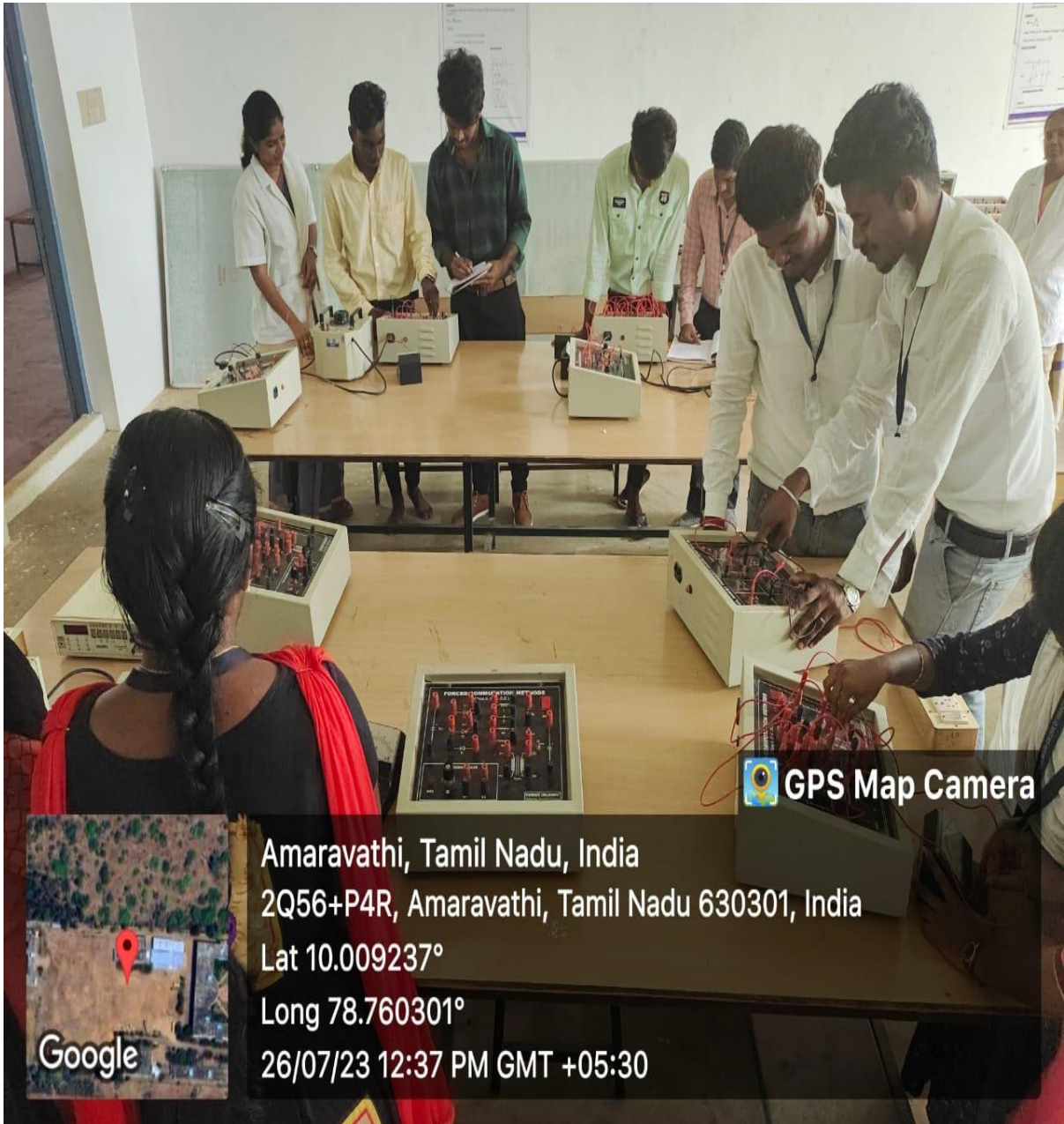
26/07/23 12:35 PM GMT +05:30



  
**PRINCIPAL**  
Sri Raaja Raajan College of Engg. & Tech  
Amaravathipudur, Karaikudi - 630 301  
Sivagangai Dist. Tamil Nadu



## POWER ELECTRONICS LABORATORY

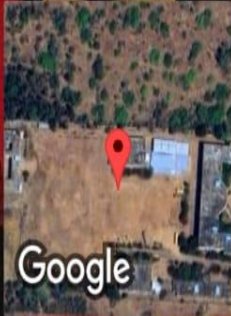


  
**PRINCIPAL**  
Sri Raaja Raajan College of Engg. & Tech  
Amaravathipudur, Karaikudi - 630 301  
Sivagangai Dist. Tamil Nadu

## POWER ELECTRONICS LABORATORY



 GPS Map Camera



Amaravathi, Tamil Nadu, India  
2Q56+P4R, Amaravathi, Tamil Nadu 630301, India  
Lat 10.009246°  
Long 78.760243°  
26/07/23 12:38 PM GMT +05:30



  
**PRINCIPAL**  
Sri Raaja Raajan College of Engg. & Tech  
Amaravathipudur, Karaikudi - 630 301  
Sivagangai Dist. Tamil Nadu





# SRI RAAJA RAAJAN COLLEGE OF ENGINEERING AND TECHNOLOGY

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

146 /4B1, Amaravathi Village,  
Amaravathipudur (Po.),  
Karaikudi – 630 301.  
Ph : 04565 – 234230 / 326132

Fax : 04565 – 234430  
Mobile : 73737 11322, 73737 11333  
E-mail : srrcet2010@gmail.com  
Website : www.raajaraajan.org

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### ELECTRICAL MACHINES LABORATORY

1. Ability to understand and analyze, both AC and DC Generator, Motor and Transformers.
2. Ability to understand and analyze EMF and MMF methods, characteristics of V and Inverted V curves, importance of Synchronous machines, importance of Induction Machines and acquire knowledge on separation of losses.



  
**PRINCIPAL**  
Sri Raaja Raajan College of Engg. & Tech  
Amaravathipudur, Karaikudi - 630 301  
Sivagangai Dist. Tamil Nadu



## ELECTRICAL MACHINES LABORATORY



  
**PRINCIPAL**  
Sri Raaja Raajan College of Engg. & Tech  
Amaravathipudur, Karaikudi - 630 301  
Sivagangai Dist. Tamil Nadu

## ELECTRICAL MACHINES LABORATORY



  
**PRINCIPAL**  
Sri Raaja Raajan College of Engg. & Tech  
Amaravathipudur, Karaikudi - 630 301  
Sivagangai Dist. Tamil Nadu





# SRI RAAJA RAAJAN COLLEGE OF ENGINEERING AND TECHNOLOGY

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

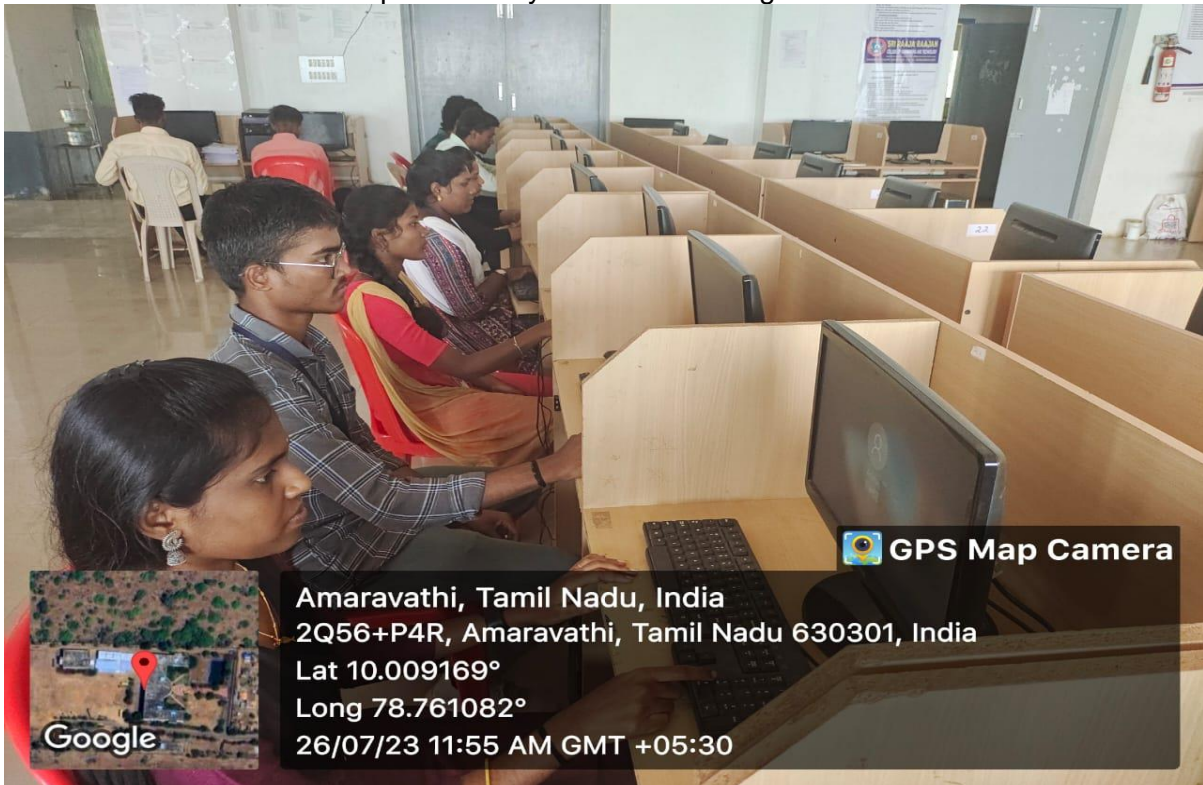
146 /4B1, Amaravathi Village,  
Amaravathipudur (Po.),  
Karaikudi – 630 301.  
Ph : 04565 – 234230 / 326132

Fax : 04565 – 234430  
Mobile : 73737 11322, 73737 11333  
E-mail : srrcet2010@gmail.com  
Website : www.raajaraajan.org

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

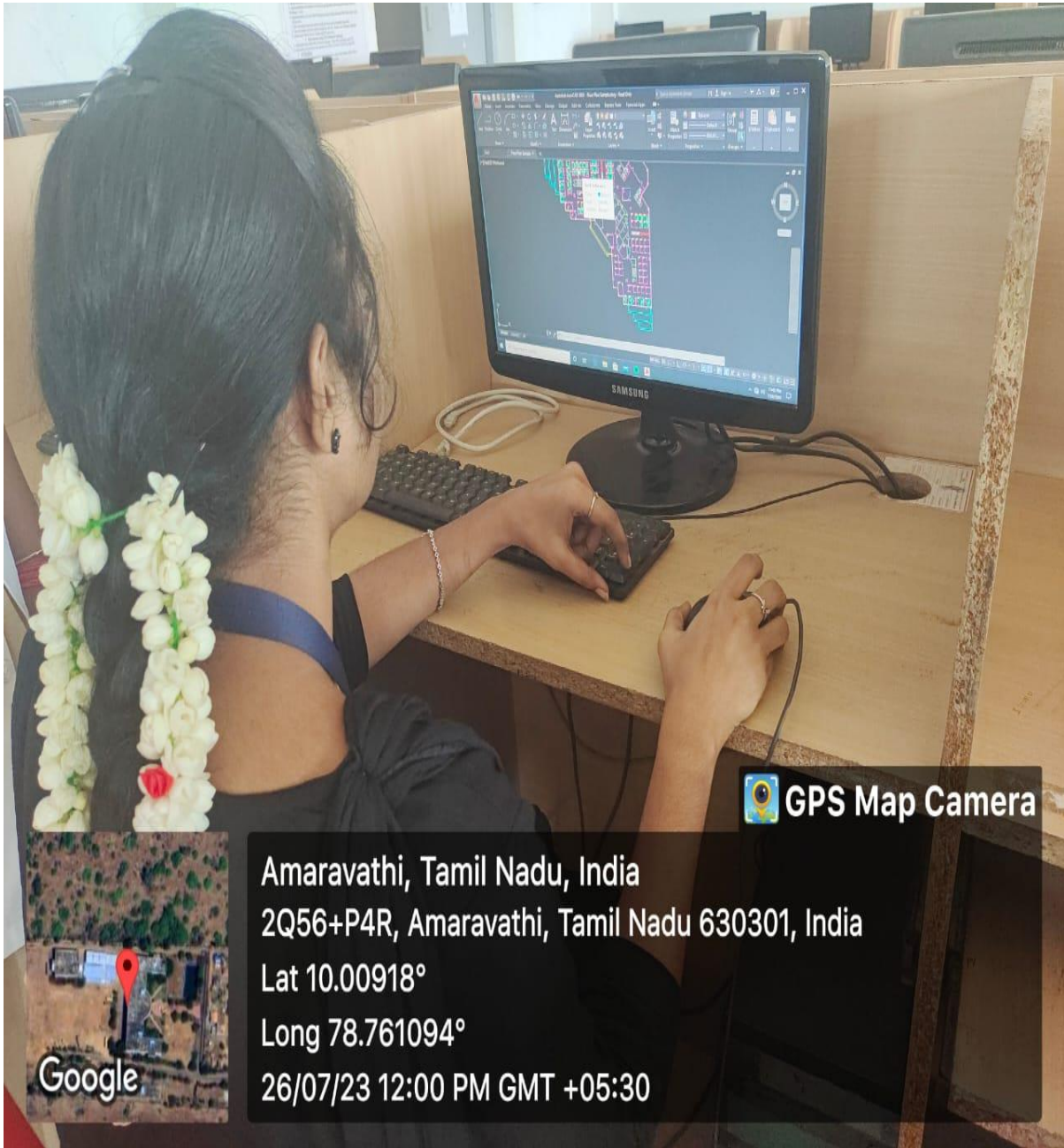
### COMPUTER LABORATORY

To learn about power system planning and operational studies. Acquire knowledge on Formation of Bus Admittance and Impedance Matrices and Solution of Networks. Analyze the power flow using GS and NR method. Find Symmetric and Unsymmetrical fault. Understand the economic dispatch. Analyze the electromagnetic transients.



  
**PRINCIPAL**  
Sri Raaja Raajan College of Engg. & Tech  
Amaravathipudur, Karaikudi - 630 301  
Sivagangai Dist. Tamil Nadu

## COMPUTER LABORATORY



  
**PRINCIPAL**  
Sri Raaja Raajan College of Engg. & Tech  
Amaravathipudur, Karaikudi - 630 301  
Sivagangai Dist. Tamil Nadu





# SRI RAAJA RAAJAN COLLEGE OF ENGINEERING AND TECHNOLOGY

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

146 /4B1, Amaravathi Village,  
Amaravathipudur (Po.),  
Karaikudi – 630 301.  
Ph : 04565 – 234230 / 326132

Fax : 04565 – 234430  
Mobile : 73737 11322, 73737 11333  
E-mail : srret2010@gmail.com  
Website : www.raajaraajan.org

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### CONTROL AND INSTRUMENTATION LABORATORY

Students learn about P, PI and PID controllers, Stability Analysis, Modeling of Systems, Machines, Sensors and Transducers, Design of Lag, Lead and Lag-Lead Compensators, Position Control Systems, Synchro-Transmitter- Receiver and Characteristics, Simulation of Control Systems by Mathematical development tools.

Bridge Networks –AC and DC Bridges, Dynamics of Sensors/Transducers (a) Temperature (b) pressure (c) Displacement (d) Optical (e) Strain ( f) Flow 10 Power and Energy Measurement, Signal Conditioning (a) Instrumentation Amplifier (b) Analog – Digital and Digital –Analog converters (ADC and DACs) and Process Simulation



PRINCIPAL

Sri Raaja Raajan College of Engg. & Tech  
Amaravathipudur, Karaikudi - 630 301  
Sivagangar Dist. Tamil Nadu