Eee 311 Electric Circuit Theory I Course Particulars

#Eee 311 #Electric Circuit Theory I #Electrical Engineering Course #Circuit Analysis #Course Particulars

Explore the foundational principles of electrical engineering with the Eee 311 Electric Circuit Theory I course. This essential offering delves into fundamental concepts, analytical techniques, and practical applications of circuits, providing students with a comprehensive understanding crucial for further study in electrical engineering. Detailed course particulars including learning objectives, syllabus, and assessment methods are available.

Eee 311 Electric Circuit Theory I Course Particulars

Lesson 1 - Voltage, Current, Resistance (Engineering Circuit Analysis) - Lesson 1 - Voltage, Current, Resistance (Engineering Circuit Analysis) by Math and Science 4,995,976 views 8 years ago 41 minutes - In this lesson the student will learn what voltage, current, and resistance is in a typical **circuit**,.
Introduction
Negative Charge
Hole Current
Units of Current
Voltage
Units
Resistance
Metric prefixes
DC vs AC
Math
Random definitions
02 - Overview of Circuit Components - Resistor, Capacitor, Inductor, Transistor, Diode, Transformer - 02 - Overview of Circuit Components - Resistor, Capacitor, Inductor, Transistor, Diode, Transformer by Math and Science 1,620,034 views 5 years ago 45 minutes - Here we learn about the most common components in **electric circuits**,. We discuss the resistor, the capacitor, the inductor, the ...
Introduction
Source Voltage
Resistor
Capacitor
Inductor
Diode
Transistor Functions

Are You an Electrician? These are 5 Formulas You Should Know! - Are You an Electrician? These are 5 Formulas You Should Know! by Electrician U 692,455 views 1 year ago 17 minutes - Being a great electrician requires a strong knowledge of math. We use it daily from bending conduit, to figuring out what wire to ...
Intro
Jules Law
Voltage Drop
Capacitance
Horsepower
Easy way How to test Capacitors, Diodes, Rectifiers on Powersupply using Multimeter - Easy way How to test Capacitors, Diodes, Rectifiers on Powersupply using Multimeter by TampaTec 2,858,982 views 10 years ago 9 minutes, 7 seconds - Best Easy Way How to Accurately test Diodes, Capacitors, bridge rectifiers in TV power-supply boards, "how to use multimeter" to ...
Which lead is positive on a multimeter?
Following Wiring Diagrams - Following Wiring Diagrams by richpin06a 1,003,639 views 11 years ago 12 minutes, 17 seconds - Following Wiring Diagrams Disclaimer: This video is not meant to be a definitive how to.Always consult a professional repair ...
Intro
Symbols
Wiring Diagram
Solenoid Basics Explained - Working Principle - Solenoid Basics Explained - Working Principle by The Engineering Mindset 1,166,431 views 4 years ago 9 minutes, 9 seconds - Solenoid basics explained. In this video we take a look at the electromagnetic field of a solenoid coil. Learning how magnets work ...
Intro
Bar Magnet
Electric Magnetic Field
Right Hand Grip Rule
Solenoid Valve
Reading Resistor Color Codes Fast, Tech Tips Tuesday - Reading Resistor Color Codes Fast, Tech Tips Tuesday by Mr Carlson's Lab 579,919 views 8 years ago 14 minutes - How to read resistor color codes the easy way. And a bonus tip as well.
Intro
Color Code Chart
Tolerance Band
Resistor Color Codes
High Value Resistors
Bonus Tip
How Transistors Work - The Learning Circuit - How Transistors Work - The Learning Circuit by element14 presents 994,516 views 5 years ago 7 minutes, 12 seconds - Rather than using a physical, mechanical switch, a transistor can act as an **electronic**, switch, using signals to turn it on or off.
BIPOLAR JUNCTION TRANSISTOR
NPN TRANSISTORS
COLLECTOR EMITTER VOLTAGE
DARLINGTON TRANSISTORS
Capacitors Explained - The basics how capacitors work working principle - Capacitors Explained - The basics how capacitors work working principle by The Engineering Mindset 8,613,159 views 4 years ago 8 minutes, 42 seconds - Capacitors Explained, in this tutorial we look at how capacitors work, where capacitors are used, why capacitors are used, the ...
Intro
What is a capacitor
How does a capacitor work
How a capacitor works
Measuring voltage
Where do we use capacitors
Why do we use capacitors
Measuring capacitance
Inductors Explained - The basics how inductors work working principle - Inductors Explained - The basics how inductors work working principle by The Engineering Mindset 4,070,659 views 4 years

ago 10 minutes, 20 seconds - Inductors Explained, in this tutorial we look at how inductors work, where inductors are used, why inductors are used, the different ...
Intro
How Inductors Work
Inductors
How to Solve Any Series and Parallel Circuit Problem - How to Solve Any Series and Parallel Circuit Problem by Jesse Mason 4,664,047 views 8 years ago 14 minutes, 6 seconds - How do you analyze a **circuit**, with resistors in series and parallel configurations? With the Break It Down-Build It Up Method!
INTRO: In this video we solve a combination series and parallel resistive circuit problem for the voltage across, current through and power dissipated by the circuit's resistors.
BREAK IT DOWN: We redraw the circuit in linear form to more easily identify series and parallel relationships. Then we combine resistors using equivalent resistance equations. After redrawing several times we end up with a single resistor representing the equivalent resistance of the circuit. We then apply Ohm's Law to this simple (or rather simplified) circuit and determine the circuit current (I-0 in the video).
BUILD IT UP: Retracing our redraws, we determine the voltage across and current through each resistor in the circuit using Ohm's Law.
POWER: After tabulating our solutions we determine the power dissipated by each resistor.
How ELECTRICITY works - working principle - How ELECTRICITY works - working principle by The Engineering Mindset 5,554,000 views 6 years ago 10 minutes, 11 seconds - In this video we learn how **electricity**, works starting from the basics of the free electron in the atom, through conductors, voltage, ...
Intro
Materials
Circuits
Current
Circuit Theory Class -1,Circuit Theory I Network Theory I Electric Circuit I Electrical, Electronics - Circuit Theory Class -1,Circuit Theory I Network Theory I Electric Circuit I Electrical, Electronics by EXAM EXPRESS BY MANISHA 12,315 views 2 years ago 35 minutes - Circuit Theory, Class -1,**Circuit Theory**, I Network Theory I **Electric**, Circuit I **Electrical**,, **Electronics**, Hello students I am Manisha, here ...
Search filters
Keyboard shortcuts
Playback
General
Subtitles and closed captions
Spherical videos