Electrical Circuits and Electronics 1

| Particle of Black Servature in Classical Particle in the Construction of Particle in the Constructin the Particle in the Constructin the Particle in t | Course Number Class Format Department | 02005126 Lecture Computer | Subject Category Credit Type and Number of Credits Student Category | Compulsory (Cl 1 Year 2 | |
|---|--|--|---|---|----------------|
| | Period of Study | Semester 1 | Classes per Week | 1 | |
| | Instructor | | d Thanyawarat Pawasor | 20N | J |
| Ability In calculate DC Grouts Calculate analysis of control is a status parameters. In a status paramet | This course provides students with bas course: Basics of analog circuits, conce | ic knowledge of Electrical Cir apts of voltage, current, powe | cuits and Electronics. | The topic covered in this nce and inductance, and | |
| | Evaluation (Rubrio) | Ideal Level of Achievement (Very Good) | Standard Level of Achievement (Good) | Unacceptable Level of Achievement (Fail) | |
| Athy is calculate simple AC circuit Char analyze attending and the second and parameters in parameters in the second and parameters in the secon | Ability to calculate DC circuits | circuits and calculate all | circuits with plural elements and calculate some | calculate simple DC | I |
| | | with plural elements and calculate all the related parameters. | Can analyze simple AC circuits and calculate some parameters. | calculate any simple AC circuits. | - |
| Notice and current sholds Instrump equication Instrum equity C11 Address of control and administer. The concurrent softwares and hardware Parse shares Instrum equity Instrume C11 Address of control and administer. The concurrent softwares and hardware Parse shares Instrume Instrume C11 Address of control and administer. Control and parsent software and hardware Parse shares Instrume Instrume C11 Address of control and administer. Control and parsent software and hardware Parsent software and control of control and parsent software and control and parsent software and parse | solution of real problems Ability to design a easy circuit for | methods are better for each problem. Understand well how to | problem by using accustomed method. Can explain how to | solve any real problem. Can not explain how to | |
| Plane share Plane share Taxiba Blanci Lachare and Plancia Onlogic Lachare Plancia and Plancia Darbia Darbia 1st usels Orana control voltage enderson on encore Dard usel Orana control voltage enderson on encore Dard usels Planting on encore Dard usels Orana control voltage enderson on encore Dard usels Planting of Planited of Planit of Planting of Planited of Planting of Planting | voltage divider and current divider | Belationship with Learning | circuit for basic applications. | design any basic circuits. |] |
| Twine Method Lecture and Markins Open Young: Lecture and Markins Control and Parkins Open Young: Lecture and Markins Control and Parkins Control and Parkins Stackents are exected to ask any quations after addition stall-burning. Stackents are exected to ask any quations after additions and the addition stall-burning. Vision State of the Control and Marked of Course Open any parking of the Course of the Cour | Please change | the computer software and | i hardware | | |
| Onder transfer Laterate and basics Owner Note: Laterate and sequences and basics and basic and basic and basics and basic and | | | | |] |
| Contract Product Contract and balance Late and Lateration and controls of the contract | Outline: | | Lecture and Practice | | |
| Serveriet *1 Contrains and Marcia of Course Search Contrains and Marcia of Course Course <thcourse< th=""> <thcourse< th=""> Co</thcourse<></thcourse<> | Class Format: Please Note : | Lecture, Pr. Students are expected to | actice and Homework A b ask any questions aft | Assignments er sufficient self-learning. | |
| 2nd week Omnis bate gener instatures unrahe instatures voltage and carriers dudar Able to calculate wake of sector and providers. V = 1 42 | Course Plan Semester 1 | Contents and Math | nod of Course | | Related MCC |
| 3rd week Ketholfs law 6VL, KQL i continue metals Able to accile KVL and CA 4th week V -Deta. Data- V transformations and Weetsteen Able to accile KVL and CA 4th week V -Deta. Data- V transformations and Weetsteen Able to accile KVL and CA 5th week V -Deta. Data- V transformations and Weetsteen Able to accile KVL and CA 5th week National holds/ Able to accile KVL and CA 6th week Meth and nodal analysis. supercondition theorem Able to shortfy the total of the total or contained to accile total of the total or contained total of the total or contained total contained total or contained total or contained total or contai | 1st week | Charge, current, voltage, re Inductor, cap | isistor, power, energy, actor | for electrical circuits and recognize the property of resistors, inductors, and capacitors. | V-C 1 |
| Ord week Kinthoffs have KVL_KQL_content weeker Able to care KVL weak 4d1 week Y-Delta. Dalla-Y transformations and Wweatseev ord. at of the Weatstore ord. at ord. at office ord. at office ord. at ord. at office ord. at ord. at ord. at of the Weatstore ord. at of | 2nd week | Ohm's law, series resistand voltage and curre | e, parallel resistance, nt divider | Able to calculate values of electrical parameters of resistance circuits. | V-C 1 |
| Efn week National holds/r MC MC< | 3rd week | Kirchhoff's law (KVL, KC circuit, and circui |), combined resistor t network | | N-C 1 |
| Other work Mesh and nodal analysis, supercontion theorem Adde to identify the local sector is a supercontion theorem 7th work Ho - Theorem's theorem with theorem withetheorem with theorem withetheorem with theorem with t | 4th week | Y-Delta, Delta-Y transforma bridge circ | itions and Wheatstone uit | Able to use Y-Delta and Delta-Y transformations and deduce the equivalent circuit of a Wheatstone bridge circuit. | V-C 1 N-C 1 |
| 7th week Ho - Transmithi theorem Norton's theorem and the set of the | 5th week | National ho | liday | | No. 1 |
| Bits week Precenting for Md-term examination Review circlemin for the mid- term examination 9th week Md-term examination Can allow problems at the mid-term examination 10th week Md-term examination Can allow problems at the mid-term examination 10th week Md-term examination Can allow problems at the mid-term examination 10th week Return exam week | 6th week | Mesh and nodal analysis. su | perposition theorem | | NO 1 |
| Bits week Precenting for Md-term examination Review circlemin for the mid- term examination 9th week Md-term examination Can allow problems at the mid-term examination 10th week Md-term examination Can allow problems at the mid-term examination 10th week Md-term examination Can allow problems at the mid-term examination 10th week Return exam week | 7th week | Ho - Thevenin's theorem, f maximum power | korton's theorem, and • transfer | circuit into the equivalent circuit by using. Ho - Thevenin's theorem and Norton's theorem. Can find a particular resistance value for the maximum power | V-C 1 |
| IOh week Metterm exam week Ioh 11th week Peturn exam papers and feedback, review of metabolic me | 8th week | Preparing for Mid-ten | n examination | | |
| 11th week Peturn exam papers and feedback, review of radian Pewew and summarize the learning. 12th week Sinuscial weekform Able to identify a sinuscial of end of the strength of the strengt | 9th week | Mid-term exam | ination | Can slove problems at the mid-term examination. | |
| Interview VC 12th week Sinucoidal wewform Able to identify a sinucoid at the product of the sinual sin | 10th week | Midterm exam | i week | | |
| 12h week Sinuacial waveform annthusts finduance, and draw and sinuance. 13h week Voltase-current national scalar and an indicator in AC crosses Abits to undestand the involtance of the over indicator in AC crosses 14th week Phaser converting Abits to convert between studied and draw and studied and studied receivers and studies receivers | 11th week | Beturn exam papers and f radiar | Return exam papers and feedback, review of radian | | |
| 18th week Volume-current relationship over a caseador ail Able to understand the income of the set of the se | 12th week | Sinusoidal wa | veform | amplitude, frequency, and | V-C 1 |
| 15th week National holdary 16th week Incoderoe and Admittance 16th week Incoderoe and Admittance 17th week Able to use complete simplement and admittance 17th week AC circuit analysis (1) 17th week AC circuit analysis (2) 18th week AC circuit analysis (2) 18th week AC circuit analysis (2) 18th week AC circuit analysis (2) 19th week Precame for final examination | 13th week | Voltage-current relationshi an inductor in A | Voltage-current relationship over a capacitor and an inductor in AC circuits | | |
| I Bith week Impodance and Admittance Abite to an complex impodance and admittance 1 Bith week AC circuit analysis (1) Can solve simple circuit problems in AC. 1 7th week AC circuit analysis (2) Can solve simple circuit problems in AC. 1 8th week AC circuit analysis (2) Can solve simple circuit problems in AC. 1 8th week AC circuit analysis (2) Can solve simple circuit problems in AC. 1 8th week AC circuit analysis (2) Can solve simple circuit problems in AC. 1 9th week Preparing for final exemination Review valued circuit exemination. | 14th week | Phasor conv | Phasor converting | | |
| 16th week Impediance and Admittance Adde to use complex modelines and admittance 17th week AC circut analysis (1) Can solve simple circut problems in AC. 18th week AC circut analysis (2) Can solve simple circut problems in AC. 18th week AC circut analysis (2) Can solve simple circut problems in AC. 19th week Preparing for final examination Review valued circut examination. | 15th week | National ho | liday | | |
| 17th week AC crout analysis (1) Can solve simple crout problems in AC. 18th week AC crout analysis (2) Can solve simple crout problems in AC. 18th week AC crout analysis (2) Can solve simple crout problems in AC. 19th week Preparing for final examination Review related circut examination. | 16th week | Impedance and A | dmittance | Able to use complex numbers to express impedance and admittance. | V-C 1 |
| 18th week AC crout analysis (2) Can solve simple crout problems in AC. 19th week Preparing for that examination Review related clout, problems for the final examination. | 17th week | AC circuit ana | bais (1) | Can solve simple circuit problems in AC. | |
| | 18th week | AC circuit ana | bala (2) | Can solve simple circuit problems in AC. | V-C 1 |
| 20th week Final Examination Can show problems at the final examination | | Preparing for final | manination | Beview related circuit problems for the final examination. | |
| | 19th week | | | | |
| Examination Quiz Maad Instastere between muteres Report / Perfete | | | ation | Can slove problems at the final examination. | |