

Course/Lecture plan

Course: CSE 123: Basic Electrical Engineering

Book Reference

Introductory Circuit Analysis by R. L. Boylestad
Electronic Principles by Malvino

Dr. A.S.M. Iftekhhar Uddin

Associate Professor & Head
Dept. of Computer Science and Engineering
Metropolitan University, Bateshwar, Sylhet-3103, Bangladesh
Cell: +880 1716304911 Email: iftekhar@metrouni.edu.bd

Class Assessment Policy

Attendance	10 marks (based on the submission of exam particulars or sudden evaluation)
Assignment/ class test	20 marks (marks can be varied from 5 to 20 and will be averaged)(no of exam can be varied 2-3) Assignment : 4-7 days Class test : Instant in discussion class
Mid-term Examination	30 marks Exam/assignment type or exam/assignment + quiz type Group/individual problem, critical problem Open book exam, Exam duration : 2-4 hours
Final Examination	40 marks (Can be split into 02 parts) Exam/assignment type or exam/assignment + quiz type Group/individual problem, critical problem Open book exam, Exam duration : 3-5 hours

Topic of learning		No. of class
Topic 1	Introduction to Electrical circuits, Circuit elements, Current, Voltage, Resistance, Laws of resistance, Ohm's Law, Open-short circuit, Source conversion, Polarities.	1-2
Topic 2	Equivalent resistance, voltage-current divider rule, delta-star transformations.	1-2
Assignment/class test (5-20 marks)		
Topic 3	Kirchhoff's laws, Relative mathematical problems.	1-2
Topic 4	Mesh analysis.	1-2
Mid Term Examination (30 marks)		
Topic 5	Nodal Analysis.	1-2
Topic 6	Thevenin' theorem & Norton's theorem.	1-2
Assignment/class test (5-20 marks)		
Topic 7	Capacitance & Inductance.	1-2
Assignment/class test (5-20 marks) * Assignment/class test (20 marks) can be either 2 or 3 based on the discussion.		
Topic 8	Alternating Circuit (AC) fundamentals.	1-2
Averaging the assessment and publication of 60 marks		
Final Examination (40 marks) * Final examination can be split into two portions based on the discussion.		



Sometime sudden-test or performance-test will be taken without any prior notice. It may carry 5-10 marks in the evaluation process.