COURSE DETAIL

ELECTRICAL ENERGY CONVERSION SYSTEMS
Country Australia
Host Institution University of Sydney
Program(s) University of Sydney
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Electrical Engineering
UCEAP Course Number 118
UCEAP Course Suffix
UCEAP Official Title ELECTRICAL ENERGY CONVERSION SYSTEMS
UCEAP Transcript Title ELEC ENGY CONV SYST
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course examines electrical energy conversion techniques and equipment. It covers magnetic circuits, inductance, sinusoidal excitation, hysteresis and eddy current loss, permanent magnets, electromechanical energy conversion, singly-excited and doubly-excited systems, transformers, single-phase, equivalent circuit parameters, three-phase transformers, autotransformers, DC machines, separate excitation, shunt excitation, series excitation, and compound excitation, efficiency, armature reaction, induction machines, revolving field, equivalent circuit, squirrel cage machines, measurements of the parameters, DC resistance test, no-load test, blocked-rotor test, synchronous machines, field relationships, power-angle relationships, and salient pole machines.

Language(s) of Instruction
English

Host Institution Course Number
ELEC3206

Host Institution Course Title
ELECTRICAL ENERGY CONVERSION SYSTEMS

Host Institution Course Details
https://www.sydney.edu.au/units/ELEC3206.html

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Electrical and Information Engineering

Course Last Reviewed
2023-2024

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