

Global Learning Semesters

Course Syllabus

Course: EENG-130A Electric Circuits II

Department: Engineering

Host Institution: Intercollege, Nicosia, Cyprus



| Course Summary | | |
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| Course Code | Course Title | Recommended Credit Hours |
| EENG-130A | Electric Circuits II | 3 |
| Semester Offered | Contact Hours | Prerequisites |
| Fall, Spring | 42 | EENG-120A Electric Circuits I. Introduction to basic electrical concepts. |
| Department | Level of Course | Language of Instruction |
| Engineering | Lower Division | English |

Course Description

In general the course seeks to develop an understanding of the analysis techniques used in ac networks. In particular the student will be introduced to concepts like frequency response of basic R, L and C elements, resonance, filters and Bode plots as well as power (ac), transformers and operational amplifier circuit model. Furthermore the usefulness of Laplace transform in circuit analysis is illustrated. In addition computer simulation and methods are introduced for the student to become familiar with the application of computer techniques to the analysis of electrical/electronic systems.

Instructor

Mr. Andreas Serghiou

Course Aims and Objectives

Being a continuation of Electric Circuits I (EENG-120A) this course aims to further develop the understanding of the analysis techniques used in electric networks.

Teaching Methods

The course is delivered through lectures.

Course Teaching Hours

The course is 42 hours long and is delivered in 14 weeks (3 hours/week).

Evaluation and Grading

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| Participation: | 5% |
| Homework: | 10% |
| Test I: | 20% |
| Test II: | 25% |

Final Exam: 40%

Readings and Resources

Required Textbooks

- James W. Nilson, Susan A. Riedel, Electric Circuits, Sixth Edition, Prentice Hall, 2001
- Robert L. Boylestad, Introductory Circuit Analysis, Prentice Hall, Tenth Edition, 2003