

The University of Jordan  
School of Engineering  
Electrical Engineering Department  
2nd Semester – A.Y. 2023/2024

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**Course:** Selected Topics in Power & Machines – 0943589 (3 Cr. – Elective Course)

**Instructor:** Prof. Eyad A. Feilat  
Office: E306, Telephone: 06/5355000 ext 22857, Email: e.feilat@ju.edu.jo  
Office Hours: Will be posted soon <http://elearning.ju.edu.jo/>

**Platform:** Modern topics in electrical power systems or electrical machines to keep the student up-to-date  
**Catalog description:** in the areas of power generation (their policies and economics), energy

Prerequisites by course: sources, distribution systems and special machines. EE (pre-requisite)  
0933481 Power System Analysis

Prerequisites by topic: Students are assumed to have a background in the following topics:

- Power system components and analysis.
- Power system protection.
- Economic operation of power systems.
- Power system stability.

Textbook:

References:

To be announced.

1. To be announced.

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Schedule:

Course goals:

On Campus [16 Weeks, 42 lectures (50 minutes each) including exams]

The overall objective is to introduce the student to the concepts and principles of electric drive systems, including variable voltage drive and variable frequency drive. The student will also be able to calculate the required size of motors based on mechanical characteristics of the load, and address issues of electromagnetic compatibility and harmonics.

Course learning outcomes (CLO) and relation to ABET student outcomes (SO):

Upon successful completion of this course, a student will:

[SO]

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Course topics:

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Hrs

42

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- 19. 20.

Ground rules: Attendance is required and highly encouraged. To that end, attendance will be taken every lecture. Eating and drinking are not allowed during class, and cell phones must be set to silent mode. All exams (including the final exam) should be considered cumulative. Exams are closed book. No scratch paper is allowed. You will be held responsible for all reading material assigned, even if it is not explicitly covered in lecture notes. Academic integrity must be maintained.

Assessment & grading policy:	First Exam 20%	Assignments 0%	Midterm Exam 30%	Projects 0%	Final Exam 50%	Lab Reports 0%
	Quizzes	0%		Presentation	0%	

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Last Revised: January 2019

Total

100%