

وصف مقرر دراسي Course Description

متطلب متزامن Co-Req.	متطلب سابق Pre-Req	تأريخ TU	عملي LB	نظري LT	الساعات CR	اسم المقرر Course Title	رقم ورمز المقرر Course Code
405 كهر EE 405	- -	-	2	-	1	معمل الدوائر المتكاملة Integrated Circuits Laboratory	406 كهر EE 406

محتويات المقرر:

قياس بارمترات الدوائر المتكاملة الخطية قياس بارمترات الدوائر المتكاملة الرقمية و اختبارها . الدوائر المتكاملة المختلطة و اختبارها.
منظمات الجهد الغير خطية

Course Contents:

Electronic Design Automation. Linear IC Measurements and Testing, Digital IC and their Testing, Mixed-Signal IC's measurement and Testing. Switched-mode Power Supply IC's.

Course Objectives:

- A- Knowledge and Understanding of
- 1-Integrated circuits, technology, design methodologies and applications (Analog, Digital and Mixed signal IC's)
 - 2- IC systems and Printed circuit boards (PCB's), fabrication and troubleshooting
- B- To Have Intellectual Skills in:
- 1- Electron Design Automation.
- C- To acquire Professional and Practical skills in:
- 1- Design of IC-based systems for specific applications, and their troubleshooting methods.
 - 2- Design of PCB systems, and their troubleshooting methods.
- D- General (non-cognitive) and transferable skills
- 1- Team work
 - 2- Time management and projects organization

Evaluation Methods:

1. Midterm exams
2. Term project
3. Lab. Reports
4. Final exam

Text Book and References:

- 1- Symon Hykin, **Communication Systems**, John-Wiley & Sons, NY, 2000