

Analog IC Design Roadmap

Arabic Resources

No.	Course	Link	Material
1	Physics of Semiconductors PHM122	Videos Slides	Textbook Assignments
2 (VI)	Electronics ECE211 (Dr. Hesham Omran)	Videos Assignments Labs	Textbook 1 Textbook 2
3	Solid State Electronic Devices ECE213	Videos Slides Labs	Textbook Problem Sets
4	Digital Circuits ECE212 (Dr. Sameh Ibrahim)	Videos Assignments	Textbook Project (VI)
5 (Optional)	Analog Circuits 1 ECE312	Videos Assignments	Textbook 1 Textbook 2
6 (VI)	Analog IC Design (Dr. Hesham Omran)	Videos 1 Videos 2 Cadence Tutorials	Textbook Labs (VI) Slides
7	Digital IC Design (Dr. Hesham Omran)	Videos 1 Videos 2 Videos 3	Textbook Labs (VI) Slides
8	Fabrication and Layout Technology	Videos (Dr. Hani Ragaai) Videos (Dr. Sameh Ibrahim)	Textbook
Advanced Topics			
9 (Optional)	Modern VLSI Devices ECE317	Videos Slides Assignments	Textbook Other References
10	Analog IC Design ECE412	Videos Assignments	Textbook
11	Analog RF IC Design (Dr. Mohamed El-Nozahi)	Videos 1 Videos 2	Textbook Slides Assignments
12	Analog Integrated Systems Design ECE486	Videos Slides	Textbook Labs
Very Advanced Topics			
13	Power Management Units ECE639	Videos (Dr. Sameh Ibrahim) Videos (Dr. Faisal (CUFE)) Textbook 1	Slides Slides Textbook 2
14	High-Speed Serial Links (Dr. Sahmeh Ibrahim)	Videos	Slides
15	Introduction to MEMS Design	Videos	

English Resources

No.	Course	Link	Material
1	Integrated Circuit Devices EE130	Videos	Textbook Assignments
2 (Optional)	Solid State Devices EE230	Lecture Notes	References Assignments
3 (VI)	Razavi Electronics 1	Videos Assignments (ASU)	Textbook 1 Textbook 2
3.1 (Optional)	Microelectronic Devices and Circuits EE105	Videos	Textbook 2
4 (VI)	Razavi Electronics 2	Videos	Textbook Assignments (ASU)
5	Analog Integrated Circuits EE140	Videos	Textbook Assignments
6	Digital Integrated Circuits EE141	Videos Assignments (ASU) Cadence Tutorials	Textbook Assignments Labs
7	Microfabrication Technology EE143	Videos Labs	Textbook Assignments
8	Integrated Circuits for Communication (RF) EE142	Lecture Notes	Textbook Labs
Advanced Topics			
9	Advanced Analog Integrated Circuits EE240	Videos (Elad) Videos (Simone) Videos (Hajmiri)	Textbook 1 Textbook 2 Slides Assignments
10	Advanced Digital Integrated Circuits EE241	Videos Assignments	Textbook 1 Textbook 2
Very Advanced Topics			
11	High-Speed Electrical Interface Circuit Design EE290C (Serial Links)	Videos Textbook 2	Textbook1 Textbook 3
12	Analog-Digital Interface Integrated Circuits EE247	Videos Lecture Notes	Textbooks Assignments
13	Introduction to MEMS Design EEC247B	Videos	Textbook Assignments