

## EEE6321 Analog IC Design 2 (ONLINE)

This course follows up on the topics discussed in Analog IC 1 and extends it to feedback, opamp types, switched-capacitor circuits, layout and matching, noise and other important aspects of IC design. We will continue to use Cadence® platform, an industry preferred simulation and layout engine. The course objective is to provide a thorough background of analog circuits, discuss the real world applications, IC design challenges and prepares students for other areas of analog and digital IC design. *If you plan to pursue career in IC design, either analog or digital, this course is “a must”, and it is recommended by ALL IC design companies.*

### *Important Update:*

*Due to campus restrictions for COVID19, this semester this course will be offered "online". The pre-recorded videos will be uploaded weekly for students to watch at home (offline). Two online class hours will be set to discuss those videos and cover additional topics. I will discuss more details during the first week of classes.*

### **Zoom Meeting Info:**

**Join Zoom Meeting**  
**TBD**

**Meeting ID: TBD**  
**Passcode: TBD**

### **Class Times:**

**Mondays 9:30pm-10:30pm**

**Fridays 9:30pm-10:30pm**

**Office Hours: Wednesdays 11am-Noon.**

### *Pre-Reqs*

*Analog IC 1 (or equivalent knowledge of the topic)*

*\*\*If you have not taken these courses and still would like to enroll, please contact me.*

Class location & dates:

**Location: Online**

**Time: TBD**

**Exams and office hours:**

**Midterm 1: TBD**

**Final Exam: TBA**

**Office hours:**

**Dr. Maghari: [maghari@ece.ufl.edu](mailto:maghari@ece.ufl.edu)      Office Hours: TBD**

**TAs: TBD**

**Send an email to meet at any other time**

***Please put EE6321 in the subject of your email for any email correspondence.***

**Textbooks**

## **Design of Analog CMOS Integrated Circuits (2nd edition)**

**(Highly recommended)**

By B. Razavi

Publisher: McGraw-Hill Education; 2 edition (January 20, 2016)

ISBN-10: 0072524936

ISBN-13: 978-0072524932

**Link to [Amazon \(Links to an external site.\)](#)[Links to an external site.](#)**

## **Grading basis**

<b>Homework &amp; Cadence</b>	<b>25%</b>
<b>Quiz</b>	<b>10%</b>
<b>Midterm 1</b>	<b>20%</b>
<b>Midterm 2</b>	<b>20%</b>
<b>Extra Credit Quiz</b>	<b>5%</b>
<b>Final Project (5320)</b>	<b>25%</b>
<b>Total</b>	<b>100%+ 5% extra credit quiz</b>

## **About the instructor:**

Nima Maghari received the B.S. degree in electrical engineering from the University of Tehran, Iran, in 2004 and the Ph.D. degree in electrical engineering from Oregon State University in 2010.

He is currently an associate professor at the department of electrical and computer engineering, University of Florida, Gainesville. From 2004 to 2006, he was with IC-LAB, University of Tehran, where he was involved with audio delta-sigma converters and low-voltage bandgap references. In 2008 he was recipient of CICC-AMD outstanding student paper award. He is currently serving as an Associated Editor of IEEE Transactions on Circuits and Systems-I. He has published more than 50 conference and journals papers in IEEE and IEE.

His research interests include high performance analog-to-digital converters, delta-sigma modulators, phased-locked loops, synthesizable analog circuits, time-assisted data conversion techniques and low-power low-voltage regulators.