

THE UNIVERSITY OF TEXAS AT EL PASO



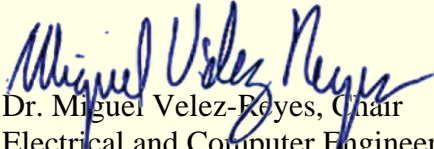
DEPARTMENT OF
ELECTRICAL AND COMPUTER
ENGINEERING

To: Dr. Carla Ellis, Chair
Undergraduate Curriculum Committee

Through: Dr. Patricia Nava, Interim Dean
College of Engineering

Through: Dr. Norman Love, Associate Dean
College of Engineering

Through: Dr. Louis Everett, Chair
College of Engineering Curriculum Committee

From: 
Dr. Miguel Velez-Reyes, Chair
Electrical and Computer Engineering

Date: May 8, 2020

RE: Changes to various undergraduate courses in EE

The faculty of the ECE Department approved the following course changes

- EE 3329: Change of pre-requisites
- EE 3384: Changes in title and description
- EE 4350: Changes in title, pre-requisites, description, and allow 2 repeats for credit
- EE 4356: Changes in title, pre-requisites, and description

Specific details are provided in the attached forms.

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The University of Texas at El Paso

Curriculum Change Proposal

Approval Page

Proposal Title: Changes to various undergraduate courses in EE

Department Chair

I have read the enclosed proposal and approve this proposal on behalf of the department.

Miguel Valez Reyes
Signature

April 20, 2020
Date

College Curriculum Committee Chairperson

I have read the enclosed documents and approve the proposal on behalf of the college curriculum committee.

Signature

Date

College Dean

I have read the enclosed documents and approve the proposal on behalf of the college. I certify that the necessary funds will be allocated by the college in support of this proposal.

Patricia A. Nava
Signature

05/15/2020
Date

Graduate Council/Undergraduate Curriculum Committee

Council Action: Approved Returned to the College

Date of Action Report: _____

Signature, Chairman

Date

From: [Granda, Virginia D](#)
To: [Rivera, Julie A](#)
Cc: [Nava, Patricia A.](#); [Everett, Louis](#); [Love, Norman D](#); [Velez-Reyes, Miguel](#)
Subject: FW: Approved UG Proposal by COECC on May 5, 2020
Date: Monday, May 18, 2020 8:37:22 AM
Attachments: [ECE--UG Proposal Changes Multiple Courses.pdf](#)
[image001.png](#)
[image002.png](#)

Julie,

Here is the approval for the first proposal.

Best Regards,

Virginia



Virginia Granda-Becker
Coordinator of Undergraduate Studies

College of Engineering
The University of Texas at El Paso
500 W. University Ave.
El Paso, TX 79968
Office: 915-747-8011
engineering.utep.edu

From: Everett, Louis
Sent: Friday, May 8, 2020 5:48 PM
To: Granda, Virginia D <granda@utep.edu>
Subject: FW: Approved UG Proposal by COECC on May 5, 2020

This looks good. I approve.

From: Granda, Virginia D <granda@utep.edu>
Sent: Friday, May 8, 2020 5:15 PM
To: Everett, Louis <leverett@utep.edu>
Subject: Approved UG Proposal by COECC on May 5, 2020

Dr. Everett,

I am attaching the UG proposal that was approved by the COECC today for your signature/approval.

Please send me an email approving the proposal or email me the version with your signature.

Have a good weekend,

Virginia

COURSE CHANGE FORM

All fields below are required

College: Engineering

Department: Electrical and Computer Engineering

Rationale for changing the course:

Update course title and description to emphasize focus on applications to Electrical and Computer Engineering.

All fields below are required

Subject Prefix and number: EE 3384

Course Title: Probabilistic Methods in Engineering and Science

Change	From	To
Description	Probabilistic Methods in Engineering and Science (3-0) Problems involving discrete and continuous random variables, distribution functions, moments, statistical dependence and an introduction to statistical methods. Emphasis to be on formulation of physical problems.	Introduction to probability, sets, combinatorics, random variables, distribution functions, conditional probability, statistical independence, moments, functions of random variables, and Central limit theorem. Computer simulations illustrate various concepts. Provides applications in Electrical and Computer Engineering.
Title	Probabilistic Methods in Engineering and Science	Introduction to Probability with Applications in Electrical and Computer Engineering (Short version - Intro to Prob. with App. in ECE)

COURSE CHANGE FORM

All fields below are required

College : Engineering

Department : Electrical and Computer Engineering

Rationale for changing the course:

EE 4350 is an undergraduate technical elective in EE. This is an update of the title and course description to reflect what is taught in the course in a rapidly changing and growing field. The new description will allow distinct instructors to teach contemporary devices in their particular area of expertise. The new restriction will allow students to take the course at most twice when different topics are covered. The addition of Quantum Mechanics (EE 3325) pre-requisite will ensure all students have the proper technical background for the course.

All fields below are required

Subject Prefix and number EE 4350

Course Title Integrated Circuits and Semiconductor Devices

Change	From	To
Ex. Prerequisite	Ex. POLS 2310	Ex. POLS 2312
Title	Integrated Circuits and Semiconductor Devices	Theory and Application of Contemporary Devices
Prerequisite	EE 3329 w/C or better	(EE 3329 with "C" or better AND EE 3325 with "C" or better) OR Department Approval
Description	Bipolar and MOS integrated circuits, microelectronic processing technology, microwave devices, photonic devices, power semiconductor devices.	Theory and application of contemporary devices based on electronic, optoelectronic, electro-mechanical, and other operating principles for analog, digital and quantum applications. May be repeated once for credit with departmental approval.
Times the course may be taken for credit	1	2

COURSE CHANGE FORM

All fields below are required

College: Engineering

Department : Electrical and Computer Engineering

Rationale for changing the course:

Update course title and description. The title needs to include the word digital to make clear both (a) the emphasis on digital (discrete-time) signal processing and (b) its association with the pre-requisites EE 3353 and EE 3376 (or CS 3432). The new description reorganizes the previous course description and removes the sentence "emphasizing the practical aspects of design over theory," that could convey the misconception of no need for DSP theory.

All fields below are required

Subject Prefix and number EE 4356

Course Title Real-Time Signal Processing

Change	From	To
Description	Real Time Signal Processing and Communication (3-0) A project based course where filtering, spectral analysis, and modulation algorithms are implemented on modern signal processing circuits. This class is programming intensive, emphasizing the practical aspects of design over theory.	Programming-intensive project-based course emphasizing practical application of Digital Signal Processing (DSP) algorithms implemented on a DSP development system. Topics covered include sampling and reconstruction, digital filtering, fast Fourier transform, spectrum analysis, and modulation.
Title	Real Time Signal Processing	Real-Time Digital Signal Processing
Prerequisites	EE 3353 w/ C or better and EE 3376 w/ C or better.	EE 3353 (with C or better) and either (EE 3376 (with C or better) OR CS 3432 (with C or better)), or Department approval.
Level	UG	UG
Major	CEPH,EE,EECE	No program restriction