

# 2013-2014 SHORT SIGNATURE SHEET



UNC CHARLOTTE

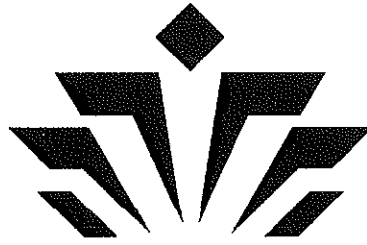
Date: April 10, 2014

Subject: Catalog Updates for ELET and ETGR Courses

Originating Department: Engineering Technology and Construction Management

TYPE OF PROPOSAL: UNDERGRADUATE X GRADUATE \_\_\_\_\_ UNDERGRADUATE & GRADUATE \_\_\_\_\_  
 (Separate proposals sent to UCCC and Grad. Council)

DATE RECEIVED	DATE FORWARDED	COMMENTS: APPROVED, APPROVED WITH REVISIONS, ETC.	SIGNATURES
	4/11/14		<u>PERSON ORIGINATING PROPOSAL</u>  [Deborah Sharer]
4/11/14	4/12/14	Approved	<u>DEPARTMENT CHAIR</u>  [Anthony Brizendine]
29-Apr 2014	29-Apr 2014	Approved	<u>COLLEGE CURRICULUM COMMITTEE CHAIR</u>  [Wesley Williams]
	5/5/14	Approved	<u>COLLEGE DEAN</u>  [Robert Johnson]
		Approved	<u>GENERAL EDUCATION</u> (if applicable; for General Education courses only)  [print name here:]
		Approved	<u>UNDERGRADUATE COURSE &amp; CURRICULUM COMMITTEE CHAIR</u> (for undergraduate courses only)
		Approved	<u>GRADUATE COUNCIL CHAIR</u> (for graduate courses only)
			<u>FACULTY GOVERNANCE ASSISTANT</u> (received and processed in Academic Affairs)



# UNC CHARLOTTE

## SHORT FORM COURSE AND CURRICULUM PROPOSAL

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\*To: Undergraduate Course and Curriculum Committee Chair

From: Deborah Sharer

Date: April 10, 2014

Re: Catalog Updates for ELET and ETGR Courses

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**SUMMARY:** The Department of Engineering Technology and Construction Management proposes:

1. Changing "ETGR2272, MATH1242" to "ETGR2272 or MATH1242" and changing from a pre-requisite to a co-requisite in ELET3113 (Network Analysis) catalog description.
2. Removing "Meets for three (3) lecture hours per week. (Spring) (Online)" from ELET3222 (Electronics II) catalog description.
3. Removing "Meets for three (3) laboratory hours per week (Spring, Summer)" from ELET3222L (Electronics II Laboratory) catalog description.
4. Removing ELET3113 (Network Analysis) as a prerequisite for ELET3292 (Junior Practicum II).
5. Addition of ETGR2122 (Technical Programming) as a prerequisite for ELET4123 (Active Filters).
6. Removing "One class hour and three lab hours per week" from ETGR4100 (Capstone Design Project I) catalog description.
7. Changing "Pre- or co-requisite: ETME 4163 and ETME 4244" to "Mechanical ET pre- or co-requisite: ETME 4163 and ETME 4244" in ETGR4100 catalog description
8. Removing "One class hour and three lab hours per week" from ETGR4200 (Capstone Design Project II) catalog description.

**FOR CONSULTATION WITH OTHER DEPARTMENTS:**

1. Does the proposed change affect other departments (including additions and/or changes to degree requirements or prerequisites offered in other departments)?

\_\_\_\_\_ Yes      X   No

2. If Yes, please list the other departments affected by the proposed change:

3. Have you consulted with each department listed in item 2 regarding the proposed change?

\_\_\_\_\_ Yes    \_\_\_\_\_ No

Result(s) of Consultation(s) (please attach documentation):

N/A

For a new course or for major modification of an existing course, include Consultation on Library Holdings.

**RESOURCES:**

1. For a new course or revisions to an existing course, check all the statements that apply:

\_\_\_\_\_ This course will be cross listed with another course.

  X   There are prerequisites for this course.

\_\_\_\_\_ There are co-requisites for this course.

\_\_\_\_\_ This course is repeatable for credit.

\_\_\_\_\_ This course will affect the number of credits hours for its program.

\_\_\_\_\_ This proposal results in the deletion of an existing course(s) from the degree program and/or catalog.

\_\_\_\_\_ This proposal will alter an agreement with a North Carolina community college.

For all items checked above, applicable statements and content must be reflected in the proposed catalog copy.

2. Indicate the additional resources required, if any, to implement and maintain the proposed change.

None

**CREDIT HOUR (Mandatory if new and/or revised course in proposal):**

Review statement and check box once completed.

- The appropriate faculty committee has reviewed the course outline/syllabus and has determined that the assignments are sufficient to meet the University definition of a credit hour.

**PROPOSED CATALOG COPY:** For existing courses copy and paste the current catalog copy and use the Microsoft Word “track changes” feature (or use red text with “~~strickethrough~~” formatting for text to be deleted, and adding blue text with “underline” formatting for text to be added). For new courses, draft comprehensive catalog copy.

**ELET 3113. Network Analysis. (3)** Prerequisites: ELET 1212 and ELET 1212L with grades of C or above, ~~ETGR 2272, or MATH 1242~~, and Junior standing. Co-requisite: ETGR2272 or MATH1242. An introduction to frequency domain analysis through Laplace Transforms and Fourier Analysis. Topics include: a review of circuit analysis fundamentals in the time domain, circuit transformations, waveform analysis and synthesis and first order natural and forced response with extensive utilization of circuit simulation software.

**ELET 3222. Electronics II. (3)** Prerequisites: ELET 2121 and ELET 2121L with a grade of C or above and Junior standing in department. A continuation of the study of solid state devices begun in ELET 2121. Topics include: frequency response of single and multistage amplifiers, feedback and stability, linear and nonlinear operational amplifier circuits, and CMOS and BiCMOS circuits with extensive utilization of circuit simulation software. ~~Meets for three (3) lecture hours per week. (Spring) (Online)~~

**ELET 3222L. Electronics II Laboratory. (1) (W)** Prerequisites: ELET 2121 and ELET 2121L with a grade of C or above and Junior standing in department. Co-requisite: ELET 3222 or permission of the department. This laboratory course supports concepts and practices covered in ELET 3222. ~~Meets for three (3) laboratory hours per week. (Spring, Summer)~~

**ELET 3292. Junior Practicum II. (1)** Prerequisites: ~~ELET 3113~~, ELET 3132, ELET 3132L, and ELET 3191. A continuation of ELET 3191, where students develop requirements and capabilities for open-ended projects encompassing more advanced topics in Engineering Technology. Extensive project planning and a formal design review for selected project(s) are required.

**ELET 4123. Active Filters. (3)** Prerequisites: ELET 3113, ELET 3222, ETGR 2122 and ETGR 2272 or MATH 1242. The design, analysis, simulation and implementation of composite, cascaded and summation filters. Topics include: bilinear transfer functions; cascade design with first-order circuits; biquad circuits; Butterworth lowpass circuits; Butterworth bandpass circuits; the Chebyshev response; sensitivity; frequency transformations; highpass and band-elimination filters.

**ETGR 4100. Capstone Design Project I. (2) (O, W)** Prerequisites: All Freshman-, Sophomore-, and Junior-level technical courses. Mechanical ET Pre- or co-requisite: ETME 4163 and ETME 4244. First of a two-semester course sequence in which student teams implement a Senior-level design project which demonstrates abilities as developed by the coursework taken thus far. Project planning techniques are utilized to make substantial progress toward implementation of a design solution. ~~One class hour and three lab hours per week.~~

**ETGR 4200. Capstone Design Project II. (2) (O, W)** Prerequisite: ETGR 4100. Second of a two-semester course sequence in which student teams continue to implement a Senior-level design project which demonstrates abilities as developed by the coursework taken thus far. The

design solution developed in the first semester is completed and evaluated during the second semester. The primary engineering results delivered is a set of rational decisions, where the rationality of those decisions are supported by the appropriate analysis and testing. The quality of the design is usually reflected in a prototype of either the hardware or software system. ~~One class hour and three lab hours per week.~~

**ACADEMIC PLAN OF STUDY (UNDERGRADUATE ONLY):** Does the proposed change impact an existing Academic Plan of Study?

- Yes. If yes, please provide updated Academic Plan of Study in template format.  
 No.

**STUDENT LEARNING OUTCOMES (UNDERGRADUATE & GRADUATE):** Does this course or curricular change require a change in SLOs or assessment for the degree program?

- Yes. If yes, please provide updated SLOs in template format.  
 No.

**TEXTBOOK COSTS:** It is the policy of the Board of Governors to reduce textbook costs for students whenever possible. Have electronic textbooks, textbook rentals, or the buyback program been considered and adopted?

- Yes. Briefly explain below.  
 No. Briefly explain below.

Electronic textbooks, textbook rentals, or the buyback program are incorporated as determined by the course instructor.

**IMPORTANT NOTE:** A Microsoft Word version of the final course and curriculum proposal should be sent to [facultygovernance@uncc.edu](mailto:facultygovernance@uncc.edu) upon approval by the Undergraduate Course and Curriculum Committee and/or Graduate Council chair.