

**DEGREE/PROGRAM CHANGE
FORM C**

Fields marked with * are required

Name of Initiator: Amber Mattson

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Date:* 09-15-11

Phone Number:* 7-9929

Initiator's Rank / Title* Admin Assistant/Scheduling Coordinator

Faculty Contact* Ramiro Jordan

Administrative Contact* Amber Mattson

Department* Electrical & Computer Engineering

Division

Branch

Program

Proposed effective term:

Semester Fall ▼

Year 2013 ▼

Course Information

Select Appropriate Program Undergraduate Degree Program ▼

CIP Code

Name of New or Existing Program * Baccalaureate Program--Electrical Engineering

Catalog Page Number

Select Category Major ▼

Degree Type B.S.

Select Action Revision ▼

Exact Title and Requirements as they should appear in the catalog.
See current catalog for format within the respective college (enter text below or upload a doc/pdf file)

[ECE Curriculum-EE_Changesx.doc](#)
[ECE Curriculum-EE_Final.doc](#)

☐ **This Change affects other departmental program/branch campuses**

Reason(s) for Request * (enter text below or upload a doc/pdf file)
The changes in the Electrical Engineering Curriculum were motivated by our last ABET review.

Statements to address budgetary and Faculty Load Implications and Long-range planning * (enter text below or upload a doc/pdf file)
This revision will incur no budgetary or faculty load changes. Long-range planning will remain the same.

Curriculum in Electrical Engineering

The Bachelor of Science Program in Electrical Engineering is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>.

Hours required for graduation: ~~132~~ 129

First Year	First Semester	Cr. Hrs.
Math 162	Calculus I	4
ECE 101	Introduction to Electrical and Computer Engineering	1
PHYC 160	General Physics	3
ECE 131	Programming Fundamentals	3
ENGL 101	Composition I: Exposition	3
	Core Elective (1)	3
ECON 105 or 106	Introductory Macroeconomics/Microeconomics (1)	3
		17
	Second Semester	
Math 163	Calculus II	4
ECE 231	Intermediate Programming and Engineering Problem Solving	3
CHEM 121	General Chemistry I	3
CHEM 123L	General Chemistry I Lab	1
PHYC 161	General Physics	3
PHYC 161L	General Physics Lab	1
ENGL 102	Composition II: Analysis & Argument	3
	Humanities Core Elective (1)	3
		18
Second Year	First Semester	
ECE 203	Circuit Analysis I	3
ECE 238L	Computer Logic Design	4
MATH 264	Calculus III	4
MATH 316	Applied Ordinary Differential Equations	3
CE 304	Engineering Mechanics	4
PHYC 262	General Physics	3
	Foreign Language Core (1)	3
		18 16
	Second Semester	
ECE 206L	Instrumentation	2
ECE 213	Circuit Analysis II	3
PHYC 262	General Physics	3
ECE 238L	Computer Logic Design	4
ENGL 219	Technical & Professional Writing	3
MATH 314	Linear Algebra with Applications	3
		14 15
Third Year	First Semester	
ECE 314	Signals and Systems (4)	3

ECE 321L	Electronics I (4)	4
ECE 344L	Microprocessors	4
ECE 371	Materials and Devices	4
	Humanities Core Elective (1)	3
	ECE Completeness Course (4)(6)	3
	ECE Completeness Course (4)(6)	3
		18 16
	Second Semester	
ECE 322L	Electronics II	4
ECE 340	Probabilistic Methods in Electrical Engineering (5)	3
ECE 360	Electromagnetic Fields and Waves	3
	Core Elective (1)	3
	Focus Elective	3
ECE 344L	Microprocessors	4
	ECE Completeness Course(5)(7)	3 ^{or} 4
	ECE Completeness Course (5)(7)	3
	Senior Technical Elective (3)	3
		16 ^{or} 17
Fourth Year	First Semester (3)	
ME/CE 350	Engineering Economy	3
ECE 419	Senior Design I (4)	3
ECE 445	Introduction to Control Systems	3
	Fine Arts Core Elective (1)	3
	Focus Elective (4)	3
	ECE Completeness Course(4)(6)	3
	ECE Track Elective (2)	3
	Senior Technical Elective (3)	3
		15
	Second Semester	
ECE 420	Senior Design II (5)	3
	Senior Technical Elective (3)	3
ECE 441	Introduction to Communication Systems	3
	Tech Elective (2)	3
	Core Elective (1)	3
	Social/Behavioral Science Core Elective (1)	3
	ECE Completeness Course (5)(7)	3 ^{or} 4
	ECE Track Elective (2)	3
		15 ^{or} 16

Notes:

1. See Electrical Engineering Advisement Brochure for list of approved UNM core electives.
2. ~~Technical electives must be approved in writing by the ECE department and 300, 400 and 500 level ECE courses. Technical electives may be a 300, 400 or 500 level course in Math (except MATH 345, 441, or 461), Physics, Computer Science, or another in the engineering department.~~
ECE Track consists of: 6 hours (two courses) from a listed track.

3. ~~Students are encouraged to take the Fundamentals of Engineering Examination during their senior year. This is in preparation for professional registration examination.~~ Senior Technical Electives must be approved by your faculty advisor and must be 300-, 400-, or 500- level courses.
4. ~~See Electrical Engineering Advisement Brochure for a list of approved focus electives.~~ Course only offered during Fall Semesters.
5. ~~No grades below a C are allowed in the Electrical Engineering Program.~~ Course only offered during Spring Semesters.
6. Fall Completeness courses: ECE 345, 371, and 381.
7. Spring Completeness courses: ECE 322L, 341, and 360.

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CHEM 121	General Chemistry I	3
CHEM 123L	General Chemistry I Lab	1
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ENGL 102	Composition II: Analysis & Argument	3
	Humanities Core Elective (1)	3
		18
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ECE 203	Circuit Analysis I	3
MATH 264	Calculus III	4
MATH 316	Applied Ordinary Differential Equations	3
PHYC 262	General Physics	3
	Foreign Language Core (1)	3
		16
	Second Semester	
ECE 206L	Instrumentation	2
ECE 213	Circuit Analysis II	3
ECE 238L	Computer Logic Design	4
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ECE 314	Signals and Systems (4)	3
ECE 321L	Electronics I (4)	4
	Humanities Core Elective (1)	3
	ECE Completeness Course (4)(6)	3
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		16

	Second Semester	
ECE 340	Probabilistic Methods in Electrical Engineering (5)	3
ECE 344L	Microprocessors	4
	ECE Completeness Course (5)(7)	3 ^{or} 4
	ECE Completeness Course (5)(7)	3
	Senior Technical Elective (3)	3
		16 ^{or} 17
Fourth Year	First Semester	
ECE 419	Senior Design I (4)	3
	Fine Arts Core Elective (1)	3
	ECE Completeness Course (4)(6)	3
	ECE Track Elective (2)	3
	Senior Technical Elective (3)	3
		15
	Second Semester	
ECE 420	Senior Design II (5)	3
	Senior Technical Elective (3)	3
	Social/Behavioral Science Core Elective (1)	3
	ECE Completeness Course (5)(7)	3 ^{or} 4
	ECE Track Elective (2)	3
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