DEGREE/PROGRAM CHANGE
FORM C

Fields marked with * are required

Name of Initiator: Amber Mattson **Email:*** midget1@unm.edu **Date:*** 07-18-11

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 **Program**

Branch

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--Computer 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-CompE_Changes.doc
ECE Curriculum-CompE_FinalEdit.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 Computer Engineering Curriculum were motivivated 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 facutly load changes. Long-range planning will remain the same.

Curriculum in Computer Engineering

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

Hours required for graduation: ~~132~~ 128

First Year	**First Semester**	**Cr. Hrs.**
Math 162	Calculus I	4
ECE 101	Intro to ECE	1
PHYC 160	General Physics	3
ECE 131	Programming Fundamentals	3
ENGL 101	Composition I: Exposition	3
	~~Social/Behavioral Science 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
PHYC 161	General Physics	3
PHYC 161L	General Physics Laboratory	1
ENGL 102	Composition II: Analysis & Argument	3
	Core Humanities Elective (**1**)	3
		17
Second Year	**First Semester**	
ECE 203	Circuit Analysis I	3
ECE 238L	Computer Logic Design	4
ENGL 219	Technical & Professional Writing	3
	Basic Science with Laboratory	4
MATH 316	Applied Ordinary Differential Equations	3
		17
	Second Semester	
ECE 206L	Instrumentation	2
ECE 213	Circuit Analysis II	3
MATH 314, 321 or 375		3
MATH 264	Calculus III	4
ECE 330	Software Design (**5**)	3
		15
Third Year	**First Semester**	
ECE 321L	Electronics I (**4**)	4
MATH 327	Discrete Structures	3
ECE 314	Signals and Systems (**4**)	3
ECE 337	Introduction to Computer Architecture and Organization (**4**)	3
	Foreign Language Core (**1**)	3
		16

	Second Semester	
ECE 331	Data Structures & Algorithms (**5**)	3
ECE 340	Probabilistic Methods in Engineering (**5**)	3
ECE 344L	Microprocessors	4
	Social/Behavioral Science Core Elective (**1**)	3
	ECE Track Elective (**2**)	3
		~~15~~ 16
Fourth Year	**First Semester**	
ECE 419	Senior Design I (**4**)	3
ECE 437	Computer Operating Systems (**4**)	3
~~CE/ME 350~~	~~Engineering Economy~~	~~3~~
	~~Humanities Elective (**1**)~~	~~3~~
	Senior Technical Elective (**3**)	3
	Senior Technical Elective (**3**)	3
	ECE Track Elective (**2**)	3
		~~18~~ 15
	Second Semester	
ECE 420	Senior Design II (**5**)	3
ECE 440	Computer Networks (**5**)	3
	~~Senior Elective (**3**)~~	~~3~~
	Senior Technical Elective (**3**)	3
	Humanities Core Elective (**1**)	3
	Fine Arts Core Elective (**1**)	3
		15

Notes:

1. See approved list of Core Electives in the ECE Undergraduate Handbook.
2. ECE Track Consists of: ECE 338 and 438, or ECE 335 and 435.
3. Senior Technical Electives~~: These electives will be developed in consultation with the computer engineering advisor from ECE, CS, Physics or other engineering related courses. See list of suggestions in Computer Engineering Advisement Brochure~~ must be approved by your faculty advisor and must be 300-, 400-, or 500- level courses.
4. ~~No grades below a C are allowed in the Computer Engineering Program.~~ Course only offered during Fall Semesters.
5. Course only offered during Spring Semesters.

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Hours required for graduation: 128

First Year	**First Semester**	**Cr. Hrs.**
Math 162	Calculus I	4
ECE 101	Intro to ECE	1
PHYC 160	General Physics	3
ECE 131	Programming Fundamentals	3
ENGL 101	Composition I: Exposition	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
PHYC 161	General Physics	3
PHYC 161L	General Physics Laboratory	1
ENGL 102	Composition II: Analysis & Argument	3
	Core Humanities Elective (**1**)	3
		17
Second Year	**First Semester**	
ECE 203	Circuit Analysis I	3
ECE 238L	Computer Logic Design	4
ENGL 219	Technical & Professional Writing	3
	Basic Science with Laboratory	4
MATH 316	Applied Ordinary Differential Equations	3
		17
	Second Semester	
ECE 206L	Instrumentation	2
ECE 213	Circuit Analysis II	3
MATH 314, 321 or 375		3
MATH 264	Calculus III	4
ECE 330	Software Design (**5**)	3
		15
Third Year	**First Semester**	
ECE 321L	Electronics I (**4**)	4
MATH 327	Discrete Structures	3
ECE 314	Signals and Systems (**4**)	3
ECE 337	Introduction to Computer Architecture and Organization (**4**)	3
	Foreign Language Core (**1**)	3
		16
	Second Semester	

ECE 331	Data Structures & Algorithms (**5**)	3
ECE 340	Probabilistic Methods in Engineering (**5**)	3
ECE 344L	Microprocessors	4
	Social/Behavioral Science Core Elective (**1**)	3
	ECE Track Elective (**2**)	3
		16
Fourth Year	**First Semester**	
ECE 419	Senior Design I (**4**)	3
ECE 437	Computer Operating Systems (**4**)	3
	Senior Technical Elective (**3**)	3
	Senior Technical Elective (**3**)	3
	ECE Track Elective (**2**)	3
		15
	Second Semester	
ECE 420	Senior Design II (**5**)	3
ECE 440	Computer Networks (**5**)	3
	Senior Technical Elective (**3**)	3
	Humanities Core Elective (**1**)	3
	Fine Arts Core Elective (**1**)	3
		15

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4. Course only offered during Fall Semesters.
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