# Course Articulation between New Mexico State University and NMSU Carlsbad Community College:

For students pursuing a bachelor of science degree in

## **ENGINEERING TECHNOLOGY**

"Linking Theory and Applications" with a major in

### **Electronics and Computer Engineering Technology**

Students wishing to begin their studies at the Community College or branch campus before transferring to NMSU typically spend at least four semesters and get an AAS or AS degree in Electronics Engineering Technology or related degree. This is typically followed by four to six semesters at NMSU. An advisor in Engineering Technology should be consulted for all transfers A complete description of the requirements for the degree may be found below and at the link:

#### http://www.nmsu.edu/Academic\_Progs/Undergraduate\_Catalog/ch6/et.pdf

This agreement voids all previous agreements and is valid for students transferring to NMSU until modified by the parties.

- Note (1):According to 5 NMAC 55.3 a set of 35 semester hours of standardized General Education common core classes in five areas of study may be taken at the Community College and transferred to NMSU in any department. To fulfill all these requirements "may" require the student to take additional classes beyond their AS or AAS degree.
- Note (2): Math sequences may be taken at the Community College or branch campus and a "math placement" exam will determine the students' math level upon entering NMSU. It is strongly recommended that transfering students have at a minimum of College Algebra to permit the easiest transition to NMSU College of Engineering the more math the better!
- Note (3): Residency requirement. The last 30 credits used to meet degree requirements must be taken at NMSU, of which at least 20 of these must be upper division.
- Note (4): C or better grade requirement. The NMSU College of Engineering requires a C or better grade in all required lower division science, mathematics, engineering and engineering technology courses. This requirement applies to NMSU courses and all transfer courses.

Courses which may be taken at the Community College or branch campus which will transfer to ETSE at NMSU are indicated in **blue italics** in the degree plan below:

# **DEGREE:** Bachelor of Science in Engineering Technology MAJOR: Electronics and Computer Engineering Technology (Total Credits 128)

Accredited by the Technology Accreditation Commission of the ABET, Inc.

Freshman Year (32 credits) Gen Ed from Area I: Public Speaking	3
Comm 265G Princ of Human Commun. 3 cr.	3
Gen Ed from Area I: English Composition  Engl 111G, Rhetoric & Composition 4 cr.	3-4
ET 101, Introduction to Engineering Technology  ETSE will transfer this credit if the student completes the AAS or A  Or	1 AS degree
ENG 100 class ET 120, Computational and Presentation Software  ET 120, Comp/Presentation Software  or  3cr.	3
CS 110G Computer Literacy 3cr.	
ET 182, Digital Logic  This could be a PLTW transfer class as there is articulation for the PLTW digital class into ET	3
ET 190, Applied Circuits – AC/DC electronics ET 191, Applied Circuits Laboratory	3
MATH 190, Precalculus Students should take this math – but has a prerequisite of	4
Math 120 - 121  PHYS 211-211L, General Physics I, General Physics Lab I  NOTE: PHYS 110G will NOT transfer for this requirement	4
Gen Ed from Area V: Humanities and Fine Arts  Any appropriate approved class from this area 3cr.	3
Free elective <u>Any</u> 3 cr. class not otherwise used will count as transfer credit  For example, COLL 101	3
Sophomore Year (35 credits)  Gen Ed from Area III: Laboratory Science*  Students are strongly encouraged to take: CHEM 110G  *Appropriate approved class from this area 4cr.  NOTE: must have a lab component	4

Gen Ed from Area I: College Level Writing <u>ENGL 218G</u> , Technical & Scientific Comm (prefered class)  Or	3
ENGL 203G, Bus/Prof Commun  ET 246, Electronic Devices I  ET 262, Software Technology I  This is a JAVA programming class and a JAVA programming of C++ programming class WOULD transfer here. No other programs is currently acceptable.  ET 272, Electronic Devices II  ET 282, Digital Electronics  MATH 235, 236, Calculus for the Technical Student I, II	
PHYS 212-212L, General Physics II, General Physics Lab II	4
Gen Ed from Area IV: Social/Behavioral Sciences  Appropriate approved class from this area 3cr.	3
Junior Year (31 credits)	====
ET 302, Manufacturing Data Analysis	3
ET 324, Linear Integrated Circuits	4
ET 344, Microcomputer Systems	3
ET 362, Software Technology II	3
ET 377, Computer Networking	3
ET 398, Digital Systems	3
Viewing a Wider World from the Business College	3
Approved technical elective	3
An approved class or group of classes "may" fulfill this require For example:	ement
Gen Ed from Area IV: Social/Behavioral Sciences	3
Appropriate approved class from this area 3cr.	
Gen Ed from Area V: Hum. And Fine Arts	3
Appropriate approved class from this area 3cr.	
Senior Year (31 credits)	
CE 450, Engineering Economy and Law	3
ET 381 Renewable Energy Technology or ET 365 Building Utilities	3
ET 402, Instrumentation	3
ET 314 Communication Systems I	3
ET 410, Senior Seminar	1
ET 444, Hardware Senior Design	3
ET 462, Remote Access Operating Systems and Advanced Scripting	3

Approved technical electives	6
Gen Ed from Area IV: Social/Behavioral Sciences or	
from Area V: Humanities and Fine Art	3
Appropriate approved class from this area 3cr.	
Viewing a Wider World – outside of Engineering and Business	3

#### ASSOCIATE of SCIENCE DEGREE: from the Carlsbad CC campus

Developmental Studies.... None would transfer

Branch Requirement (3cr.)

COLL 101, College/Life Success Would not transfer except as free elec.

NM Common Core Requirements: all would transfer

ENGL 111G. ENGL 218G COMM 253G or COMM 265G

CS 110G – could transfer to ET 120

Mathematics - (6cr)

Math 120, Inter. Algebra Math 121, College Algebra are **required** but would **not transfer** these are considered **developmental** classes.

Laboratory Sciences – (8cr.)

Students should be strongly encouraged to take **CHEM 110G** for 4cr.

Our second laboratory science is the PHYS 211 and also PHYS 212 with labs. – this is 8cr. NOTE: The PHYS 110G will NOT transfer for either of these classes.

**NOTE:** There is new GenEd requirements and you should review the NMSU 2008-2009 catalog on pages 14-17 for a list of these – Currently your AS degree outline does NOT meet these new requirements and should be modified to comply.

#### Social/Behavioral Sciences and Humanities/Fine Art

All these classes will transfer if taken according to the GenEd requirements – NOTE: several of the ET GenEd classes in this group are recommended for the Junior/Senior year but ALL WOULD TRANFER to fulfill these requirements.

Humanitites/Fine Arts:

Same as above

Foreign Language

NOTE: There is <u>NO r</u>equirement for foreign language in ET or Engineering so the SPAN classes have to transfer option

The following are classes which are taught in the first two years in the ET program in the Electronics and Computer Technology major which do not have transfer options in the current Carlsbad proposed AS degree. It is therefore proposed that these classed be developed (if the goal is for a true 2+2 program is proposed)

A brief description of these classes can be found via the NMSU on-line catalog.

ET 182, Digital Logic	3
This could be a PLTW transfer class as there is articulation for the	he
PLTW digital class into ET	
ET 190, Applied Circuits – AC/DC electronics	3
ET 191, Applied Circuits Laboratory	1
MATH 190, Precalculus	4
Students should take this math – but has a prerequisite of Math 120 - 121	
PHYS 211-211L, General Physics I, General Physics Lab I	4
NOTE: PHYS 110G will NOT transfer for this requirement	
ET 246, Electronic Devices I	4
ET 262, Software Technology I  This is a JAVA programming class and a JAVA programming or C++ programming class WOULD transfer here. No other program is currently acceptable.	
ET 272, Electronic Devices II	4
ET 282, Digital Electronics II	4
MATH 235, 236, Calculus for the Technical Student I, II	6
PHYS 212-212L, General Physics II, General Physics Lab II	4
TOTAL CREDITS to be developed	==== <b>37</b>

For more information contact:

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or

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