

**Articulation Agreement  
between**

**New Mexico State University (NMSU)  
Department of Engineering Technology  
and Surveying Engineering (ETSE)**

**and**

**Dona Ana Community College (DACC)**

**For Students Pursuing a Bachelor of Science Degree  
in  
Engineering Technology  
Major in Electronics and Computer Engineering Technology**  
Last Modified on 11/3/2011

**NMSU:**

**Attested to on this day of \_\_\_\_\_**

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**Dr. Sonya Cooper  
Associate Dean of Engineering  
New Mexico State University**

Course Articulation between New Mexico State University  
and  
Dona Ana Community College  
**ELECTRONICS TECHNOLOGY**

For students pursuing a bachelor of science degree in  
**ENGINEERING TECHNOLOGY**  
with a major in  
**Electronics and Computer Engineering Technology**

Students wishing to begin their studies at the Community College before transferring to NMSU typically spend at least four semesters and get an AAS degree in Aerospace Technology. This is typically followed by five or 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](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 AAS degree.

Note (2): Math sequences may be taken at the Community College and a MPE (math placement exam) will determine the students' math level upon entering NMSU. It is strongly recommended that transferring 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 student must complete at NMSU at least 30 of the last 36 credits necessary for the baccalaureate degree. Of these 36 credits, 21 credits must be upper division and at least 12 of these upper division credits must be in the major.

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 which will transfer to the Electronic and Computer Engineering Technology program 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 130)**

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

**Freshman Year (32 credits)**

Gen Ed from Area I: Public Speaking	3
<i>Appropriate approved class from this area 3cr. (COMM 253 3cr)</i>	
Gen Ed from Area I: English Composition	3-4
<i>Appropriate approved class from this area 3cr. (ENGL 111G 4cr.)</i>	
ET 101, Introduction to Engineering Technology	1
<i>Credit will be given for the AS or AAS degree at DACC</i>	
ET 120, Computational and Presentation Software	3
<i>OECS 105 Introduction to Microcomputer Technology 3cr</i>	
<i>or</i>	
<i>OECS 227 Computer Applications or Technicians 3cr.</i>	
ET 182, Digital Logic	3
<i>ELT 160 Digital Electronics 3cr</i>	
ET 190, Applied Circuits	3
<i>ELT 110 Electronics I 4cr (3+3p)</i>	
ET 191, Applied Circuits Laboratory	1
<i>ELT 110 Electronics I 4cr (3+3p) – lab portion</i>	
MATH 190, Precalculus	4
<i>Precalculus &amp; Trig or appropriate MATH PLACEMENT</i>	
PHYS 211-211L, General Physics I, General Physics Lab I	4
Gen Ed from Area V: Humanities and Fine Arts	3
<i>Appropriate approved class from this area 3cr.</i>	
Free elective	3
<i>Any 3 cr. class not otherwise used will count as transfer credit</i>	

**Sophomore Year (35 credits)**

Gen Ed from Area III: Laboratory Science*	4
<i>*Appropriate approved class from this area 3cr. (CHEM )</i>	
<i><u>NOTE</u>: must have a lab component</i>	
Gen Ed from Area I: College Level Writing	3
<i>Appropriate approved class from this area 3cr. such as</i>	
<i>ENGL 218G Techn. Writing 3cr.</i>	
ET 246, Electronic Devices I	4
<i>ELT 205 Semiconductor Devices 4cr (3+3p)</i>	
ET 262, Software Technology I	3
<i>*OECS 195 Java Programming 3cr.</i>	
<i>or</i>	
<i>*OECS 193 C++ Programming 3cr.</i>	
<i><u>NOTE</u>: note part of the normal DACC Electronics Program</i>	

ET 272, Electronic Devices II	4
ET 282, Digital Electronics	4

*ELT 235 Digital Electronics II 3cr. (2+3p)*

**NOTE:** this is one credit short of the ET 282 class and DACC students are strongly advised to take ET 282 even if having had this class.

MATH 235, 236, Calculus for the Technical Student I, II	6
<i>Math placement 6cr</i>	

PHYS 212-212L, General Physics II, General Physics Lab II	4
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Gen Ed from Area IV: Social/Behavioral Sciences	3
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*Appropriate approved class from this area 3cr.*

### **Junior Year (31 credits)**

ET 302, Manufacturing Data Analysis	3
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ET 324, Linear Integrated Circuits	4
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ET 344, Microcomputer Systems	3
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ET 362, Software Technology II	3
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ET 377, Computer Networking	3
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ET 398, Digital Systems	3
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Viewing a Wider World from the Business College	3
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Approved technical elective	3
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*An approved class or group of classes “**may**” fulfill this requirement*

*For example: OEES 250 & 260.*

Gen Ed from Area IV: Social/Behavioral Sciences	3
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*Appropriate approved class from this area 3cr.*

Gen Ed from Area V: Hum. And Fine Arts	3
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*Appropriate approved class from this area 3cr.*

### **Senior Year (31 credits)**

CE 450, Engineering Economy and Law	3
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ET 381 Renewable Energy Technology or ET 365 Building Utilities	3
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ET 402, Instrumentation	3
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ET 314 Communication Systems I	3
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ET 410, Senior Seminar	1
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ET 440, Senior Design	2
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ET 441, Senior Project	2
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ET 444, Hardware Senior Design	3
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ET 462, Remote Access Operating Systems and Advanced Scripting	3
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Approved technical electives	6
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Gen Ed from Area IV: Social/Behavioral Sciences or	
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From Area V: Humanities and Fine Art	3
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*Appropriate approved class from this area 3cr.*

Viewing a Wider World – outside of Engineering and Business	3
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**For more information contact:**

**Dr. Jeff Beasley**

**or**

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**Nov. 3, 2011**

## **Renewable Energy Technology Concentration**

What follows is a list of classes and the corresponding basic study areas that will result in a Concentration in “*Renewable Energy Technology*” within the ECET major. Students can fulfill this Concentration by using their three required technical electives without any additional credit requirements.

### **Required**

ET 381 Renewable Energy Technology. Note: this class cannot be considered to simultaneously fulfill the requirement for both a technical elective and that for a required class – see ET365 below

### **2 Courses From:**

ET 365 Building Utilities – Note: this class cannot serve both as a tech. elective and as a required ECET class, toward fulfilling degree requirements

ET 304 Electrical Machines,  
ET 374 Electric Power Distribution,  
ET 382 Solar Energy,  
ET 384 Wind Energy,  
ET 396 Heat Transfer and Applications,  
ET401 Heating & Air Conditioning Systems,  
EE 332 Introduction to Electric Power Engineering,  
CHE 466 Fuel Cell and Hydrogen Technology, or

Students may only take one class from the following choices:

1. ET 420 Senior Internship – (must be related to a renewable energy field)
2. ET 435 Senior Design and Project Management (must be related to a renewable energy application)
3. ET 440 Senior Design – (must be related to a renewable energy application)  
ET 441 Senior Project – (must be related to a renewable energy application)

Additionally, it is strongly “*recommended*” that students select the following courses from the General Education menu options:

**English Composition:** English 218G or 318G “Technical Writing”

**Basic Natural Sciences:** Chem. 110G or 111

**Human Thought and Behavior:** Phil 240G Ethics for Engineering and Scientific Careers

**Viewing a Wider World recommendations:**

- College of AG: AGE/ECON 337G “Natural Resource Economics” or AGHE 380G “Ecosystem Earth; The Impact of Human Activities”
- College of Arts & Science: Phys 303G “Energy and Society in the New Millennium” or Hist 302G “Science in Modern Society” or Hist 303G “History of Technology”
- College of BA&Econ: ECON 337G “Natural Resource Economics” or ECON 384G “Water Resource Economics”