

## **Mission Statement**

Texas State Technical College Wind Energy Technology Division is an extension of the Texas State Technical College System which “contributes to the educational and economic development of the State of Texas.” The Wind Energy Technology Division is dedicated to providing a quality curriculum and instruction to the students entering into the field of wind energy.

Our mission is enhanced by offering unique and diverse training which includes classroom and online training to meet the needs of both the traditional and non-traditional student.

Our fundamental goals are to equip and empower the student with the knowledge to become a competent wind energy technician and to further enhance and leverage their position in the field of wind energy.

## **Wind Energy Principles – Online Certification**

- A 16 week course that will cover:
  - Course Introduction (Computer Applications needed for the course)
  - A brief introduction to Wind Energy
  - 5 Basic Electricity Modules
  - 5 Basic Fluid Power Modules
  - 4 Electro Mechanical modules.
- It will be offered 100% online with no labs and is a knowledge based certificate. The certificate is intended to give the students a working knowledge of the principles they need to get started in the Wind Industry.
- Ideal candidates would be people who have work experience and want to move to the Wind Industry.
- Available Spring 2009
- Completion of Wind Safety and Wind Energy Skills Set (optional) will lead to an entry level position in the Wind Industry as an apprentice.

## **Wind Energy Technician - Certification II**

- Continuation of Cert I program to include the addition of wind specific courses available at TSTC
- Available Fall 2009

Rubric	Number	Course	Lecture Hrs	Lab Hrs	Ext. Hrs	Clock Hrs	Credit Hrs
<b>1<sup>st</sup> Semester</b>							
LEAD	2200	Corporate & Community Development	2	0	0	48	2
WIND	1371	Principles of Wind Energy*	3	0	0	48	3
CETT	1402	Electricity Principles*	2	2	4	96	4
POFI	1301	Computer Application I*	2	4	0	96	3
		<b>Total</b>	<b>9</b>	<b>6</b>	<b>4</b>	<b>288</b>	<b>12</b>

2 <sup>nd</sup> Semester							
ELMT	1305	Basic Fluid Power*	2	4	0	96	3
CETT	1409	AC/DC Circuits*	2	4	0	96	4
INMT	1417	Industrial Automation	2	6	0	128	4
ELMT	1201	Programmable Logic Controllers	1	4	0	80	2
<b>Total</b>			<b>7</b>	<b>18</b>	<b>0</b>	<b>400</b>	<b>13</b>
3 <sup>rd</sup> Semester							
POFT	1175	Job Search Skills	1	0	0	16	1
ELMT	2380	Co-op Electro-Mechanical Technology	1	0	14	240	3
<b>Total</b>			<b>2</b>	<b>0</b>	<b>14</b>	<b>256</b>	<b>4</b>
<b>Cert II Total</b>			<b>18</b>	<b>24</b>	<b>18</b>	<b>944</b>	<b>29</b>

\* Course available online through Apprenticeship program

### Articulation Agreement with other Community Colleges

- The intent of this agreement between the awarding college and Texas State Technical College West Texas (TSTC) is to increase the number and quality of students entering the rapidly expanding Wind Energy Industry in Texas. Students completing this program may enter industry as an entry-level technician or seek opportunities to pursue a bachelor's degree in engineering, business, or science.
- Available Fall 2009
- Applicable to students at other community colleges who have completed the necessary requirements to enter into the wind program at TSTC:
  - TSTC will deliver a capstone semester to train students on equipment and safety directly related to the wind industry as outlined below.

Rubric	Number	Course	Lecture Hrs	Lab Hrs	Ext. Hrs	Clock Hrs	Credit Hrs
WIND	1272	Wind Safety	2	4	0	96	3
WIND	1371	Principles of Wind Energy	3	0	0	48	3
WIND	2310	Wind Turbine Materials & Equipment	2	4	0	96	3
WIND	2459	Wind Power Delivery	2	5	0	112	4
WIND	2455	Wind Turbine Troubleshooting & Repair	2	5	0	112	4
<b>Total</b>			<b>11</b>	<b>18</b>	<b>0</b>	<b>464</b>	<b>17</b>

- The semester will be completed at TSTC West Texas Sweetwater
- Courses are taught in a 16 week semester, block format
- The awarding college will be responsible for the development of a degree plan leading to an A.A.S or A.S. The degree plan must ensure that students receive the learning outcomes outlined below prior to entering the capstone semester at TSTC. The degree plan must include the courses and semester credit hours taken under contract at TSTC. The degree plan must meet all requirements

stated by THECB and SACS. The degree plan may/may not include a co-op internship at the election of the awarding college.

- The colleges are accredited by SACS and all instructors of courses must be in compliance with criteria as described in the SACS Criteria for Accreditation and the Guidelines for Instructional Programs in Workforce Education (GIPWE).
- The colleges will collaborate to publicize this agreement with current students, potential students, or the community at large.
- The faculty and administrators from the colleges will meet on an annual basis to assess the status of the program, develop program offerings; and to explore potential joint grant funding.
- The colleges will share data related to the curriculum, enrollment, scholastic progress, and academic performance of former and active students in order to evaluate the success of this program.
- This agreement shall commence when it has been approved by the Chief Academic Officers of the colleges.
- A copy of the Memorandum of Understanding and Articulation Agreement along with the degree plan will be kept in the office of Academic Affairs and Transfer Programs at HC and the Registrar and Records office at TSTC.
- This agreement shall remain effective until terminated via execution of a written request by either party providing a one (1) year notice.
- Agreement shall continue until such time as either or both institutions wish to terminate it. In the event this agreement is terminated, both institutions agree to make completion provisions for individual students participating in the program at the time of termination.

# Pathways to Wind Turbine Technician

- TWI Grant Curriculum
- TWI Grant Partnerships
- TWC Online Grant
- TWI Grant Partnerships

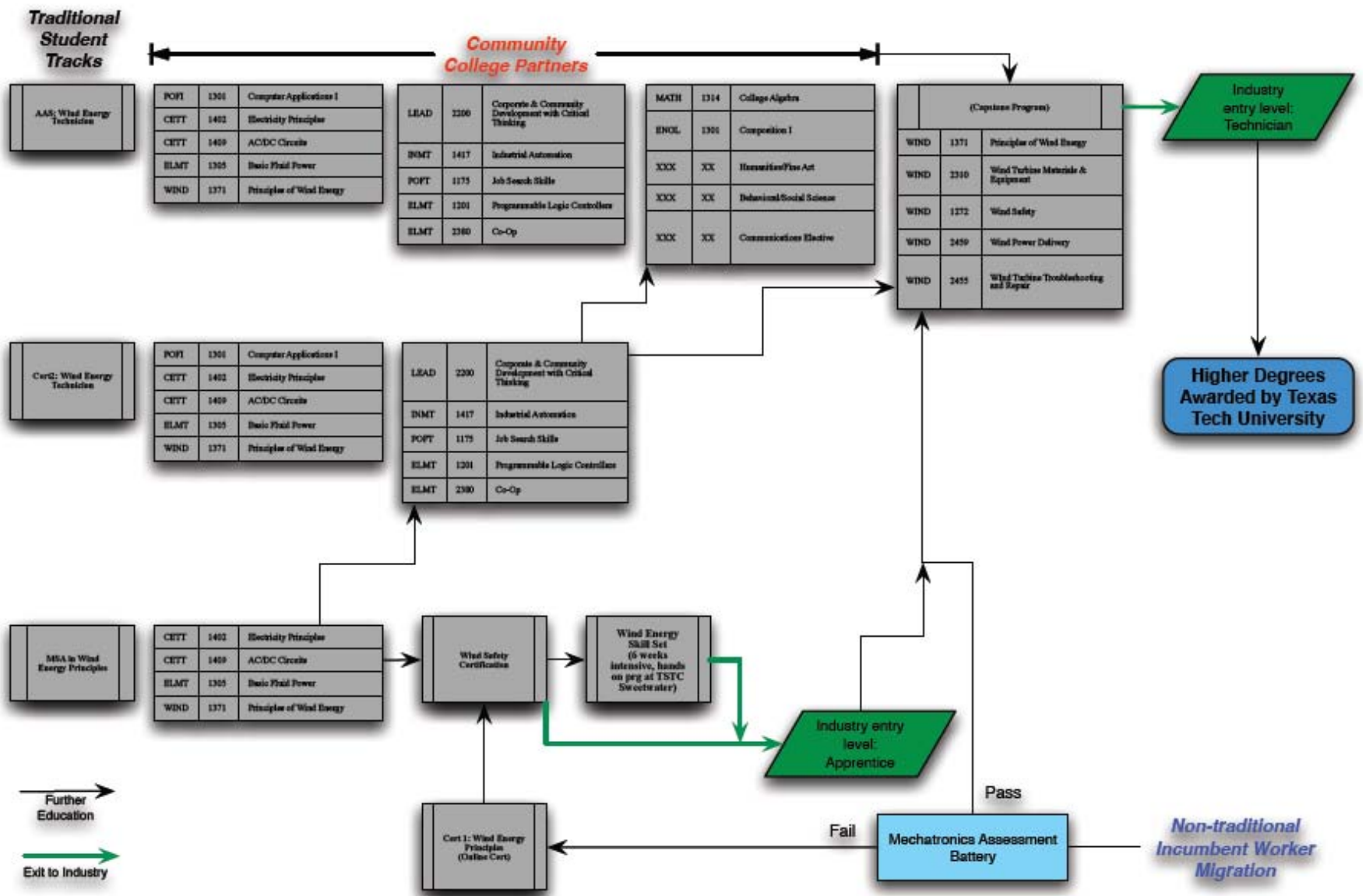


Figure 1

# Texas Tech University Wind Energy Program

To be completed by TTU

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