



## **Dealer Service Technology**

### **Program Review 2011**

*Prepared by SAC Chair Ishmael Rivas*

#### **1. Program/Discipline Overview :**

- A. What are the educational goals or objectives of this program/discipline, and how do they compare with national or professional program/discipline trends or guidelines? Have they changed since the last review, or are they expected to change in the next five years?**

*The Dealer Service Technology Program or “ThinkBIG” Program as it is known around the world started as an answer to a problem. Caterpillar dealerships were unable to find well qualified technicians to work in their service departments. The students that had completed training in colleges and technical schools had to be sent back to school to receive Caterpillar Technical Training. That is where the Dealer Service Technology Program comes in; to fill the void between a mechanic that needs further training to a profitable technician on day one. My colleagues and I work hand in hand with Caterpillar Inc. and four Northwest Caterpillar dealerships to accomplish this. The educational goal of this program is to equip students with the knowledge and ability to thrive in a Caterpillar Service Career. Our emphasis is not only on the technical aspects of Caterpillar machines and systems but also on the successful transition from PCC to the workplace.*

*The partnership we have with Caterpillar inc. and our Northwest dealer group allows us to stay current with local and national changes in our industry. The faculty spends time in each dealership making sure we are teaching the most updated practices possible. Our overall goals as a program are not set to change, but our curriculum is constantly changing to keep up with industry.*

***For additional information please see attached document “Program Explanation”***

*Please make sure to follow the page numbers when reading or for a printed copy please contact Ishmael Rivas- 971-722-7465*

- B. What changes have been made as a result of the last program review?**

- *As a program we are constantly changing and or updating our curriculum to stay current with industry standards. Even though this is Dealer Service Technology's first program review performed by PCC we have been reviewed by Caterpillar Inc. In response to their review we made the following changes;*
  - *Additional lighting in our lab areas*
  - *Updated emergency placards in lab areas*
  - *Additional specialty tooling purchases*
  - *Improvements made to the contamination control practices along with the purchase of a particle counter*
  - *Shop floor striping and designated walkways in lab areas*

**2. Curriculum: reflect on learning outcomes and assessment, teaching methodologies, and content in order to improve the quality of teaching, learning and student success.**

**A. Addressing Course-Level Outcomes: Identify and give examples of assessment-driven changes made to improve attainment of course-level student learning outcomes. Where sequences exist, also include assessment-driven changes to those sequences. (CTE programs may address this in section 6).**

- *Through our E-train testing of the students it became clear that the majority of the students scored lower in Air-conditioning and Electronics. The following changes were made to help with retention and understanding in these core areas.*
  - *The addition of online training through Caterpillar using DLMS classes*
  - *The purchase of additional training aids and materials*
  - *Further training of the faculty teaching these courses*

**B. Addressing College Core Outcomes**

- i. Describe how the College Core Outcomes are addressed in courses, and/or aligned with program and/or course outcomes.**

<http://www.pcc.edu/resources/academic/core-outcomes/index.html>

- *(Please refer to the CTE assessment plan included in the appendix to demonstrate the crosswalk.)*

### **Communication**

- *The students must learn to communicate effectively not only while on campus but while spending their time on internships. A well rounded technician is expected to be able to communicate with fellow technicians, service managers and most importantly with customers. We require students to communicate focusing on three main mediums written, personal one on one speech, and performing presentations. For the written portion the students must learn proper email etiquette, write essays, and fill out service reports. The personal one on one speech involves working in small groups and learning to work with their mentors while on internship. Presentations are practiced almost daily as the students are often asked to stand in front of the class and explain basic systems. More formal presentations require a PowerPoint presentation prepared in advance.*

### **Community and Environmental Responsibility**

- *Students are taught the importance of the proper use and disposal of oils and chemicals. The students learn about the financial affect an oil spill can have on a job site and an employer. They are taught the proper way to clean up oil spills and prevent oil or chemicals from entering storm drains and sewer systems.*

### **Critical Thinking and Problem Solving**

- *A well trained and well coached Technician must possess critical thinking and problem solving skills. A technician when entering the workforce is expected to apply the knowledge they have learned when troubleshooting and interpreting customer complaints. Taking the information they have gathered and the skills of diagnostic troubleshooting they are required to come to a conclusion of what needs to be repaired or tested further. It is the programs (Dealer Service Technology) responsibility to be certain they are capable of performing these tasks in a timely and efficient manner.*

### Cultural Awareness

- *The students are assigned partners from other Caterpillar Dealerships and are required to work with them for their first term on campus. Due to the fact that we pull students from all over the Northwest we get a variety of different races and socioeconomic backgrounds. We teach the students the importance of working well with others and how you present yourself. On internships the students learn the importance of how to address customers and how to take direction from others.*

### Professional Competence

- *Every DST class completed is a test of the student's professional competence. The students are constantly tested on the core subjects making up the Dealer Service Technology Degree making sure that when they enter the workforce they are prepared and able. The students are tested in real shop settings on their DST 150 internships to make sure that when they graduate they are able to succeed in this profession.*

### Self Reflection

- *Students are asked to look over their internship evaluation sheets and give feedback. When the faculty member managing the DST 150 internship shows up for a sight visit they go over the evaluation sheets with the students. This is a great time to see what the student is thinking and what their opinion of them self is.*

**ii. Please revisit the Core Outcomes Mapping Matrix for your SAC and update as appropriate. <http://www.pcc.edu/resources/academic/core-outcomes/mapping-index.html>**

- *The Core Outcomes Mapping Matrix is in process and is not submitted at this time.*

**C. Assessment of College Core Outcomes (Note: for Career and Technical Education (CTE) programs, Core Outcomes that have been mapped into the Degree and Certificate outcomes may be addressed in that section 6B**

*instead). This section may refer to, include or summarize the results of annual Core Outcomes assessments carried out over the last 5 years.*

➤ *2C will be addressed in section 6*

**D. To what degree are courses offered in a Distance modality? Have any significant revelations, concerns or questions arisen in the area of DL delivery?**

➤ *There are currently no DST courses offered as DL courses but we are in the process of assigning more General Ed courses to our students as DL courses. Students asked if it would be possible to lightening up the General Ed course load they have while on campus. Offering General Ed classes as Distance Learning classes helps accomplish this goal.*

**E. Has the SAC made any curricular changes as a result of exploring/adopting educational initiatives (e.g., Service Learning, Internationalization of the Curriculum, Inquiry-Based Learning, Honors, etc)? If so, please describe.**

➤ *No changes have been made at this time.*

**F. Identify and explain any other significant changes that have been made to course content and/or course outcomes since the last review.**

➤ *This is a dynamic program that is constantly changing to keep up with the latest industry tooling and equipment. We continue to add training aids and demo units to reinforce system operations and help with student comprehension.*

**3. Needs of Students and the Community: are they changing?**

**A. What is the effect of student demographics on instruction, and have there been any notable changes since the last review?**

➤ *We have students from many different demographics because we draw students from all over the Northwest. Due to the fact that we have set program requirements and prescreening, this has little effect on current teaching. A few noticeable traits have been witnessed though.*

- *Lack of computer skills*
- *Low math scores for incoming students*

*To help compensate for these problems the students are given more computer related assignments, helping them become more comfortable using their computers. We added 2 credits to DST 111 to help compensate for the added hours needed to teach and practice these basic computer skills.*

*As far as the low math scores go we rearranged the student's classes to accommodate for the addition of a prerequisite Math 60 class in their first term on campus.*

**B. Describe current and projected demand and enrollment pattern. Include discussion of any impact this will have on the program/discipline.**

- *Currently enrollment is up in the program after an all time low. The programs enrollment is directly linked to the economy and job market. All DST students must be accepted by one of the four Caterpillar Dealerships before they can enter the program. With an increase in mining and oil exploration the dealerships are beginning to accept more students and plan to fill the program this coming fall term.*
- *If the program goes from fourteen to twenty-four students in the fall we will have a few issues to address. The program was originally designed for twenty-four students but as the program has tooled up and purchased the necessary equipment to stay up with industry we have used up all of our available space. During the programs Caterpillar Inc. review process it was noted that we did not have the recommended space for twenty-four students. I foresee this as the largest hurdle the program faces with the increase in students.*

**C. What strategies are used within the program/discipline to facilitate access and diversity?**

- *We assist the dealerships in recruiting at local high schools, career fairs and career centers. The program recruits from all over the Northwest including Alaska, Montana, Idaho, Washington, and Oregon. The Caterpillar Dealerships*

*perform the initial interviews and pick students from the areas in which the dealerships are located. The dealerships have their own diversity and access strategies in place, and so far have done an excellent job of recruiting.*

**D. *Has feedback from students, community groups, transfer institutions, business, industry or government been used to make curriculum or instructional changes (not been addressed elsewhere in this document)? If so, describe.***

- *While performing an internship observation in Tukwila, WA, I spoke with a recent graduate who suggested we spend more time on electrical meter reading. We have now added supplemental information to our basic electricity class going over meter reading. This is just one example of curriculum changes that have been made following student suggestions. As far as feedback from the industry, we attempt to implement all suggested changes given by our advisory committee.*

**4. *Faculty: reflect on the composition, qualifications and development of the faculty***

**A. *Provide information on***

**i. *Quantity and quality of the faculty needed to meet the needs of the program/discipline.***

- *We currently have two qualified full time faculty and one qualified instructional support technician. The current faculty have come from industry backgrounds directly related to the subject areas in which they teach bringing with them real life experience and insight. The programs instructional support technician has over twenty years of experience working for a Caterpillar Dealership and brings with him a high level of knowledge and ability.*

**ii. *Extent of faculty turnover and changes anticipated for the future.***

- *So far there has been no turnover and there are no anticipated changes.*

**iii. Extent of the reliance upon adjunct faculty and how they compare with full-time faculty in terms of educational and experiential backgrounds.**

➤ *We currently use only Full time faculty.*

**iv. How the faculty composition reflects the diversity and cultural competency goals of the institution.**

➤ *The Dealer Service Technology faculty reflects the diversity as seen in our industry. Due to the nature of this program and the training required to be an instructor the hiring pool is limited to heavy equipment technicians. The school in its hiring practices makes sure to be as inclusive as possible when posting faculty positions, leading to the hiring of faculty from California and as far away as New York. It is the programs job to make the learning environment open to all of its students. In order for the program to succeed the students must feel comfortable with us as faculty.*

**B. Report any changes the SAC has made to instructor qualifications and the reason for the changes.**

<http://www.pcc.edu/resources/academic/instructor-qualifications.pdf>

➤ *Dealer Service Technology is in the process of modifying its instructor qualifications. Up to this point the qualifications have mirrored those of Diesel Service Technology Program. The thought behind changing the qualifications has come up due to the amount of specific Caterpillar Industry Training required to teach the classes.*

**C. How have professional development activities of the faculty contributed to the strength of the program? If such activities have resulted in instructional or curricular changes, please describe.**

*The Dealer Service Technology faculty continuously completes online and industry led training. Each member has an account with Caterpillar Inc. DLMS Online training program. DLMS or Dealer Learning Management System is a web based program that is continually updated with classes on Caterpillar's new machines and systems. The Faculty completes the classes that are relevant to the subjects taught in their assigned class or classes. As Caterpillar offers*

*new classes we are able to follow any changes they are making and incorporate those changes into the curriculum.*

*The Faculty also attends industry led classes traveling to Caterpillar's headquarters in Peoria IL, and making trips to local Caterpillar Dealerships to participate in instructor led classes. The only way to stay current in our curriculum is to constantly take classes on the new equipment and systems being produced by Caterpillar.*

*After completing many online DLMS classes it was decided that having current students complete the basic online classes would be a great supplement to their learning. The Dealer Service Technology program requested that the dealerships cover the annual cost per student for the DLMS access. The dealers agreed to cover the cost, and at the beginning of this term (Winter 2011) we began assigning online classes based on subject area to supplement the students learning.*

## **5. Facilities and Support**

### **A. Describe how classroom space, computers/technology and library/media, laboratory space and equipment impact student success.**

*The Dealer Service Technology Program is a fairly new program and was laid out very well to accommodate up to twenty-four students in all aspects except for usable shop space. As we have purchased the needed tooling and training aids to run a top notch program we have effectively used up the lab space needed to teach the classes safely and effectively. Even with low numbers this winter term we are cramped for space. With an outlook of full enrollment this fall term space is going to be an issue. At the current time we are unable to get in and out of our storage areas during normal school hours due to the parking issues on campus.*

*The effect on current students is negligible because of our low enrollment at this time. The program foresees some definite issues this coming fall term and believes this to be something that needs to be addressed.*

### **B. Describe how students are using the library or other outside-the-classroom information resources.**

- *The Dealer Service Technology Program relies heavily on internet access. All of the students are assigned laptops from their dealers and use Caterpillars private websites, the before mentioned DLMS access, and text books in PDF format. As a program we have not utilized the library in any way.*

**C. Provide information on clerical, technical, administrative and/or tutoring support.**

- Clerical support: Chrissy Randall the administrative assistant for Dealer Service Technology takes care of the bulk of the clerical work.
  - Double checking incoming student transcripts for entrance requirements
  - Tracking foundation expenditures
  - Running budget queries
  - Scheduling rooms and entering classes into banner
- Technical support: Bill Parsons and the computer help desk/IT team
  - Continually updating software for Caterpillar programs
  - Updating lab and classroom computers
- Administrative support: Division Dean Irene Giustini and administrative assistant Chrissy Randall
  - Budget assistance
  - Advisory planning and participation
  - Scheduling and class planning
- Tutoring support: Gratia Minor, Perkins advisor
  - Math, Writing, Speech Tutoring

**D. Provide information on how Advising, the Office for Students with Disabilities and other student services impact students.**

- *The Dealer Service Technology Program students deal with financial aid advisors on a weekly basis. There appears to be many issues filling out the paperwork and securing loans with the current system and they often spend their lunch hours and breaks waiting in line to get help. I believe this is an ongoing issue and appears to be one of the greatest stressors for the students.*

**E. Describe current patterns of scheduling (such as class size, duration, times, location, or other) address the pedagogy of the program/discipline and the needs of students.**

- *All of the classes offered are eight week classes, scheduled in five terms/modules a year. The maximum class size is twenty-four students. The student will complete nine terms/modules before graduating with an AAS degree in Dealer Service Technology. This is a fast paced program requiring a dedicated self motivated student. The student needs to know before entering the program what will be required of them or else you run the risk of having the student wash out in the first term. Although the terms have high credit loads it is not all lecture time but a mixture of Lec/Lab and lecture.*
- *When the program first started over four years ago the classes were not set up as all eight week classes. Part of the motivation to move from eleven and twelve week classes to eight week classes was financial. The majority of our students are from out of state and pay room and board while completing classes at Rock Creek. This financial burden proved to be more of a hurdle for students than the classes. As a program we decided to adopt the eight week term to better serve our students. We found that the students appreciated this change and put in the extra hours each week to fulfill the class hours required in an eight week term.*

## An example of fall term

	Monday	Tuesday	Wednesday	Thursday	Friday
7:00					
8:00					
9:00	<b>Writing 115</b>		<b>Writing 115</b>		
10:00	8:00-10:50 AM <i>Room 2/107 CRN 43361</i>	<b>DST 110</b> 7:00-3:30 PM <i>Room 2/107 CRN 45491</i>	8:00-10:50 AM <i>Room 2/107 CRN 43361</i>	<b>DST 110</b> 7:00-2:30 PM <i>Room 2/107 CRN 45491</i>	<b>Weld 217</b> 7:00-2:30PM <i>Room 2/132 CRN 42686</i>
11:00					
12:00	<b>Math 60</b>	Lunch 12-12:30	<b>Math 60</b>	Lunch 12-12:30	
1:00	11:15-2:45PM <i>Room 2/107 CRN 42455</i>		11:15-2:45PM <i>Room 2/107 CRN 42455</i>		
2:00					
3:00					
4:00	3-5:30 PM <b>DST 110</b>			<b>DST 111</b>	
5:00	<i>CRN 45491</i>		<b>DST 111</b> 3-6:00 PM <i>CRN 45494</i>	3-5:00 PM <i>CRN 45494</i>	

6. ***For Career and Technical Education (CTE) Programs only*** : to ensure that the curriculum keeps pace with changing employer needs and continues to successfully prepare students to enter a career field.

- A. ***Evaluate the impact of the Advisory Committee on curriculum and instructional content methods, and/or outcomes.***

*Our advisory committee is made up representatives from each of the Caterpillar Dealerships in our Northwest Territory along with input from Caterpillar Inc. The territories covered by these dealers include Alaska, Washington, Montana, Idaho, and*

*Oregon. The advisory committee meets at least twice a year in person or through teleconference. In addition to these meetings the Dealer Service Technology faculty is in contact with the committee members on a day to day basis dealing with internship logistics and new product updates.*

*This constant contact with our industry keeps us up to date on new products and systems. Very often the school is ahead of the dealerships with new information that we receive from Caterpillar Inc. The dealer group is very good at letting us know if they think we need to make any changes or if we are teaching something that is no longer relevant to the industry. It is in their best interest to keep us informed so we can properly train new technicians.*

*While the students are on internship at the dealerships they are required to complete weekly logs and are evaluated biweekly by their assigned mentors. The faculty member overseeing the internship is grading the student based on these log sheets and evaluation forms. The students are required to note new processes and lessons learned in these weekly logs. We make sure to include these new processes and lessons learned in future classes on campus. Keeping up with industry is the only thing that will keep us relevant as a needed program.*

***B. Degree and Certificate Outcomes [From the 2010 Interim Accreditation report: the college must show “progress in demonstrating, through regular and systematic assessment, that student who complete their programs have achieved the intended learning outcomes of degrees and certificates.]***

***This section may refer to, include or summarize the results of annual assessments carried out over the last 5 years.***

***i. List your degree and certificate student learning outcomes, and identify the strategies that are in place to assess them***

*Dealer Service Technology Learning Outcomes*

- Learn the culture, nomenclature, structure and products associated with a Caterpillar dealership.*
- Develop skills to trouble-shoot, repair and service Caterpillar equipment systems.*
- Understand and apply the service and parts information used in a Caterpillar dealership.*
- Develop the academic and social skills to succeed in a Caterpillar dealership environment.*

- Attain the employability skills to become a reliable employee in a Caterpillar dealership.

- Obtain employment at a Caterpillar dealership.

Assessment of these key outcomes takes place in many ways but most successfully with the use of the E-train testing and internship performance evaluations.

- The E-train testing is a great tool that allows us as a program to see what the students have learned/retained (knowledge) over their two years in the program and whether or not they are accomplishing the core outcomes.

*(Please see attached Caterpillar E-train testing document for more detailed information)*

- The internship evaluations are our best means of assessing whether or not the students are gaining the ability to work successfully (applied Knowledge) in a shop environment. The internship evaluations are performed by an assigned mentor on a biweekly schedule during the students DST 150 classes. Each evaluation is discussed with the student going over areas where there is room for improvement and of course areas where the student is succeeding. All evaluations are performed with the understanding that the student should be aspiring to become a high level technician and that is the standard they are measured against .The evaluations are then copied and given back to the student to be evaluated by the PCC Faculty managing the internship.

*(Please See attached example of Dealer Evaluation Sheet)*

**ii. Summarize the results of the assessments of these outcomes.**

- E-train Testing showed that as a program we scored above Caterpillars Benchmarks and that we are on par with the top ThinkBIG Programs in the world. Although we are up to Caterpillars standards we noticed that our scores in electronics and air-conditioning were lower than other courses we teach.
- Internship evaluations are ongoing and continue to show us areas where we are excelling and areas where we are coming up short. As a whole we are meeting all of our core outcomes, but there is always room for

*improvement. We rely heavily on the input from our mentors and shop foremen to keep us in the loop on any issues or concerns they have with the program and our students. If a student is unable to successfully complete an internship or fails to address issues brought to their attention in their evaluations they are removed from the program.*

**iii. Identify and give examples of assessment-driven changes that have been made to improve students' attainment of degree and certificate outcomes.**

- *The lower E-train test scores mentioned have led to;*
  - *Additional training aids in electronics and air-conditioning classes*
  - *New text books added to the ThinkBIG library for students reference*
  - *Online training courses (DLMS Classes) for review and repetition*
  - *Additional Faculty training in subject areas*
- *Internship Evaluations as suggested by mentors*
  - *More emphasis on basic circuit testing*
  - *Additional repetitions of common service procedures (valve adjustments, engine timing)*
  - *More time spent on accurate service writing and email etiquette.*

**C. Review job placement data for students over the last five years, including salary information where available. Forecast future employment opportunities for students.**

*The DST program is honored to say that over ninety-five percent of our graduating students are working in Caterpillar Service Departments or Caterpillar related industries at the time this document is written. Their salaries range from fifteen to seventy dollars an hour depending on where they work and the amount of hours they work.*

*The future for a DST graduate is looking better and better as the economy improves and the dealerships are starting to see more work. Many mines and*

*oil exploration projects are up and coming. Caterpillar Inc. continues to grow with the purchase of Bucyrus int. for 8.6 billion dollars and the addition of Electromotive Diesel which was purchased last year. The opportunities for a well trained Caterpillar technician continue to grow worldwide. DST (ThinkBIG) degrees are offered worldwide and a DST graduate is recognized worldwide.*

**D. Analyze any barriers to degree or certificate completion that your students face, and consider the reason that students may leave before completion.**

*The few students that have not completed their degree are in the process of retaking Math 65. Math presents itself as a large hurdle for my students, often the students do not place into the minimum Math 60 class that is required for entrance into the program. This is an issue we are in the process of addressing with the math department to see if we can better prepare these students between their Math 60 and their Math 65 classes.*

*We have few students leave before completion, but the ones that do are usually asked to leave for inadequate work. This is why it is so important that the students know what they are getting into before their first term. We never want to surprise a student with the amount of work that is required after they have already been accepted. The student must see the benefit in all of the hard work in order to not be tempted to wash out.*

*One approach is to encourage the students that are interested in the program to complete the college math requirements before being accepted into the program. The students that have been able to accomplish this tend to have lower stress and can concentrate more on their core DST classes.*

**E. Describe and explain any additional changes (not already addressed above) that have been made to the program since the last program review.**

*As a program we are constantly changing and adapting to students needs and changes in technology. If we are not changing as we go we will be left behind by industry. I am sure five years from now we will have many changes to report.*

**7. Recommendations**

**A. Identify recommendations related to teaching and learning based on assessment of student learning outcomes (course, degree, certificate and/or College Core Outcomes)**

*We found that our students scored lower in air conditioning systems and electronics than in other subject areas. This has become a common trend for the students graduating so this has become an area of concern for us. We found after inquiring of former students that we needed more hands on labs in both areas. Checking with other ThinkBIG schools around the world we also found that this was a common occurrence. We are currently in the process of reworking our air conditioning and electronics classes with help from Caterpillar Inc. and other ThinkBIG schools.*

*As noted earlier in this document we do have concerns about space in our lab area for this coming fall term. I believe this will affect the layout of the upcoming engine fundamentals course because of the need for space for the engines as they are torn down to be rebuilt.*

**B. *Identify recommendations relevant to areas such as maintaining a current curriculum, professional development, access and success for students, obtaining needed resources, and being responsive to community needs. (For recommendations that require additional funding , please identify those that are of greatest importance to the SAC)***

*When it comes to access and success of students the greatest issue we have run into has been financial problems for the students. They spend a lot of their time solving problems that arise from financial aid paperwork and funding issues. The last two terms the majority of emails and phone calls received by faculty had to do with financial aid issues and not being able to get in contact with anyone. I believe this is a common problem and I know it is being addressed but I thought it was worth mentioning.*

*This Coming May all of the DST Faculty will be attending the Global ThinkBIG Conference in North Dakota. This is a semiannual meeting of all the ThinkBIG colleges in the world. We all get together and go over each DST class and discuss changes and improvements that need to be made in the curriculum. We also compare teaching ideas and best practices. This is one of the many ways we stay current with Caterpillar Inc. the largest manufacturer of heavy equipment in the world.*

## **Dealer Service Technology**

### **Caterpillar E-Train Testing**

A well trained and well coached Technician must possess critical thinking and problem solving skills. A technician when entering the workforce is expected to apply the knowledge they have learned when troubleshooting and interpreting customer complaints. Taking the information they have gathered and the skills of diagnostic troubleshooting they are required to come to a conclusion of what needs to be repaired or tested further. It is the programs (Dealer Service Technology) responsibility to be certain they are capable of performing these tasks in a timely and efficient manner.

#### **Action Plan:**

1. All incoming students are required to complete a pretest in DST 111
  - a. This test is a Caterpillar CO. approved online exam covering all core subjects in the Dealer Service Technology Program.
  - b. The test includes real life scenarios, requiring the student to use problem solving and critical thinking to diagnose and troubleshoot problems.
  - c. Each subject area is graded individually with the results sent to the Faculty Department Chair upon completion.
  
2. After completing all of the core classes (nine terms later) the students complete a post-test in DST 204.
  - a. This test is the exact same testing that took place as the students were incoming students.
  - b. The students test scores are then sent to the Faculty Department Chair to be analyzed and compared to the students incoming test scores.
  - c. At this point, working with the SAC Chair, ongoing changes to the curriculum are decided
  
3. With this type of testing, areas needing improvement definitely stand out due to the fact that all students are required to complete the testing.
  - a. Areas with lower test scores are addressed first with ideas of a curriculum change and or supplemental information added to the course.
  - b. Any area dropping in score from a previous year is looked at to address what circumstances may have led to a drop.
  - c. High scoring classes are also assessed to see if they can be improved upon.
  
4. Recommendations of the SAC committee are implemented.
  - a. Supplemental information is included in all DST classes
  - b. All students are set up with online Dealer Learning Management System Access so they can complete online training to supplement their classroom training.
  - c. New text books added in three DST classes

SAC Chair: Ishmael Rivas

[ish.rivas@pcc.edu](mailto:ish.rivas@pcc.edu)

971-722-7465

# CTE Assessment Plan

## AAS: Dealer Service Technology

Submit to [learningassessment@pcc.edu](mailto:learningassessment@pcc.edu)

1. Outcome	2. Maps to a Core Outcome?	3. Assessment Setting/Method	4. When will assessment take place?
<ul style="list-style-type: none"> <li>Communicate effectively with Faculty, employers, coworkers and customers, adapting to feedback as it pertains to terminology, processes and skills of Dealer Service Technology.</li> </ul>	<ul style="list-style-type: none"> <li>Communication</li> <li>Professional Competence</li> </ul>	<b>DST: 150 Technical Internship</b> Please see attached document.	Year 1 and 2
<ul style="list-style-type: none"> <li>Work safely in the Dealer Service Technology industry and apply a proper understanding of the use of tools, products and chemicals and how those items affect the local and global environment.</li> </ul>	<ul style="list-style-type: none"> <li>Community and Environmental Responsibility</li> <li>Professional Competence</li> </ul>	<b>DST: 150 Technical Internship</b> Please see attached document.	Year 1and 2
<ul style="list-style-type: none"> <li>Applying the skill sets learned, a student can interpret a customer’s complaint and come to a logical conclusion, guiding him further into a solution.</li> </ul>	<ul style="list-style-type: none"> <li>Critical Thinking and Problem Solving</li> <li>Professional Competence</li> </ul>	<b>DST: 150 Technical Internship</b> Please see attached document <b>Caterpillar E-train testing/DST 111,204</b> Please see attached document	Year 1and 2
<ul style="list-style-type: none"> <li>Use an understanding of variation in culture and human interactions to working within the team environment in the Dealer Service Technology industry.</li> </ul>	<ul style="list-style-type: none"> <li>Cultural Awareness</li> <li>Professional Competence</li> </ul>	<b>DST: 150 Technical Internship</b> Please see attached document.	Year 1and2
<ul style="list-style-type: none"> <li>apply the knowledge, skills and attitudes necessary to work within the ethical and professional parameters of the Dealer Service Technology profession, with limited supervision</li> </ul>	<ul style="list-style-type: none"> <li>Professional Competence</li> </ul>	<b>DST: 150 Technical Internship</b> Please see attached document <b>Caterpillar E-train testing/DST 111,204</b> Please see attached document	Year 1and 2
<ul style="list-style-type: none"> <li>Assess, examine and reflect on their own</li> </ul>	<ul style="list-style-type: none"> <li>Self-Reflection</li> <li>Professional</li> </ul>	<b>DST: 150 Technical Internship</b> Please see attached document.	Year 1and 2

professional competence and personal beliefs and how these impact and relate to the Dealer Service Technology shop environment.	Competence	Students are also required to reflect on their work experience while on internship with assigned Instructor.	
<ul style="list-style-type: none"> <li>Advance to a career in the Caterpillar Heavy Equipment Industry.</li> </ul>	<ul style="list-style-type: none"> <li>General Education Requirements for AAS Degree</li> </ul>	Assessed at Graduation	

5. For Programs that are beneficiaries of Perkins funding: Identify assessments that will comprise the TSA.

Technical Skills Assessment will be done at the same time and using the same Internship Performance Evaluation form and rubric as the learning assessment.

## **Dealer Service Technology**

### **Caterpillar E-Train Testing**

A well trained and well coached Technician must possess critical thinking and problem solving skills. A technician when entering the workforce is expected to apply the knowledge they have learned when troubleshooting and interpreting customer complaints. Taking the information they have gathered and the skills of diagnostic troubleshooting they are required to come to a conclusion of what needs to be repaired or tested further. It is the programs (Dealer Service Technology) responsibility to be certain they are capable of performing these tasks in a timely and efficient manner.

#### **Action Plan:**

1. All incoming students are required to complete a pretest in DST 111
  - a. This test is a Caterpillar CO. approved online exam covering all core subjects in the Dealer Service Technology Program.
  - b. The test includes real life scenarios, requiring the student to use problem solving and critical thinking to diagnose and troubleshoot problems.
  - c. Each subject area is graded individually with the results sent to the Faculty Department Chair upon completion.
  
2. After completing all of the core classes (nine terms later) the students complete a post-test in DST 204.
  - a. This test is the exact same testing that took place as the students were incoming students.
  - b. The students test scores are then sent to the Faculty Department Chair to be analyzed and compared to the students incoming test scores.
  - c. At this point, working with the SAC Chair, ongoing changes to the curriculum are decided
  
3. With this type of testing, areas needing improvement definitely stand out due to the fact that all students are required to complete the testing.
  - a. Areas with lower test scores are addressed first with ideas of a curriculum change and or supplemental information added to the course.
  - b. Any area dropping in score from a previous year is looked at to address what circumstances may have led to a drop.
  - c. High scoring classes are also assessed to see if they can be improved upon.
  
4. Recommendations of the SAC committee are implemented.
  - a. Supplemental information is included in all DST classes
  - b. All students are set up with online Dealer Learning Management System Access so they can complete online training to supplement their classroom training.
  - c. New text books added in three DST classes

SAC Chair: Ishmael Rivas

[ish.rivas@pcc.edu](mailto:ish.rivas@pcc.edu)

971-722-7465

# CATERPILLAR DEALER SERVICE TECHNICIAN INTERN PERFORMANCE EVALUATION

Intern: \_\_\_\_\_

Mentor: \_\_\_\_\_



Please check the appropriate box. Bi-weekly evaluations are performed each pay day

Bi-Weekly	<input type="checkbox"/>
Final	<input type="checkbox"/>

Please evaluate the Intern's performance in each of the following areas by checking the appropriate box:

	Exceeds Expectations	Meets Expectations	Needs Improvement	Not Observed
General personal appearance				
General hygiene				
Punctuality				
Follows instructions				
Enthusiasm				
Adaptability				
Initiative				
Dependability				
Follow-through				
Works well with others				
Accepts criticism				
Ambition				
Skills and knowledge acquisition				
Skills and knowledge application				
Quantity of work				
Quality of work				
Career potential				
Accuracy				
Neatness of work				
Safety Performance				

Comments:

\_\_\_\_\_

\_\_\_\_\_

The above ratings represent my evaluation of the Intern under my supervision:

Mentor signature: \_\_\_\_\_ Date: \_\_\_\_\_

The following signatures verify that the Intern Evaluation Form has been reviewed and seen by the Intern involved. The Intern's signature does not necessarily indicate that the Intern agrees with the opinions of the Mentor.

Intern Signature: \_\_\_\_\_ Date \_\_\_\_\_

Service Manager Signature: \_\_\_\_\_ Date \_\_\_\_\_