Automotive Student Service Educational Training Program

Student Information and Application Documents

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GROSSMONT-CUYAMACA
COMMUNITY COLLEGE DISTRICT

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Published by the Grossmont-Cuyamaca Community College District.
This publication was supported by CVC-OEI through a subaward agreement with the Foothill-De Anza Community College District.

Vision

Ford ASSET is recognized as the premier program in the global automotive industry for the training and placement of new manufacturer-specific service technicians.

Mission

Ford ASSET is the primary source of new technicians trained and equipped with the basic knowledge, skills and experience to become successful and productive career professionals at the Senior Master level, while earning an associate degree.

Figure 1: ASSET Students in training at Cuyamaca College.

WE ARE FORD

“We begin as pensioners. Some people live two-thirds of their life on the provision made for them by others. We graduate into cooperators, earn our own living, hold up our own end of the job, produce a little extra for the pensioners that are coming on behind us.

A few enter the third stage, where they do something more for the world than the world does for them. They put the world in their debt by making every man’s living better, or his hope larger, or his opportunity wider. Just to hold up one’s end of the load is a great and satisfactory thing; it makes one a man. However, it only squares the account. But to do for the world more than the world does for you — that is Success.”

Henry Ford

Henry Ford
Ford Motor Company Founder

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1. THE FORD AUTOMOTIVE STUDENT SERVICE EDUCATIONAL TRAINING (ASSET) PROGRAM

1.1. Overview

The Ford ASSET Program at Cuyamaca College is a two-year associate degree and certification program designed to create a clear career pathway for students and provide Ford and Lincoln dealerships with highly qualified and trained automotive service technicians. The cornerstone of the ASSET Program hinges on a unique and long-standing partnership with Ford to foster student success in the automotive technology industry using innovative practices to accelerate learning and facilitate student placement in a fast-changing and high-paying industry.

Once enrolled in the Ford ASSET Program, students are connected to an integrated and coordinated learning community designed for success and achievement. All students enrolled in the program work closely with a team of industry leaders and college faculty/staff to guide, mentor, teach, evaluate, and sponsor students from program inception to career readiness.

Students nationwide can participate in the Ford College distance education program by enrolling in Cuyamaca College, and simultaneously enrolling in a college automotive program nearest their home. Work experience and general education classes should be a part of their college education plan. The Canvas Learning Management System (LMS) is used to work with students, respective colleges, Ford/Lincoln dealership personnel, and counselors.

Figure 2: The Ford ASSET Program is a student-centered approach to learning, development, and mastery.

1.2. Goal

The Ford ASSET training enables the ASSET student to work independently in each content area as an entry-level technician by the end of the two-year program, under the direction of the service manager, shop foreman, and lead technicians.

1.3. Student Responsibilities

Each student is required publish and complete the work task competencies for each Ford course content area. The competencies will be documented in the student portfolio which will be published and shared with the Ford ASSET Instructors, Mentors, and Service Manager, and integrated with the Canvas Learning Management System (LMS). The portfolio will be used to document artifacts of the National Automotive Training Education Foundation (NATEF) tasks completed during the instructional training classes and during the work experience classes. The “B” “Test Out” class uses multiple measures to assess and ensure student knowledge skills and abilities to perform warranty services at a Ford dealership.

Additionally, tasks will be required and documented using the Canvas LMS. One work related competency may be used to document several of the NATEF Tasks. Student competencies, NATEF task completions, and Mentor evaluations of competencies are used in assessment “B” classes to measure student capabilities to work independently in a specialty area. Student performance-based projects from the dealership or Lab are assigned during the “B” “Test” classes as live demonstrations or recorded skills demonstrations and will also be used to document each competency. Supporting artifacts must be included to document competencies as part of assessment. Each “B” “Test” assessment course requires performance projects based on real diagnosis and repair strategies performed by the student at the dealership and evaluated through assessment “B” classes.

1.3.1. Assignments

Students are required to post records of their competencies during assignments for each class.

1.3.2. Attendance

Students are required to attend each lecture. The lectures average 90 minutes but can be 1-3 hours in length. The lectures begin at various times according to the college schedule.

1.3.3. Excused Absences

Three absences will lower a student’s grade by one letter grade. Four to six unexcused absences will cause the students to fail the course.

1.3.4. Electronic Storage

Original copies of the signed competencies record book files may be collected and saved in paper form or through Canvas. However, paper form files will not be accepted for grading in the student grade center. Students are required to electronically scan paper files for each assignment. Supplementary artifacts must be included.

1.3.5. Portfolio and Competencies Record Book

The competencies record book and portfolio must be updated through Canvas. Failure to present the Record Book when required during instructor audits, web conferencing, or by dealership personnel will result in the deduction of up to one letter grade per audit request. Refer to the course syllabus for details.

1.3.6. Laptop & Cameras

Students must have access to a laptop with a camera and microphone to be able to attend lectures and post assignments. Students may also attend lectures using a smart device like a smart phone. Students must show their faces and answer questions during lectures. Students who are not able to respond to questions or who do not participate during class will be marked absent.

1.3.7. Copyright Law

Students may not publish any Ford published materials, or student work that uses Ford published materials, tools, descriptions, or any related content. All videos and content must remain private. Students must sign a release of work form prior to acceptance of the Ford ASSET Program. Please refer to the course syllabus for details.

1.3.8. Ford Web-Based Training

All students must complete all required Ford Web-based training for each specialty area. Students who do not complete the required training will not gain certification or progress in the program, which will result in a loss of dealer sponsorship.

1.3.9. Multiple Measures Assessments

Students are required to take written final exams, live and recorded evaluations of their competencies, provide documentation of their NATEF tasks, and complete self-reflection surveys.

1.3.10. Work Release Form

Students must submit the research and work release forms giving permission to college administrators, and Ford management access to the student grade center, and other program related student artifacts.

1.3.11. Complete the Orientation Module in Canvas

Students need to complete a brief training module in Canvas and pass an examination to become a candidate. Students who no longer participate in the program will be removed from Canvas.

1.3.12. Education Planning

All Ford ASSET students are required to develop and maintain an education plan with the college, maintain the plan in their portfolio throughout the program, and share their plan with their service manager and instructors.

1.4. Dealership Responsibilities

1.4.1. Mentoring Technicians

Mentoring technicians will be selected by dealership management based on technical aptitude for each content area student learning objective. For example, if the student apprentice technician is studying powertrain, the lead technician should be certified in powertrain, and should be able to demonstrate knowledge in each required competency.

Figure 3: Mentoring technician efficiency can increase drastically when working with effective ASSET students.

Our work experience records indicate mentoring technician efficiency may drastically increase when an effective ASSET student is working with them. A fair compensation plan should be developed as an incentive for mentoring technicians. Some dealerships allow each mentoring technician to flag ASSET student hours, while some dealerships work out percentages. ASSET students often develop strong relationships with the experienced technicians and receive offers to continue to work under the direction of their lead technicians for a period of time after their college training program ends.

It is vital to the success of the program to that mentoring technicians have patience, a desire to share their knowledge, and documented success working well with others.

Mentoring technicians are required to enroll in the Ford ASSET Canvas LMS.

1.4.2. Record Book and Portfolio

The mentoring technician will ensure the record book is completed and artifacts related to documentation are copied for the student to keep. Each student work experience task should be recorded as independent or assisted.

1.4.3. Artifacts and Surveys

Artifacts will be used as supplemental documentation to support each competency. Artifacts can include: repair orders, wiring diagrams, workshop manual files, pictures, videos, recordings, student group projects, hotline files, technical service bulletins. Mentors are required to complete surveys in Canvas to provide data about student capabilities.

1.4.4. IDS & Special Tools Access

Dealerships must provide access to Integrated Diagnostic Software (IDS) and special tools required for each competency.

1.4.5. Independent and Assisted Tasks

Independent tasks are documented in the record book as being performed by the student independently, without assistance from the lead technician.

Assisted tasks are documented in the record book as assisted by the lead technician.

1.4.6. Active Lectures and Vehicle Assignments

Dealerships must allow the student to attend lectures in a service bay at the dealership. Dealerships should also allow students to attend lectures offsite if there is not a suitable area at the dealership. Students will be assigned to demonstrate repair processes during lectures. A service manager must provide a vehicle for assessments and training to be used at the dealership.

1.4.7. Complete the Mentor Orientation Module in Canvas

All mentoring technicians must complete a brief orientation module in Canvas and pass an examination.

1.5. Site Visits

The Ford ASSET Instructor or Designee will visit the Ford ASSET student face-to-face at least two times during the work experience class. The instructor will also have one additional contact visit with the ASSET student via web conference. The instructor needs access to the following resources during on-site visits:

1.5.1. Student Work Experience Record Book

The student work experience record book is a separate document from the competencies record book.

1.5.2. Mentoring Technician

The instructor or designee will interview the mentoring technician to find out where improvement is needed.

1.5.3. Dealership Personnel

The instructor or designee will interview the service manager, shop foreman, or other personnel to assess student performance and improve training. This may also be performed by conference call.

1.5.4. Work Experience Agreement

The dealership service manager must sign the work experience agreement forms during the beginning of the second eight weeks of the semester.

1.5.5. Student Evaluation Forms

The dealership service manager must sign and evaluate each student evaluation form at the end of each work experience semester. The evaluation of work experience is critical for student success. The forms may be sent by electronic file.

1.6. Grading and Certification

Each student will be evaluated by the instructor, service manager, mentoring technicians, and by student self-reflection during each work experience class.

1.6.1. Certification Completion Requirements

All students are required to complete 90% of the competencies prior to certification, pass written and hands-on examinations, post artifacts and documentation of the NATEF tasks, and complete all Ford Web-based training, and all other requirements.

1.6.2. Competencies

Students may take objective tests in a content area and finish completing competencies during the Ford ASSET instructional classes and during work experience.

1.6.3. NATEF Tasks

A list of NATEF tasks is assigned for each course based on the **ASE website**.

1.7. Student Resources

We are aware of the myriad challenges that students may face during participation in the program, and we are committed to supporting each student's learning and success. Students should familiarize themselves with college resources and programs designed to offer academic, personal, and financial support, including aid with food, housing, and other necessities. Students who are struggling should reach out to their instructors, service managers, mentors, and/or counselors to ask for help. The ASSET Program is committed to supporting the success and wellbeing of all its students.

1.7.1. Scholarships and Financial Aid

Cuyamaca College offers a full array of **financial aid and scholarship programs** available to full-time and part-time students. Students are encouraged to take the time to apply for scholarships and grants. Note that Ford awards generous scholarships to students every year and does not stipulate how the funds awarded are to be used**.**

1.7.2. Disabled Student Program and Services

Students with disabilities are encouraged to apply to the ASSET Program. The program offers students of all aptitudes and abilities meaningful ways to participate and learn. Students with disabilities should register with **Disabled Students Programs and Services (DSPS)** and should arrange for accommodations with their instructors, managers, and/or mentors.

1.7.3. Military Transition Programs

Cuyamaca College's **Veterans Center** offers comprehensive services for veterans leaving the service and transitioning to civilian life, including counseling, support with applying for benefits, and opportunities to form meaningful academic and personal support networks. Additionally, military bases have transition programs and events for eligible students. Contact your Field Service Engineer (FSE) for more information.

1.7.4. Cuyamaca Cares

Cuyamaca Cares is a wrap-around program that offers additional financial, food, and housing resources.

1.7.5. Class Registration

Students can register for classes through Self Service.
Click here for instructions in three languages.

1.7.6. Meet with a Counselor

Students can schedule a meeting with a counselor online. **Click here for instructions**.

1.8. Office Hours

Office hours are Monday through Friday from 9:00am to 5:00pm PST. Phone and email messages will be returned within 24 hours. Video calls with instructors are available by appointment via Zoom**.**

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2. GENERAL EDUCATION & GUIDED PATHWAYS

2.1. Overview

Students have the opportunity to earn an Associate of Science Degree in Automotive Technology.

The ASSET Program at Cuyamaca College utilizes accelerated classes divided into sections of a 16-week semester and six-week summer semester concurrently with periods of paid work experience (on the job training) at Ford and Lincoln dealerships. Students who want to participate in the Cuyamaca College distance education program must enroll in Cuyamaca College for test classes and select and enroll in a college automotive program nearest their sponsoring dealership. Students must enroll in all desired general education, work experience, and automotive courses for each semester according to education and career planning.

Figure 4: General education requirements for the ASSET Program.

2.1.1. Associates and/or Ford Certification in Maintenance and Light Repair (M.L.R.)

Ford ASSET students are required to develop an education plan that reflects their individual career goals. The college suggests math and English graduation requirements are completed in year one, and other general education requirements are completed in year two. The coordinator will audit student education plans to ensure they are current.

Students who do not intend to earn a degree are not encouraged to attend Ford ASSET classes but may elect the Ford Maintenance and Light Repair (M.L.R) certificate program. Counselors may suggest this option for the first year of student training prior to dealership sponsorship. M.L.R. may provide a student with the opportunity to attain the knowledge, skills, and ability concurrent with/or prior to employment at a Ford/Lincoln Dealership without

the general education requirements. We recognize some students may not be able to afford the financial and academic constraints of being a full-time student. The M.L.R. program also gives dealerships the opportunity to select students who have been trained prior to a committed sponsorship for the ASSET Program.

Ford and Lincoln dealers work with the college to select students to be admitted to the program. Admission to the program is very competitive; candidates should be prepared to be proactive and diligent about finding a sponsoring dealership.

The program is designed as a circular pathway where students can begin any class on the schedule, if seats are available within the class, based on student and dealer needs. Distance Education students are either enrolled concurrently in the Ford ASSET class at Cuyamaca College or enrolled in the college program approved nearest their sponsoring dealership.

Figure 5: Universal design brings college resources together for you.

2.2. Education Planning

All students must have an education plan. The education plan will be submitted to the Ford ASSET Program coordinator using the student portfolio link located in Canvas. The goal of the plan is to graduate from the program within a two-year time frame. The education plan is not a contract and can be changed based upon student needs. **General education and automotive classes can be taken at any community college and must be included in the education plan.** Automotive courses taken at another approved community college may be accepted by examination.

2.3. Enrollment and Prerequisite Course(s)

Students may enroll in Ford ASSET during any semester. Most programs have a student cohort start date beginning in the Fall semester. **However, the start date does not prevent a student from enrolling in the semester of their choice.** All Ford courses require that students are capable of performing electrical and electronics diagnosis and repair. We suggest electrical and electronics classes are taken prior to any other Ford classes or concurrent with a Ford class.

2.4. Cuyamaca College Career Technical Education Student Learning Outcomes

1. Apply problem-solving and critical thinking skills required to perform effectively in their field;
2. Communicate effectively to gather and convey information;
3. Effectively and professionally complete course work in both self-directed and cooperative-learning environments;
4. Function safely and professionally in a typical work-place environment; and
5. Identify, select, and apply technology as appropriate

2.5. Associates of Science Ford ASSET and MLR Program

The Ford MLR program may be an alternate option for those students who are unable to manage a full-time student load or are not interested in an associate degree.

2.6. ASSET Schedule

(Typical schedule; will vary depending on each student)

Suggested Student Schedule:
FACE-TO-FACE TRADITIONAL SCHEDULE

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
General Education 8 – 11AM Ford ASSET	Work Experience	General Education 8 – 11am Ford ASSET	Work Experience	Work Experience	Work Experience

Night classes are available. Check the Cuyamaca College schedule for more details.

Fall Year 1- Based on a 16-week semester. General education classes to be determined by the student.

Title and Description	Units	Meeting Time
Auto 099 Introduction to Automotive Technology	3	Monday
Auto 196 Electrical, Electronics, Climate Control or Distance Ed 196 A, B, C,D	5	Tuesday and Thursday
Auto 197 Work Experience	3	Tuesday – Saturday
Select a general education course for a graduation requirement according to your education plan: A, B, C or D. We suggest written communication (English).	TBD	Monday – Wednesday

Spring Year 1 - Based on 16-week semester. General education classes to be determined by the student.

Title and Description	Units	Meeting Time
Auto 191Brakes, Electronic Brakes, Suspension, NVH or Distance Ed 191 A, B, C, D	7	Monday – Wednesday
Auto 197 Work Experience	3	Tuesday – Thursday
Select a general education course for a graduation requirement according to your education plan: A, B, C or D. We suggest analytical thinking (Math)	TBD	Monday – Wednesday

Summer Year 1- Based on 16-week semester. General education classes to be determined by the student.

Title and Description	Units	Meeting Time
Auto 193 Engine Repair and Diesel Engine Performance or Distance Ed 193 A, B, C, D.	4.5	Monday – Thursday
Select a general education course for a graduation requirement according to your education plan: A, B, C or D. We suggest natural science.	TBD	Mornings or Evenings

Fall Year 2 – Based on 16-week semester. General education classes to be determined by the student.

Title and Description	Units	Meeting Time
Auto 192 Drive Train – Automatic Service, Repair, 4WD and Differentials or Distance Ed 192 A, B, C, D.	8	Monday and Wednesday
Auto 197 Work Experience	3	Tuesday, Thursday, Friday, Saturday
Select a general education course for a graduation requirement according to your education plan: A, B, C or D. We suggest humanities.	TBD	Morning Monday – Wednesday

Spring Year 2 - Based on 16-week semester. General education classes to be determined by the student.

Title and Description	Units	Meeting Time
Auto 195 Engine Performance, Advanced Engine Performance or Distance Ed 195 A, B, C, D, E.	7	Monday and Wednesday
Auto 197 Work Experience	3	Tuesday, Thursday, Friday, Saturday
Select a general education course for a graduation requirement according to your education plan: A, B, C or D. We suggest social and behavioral sciences.	TBD	Morning Monday – Wednesday

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3. DISTANCE EDUCATION

The Ford ASSET Distance Educational Program Option at Cuyamaca College features a universal design model where students are engaged in synchronous and asynchronous automotive courses, Ford Web-based training, remote work experience and assessment – all provided in a virtual/online setting.

Figure 6: Face-to-face students are in the classroom; distance education students use technology.

3.1. Synchronous Project Based Lectures

Students in distance education courses attend lectures synchronously with the traditional face-to-face students. Lectures typically start during the middle of the day and last approximately 90 minutes. Classes are also offered at night. Students are considered absent if they miss class. We have the opportunity to experience and solve real problems by sharing video and computer screens, the workshop manual, and real vehicle repair situations. This makes the virtual classroom a place to learn.

3.2. Asynchronous Lectures

All lectures are recorded, so if a student received absence permissions, they may listen to the recorded lecture and will be provided a quiz or discussion assignment to demonstrate learning and understanding.

3.3. Discussion Boards

Students have the opportunity to form relationships with other students in the program online and face-to-face. Moderated discussions occur daily and often the instructor will chime in with opinions and clarifications, as appropriate. Students are required to post and reply in the discussion board weekly by responding to a prompt and self-reflection about the week's lectures and laboratory assignments.

3.4. Laboratory Assignments – Student Competencies

Ford has designed specific competencies that all students must be able to demonstrate. Students submit evidence of their learning through their assignments. Additionally, competency assignments are demonstrated in the college Ford laboratory. Distance education students will participate by simulation, observation of the discussions during lectures, and by live or recorded demonstration of their work from a dealership setting. They must also demonstrate their knowledge by performing specific competencies at their dealership during the class. This information is recorded in their portfolio, competencies record book, and Canvas LMS.

3.5. Suggested Distance Education Schedule

Typically, lectures may start at noon Mondays and Wednesdays and last an average of 90 minutes, but may be from 1-3 hours. Evening classes are also offered. A student can take classes at their nearest dealership and "Test Out" using Ford standardized tests at a Ford Training center or Ford College.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
General Education 8 – 11am Ford ASSET Noon – 1:30pm	Work Experience	General Education 8 – 11am Ford ASSET Noon – 1:30pm	Work Experience	Work Experience	Work Experience

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4. COMMUNITY OF PRACTICE

A community of practice is a group of people who share responsibility and passion about what they do. Today's technology gives a community the ability to communicate synchronously across time zones. We can also initiate announcements, discussion boards, and web conferencing by using a shared digital space (Canvas LMS). Since Advisory Board Meetings are required, why not have a continuous discussion "Advisory" about needed improvements? Canvas helps us build relationships by working together in various large and small work groups.

Education standards require an interactive and personal learning environment; we use Canvas resources to harness the technological tools available to us to communicate with our team members in a variety of ways**.** Students have access to college and industry team resources by including all stakeholders in one learning management system. This makes reports, communication, and grading more accessible.

4.1. Learning Management System

Communication and resources are more effective when we share the same Learning Management System (LMS), and most California community colleges use Canvas. Once accepted into the Ford ASSET Program, each member will be enrolled in the Canvas LMS to gain access to open and closed discussions, and to participate in program orientation and training designed specifically for your role in our learning community.

All participants are required to take a brief training course in Canvas that will orient them to the ASSET Program and community of practice. The orientation course will train students and stakeholders how to be successful. The LMS management course will be used throughout the program and will also allow each person to contribute to the program as a member of the Ford ASSET community.

The Ford ASSET Canvas LMS will provide a place where industry, educators, and students will be able to:

- Establish various organized work groups to support student progress using constructivist learning theory and best practices in instruction.
- Increase communication among team members by using collaboration technology (i.e., announcements, discussion boards, surveys, Zoom) to ensure meaningful and regular effective contact between and among students, instructors, and industry leaders.
- Share resources, information, and files in a secure and cooperative setting to support training, development, and recruitment of student trainees at Ford dealerships.
- Create reports to use as resources to monitor student progress over the five years of tenure required to become a Ford Master Technician.
- Increase the number of colleges and high schools participating in Ford training and increase the technologies and resources available to them through the relationship with Ford.

Resume Student Portfolio and Canvas Profile

All students are required to create a digital resume portfolio of work demonstrating their competencies. The portfolio will be used to store artifacts of accomplishments and capabilities. Digital media such as images, and short movie demonstrations are required class assignments that may be used as assessments.

Feedback in the grade center

How do I view grades and instructor comments?

How do I view annotation feedback in an assignment?

4.2. Team Roles and Responsibilities

Each participant plays a role in a learning management system. It is imperative to ask questions about our roles. What defines a successful training program? How do we solve training gaps from lack of knowledge, skills, abilities, management environment, and engineering technology? How do we incentivize people? What defines student success? We can leverage our roles by transferring our collective knowledge to a student using technology similar to computer network topography.

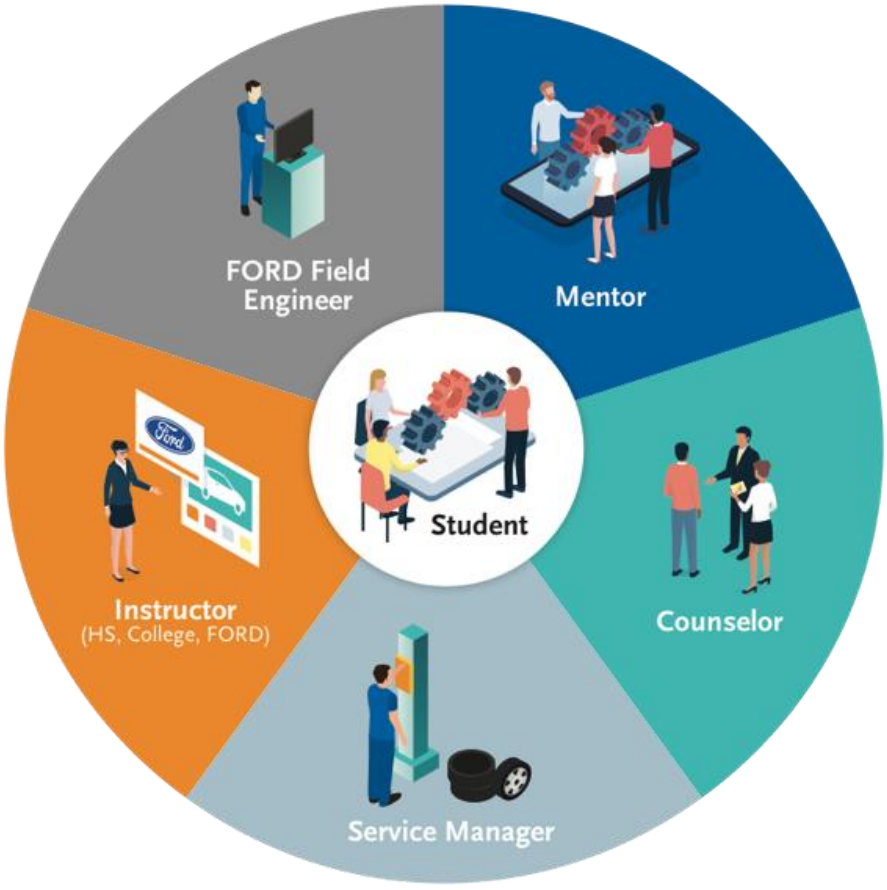

Figure 7: Student + Mentor + Counselor + Service Manager + Instructor + Ford FSE + Technology = Instruction Team

4.2.1. Ford ASSET Students

Acceptance into the Ford ASSET Program is an accomplishment. It means that instructors and Ford representatives have approved the student application, reviewed supplemental materials, and agreed to sponsor participation in the program. Once enrolled, students are surrounded with a network of support, including an assigned college counselor, program mentor, instructors, and Ford field service engineers and technicians. Throughout the program, each team member provides the student with individual and coordinated support toward course completion, technical certification, and career placement at a Ford dealership. Ford ASSET students enrolled in the program will be able to:

- Complete the Orientation and Student Training Module in the Ford ASSET Home Course
- Review and select a Ford ASSET student learning pathway
- Meet with a counselor to develop an education plan
- Read and review program requirements and competencies
- Complete and submit application and required prerequisites documents
- Work closely with team members to learn, develop, and master competencies
- Establish a portfolio (in Canvas) to showcase learning and skill development
- Create a Canvas profile used for introduction to the Ford ASSET team
- Submit success tracking surveys throughout the five-year master technician program.
- Contribute to discussion boards for advisory meetings 100% of the time.

4.2.2. Ford ASSET Counselors

Counselors are a valuable resource partner to the Ford ASSET Program and work closely with students to provide guidance and support navigating college and course application processes and requirements. Assigned counselors are trained to provide students with personalized attention and support to identify career pathways, develop an education plan, and make appropriate course selections. Counselors are available to assist students with access to resources and support throughout the program and regularly communicate with instructors to ensure education goals are met. Ford ASSET Counselors enrolled in the program will be able to:

- Describe how the program works by completing a learning module exam with 100% accuracy.
- Demonstrate how the program works by completing a work experience module with forms and by submitting a practice form.
- Create and ensure that students have an education plan.
- Create a Canvas profile.

- Demonstrate program knowledge by evaluations of posts in discussion work groups with Ford ASSET instructor, FSE, service manager, mentor, and students - closed discussion.
- Place students at a Ford dealership with a mentor and service manager agreement form signed and dealership, student goals established.
- Demonstrate knowledge by discussions in instructor private work groups.
- Perform grade student assessments using Canvas graded surveys.
- Organize and lead Ford ASSET advisory meetings every semester by Zoom.
- Submit a business plan and other documents requested by Ford Motor Company.

4.2.3. Ford ASSET Instructors

Cuyamaca College instructors are highly skilled in course curriculum, technical ability, and competency-based learning and evaluation. Auto faculty teach courses via synchronous and asynchronous settings and lead face-to-face and virtual lab demonstrations to guide students as they practice and master skills and abilities across courses and work experience. In addition to teaching automotive coursework, faculty work closely with students and Ford representatives to provide individualized guidance and support, bridge connections between Ford partners and students, and link students to information and resources.

- Complete the Orientation and Counselor Module in the Ford ASSET Home Course
- Describe how the program works by completing a learning module exam with 100% accuracy.
- Demonstrate how the program works by completing a work experience module with forms and by submitting a practice form.
- Create and ensure that students have an education plan.
- Create a Canvas profile.
- Demonstrate program knowledge by evaluations of posts in discussion work groups with Ford ASSET instructor, FSE, service manager, mentor, and student(s) - closed discussion.
- Place students at a Ford dealership with a mentor and service manager agreement form signed, and with student goals established.
- Demonstrate knowledge by discussions in instructor private work groups.
- Perform grade student assessments using Canvas graded surveys.
- Organize and lead Ford ASSET advisory meetings every semester by Zoom.
- Submit a business plan and other documents requested by Ford Motor Company.

Figure 8: Instructors work closely with students and Ford representatives to provide individualized guidance and support.

4.2.4. Ford ASSET Mentors

Mentors have been through the Ford ASSET training and are service technicians highly skilled in industry and service standards. Mentor technicians are trained to work closely with students to encourage and foster growth and development over time. As trusted advisors, mentors carefully monitor progress, assess student competencies, and provide continuous feedback to promote learning and mastery. Ford ASSET mentors enrolled in the program will be able to:

- Complete an accurate student evaluation survey.
- Describe how the ASSET Distance Education program works by completing a learning module test with 90-100% accuracy.
- Encourage student assessment and student progress by evaluations of written responses to a student using a survey.
- Participate in a discussion board for advisory meetings, teamwork group, and mentor group.
- Collaborate with other mentors, FSE, and instructors about training gaps through meetings and surveys.
- Create a profile in Canvas.
- Ensure student record keeping by measuring how often and when students submit all required electronic progress evaluations.

4.2.5. Ford ASSET Service Managers

Service managers have been through the Ford ASSET training and are service managers at a Ford/Lincoln dealership. Service managers are trained to work closely with students and mentors to encourage and foster growth and development over time. As trusted advisors, service managers ensure the student is placed and rotated through the various service specialties. The Ford ASSET service manager enrolled in the program will be able to:

- Describe how the program works by completing an examination with at least 90% accuracy.
- Assess student progress by completing graded surveys during a cooperative work experience class.
- Create and check student progress reports using a learning management system grade center.
- Demonstrate program knowledge by signing the application, sponsor agreement form, assigning mentors to students, and assigning training vehicles that can be used for tests.
- Participate in discussions for advisory meetings.
- Collaborate with other service managers in a discussion board.
- Participate in closed team discussion groups.
- Create a Canvas profile.
- Hire and train students to program completion and attend student graduation or certification ceremonies.

4.2.6. Ford ASSET Field Service Engineer

Field Service Engineers (FSEs) have been through the Ford ASSET training and Ford representatives of the ASSET Program. FSEs are trained to work closely with instructors, service managers, and mentors to encourage and foster growth and development over time. The Ford ASSET FSEs managing the program will be able to:

- Describe how the program works by completing a training module test with 100% accuracy.
- Create a profile in Canvas.
- Participate in discussion boards with ASSET instructor(s), instructor(s), students, service managers, and mentors.
- Attend and help organize advisory meetings and topics.
- Create and check student progress reports using the Canvas grade center.
- Recruit and place new students at dealerships, increasing the number of new STARS IDs as main measurement with program completion.
- Send announcements to various groups within their roles.

- Monitor student assessments and submit the student waiver form when a student recruited does not need to be trained in one subject area.
- Assist managing and increasing STAR I.D. numbers.
- Manage and assist dealership ASSET Programs, especially when a student is not being trained according to the policy and procedures manual.
- Recruit high school and colleges to participate in the Ford ASSET, ACE, AND MLR programs.

4.3. Communication

Here are some of the ways we will communicate throughout the semester and during the next two years:

4.3.1. Introductions and Discussion

Discussions are a way of organizing a lot of information by subjects. Best practice for diagnosing problems requires research of known fixes through discussions by technicians. Previous known fixes are also formalized into “Recalls” or special service messages (SSM) as part of the diagnosis and repair process. Discussions increase communications capabilities of the instructional teams, which increases student training efficiencies. Discussion Boards can also be used to decrease the amount of group meetings by problem solving without meeting in person and increase group communication just in time and across time zones.

Figure 9: Module Discussions and Group Discussions.

4.3.2. Discussion Boards

Moderated discussions occur daily and often the instructor will chime in with opinions and clarifications, as appropriate. Discussion boards encourage collaboration to solve general questions about a particular subject of a class, or about solutions for specific student questions or problems. Please feel free to answer someone's question when you can.

Discussion board list: students will only have access to "students," "advisory," "team," and other smaller discussions during classes.

- **Team Workgroup**
  Manager, Mentor, Ford Instructor, Student, Counselor, College Instructor
- Students Discussion Board
- Advisory
- Mentor
- Teacher
- Service Manager
- Ford Administrator

4.3.3. Announcements

Specific roles are able to make announcements. Some announcements relate to Ford ASSET managers specifically. Not all announcements are made to everyone. Some will feature useful resources that will help a specific team role, or as part of specific expertise in the Ford ASSET Program. If we need to make any changes to our semester schedule, this will be posted in the announcements area.

4.3.4. Canvas Mail

Canvas mail will be used to contact specific people. Team members can access this feature by clicking "Inbox" in the left-hand global navigation bar. It is best is most of our communication occur through Canvas.

Please use professional language when communicating with team members. Professional emails include greetings, necessary and contextual information for the reader, clear questions and/or requests, and closings. In this setting, emails are not the same as texts, so be sure to avoid slang and edit your writing for errors. Here is an example of an appropriate email:

Hi David,

I have the following question about our upcoming "Test Out" for brakes.
Will the test be allowed to be taken twice?

Thanks,

Joe Student
ABC Community College

4.4. Privacy

The team members will provide feedback to each other which might be sensitive. Private and/or sensitive information should be conveyed through email rather than discussion posts. Many discussions are moderated and password protected. Not all roles have access to all discussions.

Reference FERPA law and right to privacy

4.4.1. Exceptions to Consent 99.31 of FERPA

Although traditionally only registered school officials would have access to student records, and post-secondary instructors would create student grade records. The Ford ASSET Program is a cooperative work experience program and lists the following dealership roles as exceptions to official school officers, who under the direction of school officials and with the consent of a student over the age of 18, will have access to student records, create records in official surveys, and have the ability to create student reports for the purpose of increasing the level of education of students in the program.

Exceptions to school officials:

- **Ford service manager** signs cooperative work experience agreement forms and semester grade evaluations, surveys and assigns student work areas, and mentors students.
- **Mentor** - dealership lead technician(s) who has been selected by the service manager and officially communicates with the student, instructor(s), Ford representatives, and creates student performance evaluations in the student grade center under the direction of the instructor.
- **A college instructor** from another college who is not the instructor of record at GCCCD may communicate with a student and create records in the evaluation courses used for student certification and grading.
- **Ford manager** may create records in the grade center or have access to records in the student grade center.
- **Research analyst** who may or may not be affiliated with the college of record will have access to student data.
- **Students** - who are not part of the same class or same class section may be able to view another student's course work or assignments.

4.5. Ford Web Based Training Modules

Cuyamaca College uses Ford Web-based training as the basis of instruction of Ford systems and foundational knowledge. All students are required to share work projects and experiences during class using discussion boards, and during live lectures to teach real-world repair techniques during class. Each student is expected to contribute their ideas, questions, failures, and successes throughout the course. Students will share actual customer concerns and the techniques supervised by their mentor to "*fix it right the first time.*"

We use web conferencing with multiple cameras, Ford service information, and real-world circumstances to learn how to repair Ford vehicles.

Therefore, students are required to:

- Be enrolled in work experience if taking this course.
- Maintain records of competencies using digital technologies for this class which may only be accomplished at a sponsoring dealership.
- Establish a portfolio of work, establishing a digital resume.
- Be responsible for actions that represent the sponsoring dealership, the college, and Ford.
- Realize that all training is supplemented and enhanced with Ford Web-Based Training.
- Be certified in electrical and electronics before certification in any other specialty.

Each course has assigned web-based training modules. Electrical and electronics modules are prerequisites for all certifications. The list of the web-based training modules can be found on the New Ford Tech – STARS website or the Ford ACE website.

4.6. Learning Activities to Accomplish the Objectives

- Complete the orientation.
- Create a profile in Canvas.
- Review and complete the orientation module.
- Complete the training for the assigned role.
- Post in the discussion board to "introduce yourself."
- Review the Ford training application assignment exam.

4.7. Summary

- A final examination is required for each participant.
- Successfully completing the assigned training module and examination will allow a participant to become a member of the team.
- Team members will gain access to private discussion board groups in Canvas.
- Final summary reflection about this training will help the program make improvements and provide a better learning experience.

4.8. Student Selections and Application

Management should select students who have some academic experience. High school transcripts, resume, driver's license record, college transcripts, and family support will be considerations. Students who have good academic performance in the past are more likely to be successful in the future. Military veterans with satisfactory release are strong candidates. Veterans are supported by the G.I. Bill and have completed a service to the United States. Our student selection investment is the key to our success.

Figure 10: Students with good past academic performance are more likely to be successful in the future.

4.9. Best Practices for Recruiting

Become an involved sponsor of the local high school and college automotive programs. Please discuss sponsorship of a school with the Field Service Engineer. Ford will support the school with Web-based training curriculum and training supplies.

Attend school advisory meetings. Meet with the local school automotive instructor and arrange job-shadowing opportunities. Insurance may be covered by NATEF and will be covered by the school conditionally.

Become a sponsor of a local community college automotive program. Attend their advisory meetings. Offer to be a presenter during class lectures. Attend laboratory classes observing and helping students work. Service managers are successful by the quality of recruiting possibilities near their location. The college does not need to have a Ford ASSET Program. Ask to speak to the department coordinator, department chair, or dean of Career Technical Education.

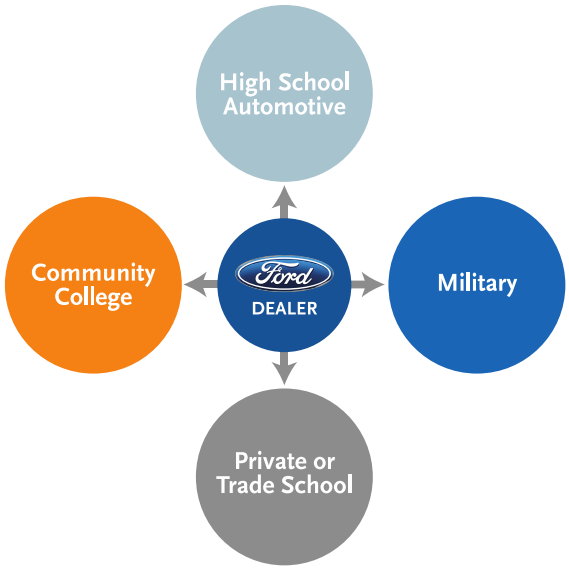

Figure 11: Recruitments can be found via several sources.

Arrange for credit work experience opportunities with the local community college. The college will pay workers compensation insurance for unpaid internships. Paid and unpaid work experience classes need to have clear objectives. Most training programs fail when there is not a vision for the future. Students need to know where they are going to be in the short term and long term.

College students who have successfully completed more than 10 credit hours of automotive instruction are most likely majoring in automotive technology with the intention of graduating. It is more effective to recruit students from college automotive programs.

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5. COURSES AND TRAINING

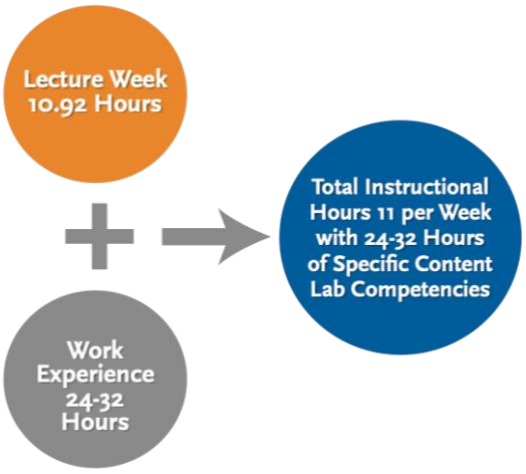

Figure 12: Laboratory and Lecture time.

All Ford ASSET courses are offered every semester. The courses are arranged by specialty into five groups. For example, brakes, advanced brakes, suspension and steering, and NVH are all given the same group number, and should all be taken during the same semester. A student placed in the work experience area of study coinciding with the specialties will be able to graduate in two years or sooner.

5.1. Lecture, Assessments, Homework

Refer to the Course Descriptions for details about each Ford ASSET Course.

Each class is described by lecture and laboratory hours for student contact hours based on a 16 – 18-week semester. A one-unit class will meet between 16 – 18 hours for one unit each week. If the one-unit class is offered during 8 weeks of a semester then the class will meet 16 to 18 hours condensed into 8 weeks. In this scenario, a student would be required to attend class for 2 hours per week. **For each hour of class lecture students are expected to perform 3 hours of homework.** Ford Web-based training modules are considered homework.

For Example, Auto 191A Brake System Diagnosis and Repair is listed in the College Catalog as 1.5 lecture credit hours and 0.5 laboratory hours. If this class was offered during the first 8 weeks a student would spend 1.5 x 16 = 24 of lecture attending class 24/8 = 3 hours per week and homework 3 X 3 = 9 hours per week.

Lecture hours are calculated 1:1. Lab hours are calculated 1:3. The test out for the 191 group is weighted based on the credit units for each class in the group. ½ of One credit unit of lab over a 16 week semester provides 1.5 X 16 = 24 hours of laboratory test time for all of the courses in that group.

Work experience is 3 units a semester and must be taken to complement the instruction and competencies. One unit of paid work experience requires 75 hours of work. During a 16 week semester a student should work 225 hours.

5.2. Ford ASSET Courses

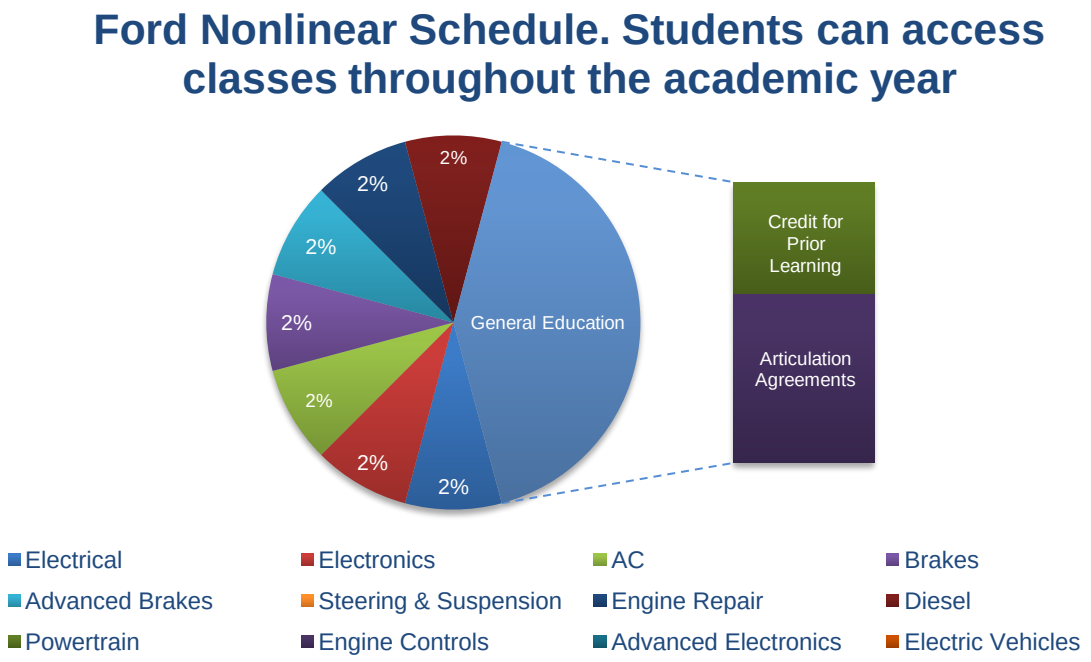

Figure 13: Schedule is nonlinear. Students can access classes throughout the schedule.

AUTO 191A – Brake System Diagnosis and Repair
Times: Wednesday 6:00pm – 8:00pm (08/17 –10/10)

This course is designed to provide students with skills and knowledge to perform diagnosis and service on base brake systems. Topics include drum and disc brake system inspections and methods of diagnosing and repairing various mechanical and hydraulic brake systems. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 38S07T1.

AUTO 191B – Brakes, Advanced Brakes, Steering and Suspension, and NVH Test Out
Times: Monday 12:00pm – 2:00pm and/or appointment (08/17 – 12/14)

This course includes hands-on summative and criterion tests for students to prove knowledge skills and abilities to perform diagnosis and repair of base brake systems, advanced brake systems, steering and suspension systems, and noise, vibration and harshness (NVH) concerns using vehicles in the department laboratory, or by using distance education technologies. Students may test out of one or more vehicle systems.

AUTO 191C – Advanced Brake System Diagnosis and Service
Times: Wednesday 6:00pm – 9:00pm (10/12 – 12/14)

This course is designed to provide students with skills and knowledge to perform diagnosis and service procedures for advanced brake systems. Topics include electronic braking system inspection, methods of diagnosing and repairing various electro-mechanical and hydraulic brake systems, and Antilock-Braking System repairs. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 38S08T1.

AUTO 191D – Steering and Suspension Diagnosis
Times: Thursday 6:00pm – 8:00pm (08/17 – 10/10)

This course is designed to provide students with skills and knowledge to perform diagnosis and service procedures for steering and suspension systems. Topics include power steering purging and filling procedures, ball joint inspection, using a power steering analyzer, diagnosing alignment related concerns and diagnosing variable assist power steering and air suspension systems. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 33S15T0.

AUTO 191E – Noise, Vibration and Harshness Diagnosis
Times: Thursday 6:00pm – 7:00pm (10/12 – 12/14)

This course covers NVH concerns, system identification techniques and practice diagnosing noise, vibration and harshness concern. The course also includes system diagnosis with Chassis Ears and Vibration Analyzers. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 30S06T0.

AUTO 192A – Automatic Transmission Service
Times: Monday and Wednesday 3:00pm – 5:00pm (08/17 – 10/10)

This course contains information about the operation and service of planetary style automatic transmissions. Course topics include disassembly, inspection, assembly, critical measurements and adjustments, and main control operation and service. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 37S13T2.

AUTO 192B – Automatic Transmission Service and Diagnosis, Differential and 4WD Test Out
Times: Tuesday 12:00pm – 2:00pm and/or appointment (08/17 – 12/14)

This course includes hands-on summative and criterion tests for students to prove knowledge skills and abilities to perform diagnosis and repair of active transmission systems and differential and 4WD systems on vehicles in the department laboratory, or by using distance education technologies. Students may test out of one or more vehicle systems.

AUTO 192C – Automatic Transmission Diagnosis
Times: Monday and Wednesday 3:00pm – 5:00pm (10/12 – 12/14)

This course provides training about diagnosing automatic transmission concerns. Topics include normal operation, electrical fault diagnosis, diagnosing shift concerns, diagnosing engagement concerns, and the proper diagnostic process. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 37S15T3.

AUTO 192D – Differential and 4WD Systems Diagnosis and Repair
Times: Tuesday 6:00pm – 8:00pm (10/12 – 12/14)

This course provides students with the skills and knowledge to properly set up ring and pinions, disassemble and assemble transfer cases, rebuild locking differentials, and diagnose several 4WD concerns. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 36S17T1.

AUTO 193A – Engine Diagnosis and Repair
Times: Tuesday and Thursday 6:00pm – 8:00pm (08/17 – 10/10)

The course teaches proper disassembly, assembly, repair, and diagnostic technique for engine. Topics include proper timing procedure and how to identify and measure critical engine clearances. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 32S09T1.

AUTO 193B – Engine Repair and Diesel Performance Test Out
Times: Wednesday 12:00pm – 2:00pm and/or appointment (08/17 – 12/14)

This course includes hands-on summative and criterion tests for students to prove knowledge skills and abilities to perform diagnosis and repair of base engine and diesel performance systems on vehicles in the department laboratory, or by using distance education technologies. Students may test out of one or more vehicle systems.

AUTO 193C – Diesel Engine Performance and Diagnosis
Times: Tuesday and Thursday 6:00pm – 8:00pm (10/12 – 12/14)

This course will cover diesel engine performance cover diesel engine performance concerns and diagnosis, which will include the use of service publications, diagnostic test procedures as well as special tools and equipment. The information and exercises, presented in the course, are focused on the 6.7L and 3.0L Power Stroke diesel engines and key subsystems found on Ford diesel powered vehicles. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 51S15T1.

AUTO 195A – Engine Performance Theory and Operation
Times: Tuesday 2:00pm – 5:00pm (08/17 – 10/10)

This course will provide the knowledge and skills needed to understand fundamental engine performance theory and operation. The course includes the study of basic and electronic ignition systems, early and modern fuel systems, and related systems. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Couse code 31S31T0.

AUTO 195B – Engine Performance Theory, Diagnosis and Advanced Diagnosis Test Out
Times: Thursday 12:00pm – 2:00pm and/or appointment (08/17 – 12/14)

This course includes hands-on summative and criterion tests for students to demonstrate knowledge, skills, and abilities to perform diagnosis and repair of engine. This course includes performance theory and operation, engine performance diagnosing and testing, and advanced engine performance systems on vehicles in the department laboratory, or by using distance education technologies. Students may test out of one or more vehicle systems.

AUTO 195C – Engine Performance Diagnosing and Testing
Times: Thursday 2:00pm – 5:00pm (08/17 – 10/10)

This course will provide the knowledge and skills needed to understand engine performance diagnosing and testing. This course includes and introduction to the Symptom/System/Component/Cause (SSCC) process, pinpoint test diagnosis and specific scan tool operation. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 31S32T0.

AUTO 195D – Advanced Engine Performance
Times: Thursday 2:00pm – 5:00pm (10/12 – 12/14)

This course will provide the knowledge and skills needed to understand and diagnose advanced engine performance topics. The course includes difficult to diagnose engine performance drivability concerns and advanced oscilloscope usage. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 31S33T0.

AUTO 196A – Electrical Diagnosis and Repair
Times: Monday and Wednesday 6:00pm – 8:00pm (08/17 – 10/10)

This course provides knowledge and skills about vehicle electrical systems. The course will cover electrical systems theory, diagnosis, and repair procedures using state of the art equipment. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 34S14T1.

AUTO 196B – Electrical, Electronics and Climate Control Test Out
Times: Friday 12:00pm – 2:00pm and/or appointment (08/17 – 12/14)

This course includes hands-on summative and criterion tests for students to prove knowledge skills and abilities to perform diagnosis and repair of electrical, electronics, and climate control systems on vehicles in the department laboratory; or by using distance education technologies. Students may test out of one or more vehicle systems.

AUTO 196C – Electronics Diagnosis and Repair
Times: Monday and Wednesday 6:00pm – 8:00pm (10/12 – 12/14)

This course provides knowledge and skills about vehicle electronic systems. This course will cover electronic systems theory, and diagnosis and repair procedures using state of the art equipment. The course applies basic electrical test applications incorporating electronic control units and computer networks. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 34S19T2.

AUTO 196D – Climate Control System Diagnosis
Times: Monday 8:00pm – 10:00pm (10/12 – 12/14) s

This course provides knowledge and skills to understand and diagnose climate control related systems. Topics include refrigeration, heating, air management and control subsystem concern diagnosis, service and repair. The course applies heating and air conditioning tests applications incorporating electronic control units and computer networks. Lectures will be recorded live on specified date(s) and uploaded to Canvas. Course code 35S05T1.

AUTO 197 – Work Experience
Times: 08/17 – 12/14

This is a work experience-training course. Students are responsible to attain sponsoring dealership employment before enrollment.

5.3. All Ford Courses Offered Every Semester

Course Number	Course Name	Units	Ford STST Group	Meeting Day(s)	Meeting Times
Full 16-Week Session Courses					
Auto 191B	Brakes, Advanced Brakes, Steering and Suspension, and NVH Test Out	0.5	33,38	M	12:00p – 1:00p
Auto 192B	Automatic Transmission Service and Diagnosis, Diff. and 4WD Test Out	0.5	36, 37	Tu	12:00p – 1:00p
Auto 193B	Engine Repair and Diesel Performance Test Out	0.5	52	W	12:00p – 1:00p
Auto 195B	Engine Performance Operation and Diagnosis, and Advanced Test Out	0.5	31	Th	12:00p – 1:00p
Auto 196B	Electrical, Electronics and Climate Control Test Out	0.5	34,35,39	F	12:00p – 1:00p
Auto 197	Work Experience	1-3	*	*	*
First 8-Week Session Courses					
Auto 191A	Brake System Diagnosis and Repair	1	38	W	6:00p – 8:00p
Auto 191D	Steering and Suspension Diagnosis	1	33	Th	6:00p – 8:00p
Auto 192A	Automatic Transmission Service	2	37	M/W	3:00p – 5:00p
Auto 193A	Engine Diagnosis and Repair	2	32	Tu/Th	6:00p – 8:00p
Auto 195A	Engine Performance Theory and Operation	1.5	31	Tu	2:00p – 5:00p
Auto 195C	Engine Performance Diagnosing and Testing	1.5	31	Th	2:00p – 5:00p
Auto 196A	Electrical Diagnosis and Repair	1.5	34	M/W	6:00p – 8:00p
Second 8-Week Session Courses					
Auto 191C	Advanced Brake System Diagnosis and Repair	1.5	38	W	6:00p – 9:00p
Auto 191E	Noise, Vibration and Harshness Diagnosis	0.5	*	Th	6:00p – 7:00p
Auto 192C	Automatic Transmission Diagnosis	2	37	M/W	3:00p – 5:00p
Auto 192D	Differential and 4WD Systems Diagnosis and Repair	1	36	Tu	6:00p – 8:00p
Auto 193C	Diesel Engine Performance and Diagnosis	2	51	Tu/Th	6:00p – 8:00p
Auto 195D	Advanced Engine Performance	1.5	31	Th	2:00p – 5:00p
Auto 196C	Electronics Diagnosis and Repair	2	39	M/W	6:00p – 8:00p
Auto 196D	Climate Control System Diagnosis	1	35	M	8:00p – 10:00p

Times will vary each semester.

Each student should be co-enrolled in work experience and in the corresponding 'B' course to become certified.

Cost per 1 unit = $46 .5 unit = $23 2 units = $92

Example: Basic Brakes = $46 Advanced Brakes = $69 Steering/Suspension = $46 NVH = $23 and Test Out = $23 Work Experience = $138 Total $345 plus parking and student fees.

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6. REMOTE ASSESSMENTS

Multiple measures are used to assess the knowledge skills and abilities of each student. Ford distance education is designed to be a more rigorous training option using a criterion assessment requirement of 90-100% accuracy. This will ensure graduates have competency and the ability to “fix it right the first time”. Distance education technologies are used to create the following data in the LMS:

- Third party evaluation surveys are used to validate competency, NATEF tasks, work experience soft skills
- Portfolios where artifacts about competencies support numerical survey data
- NATEF tasks are documented
- Live hands-on and recorded assessments video artifacts
- Ford Web-based training
- Written examinations

6.1. Test-Out Options

All students must pass Ford final examinations. We provide both hands-on testing and written tests. Hands-on tests must be administered by Cuyamaca College, Ford College, or a Ford Training Center. Test Out is a co-enrollment course attached to the current course in the schedule including student learning objectives of the Ford course descriptor. This will allow a student who has completed a course at another college to enroll in the ASSET training program and perform additional tests and labs necessary to complete the credit by exam. The Test Out class has .5 credit hours. For example, .5 lab credit hour is 16 hours of laboratory requirement.

Figure 14: ASSET test-out options include both hands-on testing and written tests.

Credit by examination ensures a student meets minimum Ford certification requirements. Students are expected to pass the criterion exams with 100% accuracy.

6.2. Credit for Prior Learning

Students who have completed manufacturers training by another manufacturer should have credit for prior learning. Ford examinations apply to all content areas for certification. An FSE may exempt a student from an examination.

6.3. Articulation agreements

Articulation agreements are created between colleges who have Ford ASSET Programs and those who do not. The college credit is recognition of learning. **Students who petition to articulate must still pass all Ford objective tests and laboratory assignments.**

6.4. Multiple Measures Assessment

Prerequisite

Enrollment in an assessment course

- Concurrent enrollment in a Ford Training course for the assessment, or
- Concurrent enrollment or completion of an equivalent training course administered by military, college, or trade school
- Completion of NATEF artifact tasks for the assessment course
- Written survey endorsement by a mentor, service manager, instructor

Assessment

Measures student competency of a subject using:

- Recordings of a student performing NATEF tasks or competency
- Digital portfolio of work “artifacts”
- Surveys of student capability of performing competency
- Live hands-on recorded tests “remote” or in a Ford training center
- Written or objective criterion examinations
- Accuracy rubric of 90 – 100%

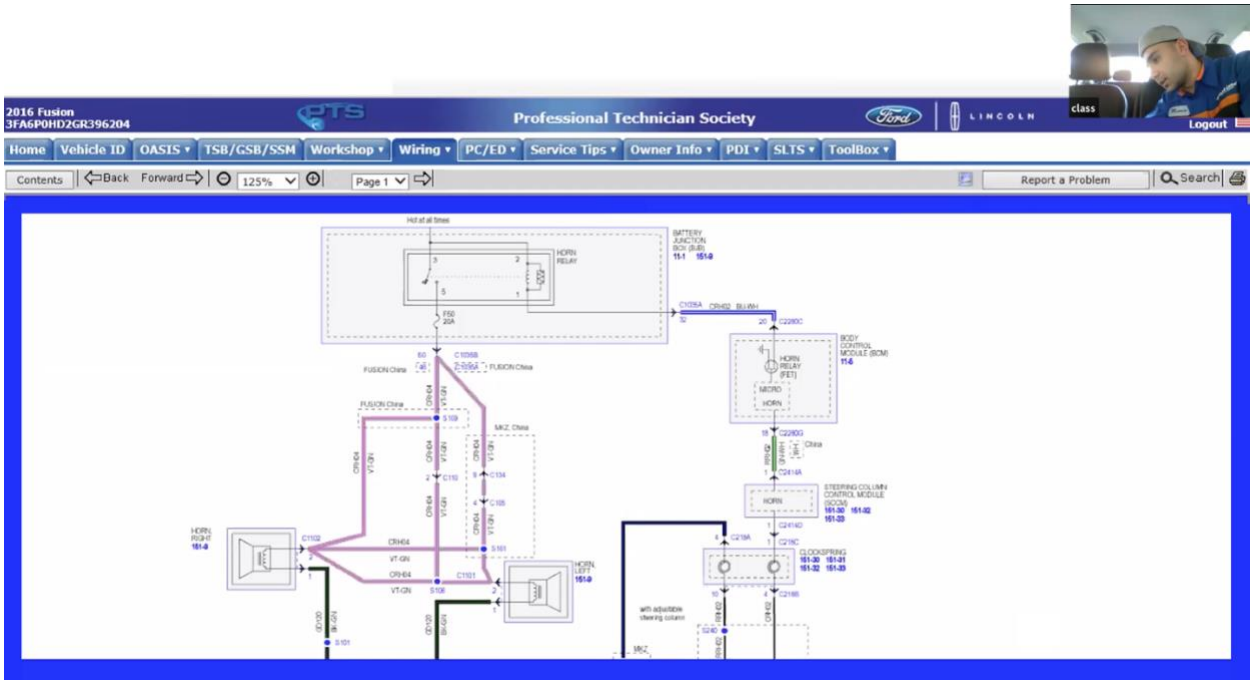

Figure 15: A student sharing a wiring diagram during a remote assessment.

Rubric example. A student must pass each column at 90% or more. This scenario = No Certification.

Auto 191 Brakes, Adv. Brakes, Steering, NVH	NATEF Task Score	Portfolio Artifacts	Competency Rating Survey	Recorded & Live Test Score	Ford Web Based Training
Basic Brakes BB	28/30 88%	91	90	80	100
Advanced Brakes AB	22/25 88%	90	95	75	100
Steering Suspension SS	30/35 85%	95	90	92	100
Noise Vibration Harshness NVH	20/23 87%	89	78	79	100
Test B Multiple Measures	No, min 90% of NAETF Tasks	BB, AB, SS	BB, AB, SS	SS	BB, AB, SS, NVH

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7. APPLICATION MATERIALS

7.1. Requirements for Admission to the Ford ASSET Program

All students must meet the following minimum requirements:

1. Applicants must provide valid California Driver's license and be insurable. Driver's records may not have too many accidents or violations, or the dealer will not be able to provide insurance.
2. Applicants must provide evidence of high school graduation or the equivalent. Transcripts are required.
3. Applicants must be 18 years old by the first day or work experience.
4. Applicants must be able to legally work in the United States.
5. Applicants must complete an orientation module in Canvas, which includes creating a profile, establishing a portfolio, posting resumes, and learning about the program.

All students must complete the following steps prior to the start of the program:

1. Submit a completed enrollment application form to the **Admissions Office**.
2. Submit a letter email to the ASSET coordinator stating why you want to be considered for the program.
3. Write a brief resume indicating education, technical training, work experience, and career objectives. This will be used during the interview process.
4. Submit transcripts of all high school and college work to the admissions office and the ASSET coordinator.
5. Students who complete the minimum requirements will be accepted as candidates and enrolled in a Ford ASSET Learning Management System, where submissions of documents will be required, and additional training will be provided.

Assessment tests are not required for ASSET. However, certain majors have prerequisites for certain classes. For this reason, applicants will meet with a counselor in the Counseling Department to review transcripts and develop an educational plan. Low test scores or grades on transcripts will not prevent a student from enrolling in the ASSET Program. However, students with low test scores will be directed to student services for additional help and be directed to classes designed to improve areas where extra help is needed.

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Ford/Lincoln Dealership Sponsorship Requirement

Students will develop a dealership sponsorship plan with the Ford ASSET Coordinator. Sponsorship is required by the second semester of courses. Employment requirements vary between dealerships. Many dealerships require DMV drivers' license history printout and drug testing.

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7.2. Ford ASSET Program Application

The following section to be completed by the student.

Last Name: _____ First: _____ Middle Initial: _____

Address: _____ City: _____ State: ____ ZIP: _____

Home Phone: _____ Mobile/Work Phone: _____ Email: _____

Birth Date: _____

High School Attended (Include Transcripts): _____

College (Include Transcripts): _____

Sponsoring Dealership: _____

Dealer Supervisor Signature: _____ Date: _____

Candidate Signature: _____ Date: _____

School Use Only:

_____

_____

_____

_____

_____

_____

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7.3. Ford ASSET Program Performance Checklist/Agreement

The following section to be completed by the student.

I (Name) _____agree to:

1. Attend all class sessions, arriving each day on time and ready to work.
2. Maintain a neat and professional appearance. Wear dealer provided uniforms.
3. Turn all assignments in on time.
4. Wear safety glasses **at all times** in the lab.
5. Have all required tools for lab each day.
6. Be courteous to all other students, faculty, and administrators.
7. Complete all assignments and Ford Web Based Training.
8. Follow all rules and regulations of Cuyamaca College as set forth in the **"Student Code of Conduct."**
9. Complete all assigned performance projects.
10. Help maintain Ford ASSET vehicles, tools, and equipment.
11. Maintain a professional attitude at all times when representing Cuyamaca College, Ford ASSET, and/or the sponsoring Ford Dealership.
12. Act professionally in the learning environment by not excessively talking and keeping all conversations relative to the subject being taught.
13. Adhere to all Cuyamaca College Automotive Technologies safety rules.

ASSET Student Signature: _____ Date: _____

Accepted by (ASSET Instructor): _____ Date: _____

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7.4. Ford ASSET Dealer Sponsor Agreement

The following section to be completed by the student.

Final acceptance into the Ford ASSET Program requires a dealership commitment to sponsor the ASSET student for Cooperative Work Experience. Students should complete the top portion of this agreement and use as an introduction to an interview with the dealer sponsor of their choice. Once a dealer has agreed to sponsor you, return the signed form to your school's ASSET Coordinator who will forward it to the Area Technical Support Operations Manager. Please make sure to keep a copy of this document for your record.

Today's Date: _____

Name of College: _____ College ASSET Coordinator: _____

Student's Last Name: _____ First: _____ Middle Initial: _____

ASSET Instructor: _____

Home Phone: _____ Age: _____ Date of Academic Acceptance Letter: _____

Address: _____ City: _____ State: ____ ZIP: _____

Why would you be a good ASSET student for this dealership?

_____

_____

_____

_____

_____

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7.5. Ford ASSET Student Sponsor Agreement

The following section to be completed by the sponsoring dealership.

As an ASSET student sponsor, we agree to appoint a Dealership ASSET Coordinator to maintain close communication with the School ASSET Coordinator, and provide cooperative education work experience, laboratory content experience in each content area of study, and uniforms in accordance with the program. We additionally agree to pay a competitive wage that reflects student progress, and provide the student with the same considerations shown all dealership employees. The completed form must be returned to your college ASSET Coordinator.

Dealership: _____ P&A Code: _____ Phone: _____

Address: _____ City: _____ State: ____ ZIP: _____

Date of Student's First Co-op: _____ Starting Salary: _____

Name of Dealership ASSET Coordinator: _____

Authorized Signature: _____ Date: _____

Print/Type Name: _____ Title: _____

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7.6. Ford ASSET Photo, Video, Academic & Work Consent & Release

The following section to be completed by the student.

This Agreement is between Cuyamaca College and the Participant with respect to the reproduction of either a performance or a photograph/video described below. The parties agree as follows:

I voluntarily grant to Cuyamaca College the absolute and irrevocable right and unrestricted permission to use my name, likeness, image, voice and/or appearance in any photos, video recordings, audiotapes, digital images, and the like, taken or made on behalf of the College or its partners.

I voluntarily grant to Cuyamaca College the absolute and irrevocable right and unrestricted permission to use my automotive related course and work assignments performed during my two-year program.

I agree that Cuyamaca College and Ford Motor Company has complete ownership of such material and can use said material for any purpose consistent with the College's mission. These uses include, but are not limited to photographs, videos, publications, advertisements, news releases, websites, and any promotional or educational materials in any medium.

I acknowledge that I will not receive any compensation for the use of such images, video, likeness, work, etc.

I release, waive, forever discharge, hold harmless and covenant not to sue Cuyamaca College, its trustees, employees, students, contractors, agents or representatives from and against any and all liability for any harm, injury, damage, claims, actions, causes of action, costs, demands, and expenses of any nature whatsoever relating to the making, showing, distribution or use of my likeness in photos, videos or work made by Cuyamaca College.

Cuyamaca College and its successors and assigns shall have the full, exclusive and complete ownership of said material produced pursuant to this release, which shall be deemed the sole property of Cuyamaca College, all of which ownership and other rights I grant to Cuyamaca College for good and sufficient consideration.

This agreement constitutes the entire agreement between the parties and is governed by the California laws. Any modification of this Agreement must be in writing and signed by bother parties.

I represent that I am over the age of eighteen (18) years and that I have read the foregoing and fully understand its contents. This release shall be binding upon me, my heirs, legal representatives, and assigns.

AGREED AND ACCEPTED:

Participant Name: _____ Date: _____

Participant Signature: _____ Date: _____

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7.7. Ford ASSET Survey Permission Request

The following section to be completed by the student.

You have been asked to voluntarily release information and work, which might be considered your intellectual property for the purpose of creating data sets for survey evaluations which will be used by college officials in the effectiveness and research department for research. Your name and information may be used to evaluate program, student effectiveness, and grant outcomes.

This is not an anonymous survey request.

This Agreement is between GCCCD district and Affiliations and the Participant with respect to the reproduction of either a performance or a photograph/video described below. The parties agree as follows:

I voluntarily grant to GCCCD the absolute and irrevocable right and unrestricted permission to use my name, likeness, image, voice and/or appearance in any photos, video recordings, audiotapes, digital images, and the like, taken or made on behalf of the College or its partners.

I voluntarily grant to GCCCD the absolute and irrevocable right and unrestricted permission to use my automotive related course and work assignments performed during my two-year program and beyond the two-year program.

I agree that GCCCD and Ford Motor Co. has complete ownership of such material and can use said material for any purpose consistent with the College's mission. These uses include, but are not limited to photographs, videos, publications, advertisements, news releases, websites, and any promotional or educational materials in any medium.

I acknowledge that I will not receive any compensation for the use of such images, video, likeness, work, etc.

I release, waive, forever discharge, hold harmless and covenant not to sue GCCCD, its trustees, employees, students, contractors, agents or representatives from and against any and all liability for any harm, injury, damage, claims, actions, causes of action, costs, demands, and expenses of any nature whatsoever relating to the making, showing, distribution or use of my likeness in photos, videos or work made by GCCCD.

GCCCD and its successors and assigns shall have the full, exclusive and complete ownership of said material produced pursuant to this release, which shall be deemed the sole property of GCCCD, all of which ownership and other rights I grant to GCCCD for good and sufficient consideration of my voluntary training and education.

This agreement constitutes the entire agreement between the parties and is governed by the California laws. Any modification of this Agreement must be in writing and signed by bother parties.

I represent that I am over the age of eighteen (18) years and that I have read the foregoing and fully understand its contents. This release shall be binding upon me, my heirs, legal representatives, and assigns.

AGREED AND ACCEPTED SIGNATURE and DATE:

Participant Name: _____ Date: _____

Participant Signature: _____ Date: _____

Please answer the next questions if you agree to research and intellectual property release.

8. FREQUENTLY ASKED QUESTIONS

How much does the ASSET Program cost?

For many students the first two years of community college are free. For those students who do not qualify, or can't afford a full-time schedule, tuition costs $46 per unit.

College and Ford Motor Company offer a full array of **financial aid and scholarship programs** available to full-time and part-time students who are eligible.

Can a student graduate from the program without being sponsored?

No. A student must have an agreement with a Ford dealership. Work experience is required and comprises at least 12 credit hours.

How much will the training cost?

Training costs approximately $500 to $800 per semester. This includes books, tuition, parking, and health fees. Financial aid and scholarships are available.

Am I required to supply my own auto tools?

No. Cuyamaca College has a well-stocked tool room, and during your work experience class you will be working under the direction of a Ford Technician. You need to check with the sponsoring dealer regarding their tool policies.

Will Ford or a sponsoring dealership pay for my education?

Yes and no. Ford and the State of California sponsor this factory level training program making the costs of the program very affordable when compared to private training programs. Ford will supply students with factory level training service publications, test cars, tools, and testing equipment to use during labs. Cuyamaca College provides the facilities, classrooms, instructors, and a college education that is transferable to California State Universities and UC's, which most private auto technical schools do not provide.

How much do students get paid during work experience?

The ASSET Advisory Committee composed of school personnel, dealership managers, and Ford Company representatives has recommended a training stipend for ASSET students of minimum wage per hour with a 50 cent raise each time the student technician returns to the dealership for work experience training. However, the dealerships are independent businesses and are free to pay as they wish. Most dealers follow the committee's recommendation. Some dealerships require a minimum grade point average in order for raises to be obtained.

Are students expected to wear a uniform?

Students are always required to wear uniforms while in class at the college and at the dealership. The dealership will supply the uniform to the student at little or no cost.

Do all graduates of the program earn full-time employment at a Ford dealership?

Historically, 99% of the graduates of the ASSET Program at Cuyamaca College have received full-time employment by sponsoring dealers. Students who successfully complete the program will receive their Associate of Science Degree in Automotive Technology, ASSET Program certificate from Ford Motor Company, Ford Motor Company Technician Specialty Training Certification in various areas, emission control license, and ASE test training.

How do I apply for credit for prior learning?

Students who have completed training by another manufacturer may have earned credit for prior learning. Ford examinations apply to all content areas for certification.

How do I find a dealership sponsor or community colleges with automotive programs?

Click on the interactive links below to find dealers and colleges by your location.

Search Ford Dealerships by your location

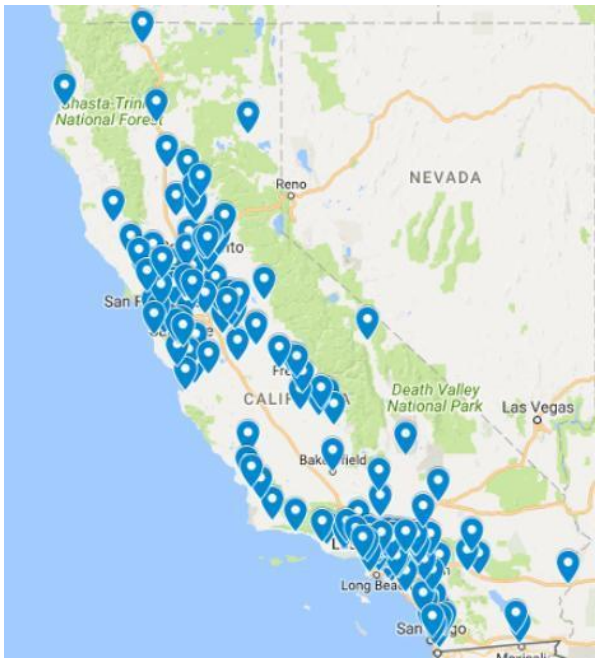

Figure 16

Search Colleges by your location

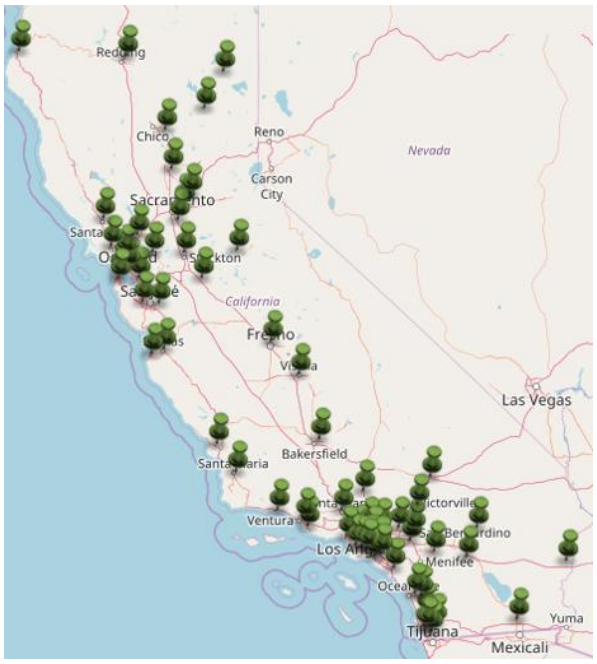

Figure 17

9. PROGRAM SUMMARY

Cuyamaca College is committed to a student-centered approach while building capacity with employers to improve access and opportunity to meet the local and regional demand for a skilled workforce. The universally designed ASSET Program at Cuyamaca College provides a model for college and industry leaders to leverage resources and create a clear pathway for students to reach academic achievement and career development in the automotive technology industry.

Over the last year, the ASSET Program utilized technology and distance education to develop new courses, improve training, create an integrated system of support through a community of practice, and design a remote test-out assessment. These program enhancements are the direct result of collaborative efforts between Cuyamaca College and local Ford dealerships to meet student need and industry demand for skilled technicians.

Together, we are making a difference for students as we develop a skilled workforce and build community. It is our hope that the ASSET model we've created may provide inspiration and opportunity for your students, campus, and region. We welcome collaboration and the sharing of resources with community colleges as we continue to shape educational opportunity for students locally, regionally, and statewide.

Figure 18: The Ford ASSET Program is a student-centered approach to learning, development, and mastery.

Brad McCombs

Automotive Technology Faculty
Ford ASSET Program Coordinator
Cuyamaca College

10. ACKNOWLEDGEMENTS

We appreciate the ongoing support from the following team members who contributed to the design of the Ford ASSET Program at Cuyamaca College.

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