

COLLEGE OF  
**MARIN**

**Automotive Technology/Automotive Collision and Repair  
Advisory Meeting**

**Minutes**

**Wednesday, May 4, 2022**

**4:30 – 6 p.m.**

**Hosted by:**

Mark Barrall, COM, Instructor for Auto Technology and ACRT, Chair for Auto Technology  
Ron Palmer, COM, Chair of Career Education, Instructor for ACRT and Auto Technology  
Heather Rahman, COM, Workforce Development and Program Partnership Specialist

**Attended:**

Fernando Oliveira, Service Manager, Porsche Marin/Indigo Auto Group  
Russ Oertel, Recruiting Manager, Hansel Auto Group  
Merrilee Alvarado, Director of Employee Culture & Community Relations, Hansel Auto Group  
Charlie Goodman, Checkers Classic Cars  
Savannah Simms, Sales Manager, Price Simms Automotive Group  
Robert Kane, Service Manager, Mercedes Benz  
Aston Martin, Service Manager, Tesla  
Vince Vandell, Operations Director, Marin Luxury Cars  
Jay Hansen, Technical Service Manager, Marin Luxury Cars  
Diana Kennedy, General Manager, Volvo Cars Marin/Price Simms Automotive Group  
Darren Rees, Automotive Apprenticeship Coordinator, Northern California  
Scott Xuereb, CA Representative, Snap-On Industrial Division  
Araceli Nunez, K-12 Pathway Coordinator, Project Supervisor, Marin County Office of Education  
Jesse Madsen, Project Coordinator, Career Readiness, Marin County Office of Education  
Kathleen Antokhin, COM, Career Education Workforce Projects Program Coordinator  
Paul Rilla, Retired Auto Teacher and COM Liaison

Welcome and Introductions	The meeting began at 4:31 p.m.
---------------------------	--------------------------------

<p>Overview of COM and Automotive Programs</p>	<p>Heather Rahman presented an overview of why we have advisory meetings and the current demographics and metrics for the COM Automotive Technology and Auto Collision and Repair programs. (Please refer to the presentation slides attached.)</p>
<p>Check-in with Advisory members</p> <ul style="list-style-type: none"> <li>❖ Technology discussion</li> <li>❖ General hiring/retention needs</li> <li>❖ General local industry climate for new employees</li> </ul>	<p>The committee reported the following.</p> <p>Aston with Tesla:</p> <ul style="list-style-type: none"> <li>• Tesla is rapidly expanding. Tesla released 60,000+ vehicles in the Bay Area alone just last year. Opening lots of new locations which will need teams.</li> <li>• At Tesla the skill level for new employees can be at various levels.</li> <li>• Tesla offers a tech training program where interns work with engineers for 3 – 6 months.</li> <li>• Education is honored with Tesla.</li> <li>• Basic car skills are needed such as tire service.</li> <li>• New employees will learn diagnostic testing.</li> <li>• Starting salary can be 32 – 40/hour with benefits for full time and lead to mastery program and promotion upon testing.</li> <li>• Tesla provides their own instructional and internal training where validation steps are assessed.</li> <li>• For course led training, Tesla will provide funds to travel.</li> <li>• The best candidates will have great hands on skills, good with computers and diagnostic skills, communication skills, be able to learn/know lens circuits.</li> </ul> <p>Vince for Marin Jaguar/Land Rover:</p> <ul style="list-style-type: none"> <li>• Jaguar/Land Rover also have internal training programs.</li> <li>• Due to the demographics and wealth in our area there are not many young people looking to go into a mechanic type careers with so much labor involved.</li> <li>• Marin J/LR are willing to hire our top students.</li> <li>• Vince asked about our programs re: EV learning. Ron stated electric technology is build into the current curriculum. Mark stated that they've tried to get students excited toward electric vehicle technology since early years, 1986 or so. The current curriculum</li> </ul>

will provide students basic and general knowledge to get them started for a career toward EV.

- Reading, math skills, showing up and remaining reliable are skills ideal candidate would have.
- Automotive classes would be attractive if we can guarantee a job upon completion of the program. (Diana Kennedy agreed.)

Jesse for Marin County Office of Education (MCOE):

- MCOE influences K-12 students to gain post-secondary education.
- Certain workshops, classes and programs work with students to learn very simple skills to gain confidence and excitement toward a career path in the auto industry.
- MCOE makes sure students understand the realistic picture of what it's like to work in the careers.

Diana Kennedy, Volvo:

- It's very possible to go from high school into some post-secondary education which leads into a high paying career without going to a 4-year college especially in the auto industry.
- A 4 – year college degree can weigh down someone with debt, but some post-secondary education can provide a very viable option to a well-paying and satisfying career.
- All of us (Volvo, Land Rover, Porsche, Tesla, MLC, etc.) are looking to hire technicians today.
- There is a need to help elevate technicians pass the Automotive Service Excellence (ASE) exam. Many technicians are good at what they do, but still cannot get through the ASE exam.
- Volvo is willing to pay for the training for their technicians to help them pass the exam.
- Enhancing the COM electric program is definitely important.
- Reading, writing, and grammar skills are important for documenting car services. The service documentation often serves as legal documents.
- Track and promote success rate as a selling point.

Darren Rees for CA Apprenticeship Initiative:

	<ul style="list-style-type: none"> <li>• Basic fundamental training is most important through apprenticeships programs.</li> <li>• Important skills include work ethic, safety, EV safety</li> </ul> <p>Russ, Hansel Auto:</p> <ul style="list-style-type: none"> <li>• The perfect employee would exhibit strong soft skills, remain in good health and take care of themselves.</li> </ul> <p>The committee asked how does COM currently direct students to your companies?</p> <ol style="list-style-type: none"> <li>1) We research and provide information to the students obtained from company websites.</li> <li>2) We have guests come to speak in classes.</li> <li>3) We give the students a realistic understanding of the work and wages to expect.</li> <li>4) We will announce to students any internships/job opportunities.</li> <li>5) We have advertised the companies at our workshops, but we're just getting back to campus post-Covid. This effort needs updated.</li> <li>6) We have a job board, and we're currently expanding a job center for students. We look to expand out internship opportunities and continue to provide resume/interview preparedness workshops.</li> </ol>
<p>Labor Market Information (5 minutes)</p>	<p>Heather shared the current findings for industry growth and median wages. The committee reported that the labor market data is very low for both wages and demand. The committee stated this data should be updated. Most apprentices start at about \$30/hour and Journeyman Techs are \$45-55/hour. (Please refer to the attached slides.)</p>
<p>Review and Open Discussion of Programs (15-30 minutes)</p> <ul style="list-style-type: none"> <li>❖ Potential new certificates</li> <li>❖ Hybrid courses</li> <li>❖ Tool talk</li> </ul>	<p>Ron and Mark explained about their programs and how they are preparing the students to understand hybrid and electric technology. They also explained how they prep students for the ASE exam.</p> <p>Ron explained the teaching and class experience with using virtual reality for training.</p> <p><b>We asked the committee about providing 3 new certificate offerings:</b></p>

	<p><b>1) Electric Car Technology Certificate</b>  <b>2) Solar Technology Certificate</b>  <b>3) Sustainability Electrical Technology Certificate</b></p> <p>The committee applauded and endorsed the certificate for EV training. <b>All agreed that these 3 certificates are the right direction for students.</b></p> <p>Comments included:  Car manufacturers will not be designing more fuel combustion engines in the near future. This is the right direction for College of Marin.</p> <p>Ron explained the efforts to create existing classes as a hybrid choice.</p> <p>Scott Xuereb spoke about the tool sets available for students and the discount students can take advantage of through Snap-On.</p> <p>The committee agreed that these are the right tools for employees to have for Auto Collision Repair and Auto Technicians.</p>
<p>High School pathways (5 minutes)</p>	<p>Heather reported about the local high school auto offerings and how MCOE and COM are working together to provide career pathway recommendations for students interested in this industry. We reported on the current high school courses articulated with the COM classes.</p>
<p>What’s Next – GGT Bus Coach Apprenticeship</p>	<p>Heather reported out the highlights of our new Golden Gate Bus Coach Apprenticeship program we recently were awarded funding for and are currently building.</p>
<p>Conclusions</p>	<p>The group stated afternoon meetings are best and zoom or in-person meetings will work for most. The meeting adjourned at 5:59 p.m.</p>

**Comments from the chat box included:**

- Volvo and Mercedes are interested in hosting internship positions.
- Volvo would like to host a tour for students.
- Volt meter is a good item for students/employees to have.
- Marin Luxury Cars is interested in partnering with our JC automotive program.

COLLEGE OF  

---

**MARIN**

**Auto, ACRT, Electronics Technology  
Advisory Committee Meeting**

*May 4, 2022*

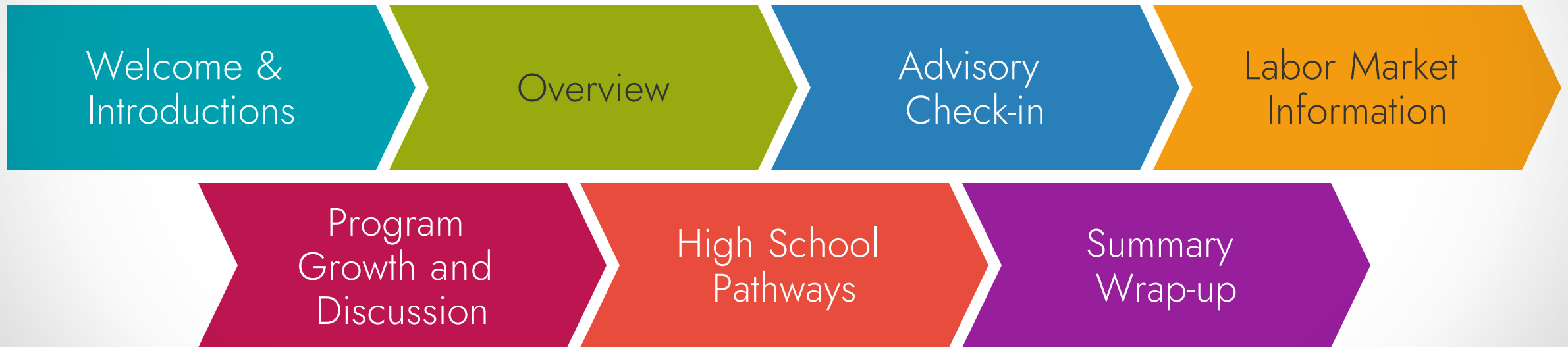


# Hello!

Please share your name, role, organization.

# AGENDA

Where We Are. Where We're Going.





# Overview

Alina Varona, Dean of Career Education and Workforce Development

# WHY ADVISORY COMMITTEES?

## Centering the Community in Community College Practice and Programs

### Title 5: §55601[1]

- The governing board of each community college district participating in a vocational education program shall appoint a vocational education advisory committee
- Committee will develop recommendations on the program and be a liaison between the district and potential employers.

### Committee Members

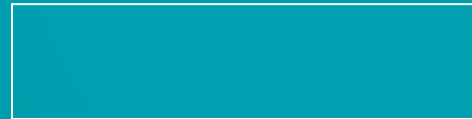
- Shall have one or more representatives of the general public
- Must be knowledgeable about the educational needs of disadvantaged populations
- Students, teachers, business, industry, the college administration, and the field office of the Employment Development Department

### Funding Requirements

- Extensive business and industry involvement
- Evidenced by not less than one annual business and industry advisory committee meeting
- (Section 135(b) of Perkins IV[2]).

# Meaningful Advisory Committee Participation

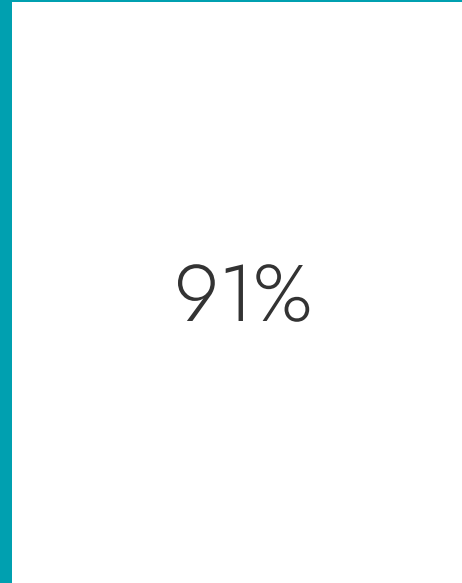
18%



2019-2020

**Two out of Eleven  
Programs Convened**

91%

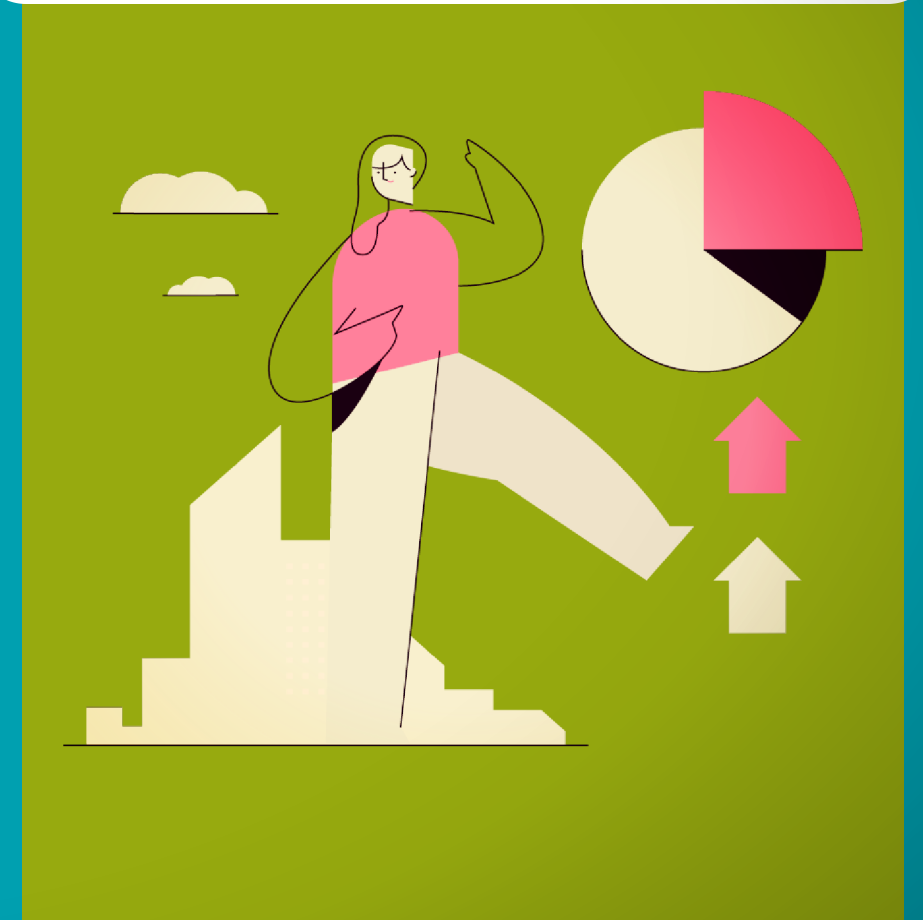


2020-2021

**Four Programs  
Convened. Six  
Scheduled.**

**Some programs will  
meet more than once.**

35% increase in advisory member participation to date



# EMPLOYMENT DATA

18 months after college completion-

85% Goal

77%



Found a job very closely or closely related to their field.

23%

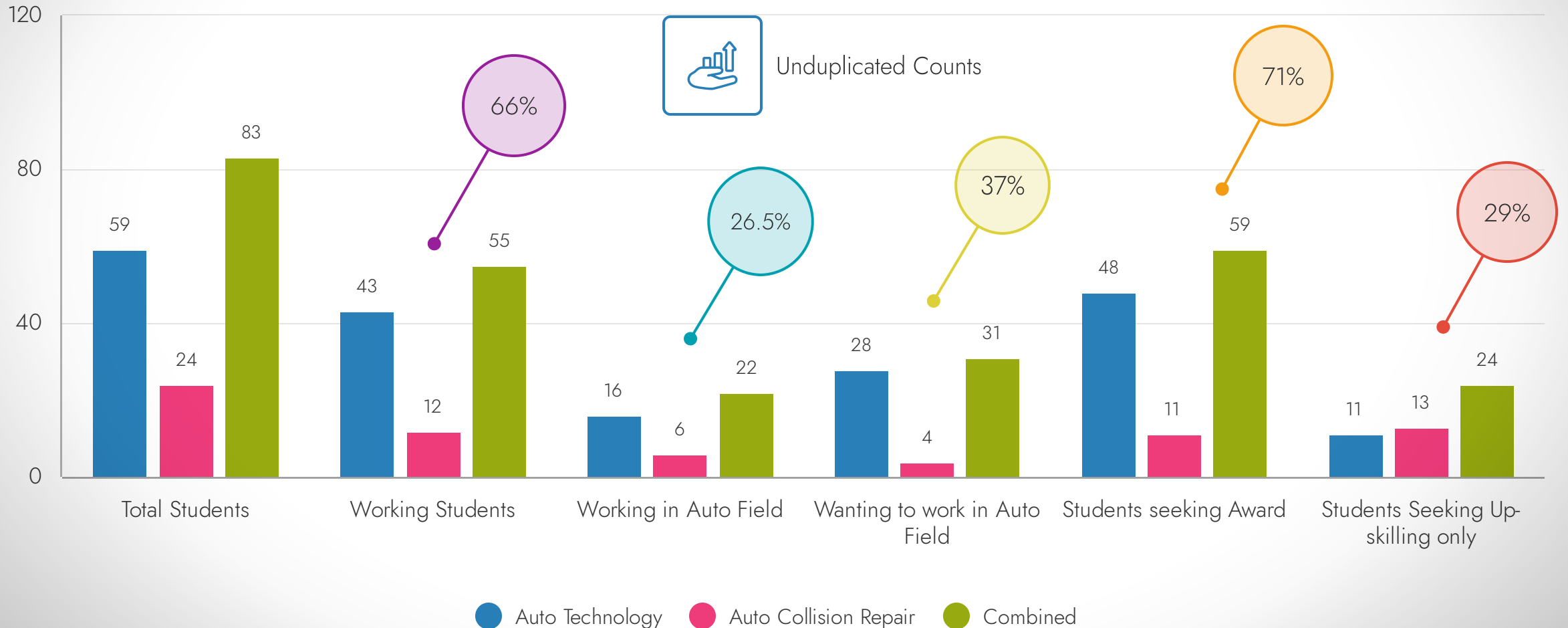


Reported job is not closely related to their field.

206 Student respondents

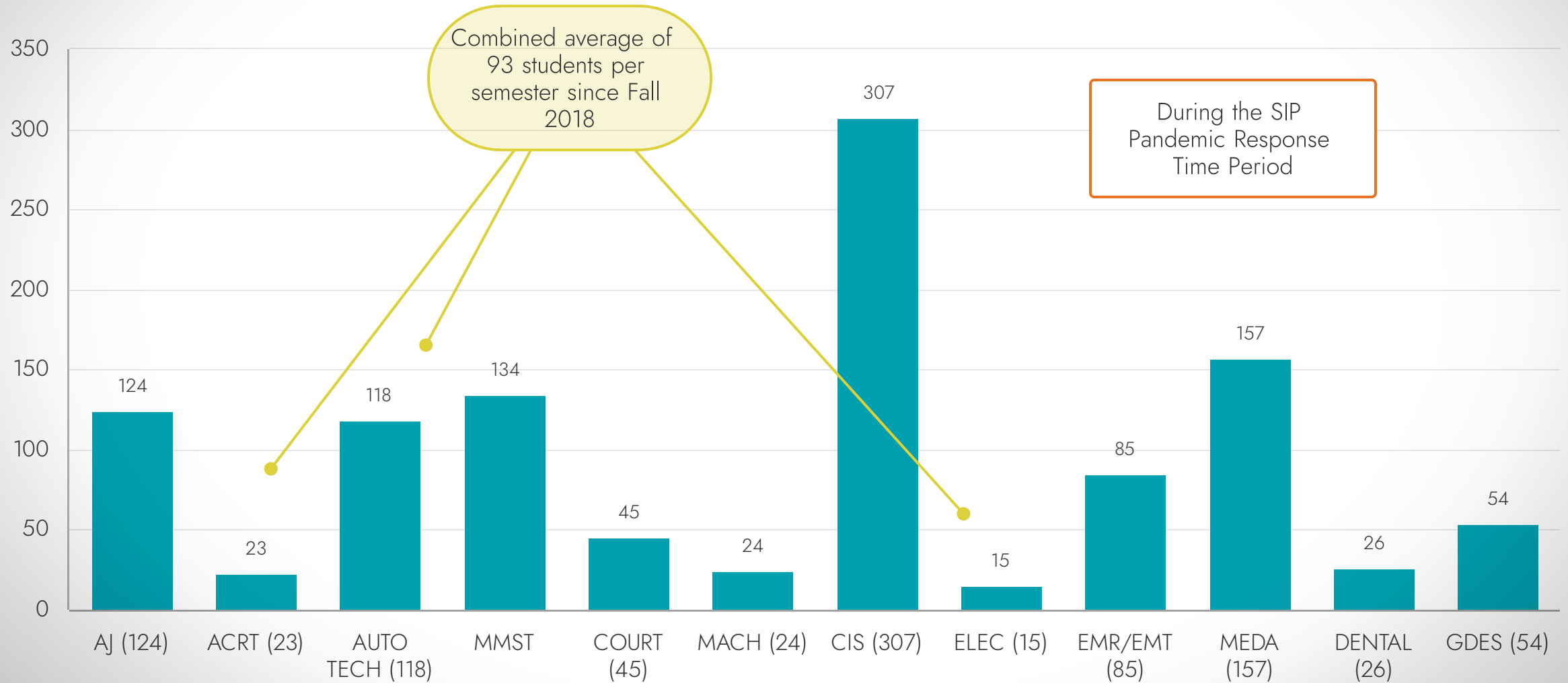
# AUTO/ACRT Student Employment Status and Goals

Current Semester - Spring 2022



# Enrollments by Program

Academic year **2020-2021** unduplicated headcount by program

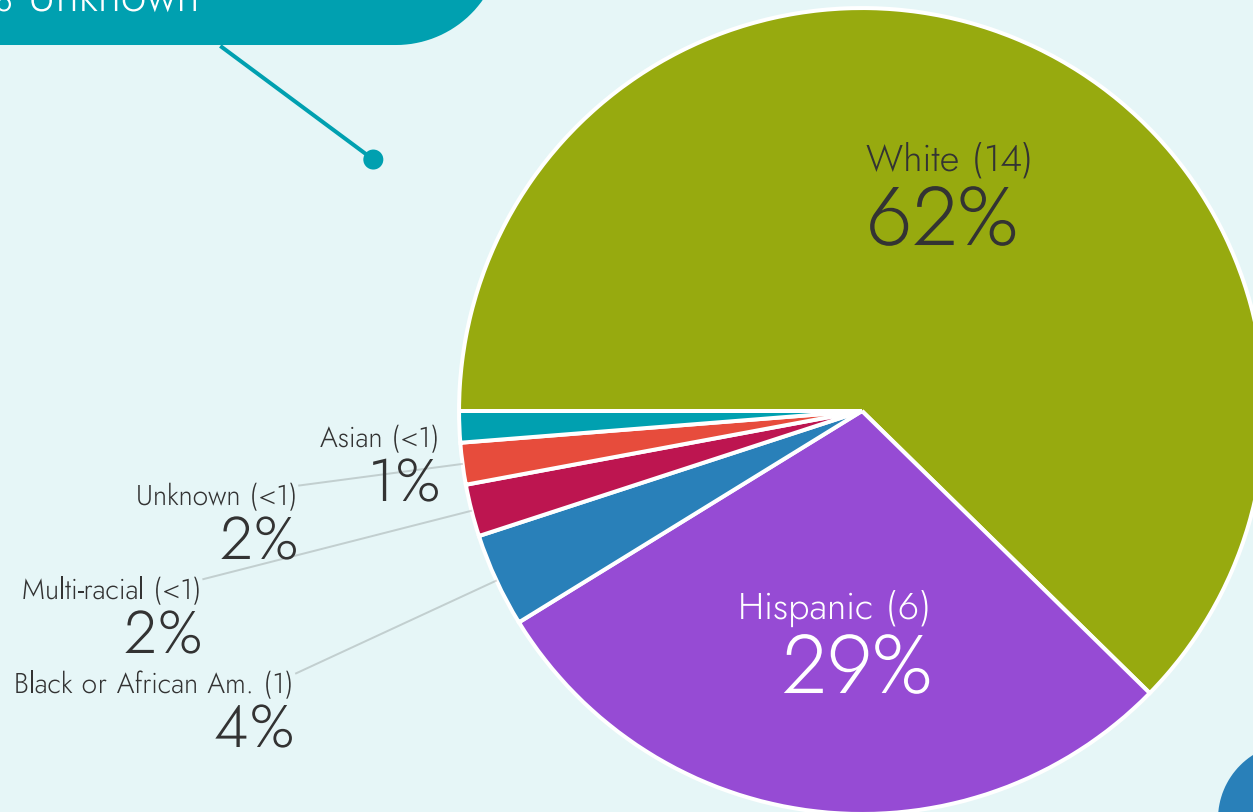


# Average Student Demographics

## Automotive Collision and Repair Technology

2018 - 2021

80% Male (18 avg. per sem.)  
12% Female (3 avg. per sem.)  
8% Unknown



**COLLEGE OF MARIN CREDIT STUDENT CHARACTERISTICS**

Gender: Male 39% Female 60%;  
Median Age: 23  
Race/Ethnicity:  
Asian: 487 (7%)  
Black/African American: 207 (3%)  
**Hispanic: 1,985 (30%)**  
Multi-racial: 408 (6%)  
Native American: 14 (0.2%)  
Native Hawaiian/Pacific Islander: 13 (0.2%)  
**White: 3,211 (48%)**

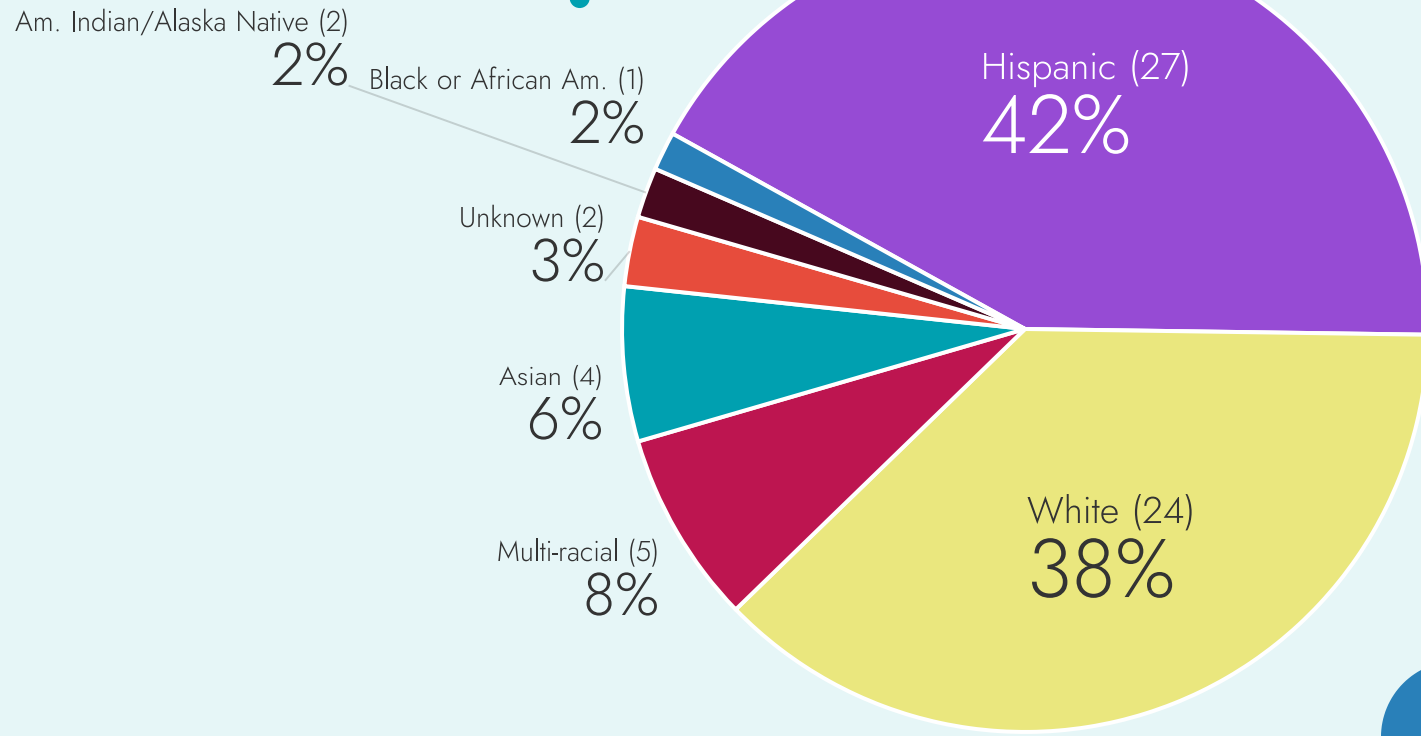
Avg. number/semester count in parenthesis

# Average Student Demographics

## Automotive Technology

2018 - 2021

88% Male (56 avg. per sem.)  
11% Female (7 avg. per sem.)  
1% Unknown



**COLLEGE OF MARIN CREDIT STUDENT CHARACTERISTICS**

Gender: Male 39% Female 60%;  
Median Age: 23  
Race/Ethnicity:  
Asian: 487 (7%)  
Black/African American: 207 (3%)  
**Hispanic: 1,985 (30%)**  
Multi-racial: 408 (6%)  
Native American: 14 (0.2%)  
Native Hawaiian/Pacific Islander: 13 (0.2%)  
**White: 3,211 (48%)**

Avg. number/semester count in parenthesis



# Program Outcomes

## Automotive Collision and Repair Technology

2018 - 2021

### **Persistence** - First Time

Students Fall to Spring

- Female: **8%**
- Male: **56%**

---

Program Persistence Overall:

**55%**

---

Lower than the College persistence rate: **73%** average

Course **Retention** by Gender (%)

- Women: **100%**
- Men: **88%**

---

Program Retention Overall:

**94%**

---

Above College average at **85%**

### **Program Success** -

Awards

Fall 2018 - Spring 2021

- Certificates: **4**

---

### **Course Success** -

Overall course success rate is:

**88%**

---

Above College average at **77%** for 2019-20

**Persistence** - the students remains in a class to completion

**Retention** - the students complete one class and continue to another course in a following semester

# Program Outcomes

## Automotive Technology

2018 - 2021

**Persistence** - First Time Students  
Fall to Spring

- Female: **8%**
- Male: **56%**

---

Program Persistence Overall:

**55%**

---

Lower than College persistence rate:  
**73%** average

Course **Retention** by  
Gender (%)

- Female: **93%**
- Male: **94%**

---

Program Retention  
Overall:

**94%**

---

Above College average at  
**85%**

**Program Success** -  
Awards

Fall 2018 - Spring 2021

- Certificates: **41**
- Degrees: **4**

---

**Course Success** -

Overall course success rate is:

**92%**

---

Above College average at  
**77%** for 2019-20

# Advisory Check-In

# PRIORITIES AND CURRENT LANDSCAPE

## Advisory Member Share Outs & Discussion

**What has this last year looked like for your field?**



### Staffing and Recruiting

- Where do you find your candidates?
- What wages can be expected for entry level positions? Skills required?
- What skills are needed for middle-skilled technicians?
- With more electric vehicles emerging what training should students gain to ensure to meet market demands?



### Community Partnership & Impacts

- What are **your current priorities** and needs for hiring?
- What are the urgent concerns of the Auto/ACRT workforce today?
- How should we best prepare our students to be qualified and competitive?



### Other Key Items?

- Any other potential technology, training, or emerging sectors?

# Labor Market Information Overview

Heather Rahman, Workforce Specialist

Regional Counties:  
Marin, Napa,  
Sonoma, Solano,  
San Francisco and  
San Mateo

# Regional Labor Market Information

Sources: Centers of Excellence Demand Tables  
and O\*Net Online

Per committee:  
"upper-end" body  
shops will hire new  
employees at rate  
of \$25/hour =  
\$48,000/year

Automotive COM Offerings	Occupation	Job Titles	Average Annual Earnings	Annual Job Openings projected through 2028
Certificate or A.S. in ACRT, Master Collision Repair	Automotive Body and Related Repairers	Auto Body Repair Tech, Auto Body Repairman, Collision Repair Tech, Refinish Tech	\$67,714	123
Certificate or A.S. degree in AUTO, Master Repair Technician	Automotive Service Technicians and Mechanics	Auto Mechanic, Automotive Drivability Tech, Auto Service Technician, Master Auto Technician, Service Tech	\$56,988	557
Certificate, Automotive Electronics Specialist	Electronic Equipment Installers and Repairers, Motor Vehicles	Automotive Technician, Electronics Technician, Installation Technician	\$45,000	122

<http://coeccc.net/>  
<https://www.onetonline.org/>



# Automotive Technology, Auto Collision and Repair and Electronics Technology

**Ron Palmer, Instructor and Department Chair**

**Mark Barrall, Instructor**

Program Updates, Technology Needs, Hiring Needs, New Developments

# Current Program Offerings

## Automotive Technology

- A.S. Degree in Automotive Technology, Master Repair Technician
- 
- Certificate, Automotive Chassis and Drivetrain Specialist (A3, A4, A5)
  - Certificate, Automotive Engine Specialist (A1, A9)
  - Certificate, Automotive Technology: Master Repair Technician

## Auto Collision and Repair

- A.S. Degree, ACRT, Master Collision Repair
- 
- Certificate, ACRT, Painting and Refinishing
  - Certificate, ACRT, Structural and Nonstructural Damage Repair
  - Certificate, ACRT, Master Collision Repair

## Electronics Technology

- Certificate of Achievement, Automotive Electronics Specialist (A6, A7 & A8)



# Awards 2015 - 2020

Pre-pandemic

	ACRT Master Collision Repair	ACRT Painting and Refinishing	Auto Chassis Repair Tech	Auto Electrical Tech	Auto Emissions Tech	Auto Master Repair Tech	<b>Total</b>
Certificates	10	2	20	22	20	28	102
Degrees						9	9



# New Certificate Offering

## Electric Car Technology Certificate

### Electric Car Technology Certificate of Competency (9 units)

Students will earn this certificate by completing the courses listed below demonstrating competency in electrical fundamentals, National Certification in use of electronic meters, and electric car design and maintenance.

Electrical 120 - **Electric and Alternative Energy**

Electrical 260 - **Electric Instrument Certification**

Electrical 292 or Auto 292 - **Electric and Hybrid Vehicle Design and Maintenance**

### Program **Student Learning Outcomes**

- Demonstrate an understanding of the safety requirements necessary to succeed as a Electric Car Repair Technician
- Demonstrate the skills and competencies for the automotive specialty area of electrical, high voltage electrical and high voltage batteries.
- Display the basic skills necessary to become a lifelong learner in order to keep abreast of the latest technological changes in bot hybrid and electric cars as measured in attendance in seminars and ASE Certifications

Thoughts? Do you endorse this certificate?



# New Certificate Offering

Solar Technology Certificate

Thoughts?  
Do you  
endorse this  
certificate?

## Solar Technology Certificate of Competency (9 units)

- Electrical 120 - **Electrical and Alternative Energy**
- Electrical 200 - **Solar Photovoltaic Design**
- Electrical 260 - **Electric Instrument Certification**

## Program **Student Learning Outcomes**

- Demonstrate an understanding of the safety requirements necessary to succeed as a Solar Technician
- Demonstrate the skills and competencies for the electrical specialty area of high voltage DC electrical, high voltage batteries and solar electrical interconnections.
- Display the basic skills necessary to become a lifelong learner in order to keep abreast of the latest technological changes in the solar industry.



# New Certificate Offering

Sustainability Electrical Technology

Thoughts?  
Do you  
endorse this  
certificate?



## Solar Technology Certificate of Competency (9 units)

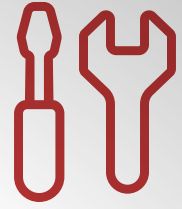
- coming soon

## Program **Student** **Learning Outcomes**

- coming soon



# Coming Soon - **Hybrid** Class Options



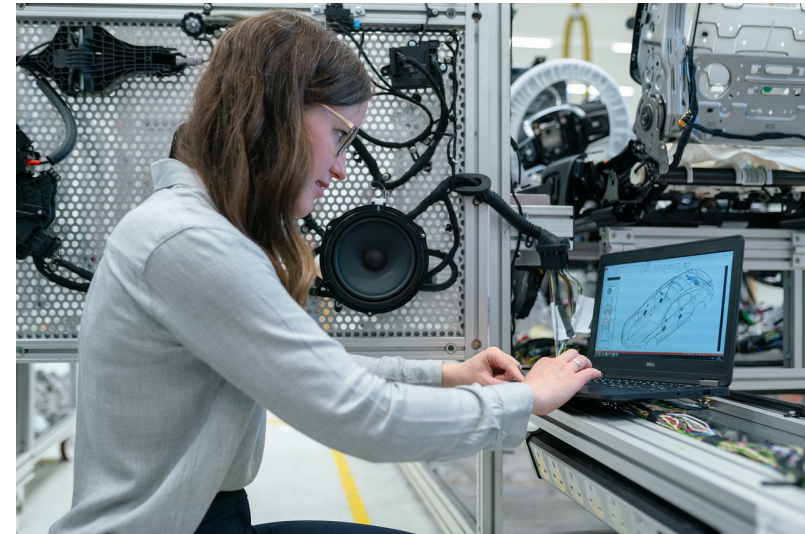
Hybrid classes can be conducted online or in-person

## **Fall 2022 - Spring 2023**

- AUTO/ACRT 100 - Career/Measurement/Math
- AUTO 110 - Intro to Automotive Program
- AUTO 113 - Spec. Electronic Training
- AUTO 114 - Auto Engine Performance
- AUTO 118 - Brakes/Alignment/Suspension
- AUTO 215 - Vehicle Service

- 
- ACRT 101 - Basic Sheet Metal Operations
  - ACRT 102 - Intro to Auto Collision Repair
  - ACRT 103 - Nonstructural Analysis

- 
- Electrical courses  
Etc.



Allows industry working students to take classes and improve skills to meet their schedules and pace

# TOOL TALK

Collision Tech Starter Kit



Auto Tech Starter Set

Auto Body Add-on Set



# About the Tool Sets

## Auto Tech Starter Set

- Most basic tools needed to learn the fundamentals of their trade
- Basic pliers, screwdrivers, wrenches and sockets are included in this set giving you the tools to meet most instructor's minimum requirements

## Collision Tech Starter Set

This set includes specific tools to get you started with auto body repair. Set features hammers, pneumatic palm sander, paint spray gun, and other assorted tools.

## Auto Body Add-on Set

- A great selection of tools for most collision repair needs
- Includes body hammers, gloves, snips and clamps used in today's body shops



# High School Connection



# Building Pathways

## High School Offerings

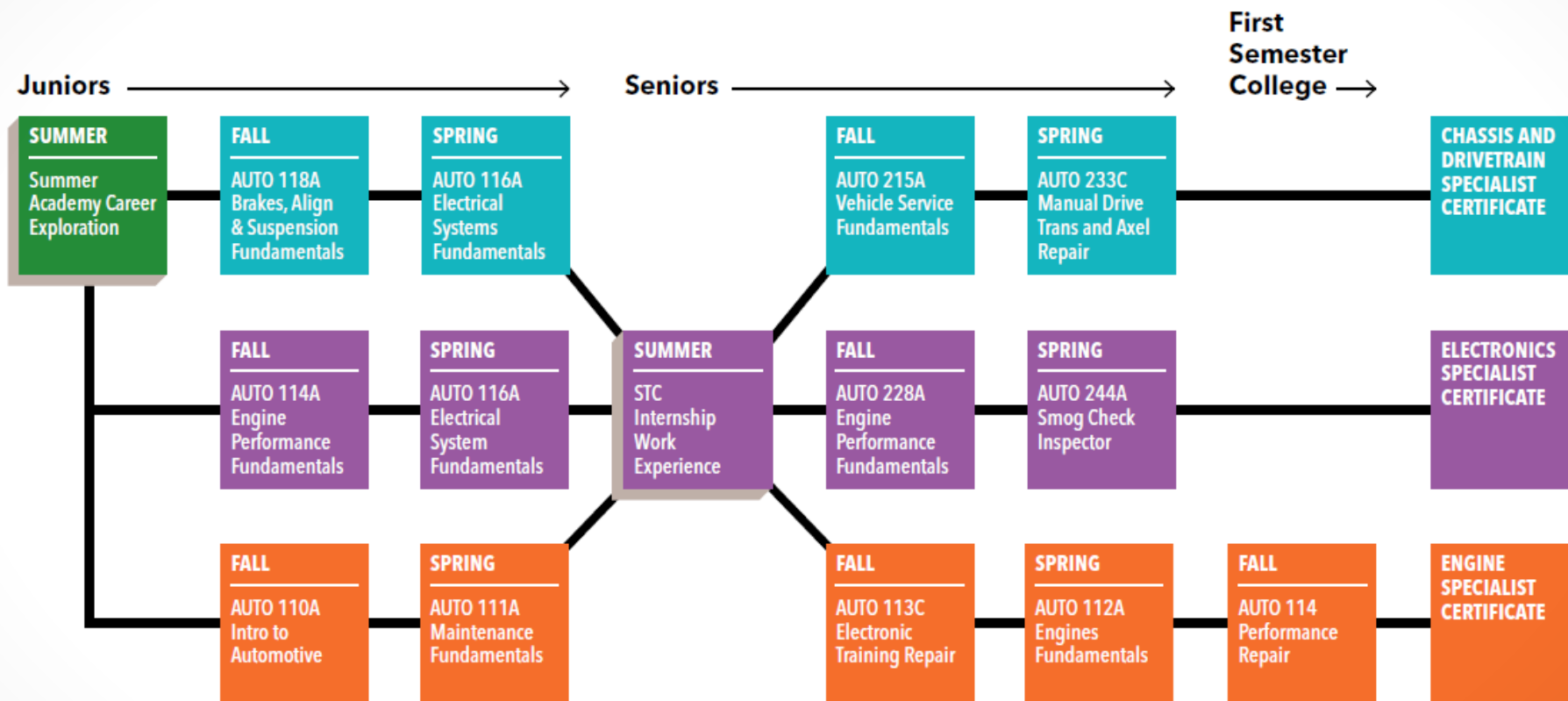
looking to  
add a  
3rd  
section

TERRA LINDA H.S. (Marin County ROP Courses)	TALMAPAIS H.S.	Car Appreciation and Preservation Program - Terra Linda H.S.
Automotive Technology 1 (Articulated with COM AUTO 110)	Automotive Technology 1 (Articulated with COM AUTO 110)	Afterschool program for all Marin H.S. students; Meet 1/week
Automotive Technology 2 (Articulated with COM AUTO 111)	Automotive Technology 2 (Articulated with COM AUTO 111)	Involves field trips to visit auto shops; learn about cars, vintage, upkeep and restoration.
Teacher: John Callas	Teacher and Lead of the HS Auto Advisory Committee: Dan Silin	John Callas (lead teacher) and Charlie Goodman
Headcount: 50 students	Headcount: 50 students	Headcount: 20 students

# Auto Technology

## High School-to-College Career Pathway Map

academics.marin.edu/program/auto



To get first-hand knowledge of careers, join the Bright Futures Speaker Series at [marinschools.org/Page/8304](http://marinschools.org/Page/8304).



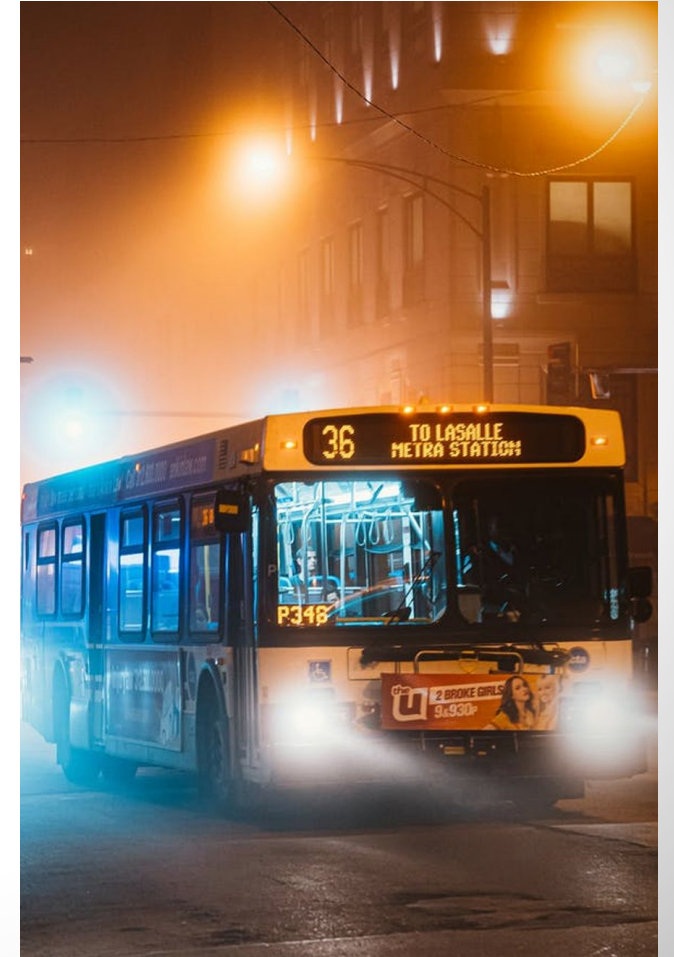
### Earn College Units

If you've come this far, you have either completed certificates in Chassis Drivetrain Specialist or Electronics Specialist. If you're on the Engine Specialist pathway, you only have one more class to go before you get to COM!

**What's coming up...**

# Golden Gate Transit Bus Coach Operator **Apprenticeship**

- Builds equity to help lift priority population communities
- Reforms the hiring practice for Golden Gate Transit
- Starting salary at \$28.00/hour in the first 6 months + benefits
- Supports economic vitality by reinforcing service along 101 corridor
- Provides pathway for degree attainment
- Leads to career advancement and increase in wages

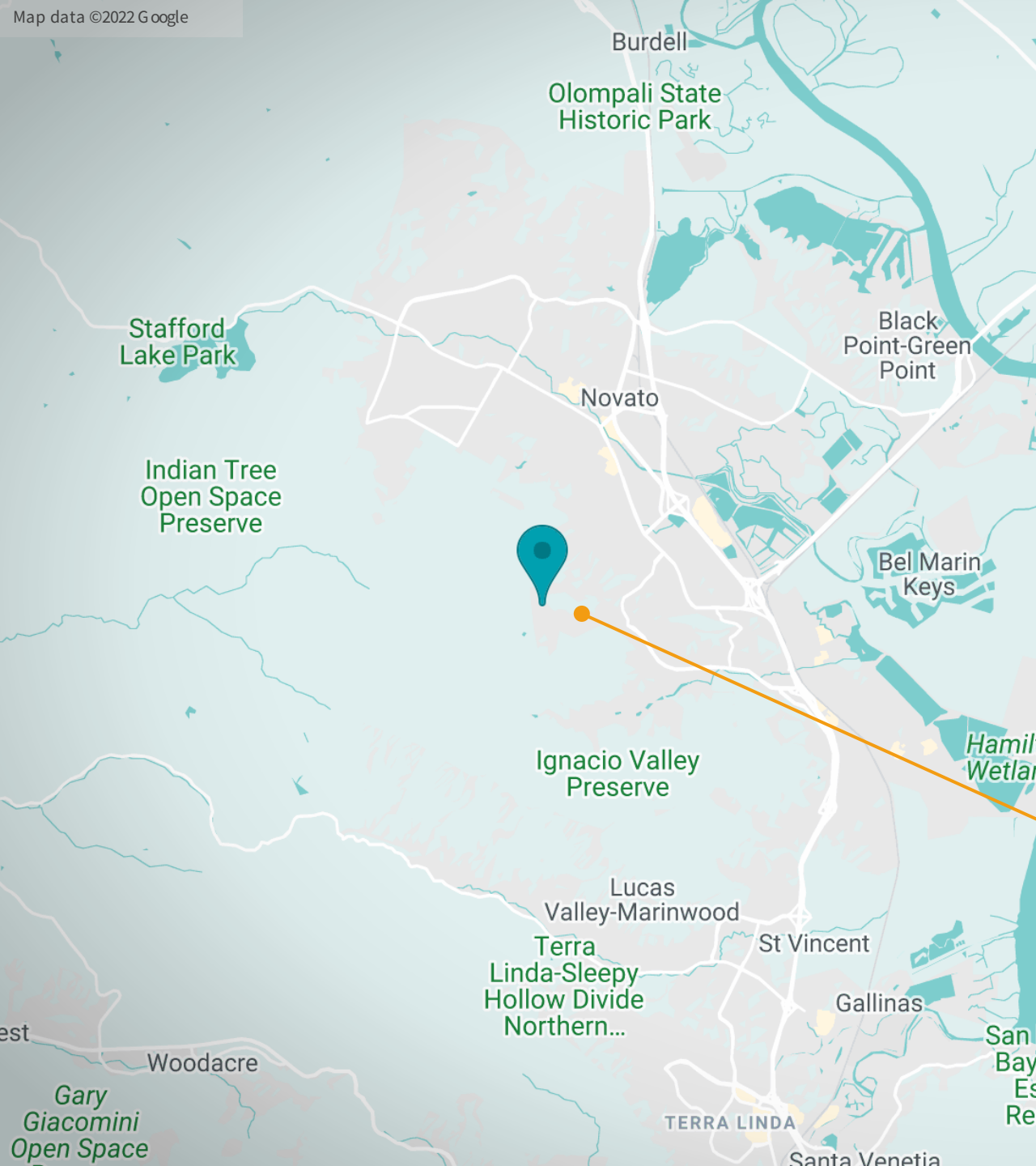


Summary/Wrap-up

Thoughts? **Questions?**

NEXT STEPS





# Thank You!

1800 Ignacio Boulevard Novato, CA 94949

@ rpalmer@marin.edu

@ mbarrall@marin.edu

@ hrahman@marin.edu

**College of Marin, Indian Valley Campus**