Substantive Change Application Form

New Baccalaureate Degree Program

Directions: This application should be submitted *at least* 30 days prior to the anticipated start date of the change. Applications must be complete and the required fees received in order to be scheduled for review.

Email completed application to substantivechange@accjc.org.
Fees must be submitted to ACCJC, P.O. Box 147, Novato, CA 94948

Date of Inquiry:	**01/13/2013**	**Anticipated Start Date: Fall 2025**	
Institution Name:	**Ventura College**		
Address:	**4667 Telegraph Road**		
City:	**Ventura**	**State: CA**	**Zip: 93003**
ALO Name:	**Dr. Jennifer Kalfbeek-Goetz, Vice President of Academic Affairs**		
Telephone:	**(805) 289-6254**	**Email: jkgoetz@vcccd.edu**	

Title of Application and Description of Proposal:

Bachelor of Science in Automotive Career Education

In alignment with its educational mission and in response to an identified need that is supported by a labor market study prepared by the South Central Coast Center for Excellence, Ventura College is seeking approval to offer a Bachelor of Science in Automotive Career Education.

Introduction:

Concise description of the proposed program:
The electrification of the automotive industry requires individuals to have advanced diagnostic skills to service the complex vehicles of today. The Bachelor of Science Degree in Automotive Career Education at Ventura College is designed to provide students with the knowledge and skills needed for high demand jobs within the changing high technology automotive industry. The program will primarily specialize in vehicle electrification, advanced driver assistance systems (ADAS), and autonomous vehicle systems, while providing students with training in business operations and management.
Rationale for the proposed program:
In recent years the shift toward transportation electrification has grown in both the private and public sector, with California leading the way. In 2012, California's then Governor Brown established a target of one million zero-emission-vehicles (ZEVs) on the road by 2025. More recently in 2020, Governor Newsom established a goal for all in-state sales of new passenger vehicles to be zero-emission by 2035.[1] In 2021, General Motors announced their commitment to "an all-electric future" by 2035.[2] Similarly, Volvo announced its intent to make only electric vehicles by 2030.[3] Of the more than 5 million electric vehicles sold nationwide between October 2017 and September 2022, 28.5% of sales have been in California.[4] The electrification of the transportation industry will require training on new technology and opportunities for advancement for the existing automotive workforce. The Bachelor of Science Degree in Automotive Career Education is designed to prepare an individual for a wide variety of technology-based careers within the transportation industry. The electrification of the automotive industry requires individuals to have advanced diagnostic skills to service the complex vehicles of today. This degree provides the overall knowledge and skills needed within today's high-tech transportation industry, specializing in electrification, advanced driver assistance systems (ADAS), and autonomous vehicle systems. There is sufficient demand for the Bachelor of Science in Automotive Career Education as noted in the key findings in the attached "Automotive Technology – Baccalaureate" Labor Market Report prepared by the South Central Coast Center of Excellence for Labor Market Research in June 2022.

[1] Executive Order N-79-20. Executive Department State of California (September 2020). www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf

[2] https://www.nbcnews.com/business/autos/gm-go-all-electric-2035-phase-out-gas-diesel-engines-n1256055

[3] https://www.media.volvocars.com/us/en-us/media/pressreleases/277409/volvo-cars-to-be-fully-electric-by-2030

[4] Alliance of Automobile Manufacturers (2022). Advanced Technology Vehicle Sales Dashboard. Data retrieved January 11, 2023 from https://public.tableau.com/views/AutoAllianceAdvTechVehSalesDashboard/ATVSales?:embed=y&:display_count=yes&:showVizHome=no&:host_url=https%3A%2F%2Fpublic.tableau.com%2F&:tabs=yes&:toolbar=yes&:animate_transition=yes&:display_static_image=no&:display_spinner=no&:display_overlay=yes&:loadOrderID=0

The report identified eight occupations in the standard occupational classification (SOC) system that were identified as related to the proposed automotive baccalaureate degree:

1. Automotive engineers
2. General and operations managers
3. Marketing managers
4. Industrial production managers
5. Transportation, storage and distribution managers
6. Training and development managers
7. Training and development specialists
8. Sales engineers.

Data from the South Central Coast Center of Excellence and local employers indicate that employers in the automotive industry are having difficulty filling positions that require a baccalaureate degree.

According to the Center of Excellence Labor Market Report,

1. In the South Central Coast region, the number of jobs related to Automotive Technology are expected to increase for training and development specialists and remain steady for other aligned occupations.
2. In 2021, there were 4,219 total job ads posted for the automotive technology occupations selected for the analysis, with 71% (2,994), of them requiring a bachelor's degree. This data indicates a continued growth in related job postings, as well as demonstrate that the majority of postings for this set of occupations suggest a bachelor's degree.

An informal survey administered by Ventura College to local automotive dealerships showed that among all respondents, 25% or less of their workforce currently holds a bachelor's degree. Employers (50% of respondents) indicated that they are willing to pay candidates with a bachelor's degree more than those with an associate's degree or no postsecondary degree. Furthermore, 66.67% of respondents stated that would be willing to subsidize additional education and training for incumbent automotive technicians to upskill to a bachelor's degree and that they would prefer candidates with bachelor's degrees for the following positions:

- Management:
    - Assistant service managers
    - Customer Relations managers
    - General managers
    - Parts and service managers
    - Sales managers
    - Service managers
- Service consultants
- Service Master Technicians.

Evidence of sufficient demand for proposed program:

Ventura College is uniquely positioned to attract a sufficient number of students to the baccalaureate program in Automotive Career Education given the following factors:

1. Expressed student interest
2. High quality associate degree program
3. Fully online upper division coursework
4. Large number of associate degree completers
5. Lack of bachelor's degree program in automotive
6. Affordability

Expressed Student Interest

In December 2022, Ventura College administered a simple two-question survey to 1,008 students who enrolled at Ventura College or graduated with automotive declared majors between Fall 2017 to Fall 2022. Eighty-three current and former students responded, for a 0.08% response rate.

The results of the student survey indicate substantial interest in an automotive baccalaureate degree program. The survey asked:

1. If students were in the process of completing an associate's degree in automotive
2. If students would be interested in enrolling in a bachelor's degree program in automotive.

Of the 77 respondents to the first question, 66 (87%) had completed or were in the process of completing an associate's degree in automotive. Twenty-nine respondents (37.66%) had completed an associate's degree in automotive, 38 (49.35%) were in the process of completing an associate's degree in automotive, and 10 (12.99%) did not plan on completing an associate's degree in automotive.

The majority of students or alumni who completed the second question (66 of 83, or 79.52%) stated that they were extremely interested (53 of 83, or 63.86%) or very interested (13 of 83, or 15.66%) in enrolling in a bachelor's degree program in automotive. An additional 12 students were moderately interested, one respondent was slightly interested and four were not at all interested in enrolling in an automotive bachelor's degree program.

High Quality Associate Degree Program

The proposed baccalaureate program will build on the existing and highly regarded associate's degree in Automotive Career Education at Ventura College. The associate's degree program has received the highest level of accreditation from the National Institute for Automotive Service Excellence (ASE) for over 30 years. It has also been a part of the Toyota Technician and Training Education Network (T-TEN) program since 1986. T-TEN has been considered the auto manufacturers' benchmark for technician career-entry programs, with over 10,000 students who have completed the program and received Toyota factory certification. Each year, nine out of 10 T-TEN graduates are hired by a Toyota or Lexus dealer. Ventura College graduates show high levels of success in terms of employment, living wage and skills attainment.

Fully Online Upper Division Coursework

Ventura College anticipates that students who will enroll in the baccalaureate program will be working part-time or full-time. As such, the program plans to offer the upper division coursework as fully online to provide students with the flexibility to pursue a bachelor's degree while continuing to work. Offering upper division coursework fully online will also allow students throughout California to enroll in the program, expanding the pool of prospective students.

Large Number of Associate Degree Completers

During the 2018-2019 academic year, there were 300 completers for the automotive Associate's degree programs in the South Central Coast region and Los Angeles Counties, as shown in the table below.

Automotive Technology AA/AS Completers, 2018-2019

AA/AS Programs	Completers
Universal Technical Institute – Southern California	206
Allan Hancock College	13
Ventura College	11
El Camino Community College District	11
Oxnard College	10
Los Angeles Trade Technical College	8
East Los Angeles College	7
Cuesta College	6
Santa Barbara City College	5
Los Angeles Pierce College	5
Citrus College	5
Rio Hondo College	3
Pasadena City College	3
Long Beach City College	3
College of the Canyons	2
Antelope Valley College	1
Compton College	1

Source: Economic Modeling Specialists International (EMSI)

Lack of Bachelor's Degree Programs in Automotive

Rio Hondo College is currently the only school in California offering a bachelor's degree program in Automotive Technology.

Affordability

Given that Rio Hondo College is the only school in California that offers a bachelor's degree in automotive technology, students often have to enroll in automotive baccalaureate programs outside of the California. Enrolling in out-of-state colleges significantly increases the cost for students. For instance, the 2022-2023 out-of-state tuition fees for Weber State University (a college that offers a Bachelor of Science in Automotive Technology) is $16,164 for two semesters. In contrast, the total student expenses to complete the upper division coursework, inclusive of enrollment fees, instructional materials, other student fees, for the proposed Bachelor of Science in Automotive Career Education at Ventura College is estimated at $7,068 over two years, as outlined in the Estimated Costs to Students table below. In addition to lower enrollment fees, Ventura College also plans to offer the majority of upper division courses (10 of 14) as Zero Textbook Cost.

Estimated Costs to Students for Upper Division Coursework

Student Expenses	Year 3	Year 4	Upper Division Total	Notes
Enrollment Fees	3,128	3,120	6,500	$46 (community college enrollment fee) + $84 (upper division) = $130 per unit for upper division coursework
Health Fee	60	42	102	$21/semester (fall and spring), $18 summer
Materials	504	194	698	Hybrid Gloves for bootcamp - $60 Society of Automotive Engineers student subscription - $35/year Automotive News Subscription - $159/year Cengage Unlimited - $250 for 2 years
Student Center	10	10	20	Ventura College students voted to enact a student center fee of $1 per unit up to a maximum of $10 per student per fiscal year for the purpose of establishing and operating a Student Center.
Total	3,702	3,366	7,068*	*Cost is for students who need to take the Automotive Technology Bootcamp. The total cost for students who have A.S. from T-TEN or ASE MAST program is estimated at $6,852

Standard I: Mission, Academic Quality and Institutional Effectiveness, and Integrity

Describe how the proposed program is consistent with college's mission and goals.

The Bachelor of Science in Automotive Career directly supports the college's mission and Educational Master Plan. The proposed program focuses on workforce preparation and degree completion and directly meets two of the five goals in the college's Educational Master Plan (2017-2023).

Ventura College Mission Statement
Ventura College places students at the center of their learning experience, supporting them in achieving their personal, academic, and career goals in an anti-racist, liberating, and inclusive environment. The College is an open access educational institution that supports our diverse community, helping them transform their own lives by offering degrees, certificates, transfer, and workforce preparation opportunities.

Ventura College Educational Master Plan (2017-2023)

- Goal 1: Increase the success of our students while closing equity gaps.
  Objective 7: Ensure that all workforce preparation programs meet student employment goals set by the State of California.
- Goal 2: Increase our community's access to transfer, workforce preparation, and basic skills education.

As a Hispanic Serving Institution, Ventura College serves approximately 10,000 full-time equivalent students, 60% of whom are Hispanic and 55% are low income (students with a household income of $36,000 or less for a family of four). The majority of students who enroll in Ventura College's current transportation programs (automotive and diesel) (65.9%) are Hispanic.

According to the South Central Coast Center of Excellence labor market report,

3. In 2021, there were 4,219 total job ads posted, with 71% (2,994), of them requiring a bachelor's degree. This data indicates a continued growth in related job postings, as well as demonstrate that the majority of postings for the set of occupations for which the program will prepare students suggest a bachelor's degree.
4. Completers of regional Automotive Technology programs from the 2018-2019 academic year had a median annual wage upon completion of $29,246. In contrast, the average wage in the South Central Coast region for the occupations that the proposed baccalaureate program will prepare students for is $50.45 per hour, or $104,936 annually.
5. 75% of completers of regional Automotive Technology programs were part-time, 48% of students were first-generation, 12% skill-builders, and 84% economically disadvantaged.

The Bachelor of Science in Automotive Career Education will enhance Ventura College's ability to meets its mission by providing educational and career advancement opportunities at an affordable price for automotive technicians who have not traditionally pursued baccalaureate degrees and students of color and low-income students who are underrepresented in higher education.

Describe the planning process that led to the proposed baccalaureate degree.

Ventura College consulted with local and regional employers, other California community colleges with Associate of Science in Automotive Technology programs, students, and the South Central Coast Regional Consortium (SCCRC) on the development of the proposed Bachelor of Science in Automotive Career Education degree program. Letters of support from the Ventura County Workforce Development Board, SCCRC, and local automotive dealerships are included in the Evidence Section.

In Spring 2022, faculty members in the automotive program began engaging in informal dialogue with California community colleges with Associate of Science in Automotive Technology programs and local and regional industry partners to assess the demand for an automotive baccalaureate degree program.

In order to confirm the need for the baccalaureate degree, Ventura College requested a Labor Market Information Report from the South Central Coast Center of Excellence. The "Automotive Technology – Baccalaureate" Labor Market Report was prepared in June 2022.

Below is a summary of the key findings:

1. In the South Central Coast region, the number of jobs related to Automotive Technology are expected to increase for training and development specialists and remain steady for other aligned occupations.
2. In 2021, there were 4,219 total job ads posted, with 71% (2,994), of them requiring a bachelor's degree. This data indicates a continued growth in related job postings, as well as demonstrate that the majority of postings for this set of occupations suggest a bachelor's degree.
3. Completers of regional Automotive Technology programs from the 2018-2019 academic year had a median annual wage upon completion of $29,246. In contrast, the average wage for the occupations in the South Central Coast region that the proposed baccalaureate program will prepare students for is $50.45 per hour, or $104,936 annually.
4. 75% of completers of regional Automotive Technology programs were part-time, 48% of students were first-generation, 12% skill-builders, and 84% economically disadvantaged.

In November 2022, Ventura College provided an overview of the proposed program to the South Central Coast Regional Consortium. The consortium includes the following colleges: Antelope Valley College, College of the Canyons, Oxnard College, Moorpark College, Ventura College, Santa Barbara City College, Allan Hancock College, and Cuesta College. The consortium reviews all new programs for appropriateness, regional duplication, and completion. The program was recommended by the consortium as demonstrated in the attached meeting minutes.

To solicit additional feedback on local industry interest in offering an automotive baccalaureate degree, Ventura College also administered a survey to local automotive dealerships. In December 2022, the survey was sent to 13 dealerships. Six dealerships responded and the results were compiled in January 2023.

The majority of respondents (66.67%) reported that they would prefer candidates with a bachelor's degree in automotive over other bachelor's degrees. All respondents stated that 25% or less of their workforce currently holds a bachelor's degree and that 66.67% would be willing to subsidize additional education and training for incumbent auto technicians to upskill to a bachelor's degree. The responding dealerships indicated that they would prefer candidates with bachelor's degrees for the following positions:

- Management:
    - Assistant service managers
    - Customer Relations managers
    - General managers
    - Parts and service managers
    - Sales managers
    - Service managers
- Service consultants
- Service Master Technicians

Describe how the baccalaureate degree program will be evaluated and fit into the existing college planning process.

The baccalaureate degree program will be evaluated following Ventura College's established annual program review process. Program review provides the most comprehensive opportunity for individual programs to discuss all factors that support academic quality, including the review of student learning and student achievement data, program curricula, student support, instructional equipment, staffing, technology, facilities, and budgets.

At the program level, the annual program review process entails comprehensive data analysis. Each program is provided with a link to data dashboards that display comprehensive student achievement data for review and analysis. For instructional programs, this includes data on course enrollment, successful course completion, numbers of degrees and certificates conferred, percentage of courses taught by full-time faculty, productivity, and course fill rates. Program faculty and staff include analyses of these data in their program review reports, and use the results in developing improvement plans and initiatives, and as a measurement of need when requesting resources.

Programs review key data metrics that align with the college mission; identify areas where they are doing well and areas that can be improved; and request resources for improvement. College committees then use data-based rubrics to prioritize and rank resource requests. The College President and Executive Team develop a final list of ranked priorities for funding. Thus, the program review process uses data to drive decisions made about the allocation of dollars for new personnel and program improvement.

In addition, all courses that are part of the baccalaureate degree program will be reviewed by discipline faculty on a regular basis and presented to the industry advisory committee for review at least every two years to ensure continued currency with industry standards and responsiveness to local and regional demand.

Standard II: Student Learning Programs and Support Services

Explain the program requirements (include program sheet for the college catalog and anticipated time to completion).

- **Must provide evidence Baccalaureate Degree has 120 credits**

(*if degree is more than 120 credits, provide justification for additional credits*)

- **Must provide evidence degree has 36 units of General Education**

The Bachelor of Science Degree in Automotive Career Education at Ventura College is designed to provide students with the knowledge and skills needed for high demand jobs within the changing high technology automotive industry. The program will primarily specialize in vehicle electrification, advanced driver assistance systems (ADAS), and autonomous vehicle systems, while providing students with training in business operations and management.

Application for Admission

The application process for admission into the baccalaureate degree program will require two separate applications. The first application will be to Ventura College under standard community college enrollment rules applicable to Ventura College pursuant to Education Code, Section 76000 et seq. A second application will be required for admission to the baccalaureate degree program, which will be developed by the college.

Admission Requirements

Admission to Ventura College will not guarantee admission into the baccalaureate program. Students interested in pursuing the Bachelor of Science in Automotive Career Education must meet the following requirements in order to be considered for admission into the program:

1. Major Courses – 40 units of transportation related courses from a designated associate degree course sequence per the California Community College Chancellor's Office Taxonomy of Programs (TOP) code 0948.00. Each course must be completed with a "C" or higher.
2. A minimum of 30 units (45 quarter units) in general education from either CSU General Education Breadth or IGETC patterns with a minimum 2.0 cumulative GPA. The 30 units must include the following courses, completed with a "C" or higher:
    a. Written communication
    b. Oral communication
    c. Critical thinking
    d. Mathematics

Student Learning Outcomes

Students who successfully complete the Bachelor of Science in Automotive Career Education will meet the following Program Student Learning Outcomes (PSLOs):

- *PSLO 1*: Demonstrate an understanding of safety, operation, service, and repair of electrified vehicle systems and supporting systems.
- *PSLO 2*: Demonstrate critical thinking and diagnostic skills needed to diagnose, repair, and test electrified vehicle systems and supporting systems.
- *PSLO 3*: Demonstrate proficiency in the use of electrified vehicle diagnostic equipment to evaluate system performance and determine needed repairs.
- *PSLO 4*: Demonstrate comprehension of electrified vehicle systems and supporting systems theory and operation.

Program Requirements

Successful completion of the Bachelor of Science degree in Automotive Career Education (ACE) will be awarded upon successful completion of a total of 130 units that includes:

- Lower Division General Education – 40 units (CSU Breadth or IGETC)
- Lower Division Major Courses – 43 units
- Upper Division General Education – 16 units
- Upper Division Major Courses – 31 units

All courses in the major and all upper division general education courses must be completed with a "C" or better.

Lower Division Major Courses

Course ID	Title	Units
ACE V11	Automotive Vehicle Maintenance	3
ACE V12	Auto Electrical Systems I	4
ACE V13	Automotive Engine Repair	4
ACE V21	Automotive Brake Systems	4
ACE V22	Automotive Steering & Suspension Systems	4
ACE V23	Automotive Electrical Systems II	4
ACE V31	Automotive Heating and A/C Systems	4
ACE V32	Automotive Engine Management	4
ACE V33	Automotive Manual Transmissions	4
ACE V41	Automatic Transmissions	4
ACE V42	Automotive Engine Driveability	4
Total Lower Division Major Units		**43**
Total Lower Division General Education Units (CSU Breadth or IGETC)		**40**

Upper Division Major Courses		
Course ID	**Title**	**Units**
ACE V110	Electrified Vehicle Safety	4
ACE V111	Electrified Vehicle Classification and System Design	4
ACE V121	Electrified Vehicle Supporting Systems	4
ACE V122	Electrified Vehicle Diagnostic Processes and Equipment	4
ACE V123	Capstone 1 Research Project	1
ACE V131	Advanced Driver Assistance Systems	4
ACE V132	Automated Safety and Convenience Systems	4
ACE V141	Automotive Standards, Laws, and Regulations	4
ACE V142	Capstone 2 Research Project Development	2
Total Upper Division Major Units		**31**
Upper Division General Education		
BUS V100	Automotive Technology Business Operations	3
BUS V101	Automotive Technology Business Management	4
COMM V100	Interpersonal and Intercultural Communication	3
COMM V101	Business and Professional Communication for Managers	3
PHIL V101	Ethics and Technology	3
Total Upper Division General Education Units		**16**

The attached Program of Study document outlines the required coursework and sequence of courses for the proposed baccalaureate program.

Program Goals

The goal of the proposed Bachelor of Science in Automotive Career Education is to provide students with a high-quality education at an affordable price that prepares them to perform specialized skill sets that are aligned with current and emerging automotive industry needs. The program design has been informed by regional labor market information, local automotive industry input, dialogue with students, two-year automotive associate degree programs and four-year universities. The program will be regularly evaluated to ensure quality education for all students and ongoing alignment with the needs of industry and communities served by Ventura College.

Provide evidence that program learning outcomes are the appropriate level for Baccalaureate Degree.

The program learning outcomes are appropriate for upper division coursework and immediate employment in today's high technology automotive industry. The students' academic pathways and learning outcomes are scaffolded from Ventura College's established and well-regarded Associate of Science in Automotive Career Education. Each program learning outcome rests on foundational skills and competencies provided by the lower division coursework.

The existing associate's degree program is well aligned with the local, regional and national automotive industry and has received the highest level of accreditation for over 30 years. It has been evaluated by the National Institute for Automotive Service Excellence (ASE) and has been certified in all eight ASE automotive repair categories and has received the highest level of accreditation as a Master Automotive Service Technology program. The program also has third-party manufacturer certification through Toyota's Technician and Training Education Network (T-TEN) program. T-TEN is a nonprofit group under the ASE umbrella and is comprised of community college and vocational automotive programs run by automotive educators from across the nation working in partnership with Toyota, Lexus, and regional dealerships to provide an accelerated career path. It provides a fast-track, two-year program to become a certified automotive technician by combining classroom hours, job shadowing and internships at automotive dealerships.

The upper division coursework and learning outcomes will expand upon the rigorous competency-based learning objectives of the lower division courses and will provide advanced level automotive industry-specific knowledge and skills and business operations and management concepts needed for career advancement in the changing and high technology automotive industry.

Ventura College will continue to work in close partnership with industry and educational partners to ensure that the program learning outcomes are the appropriate level for a baccalaureate degree and responsive to industry needs.

Describe the Student Services (counseling/advising, etc.), Learning Support Services (tutoring, etc.), Library Services, and other activities that will support baccalaureate students. Be sure to highlight how the services are tailored specifically to baccalaureate students.

Ventura College is part of the Ventura County Community College District (VCCCD) and operates in a manner that is consistent with its authority and mission. Ventura College will work in collaboration with VCCCD and its sister colleges, Moorpark College and Oxnard College, to develop the necessary financial and administrative processes to facilitate the successful implementation of the program.

VCCCD already has a system in place to maintain separate records for students who are enrolled in courses classified as lower and upper division courses and the ability to report students who are enrolled in lower division courses as community college students and to report students enrolled in upper division courses as baccalaureate degree program students.

Ventura College's Financial Aid and Admissions and Records Offices are in full support of implementing baccalaureate degree programs and is committed to developing the processes needed to support baccalaureate students.

Ventura College supports a robust network of services aimed at bolstering student success and accommodating student needs by meeting students where they are regardless of modality. Student

support services include Enrollment Services (Admissions and Records, First Year Experience, Student Connect, Outreach, Financial Aid), Counseling, Veterans Resource Center, Student Activities and Student Life, Extended Opportunity Programs and Services, Disabled Students Programs and Services, CARE, CalWORKs, Basic Needs, Student Health Center, Mental Health and Wellbeing Counseling, Title IX Office, Wellness Services, Undocumented Resources, MESA, Career and University Transfer Center, and STEM Harbor. The baccalaureate program will coordinate services with on-campus programs that serve low-income students and other special populations, as well as campus-wide services including counseling, tutoring, student health center, and financial aid.

Ventura College offers comprehensive counseling support services and programs to assist students through their educational journey both virtually and in person. The College's counseling services encourage students to explore potential career and major pathways through personal, academic, and career counseling. Counseling services ensure students receive timely, useful, and accurate information about academic programs, including graduation and transfer requirements.

VC supports student learning and achievement through library and other learning support services with designated qualified personnel responsible for working with students. Learning is emphasized and supported with sufficient resources and services at Ventura College. The Library provides a wide variety of academic resources (including access to check-out Chromebook computers, hotspots, and calculators) available to all students, including those attending classes at VC East Campus and online. The Evelyn & Howard Boroughs Library, the Testing Center, the Stan Wiesel Tutoring Center, the Learning Center (previously called the B.E.A.C.H. Learning Resource Center), as well as their online complements are all advertised and accessible to the student body via the College website.

The College utilizes Starfish Connect to facilitate communication between faculty and students, and to help connect students to helpful support services. This tool increases access to learning support, directly linking students to counselors and learning support services and centers.

In-person and online library research assistance, tutoring, and workshops are advertised at VC's main campus, East Campus, and online. Library services, tutoring and workshops are also promoted through monthly library newsletters sent to the campus community (and then posted on the library website) as well as through social media, including Instagram, Twitter, and Facebook.

VC's Library and Tutoring centers provide access to materials and programming to support student learning in online as well as face-to-face environments. In addition to providing in-person assistance, the Library provides opportunities for online assistance through multiple modalities, including real-time live VC librarian assistance through LibChat and appointment scheduling with a librarian.

The Tutoring Center likewise provides both in-person services and online services through a variety of services; online tutoring services are provided either as synchronous Zoom-based tutoring sessions with a VC tutor, asynchronous workshops in canvas or as via partnership with the online tutoring resource, NetTutor.

The Library also provides comprehensive electronic resources that are available remotely. These resources include online synchronous reference services, booking research appointments with a librarian, online synchronous librarian-led one-shot information literacy instruction sessions, discipline-specific research guides, databases containing electronic books, journals, and streaming media, and librarian-created, discipline- / instructor-specific learning management system information literacy lesson modules. Students have direct access to library resources via a link in the

Canvas LMS, from the MyVCCCD portal and from the Library homepage. Librarians maintain and update print and electronic library collections, as well as the online research guides and information literacy modules, providing direct support of instruction, for on-campus and remote students. A librarian is on duty to provide in-person research assistance during operating hours. Comparable online research assistance chat staffed only by VC librarians is available to students through the Library's "LibChat" service.

VC's library and learning support services provide access to computers, textbooks, scanners, and other materials to support their learning. In addition, the Learning Center computer lab provides access to specialized software for student use. The Learning Center computer lab is equipped with appropriate and course specific software meeting the instructional needs of students with regular support and updates of both software and hardware.

Learning support services offer regular programming throughout the year, including study sessions and academic skills workshops. The library and learning support services are staffed with full-time personnel, as well as peer tutors and student workers. Full-time staff and faculty working in academic success centers receive regular professional development training throughout the year via VC's Flex Day programming, ongoing professional development opportunities hosted throughout the year as well as other training opportunities. Peer tutors receive training prior to starting work and receive regularly scheduled tutor training throughout their employment.

The VC Library and learning support services employ the expertise of credentialed professionals in the oversight and selection of resources, equipment and materials that support student learning and achievement. Staff and faculty work together in each of these areas to evaluate, maintain, and direct the purchase and implementation of equipment, textbooks, and computers, as well as other support services and learning materials.

The Library provides access to semester-length loans of many textbooks through the Lending Library. With support from the VC Foundation, the Library also makes efforts to purchase at least one print copy of all assigned textbooks for its Reserves collection. The Library also works closely with discipline faculty in the creation of OER materials.

In addition to textbook collections, librarians maintain the library's collection of approximately 100,000 physical books and materials that directly support the college curriculum, as well as a growing number of eBooks. Librarians review and update resources, including the library catalog, research guides, and databases, making all items searchable, accessible, and relevant.

Open-access computer labs are available for student use in VC's Library as well as in many of the learning support centers. Additional equipment including printing, scanners and technology checkout are provided by the Learning Center computer lab. In response to the global pandemic of 2020-22, students were also provided access to Chromebooks and hotspots that could be checked out through our Lending Library; this support service remains available during this post-pandemic time.

The labs are staffed, and student technology needs are supported with appropriate software. Computers and software are continuously updated under an established replacement schedule. In collaboration with DSP&S, the Library and other locations on campus provide access to specialized equipment and software to make library computer labs, resources, and textbooks available for students. As stated on page 10 of the Library Policy Handbook the Library also works to ensure that all database subscriptions and online resources are 508 compliant, as indicated in the Library Policy

Handbook.

Finally, services and software to support student learning are purchased under the guidance of faculty, including librarians. Examples of this include Nettutor, the online tutoring service chosen by the Campus Distance Education Committee to provide online learning support to distance education and other students at VC. In addition, it includes access to online databases, including JoVE, Films on Demand and Kanopy streaming media databases, all which were based on faculty recommendation.

Ventura College's established counseling, library and learning support services are well positioned to meet the specific needs of baccalaureate students. The baccalaureate program will engage in an ongoing program part of the annual program review process, the college will assess the specific student services needs of baccalaureate students

Standard III: Resources

Please describe the staffing plan to support the proposed program.

Faculty:

Ventura College employs three full-time and three active adjunct faculty members for the Associate of Science degree in Automotive Career Education. Three current faculty members meet the minimum qualifications to teach the upper division major coursework. Based on the sequence of courses, an additional 0.7332 to 0.7999 faculty load is needed each semester to offer the upper division major and general education courses for the baccalaureate program. As such, a full-time faculty member is not required to launch the program. The additional faculty load generated by the baccalaureate program will be supported through the hiring of additional adjunct faculty members in automotive and the general education disciplines.

Although a full-time faculty member is not needed to launch the program, the program anticipates that release time for faculty facilitator may be needed to lead coordination of the annual review of baccalaureate degree applications and admission and orientation of new cohorts of students. Full-time and adjunct faculty members would be eligible to apply for the faculty facilitator position.

Staff:

In addition to the three full-time faculty and adjunct faculty members, the automotive program also employs two full-time and one hourly instructional lab technicians. The instructional lab technicians are all ASE Certified Master Technicians. The instructional lab technicians provide instructional support and training for students; maintain instructional materials inventory; and maintain and repair instructional equipment.

The Career Education Division also has two administrative assistants. One administrative assistant supports the agriculture, technology and transportation departments. The administrative assistant will support the coordination and implementation of the annual baccalaureate degree program application, admission, and orientation process.

Administration:

Ventura College is fully invested in offering a high-quality automotive baccalaureate degree program. As such, it will commit the technical expertise, human resources, financial support and other resources needed to ensure the success of the program and its students. The leadership team has the formal education, training and experience needed to effectively manage, implement, and evaluate the program to ensure that the program maintains academic rigor and continues to meet the current and emerging needs of the industry and communities served by Ventura College. The Dean of Career Education II, who currently manages the Agriculture, Technology, and Transportation departments, will oversee the Bachelor of Science in Automotive Career Education. The dean will serve as an integral part of the institution's administrative team to help secure resources, collaborate with various departments, and gain support from internal and external stakeholders.

Provide faculty qualifications.

The faculty have the breadth and depth of experience needed to offer a quality baccalaureate degree program in Automotive Career Education.

Industry Certifications and Currency

All automotive faculty members at Ventura College are required to maintain National Institute for Automotive Service Excellence (ASE) industry certifications. The program must have one or more instructors certified in each of the ASE certifications: G1, A1-A8, and L1. All instructors must be certified in G1, A6, and any areas taught (A1-A8). Instructors teaching engine performance must also be certified in L1. Those teaching hybrid and electric vehicle diagnosis and repair are also required to be certified in L3. The Instructional Lab Assistants are also all ASE Certified Master Technicians.

Faculty Qualifications

Brief bios and qualifications of current full-time and adjunct automotive faculty members are included and their resumes are attached in the Evidence Section.

- **Chad Stangeland** – Full-time automotive faculty member, T-TEN Program Coordinator, and Transportation Department Co-Chair. Mr. Stangeland has a M.S. in Technology from Pittsburg State University and a B.S. in Automotive Technology from Weber State University. He completed the A.S. in Automotive Technology and T-TEN program from Ventura College. He has served as a faculty member at Ventura College for nine years. Prior to serving as a faculty member, he worked in the automotive industry for over seven years. He is an ASE Certified Master Technician, certified Toyota T-TEN instructor, Toyota Master Diagnostic Technician, Lexus Diagnostic Specialist and maintains multiple industry certifications. Mr. Stangeland has led the development of the program design and curriculum for the proposed baccalaureate program.
- **Eric Irwin** – Full-time automotive faculty member. Mr. Irwin has a B.A. in Career and Technical Studies from California State University San Bernardino and an A.S. in Automotive Technology from Santa Barbara City College. He has served as a faculty member at Ventura College for nine years. Prior to serving as an instructor, he worked in the transportation industry for 10 years. He is an ASE Certified Master Technician, certified Toyota T-TEN instructor, Licensed California Bureau of Automotive Repair Smog Instructor. He has extensive professional industry experience available for program and curriculum development.

- **Russell Gardner** – Full-time automotive faculty member, Transportation Department Chair, NC3 Snap-On Certification Coordinator, Subaru University Program Coordinator. Mr. Gardner completed the A.S. in Automotive Technology and T-TEN program from Ventura College. He has served as a faculty member at Ventura College for five years. He worked in the automotive industry for 15 years prior to teaching at Ventura College. He is an ASE Certified Master Technician, Toyota/Lexus Master Certified Technician, Licensed California State Smog Check Inspector and Repair Technician and maintains multiple industry certifications.
- **Andrew Cawelti** – Adjunct automotive faculty member. Mr. Cawelti has a B.A. in Economics from California State University, Fresno. He served as a full-time automotive faculty member at Ventura and Oxnard College for a total of 11 years prior to transitioning to an adjunct faculty member role. During his tenure as a full-time faculty member, he served as Department Chair and Toyota T-TEN Coordinator. He is an ASE Certified Master Technician, certified Toyota T-TEN instructor, Licensed California Bureau of Automotive Repair Smog Instructor, and Evaluation Team Leader for ASE, leading automotive program accreditation review teams.
- **Charles Rockwood** – Adjunct automotive faculty member. Mr. Rockwood has an A.S. in General Studies from Santa Barbara City College. As a former full-time automotive faculty member at Ventura College, Mr. Rockwood has served as an automotive instructor at Ventura College for over 40 years. He maintains multiple industry certifications and has co-authored three automotive technology textbooks.
- **Kevin Coogan** – Adjunct automotive faculty member. Mr. Coogan has served as an adjunct automotive faculty member at Ventura College for seven years. He has worked in the automotive industry for 35 years and continues to serve as a Master Diagnostic Specialist and shop foreman at a local auto dealership. He is an ASE Certified Master Technician and Certified Master Lexus Diagnostic Specialist.

The California Community Colleges Chancellor's Office Baccalaureate Degree Pilot Program Handbook (2016) states that "any faculty member teaching upper division courses that are part of an approved baccalaureate degree program must satisfy one of the following criteria:

1. Possession of a master's degree, or equivalent foreign degree, in the discipline of the faculty member's assignment as listed in *Minimum Qualifications for Faculty and Administrators in the California Community Colleges*.
2. In disciplines where the master's degree is not generally expected or available, but where a related bachelor's or associate degree is generally expected or available, possession of either:
   - A master's degree or equivalent foreign degree in the discipline directly related to the faculty member's teaching assignment and two years of professional experience directly related to the faculty member's teaching assignment and any appropriate licensure; or
   - A bachelor's degree or equivalent foreign degree in the discipline directly related to the faculty member's teaching assignment and six years of professional experience directly related to the faculty member's teaching assignment and any appropriate licensure
3. In disciplines where the master's degree is not generally expected or available, but where a related bachelor's or associate degree is not generally expected or available, possession of either:
   - Any master's degree or equivalent foreign degree in the discipline directly related to the faculty member's teaching assignment and two years of professional experience directly related to the faculty member's teaching assignment and any appropriate

licensure; or

- Any bachelor's degree or equivalent foreign degree in the discipline directly related to the faculty member's teaching assignment and six years of professional experience directly related to the faculty member's teaching assignment and any appropriate licensure

For the automotive discipline, master's and bachelor's degrees are not generally expected or available. As such, the following automotive faculty would be initially qualified to teach the upper division major coursework using criteria 3 above:

- Chad Stangeland – M.S. in Technology and B.S. in Automotive Technology
- Eric Irwin – B.A. in Career and Technical Studies
- Andrew Cawelti – B.A. in Economics

Explain the impact on the following resources:

Physical Resources

Ventura College has an existing associate's degree in automotive, which has state-of-the-art automotive facilities, vehicles, and equipment. The ongoing expenses to offer the upper division coursework will be minimal because the upper division courses will be fully online and will not require additional facilities or multiple pieces of equipment that will be used by students. The budget included in the Impact on Financial Resources section of this application outlines the estimated ongoing costs to implement the baccalaureate degree program.

Technology

Ventura College's current technology infrastructure is well positioned to support fully online upper division courses. Our automotive facilities offer state-of-the-art technology to support effective teaching and learning, including web cameras, wireless microphones, and HyFlex technology that tracks instructors' movements when demonstrating procedures in the classroom or laboratory facilities. The college also has an established system of updating computer hardware and software. Software licenses are renewed annually to maintain currency.

Equipment

Ventura College anticipates that approximately $120,000 in one-time instructional equipment costs for electric and fuel cell vehicles and equipment and Advanced Driver Assistance Systems equipment is needed to launch the program. Ventura College is confident in its ability to secure the equipment needed by the launch of the program in the fall of 2025.

Ventura College's Career Education Division annually allocates funding towards program innovation projects that respond to industry and community needs and promote student success. The automotive program and the Ventura College Foundation are also able to leverage their extensive network of industry partners and private donors to secure equipment and monetary donations to support the program.

Ongoing equipment costs are minimal as the upper division courses will be offered as fully online. As such, equipment costs will be limited to equipment that is needed by faculty to demonstrate lessons via synchronous online instruction or video recordings.

Explain the impact on financial resources.
Provide a budget showing evidence the institution has the capacity to start and maintain the proposed program.

The program budget below outlines the projected expenses for the upper division portion of the baccalaureate degree program. Given that the proposed program builds on the existing Associate of Science in Automotive Career Education, expenses for years one and two are already part of the institution's general fund and supplemented with categorical and grant funds and private donations, as needed.

Expenses	Year 3	Year 4	Upper Division Total	Notes
Total FTEF	1.733	1.5997	n/a	
Facilities	0	0	0	No additional facilities needed
Equipment	10,000	10,000	20,000	Ongoing equipment costs
Other	10,000	10,000	20,000	Professional development
Total	**20,000**	**20,000**	**40,000**	**Does not include faculty costs**

As part of the pilot baccalaureate program authorization, the Board of Governors authorized community colleges to assess students an additional $84 per unit for upper division courses that, along with the incremental apportionment funding associated with the baccalaureate degree program, is intended to be devoted toward program implementation and expansion. With the State's designated baccalaureate funding and expected ongoing associated apportionment funds, Ventura College has determined that these resources are adequate to develop, grow, and sustain the program without adverse impact on the institution's budget. The District also has a process for applying for major initiatives funds to initiate new programs in the event that additional funding is needed.

Standard IV: Leadership and Governance

Describe the leadership and governance structure that will ensure academic quality and institutional effectiveness are sustained and maintained.
Ventura College, thought its participatory governance process, regularly evaluates its policies and practices across all areas of the institution to ensure academic quality and institutional effectiveness are sustained and maintained. The participatory governance process involves committees and advisory groups that are established with a specific charge and focus. In committee meetings, ideas are discussed at length, voted upon, and ultimately recommendations are presented to the College President, who makes a final decision. The College engages in a continuous, cohesive, integrated, systematic, and holistic approach to planning, assessment, and resource allocation designed to support its mission and improve institutional effectiveness and academic quality. The College mission underlies all efforts in this area and frames the creation of the Educational, Facilities, and Technology Master Plans. Each of these longer-range plans provides the context for the development by the College Planning Committee of the three-year Strategic Plan with its Strategic Goals and specific Action Steps outlined with a timeline for completion. Each spring the College administration publishes its Planning Parameters to provide direction and context for the formulation of the following year's program reviews. As part of the program review process, faculty, staff, and administrators analyze pertinent student learning and achievement data and develop three-year objectives for improvement. Each subsequent year, they review progress made toward those objectives and request appropriate resources needed to meet them. All program review resource requests then go through a data-based prioritization process to determine which resources will be funded in the subsequent year.
Describe the internal approval process.
Through the multiphase curriculum review process, Ventura College ensures that instructional offerings align with the College mission, are appropriate for higher education, possess relevant and clearly outlined student learning outcomes, and support the attainment of competencies, certificates, and degrees that support university transfer and career goals. All courses, certificates, and degree programs engage in a rigorous curriculum approval process from the point of initial development through all stages of the review process and eventually to the point in which a course is offered to students. Credit and noncredit courses and programs, as well as programs offered in a traditional, in-person format and/or via distance education, are subject to the College's rigorous curriculum review process. To remain compliant with all legal mandates and accreditation requirements, and to remain current in the various fields of study, all course offerings and programs are formally reviewed and updated regularly and systematically. Newly proposed Ventura College curriculum is reviewed and approved by the Curriculum Committee, a sub-committee of the Academic Senate. Through the College's Curriculum Committee review processes, which includes a technical review process and an overall curriculum review process, it is the responsibility of the Committee members to ensure that courses and instructional programs offered at all locations and in all modalities are consistent with the College mission; are feasible for and sustainable by the college; meet all state mandates and regional and specialized accreditation requirements; and are of a quality and rigor appropriate to higher education.

Members of the committee are trained on state requirements for community college curriculum, using the state's Program and Course Approval Handbook and are provided a Ventura College Curriculum Committee Handbook. The committee's processes and practices adhere to the Ventura County Community College District's (VCCCD) Administrative Procedures on Curriculum Development, Program Discontinuance, Course Approval, and Philosophy and Criteria for Associate Degree and General Education.

Describe the external approval process (state/federal approvals, etc.).

Ventura College operates within the standards of the Accrediting Commission for Community and Junior Colleges with regard to shared governance and participatory leadership and decision making. In addition, Title 5 requirements set forth by the California Community Colleges Chancellor's Office (CCCCO) and local standards of curriculum processes set forth by the college Academic Senate and approved through the college's Curriculum Committee ensure the appropriate depth, breadth and rigor of courses and programs.

Ventura College also submitted the proposed Bachelor of Science in Automotive Career Education to the California Community Colleges Chancellor's Office in response to the Baccalaureate Degree Program Cycle 2 call for applications. External approval of both the lower and upper division coursework will follow the CCCCO standards and processes.

Evidence

Please include documentation that will help the Committee understand the process by which the change was developed, such as former and proposed mission and/or objectives, summary of discussions and approvals with campus constituents, (Board of Trustees, Academic Senate, students, community members), strategic plans, financial plans, copies of Board minutes, as appropriate, copies of draft legal documents regarding the new location, copies of draft legal documents dealing with matters of facilities and other institutional property, as appropriate. Please include documentation of all state and/or federal approvals, as appropriate.

The following documents have been included as evidence:

1. "Automotive Technology – Baccalaureate" Labor Market Study
2. Dealership Survey Results
3. Student Survey Results
4. Letters of Support – Ventura County Workforce Development Board, SCCRC, industry
5. SCCRC Meeting Minutes
6. Program of Study
7. Faculty Resumes