



## ACADEMIC AFFAIRS AND ACADEMIC PROGRAM PLANS

The external scan revealed demographic trends that will significantly change the make-up of college student population and the education programs and delivery modalities they desire and learn best from.

Younger Generation Z students, who are currently enrolled in VVC dual enrollment programs, comprise most recent high school graduates transitioning to the college and soon will be the majority of VVC's enrollment. These students are experience-driven and seeking more quality, personalized, and technology-mediated learning. Mobile technologies and video interfaces will be essential for serving these younger student populations. Quality and immersive physical learning spaces, collaborative learning opportunities, and the way educational experiences make students feel will be important to appeal to this student population and for competing with online and alternative delivery providers that are growing but cannot provide the same in-person experiences. The college will also need to re-imagine and transform learning space design including classrooms and the library.

VVC will begin serving five to six generations of students including a much older population. This aging population will be seeking higher education in numbers never seen before and combined with expanding numbers of non-traditional students will increase demand for learning options that accommodate working adults. Therefore, the college will need to offer a full range of flexible programs and delivery modalities such as online learning, micro-learning and credentials, and credit for prior learning and work experience.

Significant numbers of older adults will not be able to retire. They will be seeking education and training opportunities to re-skill, up-skill, and/or make career transitions. Credit programs will need to adjust to serve a much older student population who historically have had lower retention, persistence, and success rates. The noncredit, contract education, and community services departments will need to expand short-term up-skilling and re-skilling programs for this student population. Additionally, a robust "emeritus" (e.g., older adults) program will become an opportunity in the not-to-near future. Historically, emeritus programs typically included courses in arts and crafts, health and wellness, music, body dynamics and aging process, literature and writing, nutrition, technology, communications, consumer education, social studies, and retirement living but will need to expand to accommodate working seniors.

An expanding, older population also means the college should begin planning and developing new or expanded academic programs for industries and occupations that serve the elderly. A geriatric specialization in fitness training programs (e.g., Kinesiology), eldercare mental health (e.g., Psychology), and elder day care (e.g., Child Development) are a few examples. This is also an opportunity to attract older students to these programs who may be looking to transition to a new career including one that can prolong their ability to work in their senior years. Marketing the programs to an older market will be a new approach for the college while it targets programs for an aging population.

Given the depth and breadth of distance education providers and programs, the quality of distance education will soon outweigh quantity. To keep pace, academic programs must increase online, hybrid, and other e-learning/digital programs and course offerings. To do so, professional development for instructors and other supports for faculty and students in online courses will need to greatly expand. To achieve better quality, online programs will have to become mobile friendly, integrate adaptive and personalized learning technologies, be connected to student services including career services, and diversify offerings. Micro- and mobile-learning modalities and digital badges will also need to be developed and expanded. These changes will become essential with the growth of Generation Z students who are digital natives and expect

---



personalized learning that is career connected. New and creative business models will need to be developed to support multiple and varied delivery options.

Community colleges will have a distinct advantage in the online learning market if: (1) programs offered are more diversified than the handful of typical online programs at colleges and (2) they are of high-quality and offered at the community college tuition rate or even free if they are offered through noncredit.

The environmental scan illuminated changing social-political dynamics, mostly stemming from the shift in power and influence. These shifts reflect a paradox of progress considering many present challenges due to progressive changes in technology, healthcare, economics, and more. Peer coordination, agency of the crowd, and participation scale is growing. Technological advances are aggravating divisions between technology “winners” and “losers”. Gender power dynamics are shifting. Gaps in politics are widening, the proper role of government is being challenged, and governing is getting more difficult. Additionally, ideas and identities are driving a wave of exclusion. These dynamics provide social science disciplines and programs with ample conditions to address, providing real-world contexts useful for instructional purposes and appealing to students.

Industries 4.0 and 5.0 are changing the future of work. The college will need to develop new programs as new or transformed occupations emerge, make curricular changes as new skill-sets and competencies are demanded, adjust programs related to industries/occupations being impacted by automation, and incorporate new technologies and materials so students graduate with state-of-the art experiences and competencies.

Here are a few examples of the future of work and implications for VVC programs and curriculum. First pertaining to the sciences, digital innovations such as 3D modeling and Virtual and Augmented Reality (AR/VR) (coupled with modeling) are transforming many fields like geography, geology, and environmental science thus, expanding the skills sets required of professionals in these fields. In Biology, the Internet of Things (IoT) will increasingly depend on miniaturized sensors which will evolve to nanoscale sensors that would be small enough to circulate within living bodies and will take the field into whole, new dimensions. Robotics is bringing about breakthroughs in unlocking the human genome. And new materials are transforming the industry such as the integration of cellular and molecular biology, genetics and developmental biology, tissue biotechnology is fostering the bioengineering of new prosthesis and organs. In addition to developing new programs such as robotics and GIS, these changes also mean interpreting and using data, working collaboratively, and co-designing skills will be in high demand and these competencies.

For Computer Information Systems, the future of computing is scaling fast and is nearly limitless with the explosion of Industry 4.0 and new technologies that are emerging every day. The field has become so broad that—what was once a single or few disciplines—are now often multiple, separate academic disciplines such as Information Technology and Software Development. New studies are also emerging such as Artificial Intelligence, Data Science (which intersects with Mathematics), Machine Learning, Pattern Recognition, Computer Graphics, Computer Game Design, and Cybersecurity. Social media, video calling, and chatting apps are completely revolutionizing the way people interact and work, also spurring new fields of study.

In Nursing, the accelerated pace of care and advanced technologies, nurses are expected to have an expanded set of competencies including leadership, health policy, system improvement, research and evidence-based practice, and teamwork and collaboration. Nurses also are being called upon to fill broader roles and to master technological tools and information management systems while collaborating and coordinating care across teams of health professionals.

Additionally, many opportunities exist and will increase in the Gig Economy for students to have a DIY career. However, the market will be saturated with individuals who are seeking to follow this route. Students will need new skill-sets to be

---



successful in this environment. Some VVC programs that will likely have large numbers of students who will be gig workers are visual communications, graphic design, music, and theater.

Digital literacy skills will be of increasing importance in an Industry 4.0 and 5.0 world and developing them in all students at VVC should be a priority.

Additionally, given the rapid pace at which industries and occupations will change, individuals will have to continuously up-skill and/or change careers. This will increase the demand for “just-in-time” education and perpetual, life-long learning. Therefore, VVC will need to increase the speed at which programs are developed and launched, increase scheduling flexibility, and establish life-long relationships with students to serve them as they transition within and between careers.

These and many more changes that stem from the environmental scan, were considered by each academic program, and are reflected in the academic plans that follow.

---

## 3D-Animation

---

### Program Description

The 3D-Animation program curriculum is geared toward individuals interested in creating video games, broadcast commercials, product visualizations, animated logos, 3D website graphics, and film-based animation and special effects. Students learn essential techniques and disciplines for producing professional quality work, with each class built around a series of simulated problem-solving projects similar to those that one would encounter in a real-world production environment. Graduates possess entry-level skills designed to position them for jobs such as 3D modeler, character animator, game level designer, texture artist, lighting design technician, effects artist, and many other exciting career opportunities.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends will likely have several programmatic implications for the 3D-Animation program in the next five years as follows.

- ▲ The exponential growth of internet users, coupled with innovation in motion graphics animation, translates into expansive and unlimited growth in the industry.
- ▲ Market demand is high for 3D elements, integrating 2D and 3D animation and inserting 2D over layers, adding complex visual effects to video, kinetic typography, digital-surrealism, motion graphics animation for augmented and virtual reality, and the use of motion graphic templates in web and mobile applications.
- ▲ Many opportunities exist and will increase in the Gig Economy for students to have a DIY career as an independent artist/contractor.
- ▲ The rapid pace at which technologies change in the industry means there will be sustained demand for noncredit, continuing education programs.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

---



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Examine and revise program curriculum to meet current business/and industry needs to increase enrollment and student career success.	Strategic and Efficient Enrollment Growth  Retention, Persistence, Completion, and Post-Completion Success	Student Experience and Success
Increase VVC counseling staff awareness and knowledge of the 3D-Animation program to assist students' enrollment and successful progress/completions.	Retention, Persistence, Completion, and Post-Completion Success	Institutional Learning
Increase community and feed high school awareness and knowledge of the 3D-Animation program to support program growth.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Create better articulated courses and programs with universities and private schools in the region to improve student transfer success.	Retention, Persistence, Completion, and Post-Completion Success	High Quality Practices/ Excellence
Develop curriculum with an emphasis on DIY careers including additional focus on "hard skills" and alignment within industry trends to promote student career success.	Retention, Persistence, Completion, and Post-Completion Success	Student Experience and Success
Expand online course offerings.	Distance, Digital Learning Expansion and Enhancements	Student Experience and Success
Keep current with industry-proven software applications, while using real world techniques and practices, to ensure student success.	Retention, Persistence, Completion, and Post-Completion Success	Student Experience and Success

## Agriculture/Natural Resources

### Program Description

California and the United States are rapidly reaching a crisis situation in the management and preservation of natural resources. The recent crises with water and energy in California bear witness to this fact. The most important issues concern the critical natural resources of food, energy, water, air, minerals, wildland, and wildlife. It is essential that our society be taught a greater awareness of the need to conserve and wisely manage these resources. Careers and the public and private entities that produce, manage, and use these resources are expanding rapidly as the critical nature of these issues become more apparent. Individuals that are trained in agricultural and natural resource management principles and technologies are perfectly positioned to take advantage of these exciting opportunities.

### On the Horizon

Current and projected global, U.S., California, and regional/local industry changes, shifting demographics, technological changes, policies, and other trends/conditions (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Agriculture and Natural Resources programs in the next five years as follows.



- ▲ Globally, the agriculture industry is facing several challenges in meeting the food demands of the future: population growth, scarcity of natural resources, climate change, and food waste and to meet these challenges, farmers and natural resource stewards will need to use different techniques and integrate many new and innovative agriculture technologies.
- ▲ California and the United States are rapidly reaching a crisis situation in the management and preservation of natural resources. The most important issues concern the critical resources of food, energy, water, air, minerals, wildland, and wildlife. Careers and the public and private entities that produce, manage, and use these resources are expanding rapidly as the critical nature of these issues become more apparent.
- ▲ California is a leader in the world and the U.S. in the level of environmental policy and successful implementation of sustainable practices as well as both the size and level of innovation in agriculture.
- ▲ Because of the proliferation of complex, science- and technology-based practices and applications in the industry, the demand for agricultural, environmental, and natural resource professional with advanced degrees is increasing.
- ▲ Job growth and industry demand for agriculture and natural resource related positions will continue to remain strong; especially for individuals with science- and technology-related skills.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Implement multiple Agricultural Science and Natural Resource Management (ASNR) certificate and degree programs <sup>16</sup> that allow students to begin their studies in high school, transition to VVC, directly obtain a career, or seamlessly transfer to a university via Associates of Science Transfer Degrees (AST).	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence Student Experience and Success
Develop and implement in-demand classes and workshops (in multiple delivery modalities including noncredit) that teach applied natural sciences and technology skills needed to compete in this career field including animal, plant, soil, geographic information, and environmental and water science; environmental technologies such as Geographic Information Systems (GIS), Global Positioning Systems (GPS), soil and water analysis, sustainable agriculture, integrated pest management, and ecological restoration.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post-completion Success  Noncredit, Other Expanded Learning Options Development	Student Experience and Success
Launch the Mojave Sustainability Collaborative—formalizing community partnerships with government agencies industry partners, local high schools, and other VVC departments—and co-develop interdisciplinary classes, expand dual enrollment and articulation agreements, and increase program growth and success.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post-completion Success	Institutional Learning

<sup>16</sup> The department will develop and implement 2 new AST degrees in: Agricultural Science-Plant Sciences; and Agriculture Science-Animal Sciences and 9 "stackable" industry recognized Certificates of Achievement (COA), that prepare students for entry into careers in this sector and facilitate industry required license exams within two career pathways as follows: Animal and Veterinary Science Pathway: Agriculture Animal Sciences, AS-T Animal Science Specialist (COA\*\*) Equine Science Specialist (COA\*\*) Agricultural Sciences and Natural Resources Pathway: Agriculture Plant Sciences, AS-T Environmental Horticulture, AS Ecological Restoration (COA\*\*) \*Environmental Horticulture and Landscaping (COA\*\*) Floral Design (COP\*\*\*) \*Plant Science (COA\*\*) Natural Resource and Environmental Technician (COA\*\*) Geospatial Technology (COA\*\*) Irrigation and Water Management (COA\*\*) \*\*Certificate of Achievement (COA) \*\*\* Certificate of Preparation (COP)



## Anthropology

### Program Description

Training in anthropology will prepare one for any career that involves working on the interface between two or more cultures, aspects of human biology and evolutionary history, humanity’s past, and the origins and evolution of language and its connection to diverse cultures. Specialized preparation in this subject can lead to some of the world’s most exciting and interesting work—the study of past and existing lifeways; archaeological excavation and interpretation; primate behavior; and social research into economics, politics, law, language, religion, art, and music.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely spur several program changes within the Anthropology program in the next five years as follows.

- ▲ Changing socio-political dynamics provide ample conditions for real-world contexts that have proven useful for instructional purposes in anthropology.
- ▲ Industry 4.0 is spawning new, “hybrid” occupations that draw from and integrate liberal arts disciplines, such as anthropology, sociology, psychology, political science, and economics coupled with career technical disciplines.
- ▲ Cultural anthropology continues to experience a resurgence as the practice of integrative design grows exponentially.
- ▲ Anthropology is one of the most popular disciplines in the social sciences for students to enroll in to meet general education and transfer requirements.
- ▲ Because anthropology examines matters of biological, social, political, and economic importance and because of its popularity, specific anthropology courses (such as Cultural Anthropology and Biological Anthropology) should be identified as “recommended choices” for general education requirements for select programs of study such as business, nursing, etc.
- ▲ To meet students’ increasing expectations for career-connected programs and an expeditious path to their desired career, it will be essential for the development of an Associate Degree Transfer program that includes stacked, career-related certificates.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop an AA/ADT Anthropology degree and embedded/stacked certificate programs (e.g., field/lab assistant) to increase students’ transfer and career opportunities; including in an online modality.	Strategic, Efficient Enrollment Growth  Distance, Digital Learning Expansion and Enhancements	Student Experience and Success



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Collaborate with counselors to recommend courses for STEM/Non-STEM majors and as guided choices for select degree programs.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Expand resources, including facilities, to support program growth.	Strategic, Efficient Enrollment Growth	Student Experience and Success

## Architecture Drafting and Design

### Program Description

Victor Valley College offers preparatory courses for transfer into a school of architecture through the Computer Integrated Design and Graphics (CIDG) Department. Students can also obtain architecture-related certificates that prepare them to enter into a school of architecture at the university level with an Associate in Science degree or go directly into the workforce.

### On the Horizon

An analysis of current and projected industry changes, labor market demand, shifting demographics, and other trends reveals several opportunities for programmatic changes, growth, and new delivery modalities as follows.

- ▲ Technological advancements and the age of "Big Data" is transforming the architecture industry.
- ▲ The boundaries of architectural drafting are achieving new dimensions with 3D solid modeling (within CAD programming) and in 3D rendering software, Virtual Reality, and building information modeling (BIM) technologies.
- ▲ Labor market data indicates there will be steady employment in the greater San Bernardino area.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Examine and revise program curriculum to meet current business/and industry needs to increase enrollment and student career success.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Increase VVC counseling staff awareness and knowledge of architecture programs to assist students' enrollment and successful progress/completions.	Retention, Persistence, Completion, Post-completion Success	Institutional Learning
Increase community and feed high school awareness and knowledge of the architecture programs to support program growth.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Create better articulated courses and programs with universities and private schools in the region to improve student transfer success.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence



---

## Art, Photo, and Commercial Art

---

### Program Description

Through the department a student may take art courses to fulfill humanities general education requirements; to become aware of art's role in civilization; to develop a career in art; to become acquainted with an exciting, creative diversity of media; and to make a statement about himself/herself for self- enrichment and expression. The art programs provide for individual consultation with the faculty. Students may choose a program leading to an AA degree and art courses that are transferable to four-year colleges.

### On the Horizon

Shifting demographics, technological changes, contemporary challenges, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Art, Photo, and Commercial Art program in the next five years as follows.

- ▲ Artists and their work have always been greatly influenced by contemporary challenges and in the near-term future will be grappling with artificial intelligence, human colonies in outer space, and others that are unimaginable today.
- ▲ Industry 4.0—including automation, robotics, 5G, AI, cybersport, Internet of Things, artificial neural networks, and cloud technology—and other new and emerging technologies are also transforming, democratizing, and disintermediating creativity, art-making, and curation.
- ▲ Rapid development and adoption of new technologies is increasing the prevalence of augmented- and virtual-reality enabled immersive experiences, new media and digital formats, a neo-hybrid art movement, and increasing the breadth of artists and collaboration among them.
- ▲ The internet and digital resources have opened access to fine art information and tools that previously had been reserved exclusively to fine artists.
- ▲ Workforce demand for commercial art and multimedia graduates exceeds the supply and there are opportunities for enrollment expansion.
- ▲ Many Art and Commercial Art students are Generation Z, digital natives who seek and prefer more technology/digital-enabled and career-connected learning. Photography has a wide range of student age groups. Therefore, the department will need to offer courses in different delivery modalities, utilize non-traditional scheduling options, employ digitally-enhanced instruction, and find other strategies that work for multi-generations of learners.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Integrate the latest and most relevant technology in the teaching and production of art to improve instruction and student success/transfer rates and keep students current with contemporary art practices.	Retention, Persistence, Completion, Post-completion Success  Distance, Digital Learning Expansion and Enhancements	High Quality Practices/ Excellence



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop and promote multiple career pathways and opportunities in the arts (both fine and applied) by making every course transferrable, re-designing commercial art as graphic design, and integrating graphic design with illustration and web-based applications.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Acquire resources (e.g., gallery, technology, etc.) and expand co-curricular and community service activities that both enrich the cultural life of students, faculty, and the community and keep students current with contemporary art practices that increase completion, transfer, and career success.	Retention, Persistence, Completion, Post- completion Success	High Quality Practices/ Excellence  Student Experience and Success

## Automotive Technology

### Program Description

It is the mission of the Automotive department of Victor Valley Community College to provide quality automotive instruction to a diverse community of students; the array of courses offered serve the educational needs of the beginning student as well as the employed professional. Through industry input the department strives to create and maintain the most up-to-date-curriculum based on current industry trends. The department acquires and maintains the appropriate equipment that augments the current course curriculum. Each year the Bureau of Labor Statistics lists the need for Automotive Technicians as one of the nation's highest. Victor Valley College's automotive program is designed to give the student a thorough and complete knowledge of the basics of the modern automobile. The program is capable of training the student to entry-level performance on the latest industry-approved equipment.

### On the Horizon

An analysis of current and projected industry changes, labor market demand, shifting demographics, and other trends (refer to Environmental Scan in Supporting Documents) reveals several opportunities for programmatic changes, growth, and new delivery modalities as follows.

- ▲ The next 5 years could bring more change to the auto industry than the past 50 including the rapid expansion of new technologies, the shift to internet in aftermarket auto repair, the “electrification” of transportation, and autonomous vehicles.
- ▲ There is a serious lack of automotive technicians who can work on advanced technologies in vehicles today, and that shortage is likely to continue.
- ▲ Several transportation industries are highly competitive in San Bernardino County including Truck Transportation and Rail Transportation.
- ▲ Job growth for automotive-related positions will remain strong and above the national average.
- ▲ Education programs in the Greater San Bernardino, Riverside, and Ontario area are not keeping pace with employment demand.
- ▲ There are ample opportunities to develop short-term programs (including noncredit) for in-demand occupations and skills that have the purpose of preparing students for occupations requiring only short-term training and for incumbent workers who want to upskill and keep pace with industry demand.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Increase Certificate of Achievement and Associate of Science degree completions by implementing multiple strategies including modularizing/chunking courses; stacking/latticing courses, certificates, and degree(s); increasing online offerings; and shorter-term and other flexible scheduling options.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Increase program visibility to high school programs, industry partners, and general public.	Strategic, Efficient Enrollment Growth	High Quality Practice/Excellence
Increase graduates' employment attainment outcomes by rapidly updating curriculum to stay current with industry changes and instruct and counsel students on industry requirements.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Develop heavy-duty diesel program to meet transit/bus and rail industry mechanic demand and provide more living-wage employment opportunities for graduates.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Develop new, noncredit programs including noncredit versions of existing credit courses/certificates such as the smog inspector program.	Noncredit, Other Expanded Learning Options Development	Student Experience and Success

## Aviation

### Program Description

The VVC Aviation program is the result of a collaborative effort including the college, city, county, and industry leaders. Under the Victor Valley Aviation Education Consortium (VVAEC) all stakeholders have come together to make this training and employment opportunity available in the High Desert. Over \$700,000 has been donated by city, county, and state officials to renovate classrooms, create lab spaces, and fully equip the labs according to FAA specifications.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Aviation program in the next five years as follows.

- ▲ The aviation industry is expected to undergo significant job growth to meet passenger demand and needs propelled by several aviation industry trends including an expected 75% increase in ground operations (maintenance) jobs in the next several years at the same time there is a shortage of qualified personnel.
- ▲ Aircraft operators are pushing for faster troubleshooting, automated aircraft inspection to reduce downtime, better task planning, and optimized parts management and they are implementing a range of innovative technologies to do so. Digital fluency and skills will be increasingly expected of aviation mechanics and personnel.
- ▲ Many aviation mechanics are retiring or near retiring. This trend combined with the increased need for maintenance means the demand for new workers will be strong in the near- and long-term.
- ▲ Labor market data analysis reveals there are significant career and employment opportunities for aircraft mechanics and technicians in the greater San Bernardino, Riverside, and Ontario area.
- ▲ There is wide distribution of student age groups taking Aviation courses and the department will be one of the first at VVC to identify multi-generational strategies and practices necessary for ensuring student access, retention, and success such as offering courses in different delivery modalities, utilizing non-traditional scheduling options,



employing digitally-enhanced instruction, and implementing other strategies that work for multi-generations of learners.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Obtain FAA approval to increase the 100 student cap to 200 to enable program growth.	Strategic, Efficient Enrollment Growth	Institutional Learning
Strengthen the program to include digitally-enhanced, competency-based pedagogies including hybrid delivery, soft skills, and new and emerging technologies.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence
Create an automated student record database for tracking student attendance and lecture and lab grades and through digital inquiry develop strategies for improving student success.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence
Create and maintain higher-level learning experiences that are consistent for both morning and evening programs.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success

## Basic Skills

### Program Description

The Basic Skills program provides students with the opportunity to build a strong foundation in English and/or mathematics.

### On the Horizon

Current and projected policy changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Basic Skills program in the next five years as follows.

- ▲ AB 705, a key policy impacting mathematics and English instruction, has initiated a re-thinking of which, how, and when mathematics is taught; development of new teaching pedagogies and delivery modalities; and the implementation of multiple strategies (including basic skills approaches) for ensuring students’ success.
- ▲ There are ample opportunities for expanding the Basic Skills program to include additional “essential skill” options for developing in demand skills including in a noncredit modality.
- ▲ Interdepartmental coordination and collaboration are critical for providing students a full spectrum of math, English, and essential skills options and for mitigating instructional redundancies and/or gaps.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are many of the students taking basic skills courses.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop strong, comprehensive non-credit program that helps students reach academic or workforce goals; including in partnership with the Adult Education, English, mathematics, and other college programs.	Strategic, Efficient Enrollment Growth  Noncredit, Other Expanded Learning Options Development	Student Experience and Success
Provide ongoing professional development opportunities for noncredit basic skills instructors to enhance their expertise in delivery of basic skills instruction, services, and student support.	Retention, Persistence, Completion, Post-completion Success	Institutional Learning  High Quality Practices/ Excellence
Develop a reading and writing certificate program to increase essential skills students need to succeed in all college courses.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success

## Biology

### Program Description

The Biology department offers courses in a variety of interconnected topics, including microbiology, molecular biology, cellular biology, genetics, anatomy, physiology, and ecology. Many of the topics address important social issues including public health, natural resource management, nutrition, and the law.

Students and faculty collaborate on laboratory research, fieldwork, and publications with real-world application. The department provides students with a broad exposure to biological processes and systems and a deep understanding of biology at environmental, organismal, cellular, and molecular levels. Through these experiences VVC students gain a conceptual and experiential understanding of the biological sciences spanning from molecules to ecosystems.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Biological Sciences program in the next five years as follows.

- ▲ Biological sciences are facing a ‘data tsunami’ and data analytics and research, to make all this data meaningful, will be of increasing importance and in-demand skill-set.
- ▲ Many developments are occurring in biotechnology and expanding career opportunities.
- ▲ Given the increasing complexity of biological technologies and processes, most biology-related careers require a bachelor’s degree or higher and having a robust biology transfer degree pathway will be important for students’ long-term career success.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are many of the students taking biological science courses. To meet the needs and learning preferences of these students, courses, and experiences in multiple modalities, including online, will be important.



## Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop/implement new certificate and degree programs to meet industry and student demand and provide students with more career opportunities including a Biology AS-T Human Biology AS degree, Nutrition AS-T degree, and Biotechnology and Forensic Science certificate programs that are stacked, latticed within degree programs (including across other departments)	Strategic, Efficient Enrollment Growth	Student Experience and Success
Increase online/digital learning options to free up classroom space so class offerings can be expanded and to increase equity and opportunity for students.	Distance, Digital Learning Expansion and Enhancements  Strategic, Efficient Enrollment Growth	Student Experience and Success
Expand research activities and opportunities (a distinctive program niche), with supportive resources, to increase students' transfer and subsequent advanced degree and career success	Retention, Persistence, Completion, Post- completion Success	Student Experience and Success

## Business Administration/Economics

### Program Description

The Business Administration department offers a variety of courses in business which allows a student to comply with the lower-division requirements for transfer to university-level programs. Courses are also offered which allow the student to prepare for entry-level careers and for upgrading job skills.

The department offers two certificates: A Management Certificate and Bookkeeping I certificate. The certificate programs are designed for students interested in entering the field of business or who are currently working and would like to upgrade their business skills. Students completing the Management certificate will have entry-level management knowledge and skills. Students completing the Bookkeeping I certificate will have entry-level bookkeeping/accounting clerk skills. These certificates also indicate that the student has completed a series of skill-upgrading courses for those already employed.

In addition to the certificates, students may also earn an Associate of Science Degree in Business Administration. Many Business Administration department courses are offered online via the Internet, allowing a student to earn the Management Certificate and/or the AS Degree through distance education.

### On the Horizon

Current and projected policy changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Business Administration programs in the next five years as follows.

- ▲ The field of management is constantly changing to keep pace with rapid developments in business and industry which are the expansion of the 4th Industrial Revolution (Industry 4.0) will have the most immediate and significant impact on management and accounting professions.



- ▲ Automatization of internal and external-facing (customer/client) processes, aided by artificial intelligence technologies, is occurring throughout businesses and organizations.
- ▲ Big data and data analytic tools and technologies are also a key trend impacting business management and accounting.
- ▲ The remote and gig workforce (e.g., virtual and flexible workers) is growing rapidly and is projected to become the norm within five years and managers will need skills for supervising remote and outsourced employees.
- ▲ Information/digital literacy and data/analytical skills will be increasingly essential for all students in business fields driven by economic and technological changes and by social dynamics influencing consumer demand.
- ▲ Because of the rapid development and deployment of changing technologies and work, management and bookkeeping/accounting professionals will need to be agile and adaptive and continuously re-train and up-skill to remain relevant and successful.
- ▲ While students enrolling in economics courses tend to be of traditional college-going age; there are multi-generations enrolled in accounting and business management courses and the department is one of the first at the college to find effective strategies for serving multiple generations of learners including multiple delivery modalities such as online, digitally-enhanced, and non-credit.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop courses (including noncredit) and multiple stacked and latticed certificate and degree programs such as marketing, human resources, entrepreneurship, retail management, and an economics ADT to meet industry demand and provide students more career and transfer opportunities.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post-completion Success  Noncredit, Other Expanded Learning Options Development	Student Experience and Success
Implement multiple strategies (in all delivery modalities) such as Guided Pathways, open educational resources, and strategic enrollment management to achieve up to double-digit increases in student access, retention, certificate/degree completion, and transfer.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Develop comprehensive and streamlined assessment schedule, methods, and processes to improve student success and ensure high quality courses and programs.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence

## Business Educational Technology

### Program Description

The study of Business Education Technologies (BET) is designed to prepare students for a variety of careers in high-tech business offices. Transfer-level courses are available for students preparing for a bachelor's degree. Certificates of Achievement and the Associate in Science degree are awarded. The Business Education Technologies program offers classes



with a lecture component paired with an open lab. The flexibility of the open lab allows the student to complete their assignments while setting their own time schedule during the 58 hours the lab is available.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Business Educational Technology program in the next five years as follows.

- ▲ The market demand for administrative assistant positions will continue to grow especially for medical secretaries and demand is currently unmet by regional programs; thus, there are opportunities for program growth.
- ▲ The role of administrative support positions is continuously evolving with growing expectation these positions are a strategic partner to the organization with increasing responsibility and accountability; thus, now requiring advanced technical and digital/computing skills.
- ▲ Many opportunities exist and will increase in the Gig Economy for BET students to have a DIY career.
- ▲ It will also be importation for individuals to acquire skills and characteristics that make them indispensable, particularly considering the impact of automation on the profession.
- ▲ There is wide distribution of student age groups taking BET courses and the department will be one of the first at VVC to identify multi-generational strategies and practices necessary for ensuring student access, retention, and success such as offering courses in different delivery modalities, utilizing non-traditional scheduling options, employing digitally-enhanced instruction, and implementing other strategies that work for multi-generations of learners.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Expand face-to-face, online, and technology- based course offerings to better meet the industry demands and the wide-range of BET student populations.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post- completion Success	Student Experience and Success
Expand curriculum by increasing Certificates of Achievement and noncredit certificates, including for the Business Information Worker (BIW) and for in-demand skills, and by aligning with industry-recognized credentials to enhance students' career and employment opportunities.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post- completion Success	High Quality Practices/ Excellence
Ensure program keeps pace with industry changes and standards and community needs (e.g., faculty with continuous professional development, up-to-date/industry-quality technology, etc.) including high school outreach and dual enrollment to ensure student completion and employment outcomes.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post- completion Success	Student Experience and Success



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Change department/program name and utilize naming nomenclatures for new certificate programs that are aligned with industry and occupation titles/expectations to increase both students' and employers' recognition of programs.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence

## Business Real Estate and Escrow

### Program Description

The Business Real Estate and Escrow program is designed to provide the student with the comprehensive knowledge needed to enter or invest in the real estate industry. A progressively challenging course curriculum starts with the Principles class and learning legal terminology of real estate. This is the first, state-mandated course for those testing for a real estate salesperson's license. From there an "investor" student might pursue the more difficult finance, appraisal, and property management courses. The certificate program provides a structured approach to the course work. The Business Real Estate Apprentice Certificate includes three courses necessary to take the state of California's Real Estate Salesperson's examination.

The single largest business transaction entered into by most people is the sale or purchase of a home or other real property. Consequently, people often seek the professional opinions and assistance of real estate salespersons, brokers, and appraisers. These professionals are familiar with the various forms of financing available in any given market. They keep abreast of the local economic market (residential, commercial) and become familiar with the zoning laws, tax laws, and real estate contract laws in order to better serve their clients.

The Business and Real Estate AS degree program is intended to prepare students to transfer to the CSUs or UCs with a major or minor in Real Estate and ultimately obtain a bachelor's degree. The bachelor's degree is required for the California appraiser's license and enables an accelerated, alternative path for obtaining a broker's license. The VVC Business Real Estate and Escrow program also offers a wide range of courses to prepare individuals for the full spectrum of careers and specializations in the real estate industry such as appraiser, mortgage lender, real estate attorney, property manager, real estate investor, commercial asset manager and other commercial-related careers, real estate brokerage owner, transaction coordinator, escrow officer, and many more.

### On the Horizon

Shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the real estate program in the next five years as follows.

- ▲ Change is a constant occurrence in the real estate industry as new technologies emerge and economic trends continue to shift. Therefore, every professional in the real estate industry needs to be agile, ready to respond to changes, and adaptable for long-term success.
- ▲ As platforms such as YouTube take center stage in modern media consumption, sellers will be attracted to agents who use video/multimedia and other new technologies such as 3-D walkthroughs, 360 degree pictures, and aerial videos.
- ▲ Online branding, including the use of social media, is a necessity for real estate agents as most property buyers and sellers turn to the internet to look for qualified and credible real estate professionals.
- ▲ Accessibility of information and tools for self-service buyers and sellers is increasing competition/alternatives (such as ibuyers and other automated services), therefore, real estate agents/brokers and other professionals will need to discover methods for delivering value and differentiating themselves.



- ▲ Many real estate agents have begun to diversify or develop market niches such as branching into property management (including for online, platform-generated rentals such as AirBnB) and specializing in energy-efficient (e.g., green) housing and properties.
- ▲ There is wide distribution of student age groups taking real estate courses. The department will be one of the first at VVC to identify multi-generational strategies and practices necessary for ensuring student access, retention, and success. Examples include offering courses in different delivery modalities, utilizing non-traditional scheduling options, employing digitally-enhanced instruction, and implementing other strategies that are effective for multi-generations of learners.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop courses and certificates (including noncredit) to expand the program beyond preparing individuals for licensure (e.g., pre-agents) and also prepare them and existing agents for broad real estate practices including real estate escrow and management, real estate investing, and real estate computer applications.	Strategic, Efficient Enrollment Growth  Noncredit, Other Expanded Learning Options Development	Student Experience and Success
Due to this expanded mission, change program name and expand pool of faculty with broad industry experience and specializations.		High Quality Practice/Excellence
Implement strategies for successfully serving an older student population including flexible scheduling, offering online courses, and more.	Retention, Persistence, Completion, Post-completion Success  Distance, Digital Learning Expansion and Enhancements	Student Experience and Success
Implement strategies for increasing enrollment and student success such as expanded outreach and recruitment, offering courses in the intersession, English/writing preparation, and computer skills training.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success

## Chemistry

### Program Description

Chemistry encompasses theories of atomic structure, and the application of these theories to an understanding of bonding, solution processes, states of matter, gas laws, general properties of matter, and principles of stoichiometric calculations. Laboratory emphasis is placed on the development of experimental skills.

### On the Horizon

Current and projected industry changes, shifting demographics, and other trends (refer to Supporting Documents) will likely have several programmatic implications for the Chemistry program in the next five years as follows.

- ▲ Chemistry courses serve as both pre-requisites and requirements for other certificate and degree programs at the college therefore coordination with other departments (scheduling, examining/addressing course retention and success rates, and curriculum alignment) that chemistry courses support is critical for ensuring student success.



- ▲ Most chemistry-related careers require bachelors' degrees or higher (particularly careers that pay family-sustaining wages with career advancement opportunities) therefore having strong transfer degree pathways for students pursuing chemistry careers is important.
- ▲ Information and digital literacy skills will be increasingly important in an Industry 4.0 world for all physical science disciplines including chemistry.
- ▲ Health-related technician occupations such as medical technologists, laboratory technicians and laboratory assistants, and field technicians are in demand due to the large number of occupations in general medical and surgical hospitals, medical and diagnostic laboratories, physician offices, and outpatient care centers in the area.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are many of the students taking chemistry courses.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Revise/remix chemistry courses in collaboration with other departments, such as culinary arts, health-science, biology, and/or agriculture, to create an interdisciplinary certificate/AS program aimed at occupations such as technologists, laboratory technicians and laboratory assistants, and field technicians.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Improve chemistry equity, innovation, and success in the classroom through implementation of evidence-based teaching strategies, quality instruction, technical support, and digital content/technologies.	Retention, Persistence, Completion, Post- completion Success	High Quality Practices/ Excellence  Student Experience and Success

## Child Development, Education

### Program Description

VVC's Child Development and Education programs prepare students for a variety of educational and career pathways. These pathways include employment in early childhood education and/or transfer to a four-year university to pursue more advanced study in areas such as K-12 education and related fields.

The Child Development and Education programs pride themselves on providing future child development and education professionals with the knowledge and skills needed to succeed in the field as well providing local industry with knowledgeable, competent early childhood and education professionals.

The Child Development and Education programs offer on-campus courses in the morning, afternoon, and evenings. There are numerous online courses to accommodate students with busy schedules. Additional information on certificate and degree programs, the CHDV Instructional Lab, career opportunities, and a variety of student and alumni resources is provided on the program websites.

The field of Child Development is unique in that students with as little as 12 units of Child Development and 50 days experience (3 hours or more per day) can qualify for an Associate Teacher Permit from the California Office of Teacher Credentialing. With this entry-level permit, individuals are able to gain career related experience (subbing, teacher's aide) while continuing their Education towards an Associate Degree or preparing for transfer to a four-year university.



The field of Education offers preparatory courses that may transfer to Education major and pathway to Educational Technology when and where articulation agreements exist. Education is the career field for those individuals who desire to teach in elementary and secondary schools, as well as in colleges and professional education. This field of study prepares students to participate as teachers and learning facilitators. For graduates in this field, bachelor's degree and postgraduate study is typically required to qualify for a variety of positions, including teaching at the elementary, secondary, and college levels. Education remains on the national list of growing occupations.

## On the Horizon

An analysis of current and projected industry changes, labor market demand, shifting demographics, and other trends reveals several opportunities for programmatic revisions, expansion, and enhancements in Child Development as follows.

- ▲ In San Bernardino County, it is projected in the next 8 years (2020-2028) the population ages 0 to 5 will increase 5% and ages 5 to 9 will increase 8%.
- ▲ Labor market data reveals that workforce demand exceeds supply and there are opportunities for enrollment expansion.
- ▲ Job growth for K-6 teachers is also an opportunity for program expansion as there is great employment demand and gaps in workforce supply.
- ▲ Philanthropic organizations and venture capitalists are investing more funding in innovative early childhood education initiatives to achieve greater outcomes.
- ▲ California has placed greater attention and importance on early Education including the establishment of a California Assembly Blue Ribbon Commission on Early Childhood Education and governor support for providing subsidized preschool to all low-income 4-year-olds and establishment of a new Department of Early Childhood Development.
- ▲ The child development program will need to continuously adjust to meet new/revised licensure and permitting requirements and other requirements as the nation and California develop and implement additional quality standards.

Similarly, several trends also reveal opportunities in Education and Educational Technology.

- ▲ Educational technology (e.g., edtech) investments in 2019 reached a stunning \$18.66 billion and is expected to grow to \$40.9 billion by 2022. Most investments are being made in Artificial Intelligence and game-based learning technologies.<sup>17</sup>
- ▲ These educational technologies are transforming education, along with other trends such as expanded leadership models, a focus on improvement and accountability, formative assessment, integrated learning solutions, micro-learning, mindfulness, restorative justice, and trauma informed Education to name a few.
- ▲ Because of the emerging technologies and trends above, professionals looking to enter the field of Education will need to be adaptive and have a level of educational technology competence.
- ▲ Job growth for both education and education technology graduates will remain strong. Moreover, as edtech solutions continue to proliferate the demand for educational technology professionals will increase dramatically.
- ▲ Given the subject matter and purpose of the ETEC courses, the noncredit continuing education modality is ideally suited for existing education professionals to upskill.

---

<sup>17</sup> Metaari. January 7, 2020. *The 2019 Global Learning Technology Investment Patterns: Another Record Shattering Year*. Analysis by Sam S. Adkins. Downloaded from <https://seriousplayconf.com/wp-content/uploads/2020/01/Metaari-2019-Global-Learning-Technology-Investment-Patterns.pdf>

---



## Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Rename the department to reflect the combined mission and objectives of the Child Development and Education programs and Educational Technology discipline.		High Quality Practices/ Excellence
Develop an Education Track, focused on K-6 teaching, with at least one stacked certificate within a transfer degree pathway.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Revise the existing Early Intervention Certificate to include a Special Needs component that results in an additional career pathway for students.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Expand program to ensure all necessary curriculum is offered and students meet requirements to obtain any of the six Child Development permits in the state of California and/or transfer.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Establish the Child Development Training Center, with national accreditation, to provide sufficient experiential learning opportunities for students to meet California permit requirements.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Continue to engage in, model, and teach action research, community of practice, situated learning, and legitimate peripheral participation, all of which enact the founding principles of the Education and Educational Technology program.	Retention, Persistence, Completion, Post-completion Success	Institutional Learning
Address the challenges of the Education and Educational Technology room assignment stability to continue to promote high-quality student experiences.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Continue to provide high-quality Education and Educational Technology instruction for current and additional courses, while increasing program visibility to ensure growth of student enrollment and engagement.	Strategic, Efficient Enrollment Growth	Strategic, Efficient Enrollment Growth

## Communication Studies

### Program Description

Communication studies is an expansive field which aims to: (1) analyze, understand, and facilitate effective expression of organized thought and (2) facilitate successful interaction with self, others society, and the world. Skills developed within this field are readily applicable in daily life. A bachelor's degree in Speech Communication offers pathways to careers in law, education, government, public relations and advertising, arts and entertainment, social and human services, international relations, and negotiations. Career opportunities, which may require advanced degrees, include administrator, advertising, counselor, lobbyist, marketing specialist, ministry, news anchor, public information officer, publicity manager, speech writer, teacher.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Communications Studies program in the next five years as follows.



- ▲ The rapid development and adoption of new technology has changed the face of communication—new media and digital formats are becoming more prevalent and professional journalists in print and broadcast media have had to compete with amateur publishers that are widely accessible on web-based and mobile apps.
- ▲ Communications professionals need to have excellent interpersonal, organization, analytical, and writing skills to tailor messages and branding to intended audiences and work with content producers to integrate messages into multiple media platforms.
- ▲ Many opportunities exist and will increase in the Gig Economy for students to have a DIY career.
- ▲ Most communication studies and journalism careers require bachelors’ degrees or higher thus having a prolific transfer pathway is of critical importance for students who wish to pursue a career in these disciplines.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are many of the students taking communications courses.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Increase Communications Studies program course offerings in face-to-face, online, and hybrid modalities.	Strategic, Efficient Enrollment Growth  Distance, Digital Learning Expansion and Enhancements	Student Experience and Success
Increase number of high-school-articulated courses to showcase Communications Studies programs, course offerings, image, and to increase future student interest and enrollment.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Increase Communication Studies program visibility through various campus, community, and high school activities such as speech contests and debate tournaments.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Enhance and expand digital instructional and co-curricular activities to prepare students for technological changes in communications studies such as the digital format for the VVC newspaper.	Distance, Digital Learning Expansion and Enhancements	Student Experience and Success

## Computer Information Systems

### Program Description

The Computer Information Systems (CIS) program at Victor Valley College offers an associate degree as well as several certificates that are designed specifically to give students marketable skills in specialty areas.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the CIS program in the next five years as follows.



- ▲ The future of computing is scaling fast and is nearly limitless with the explosion of Industry 4.0 and new technologies that are emerging every day so the employment outlook for computer information system professionals is bright and will continue to be so.
- ▲ Because of technology advancements the field has also become so broad that new programs of study are developing in Artificial Intelligence, Data Science (which intersects with Mathematics), Machine Learning, and Cybersecurity to name a few.
- ▲ The demand for computer information system professionals far exceeds the supply of educated/trained individuals in many CIS occupation groups such as Cloud Computing, Cybersecurity, and Mobile Programming to name a few.
- ▲ Given the rapid pace of technological advancements and emerging industry trends, the CIS department will need to continuously monitor and adjust its programs to keep pace with market needs.
- ▲ The competitiveness of the CIS labor market, coupled with VVC’s geographic limitations, will continue to make it difficult to attract and retain faculty (especially part-time faculty).

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Stabilize and sustain funding sources (including district funding) for the CIS tutoring program to ensure high course success, retention, persistence, completion, and transfer rates.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence
Ensure sufficient faculty levels (and pool of part-time faculty) to keep pace with industry and technological changes, meet enrollment demands, and be responsive to student needs.	Retention, Persistence, Completion, Post-completion Success  Strategic, Efficient Enrollment Growth	Student Experience and Success

## Construction Technology

### Program Description

The Construction Technology program provides preparation for a wide variety of positions in the construction field as a contractor, supervisor, building inspector, or tradesperson. The program offers the opportunity to be self-employed and the pride and satisfaction of creating and building with your own hands.

Certificates of achievement can be earned in Construction Technology, Construction Management, Building Construction, Building Inspection, Public Works, HVAC/R, Plumbing, Electrical, Residential Maintenance, Renewable Energy and Solar (Photovoltaics). The Associate in Science degree is awarded upon completion of 22.5 semester units in Construction Technology program courses and the required general education and elective courses. Additionally, the program offers student coursework to transfer to the CSU system for a bachelor’s degree in Industrial Technology.

### On the Horizon

Current and projected sustainability policy changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Construction Technology program in the next five years as follows.



- ▲ Artificial intelligence (AI), the Internet of Things, robotics, and other technologies are not only responsible for the emergence of smart cities they are also changing the construction industry.
- ▲ Digital transformation has tremendous potential to increase efficiency and productivity of the construction industry which is crucial for affordable housing/infrastructure and for the lessening the impact on the environment.
- ▲ Transformative technological developments, like 3D printing and automated construction equipment, and the growth of pre-fabricated structures has occurred. Digitalization is being used to transform construction materials and elements. Additionally, building information modeling (BIM) technologies will soon become the centerpiece of the construction industry’s digital transformation.
- ▲ The internet of things (IoT) allows connections and communication between people and their physical environment to create “smart” structures and savvy, eco-conscious property owners (and the demand for technicians who install and repair communication devices in homes and buildings) will increase significantly.
- ▲ The footprint of the construction industry on the environment is significant and sustainable policies/standards, products, and practices, such as new construction materials and the growing use of natural and renewable materials, have been and will continue to pervade the industry.
- ▲ The construction industry needs people with the talent and skills to adopt/adapt to these new technologies, practices, policies, and licensure/certification requirements.
- ▲ Because of labor market demand and growth in the Greater San Bernardino area, there is significant career and employment opportunities in construction technology for the next five years.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop an enhanced, state-recognized electrical program that includes industrial electrical maintenance.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Complete curriculum revisions so all certificate programs are state-approved and increase student and institutional success outcomes.	Strategic, Efficient Enrollment Growth	High Quality Practice/Excellence
Expand/build upon the MC3 program including offering courses in the intersessions, improving dual enrollment coordination, and developing strong relationships with trade unions and employers to create a seamless pathway from high school through VVC certificates to employment in the following trades: electrical, plumbing, carpentry, masonry, and HVAC.	Strategic, Efficient Enrollment Growth	Student Experience and Success  High Quality Practice/Excellence
Develop/grow internship programs creating pathways for construction management students to find direct employment after certificate/A.S. degree completion, as well as, continuing to four-year institutions for bachelor's degrees in construction and project management.	Retention, Persistence, Completion, Post- completion Success	Student Experience and Success

## Contract and Community Education

### Program Description

The mission of the Contract and Community Education (CCE) department is to provide customized training opportunities for community members, local employers, and unique populations to improve the high desert economic workforce and address local needs.



The department offers community education classes in compliance with Education Code section 78300. These classes are self-sustaining through a fee-based model and encompass not-for-credit training in various subject matters. The department also offers contract education in compliance with Education Code sections 78020-78023. The primary purpose of contract education is to provide high quality credit and not-for-credit courses of instruction for both public and private entities that also generates resources, monetary and non-monetary, for the benefit of the Victor Valley Community College District.

### On the Horizon

An analysis of current and projected industry changes, labor market demand, shifting demographics, and other trends (refer to Contract and Community Education section in the Supporting Documents) reveals several opportunities for programmatic changes and growth.

- ▲ Funding limitations, which stems from VVC’s predominate reliance on state apportionment generated by credit courses, precipitates the college’s need to expand program and course offerings that generate other revenue sources such as those generated by contract and community education.
- ▲ The employment market has shifted much of the burden of keeping pace with in-demand skills to individuals who must seek out training to remain competitive.
- ▲ There is growing recognition that additional skills-based training is needed in the High Desert region to move the workforce into higher-skilled occupations paying family-sustaining wages.
- ▲ The 4th Industrial Revolution (Industry 4.0) has greatly increased the demand for information and digital literacy skills and most of the existing workforce will need additionally training. Additionally, significant investments will be made in training and retraining for new roles to support industry 4.0.
- ▲ The Gig economy and Gig workforce is growing. Many gig workers will need to continuously upskill to remain competitive in this market.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Increase customized training programs/offerings, responding to the needs of community members, local employers, and unique populations.	Strategic and Efficient Enrollment Growth  Noncredit, Other Expanded Learning Options Development	Student Experience and Success
Enhance knowledge and improve skills of local workforce and social needs through expanded contract and community education offerings.	Noncredit, Other Expanded Learning Options Development	Student Experience and Success
Develop and maintain a self-sustaining department and operations.	Noncredit, Other Expanded Learning Options Development	High Quality Practice/Excellence



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Increase training opportunities at the newly acquired training facility at the Southern California Logistics Airport (SCLA) for community, contract, and apprenticeship programs.	Strategic and Efficient Enrollment Growth  Noncredit, Other Expanded Learning Options Development	Student Experience and Success

## Cooperative Education

### Program Description

Cooperative Education offers 16-, 12-, and 8-week classes. Students must have a job or internship to enroll in any Cooperative Education class. Students can only enroll in one Cooperative Education class per semester.

### On the Horizon

Changing student expectations, recent research findings, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Cooperative Education program in the next five years as follows.

- ▲ “Working and learning” can lead to better employment opportunities and higher wages when employment is linked to the learner’s program of study as well as with other formal “working and learning options” such as paid internships.
- ▲ A majority of today’s students are looking for a learning provider that enables them to reach their ideal career position in the shortest amount of time...using mostly non-traditional delivery methods...provides links to labor markets...and puts them in touch with relevant employers and prepares them for their career transition.
- ▲ There is a significant, untapped potential for increasing and enhancing work-based learning opportunities to improve student academic and career success.
- ▲ The new Student Success Funding Formula, with career-related metrics, places greater emphasis (with associated funding) on student employment and wage outcomes which can be enhanced through quality, work-based learning experiences.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Create partnerships that use expertise of the High Desert community to maintain and build innovative, contemporary, responsive, and relevant educational programming.	Strategic, Efficient Enrollment Growth	High Quality Practices/ Excellence
Strengthen outreach and communication to students vis-a-vis social media, on-campus presentations, in-class presentations across disciplines, and other platforms to increase awareness of program offerings.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Provide innovative and alternative methods of instructional design and delivery that broaden and diversify students' opportunities for retention, access, and success.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Partner to establish a VVC career network and comprehensive programmatic activities and services to meet students' career-connected expectations and to improve career and employment success.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Increase outreach and collaboration with all programs at the college to increase awareness of and enrollment in cooperative education.	Strategic, Efficient Enrollment Growth	High Quality Practices/ Excellence

## Counseling and Guidance

### Program Description

The Counseling faculty are committed to helping students achieve their educational and career goals. Whether students wish to take one course, earn a certificate or an associate degree, or transfer to a four-year college or university, counselors are available to help them clarify their academic and career goals and discuss personal issues in confidence.

### On the Horizon

Refer to Student Services section for a full description of trends related to counseling, advising, and student support services.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Reposition counseling services to increase visibility and utilization by all students, particularly in light of the new One Stop center.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Implement services and activities in support of Guided Pathways including completing the academic program mapping.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Ensure that all new counseling faculty receive professional development and training by creating online counseling faculty training modules in Canvas.		Institutional Learning

## Criminal Justice

### Program Description

All areas of criminal justice require that individuals possess the personal and physical qualities essential to be effective peace officers. Many employment opportunities currently exist for individuals desiring entrance into law enforcement or related fields at various governmental levels. Security and corrections are fast-growing professions. Individuals interested in these professions should understand that the work is demanding, requiring a combination of training, education, and experience, along with mental and physical stamina.



## On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Criminal Justice program in the next five years as follows.

- ▲ Job growth for criminal justice and police science professions in the greater San Bernardino, Riverside, and Ontario area is projected to grow at a rate higher than the national average and there is sufficient demand for program growth.
- ▲ As technology is used to commit more sophisticated crimes, law enforcement officers and those in the legal system are increasingly using cutting-edge technologies and software to combat crime thus digital competence and literacy will be increasingly critical for program graduates and also provides opportunities for noncredit, continuing education for incumbent professionals.
- ▲ Recent job postings for police officer/criminal justice positions reveal having first aid skills, CPR certification, and bilingual skills are desirable.
- ▲ Criminal justice career decisions are often made early by students already in high school providing ample opportunities for dual enrollment with early credential completion milestones.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are many of the students taking criminal justice courses.

## Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Obtain Level 1 Policy Academy designation for program recognition/growth and to increase students' career and employment opportunities.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence
Develop and expand online/digital learning options to increase enrollment and meet students' (especially Generation Z) expectations for more flexible and technology-enabled programs.	Distance, Digital Learning Expansion and Enhancements  Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Increase course offerings, including noncredit, aimed at providing students and incumbent professionals additional career opportunities and growth such as leadership courses/academy.	Retention, Persistence, Completion, Post-completion Success  Noncredit, Other Expanded Learning Options Development	Student Experience and Success



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Identify and implement strategies to increase AS-T degree completions and transfer such as increasing engagement with counselors.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success

## Electronic Technology

### Program Description

Throughout California and Victor Valley, there is unlimited opportunity for employment for men and women who have specialized, and up-to-date education and training in electronics and computer technology.

Associate degree, certificate, and professional certification program curriculums and courses offered by the Electronics and Computer Technology Department is a start toward this education and training.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends will likely have several programmatic implications for the Electronic Technology program in the next five years as follows.

- ▲ The Internet of Things (IoT), automation, and other technology advancements in Industry 4.0 are changing computer networking technology and electronics communications.
- ▲ IoT gadgets, the transition from 4G to 5G mobile networks, Wi-Fi 6 broadband deployment, advancements in Artificial Intelligence; software-defined wide-area networks; 4D and open-switch networks; and internet-based networking means the skills required of electronics technology professionals will continually evolve and expand.
- ▲ There will be continued workforce demand in the next five years for electronics technology graduates, however not all jobs will require a degree but will require some postsecondary education such as certificate programs.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Expand and improve industrial electronics offerings by developing an industrial electronics/mechatronics certificate, obtaining more lab equipment, and expanding/improving the lab to accommodate the new program.	Strategic, Efficient Enrollment Growth	High Quality Practices/ Excellence
Develop Avionics Certificate in collaboration with Aviation department.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Maintain and promote the General Atomics internship program.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence
Develop an Engineering AS-T program in collaboration with other departments at the college and facilitate engineering students' transfer to 4-year colleges and universities.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success



## Emergency Medical Services

### Program Description

Victor Valley College offers two programs that enable students to enter careers in Emergency Medical Services. The first is the Emergency Medical Technician (EMT), after which students may continue to the Paramedic Program. Classes in this area meet California State EMS authority and ICEMA regulations.

### On the Horizon

An analysis of current and projected industry changes, labor market demand, shifting demographics, and other trends (refer to Environmental Scan in Supporting Documents) reveals several opportunities for programmatic changes, growth, and new delivery modalities as follows.

- ▲ Employment demand will continue to be strong due several healthcare factors including substantial growth of the population aged 65 and older.
- ▲ The profession is expanding to provide more community-based care including wellness and preventative services.
- ▲ Ongoing discussions—as to which clinicians provide specific services—means the role and activities of EMT/EMS professionals will evolve. Paramedicine will be a growing career path and different specializations will be beneficial for career success.
- ▲ Technologies utilized in the profession are and will continue to rapidly change including dynamic communication platforms, real-time and predictive analytics, wearable devices, and other technologies that are currently transforming the industry. Digital competence will be increasingly critical for graduates.
- ▲ Accreditation standards will likely change as these trends evolve.
- ▲ EMT/EMS career decisions are often made early by students already in high school providing ample opportunities for dual enrollment with early credential completion milestones.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Expand Basic Life Support programs (EMS 50, EMS 60, EMS 61) to support dual enrollment growth and high school students' early credential completion and obtainment of industry-recognized CPR card.	Strategic, Efficient Enrollment Growth	High Quality Practice/Excellence
Develop/expand online course offerings including the EMT course that is required for the Fire Technology program.	Distance, Digital Learning Expansion and Enhancements	High Quality Practice/Excellence
Launch newly developed noncredit 40 series courses and expand noncredit offerings (including in an online delivery modality) to meet labor market demand – including for incumbent workers.	Noncredit, Other Expanded Learning Options Development  Distance, Digital Learning Expansion and Enhancements	Student Experience and Success  High Quality Practice/Excellence



Ensure responsiveness to industry demand/changes and accreditation standards/requirements through curriculum revisions and expansion, state-of-the-art equipment (e.g., ambulances, mobile fleet), requisite faculty and professional development, and sustainable maintenance practices.	Strategic, Efficient Enrollment Growth	High Quality Practice/Excellence
	Retention, Persistence, Completion, Post- completion Success	

## Engineering Drafting and Design

### Program Description

Victor Valley College offers preparatory courses needed for transfer for transfer into a school of engineering at a university. These courses are offered through the Engineering Drafting and Design, Physics, and Electronics Technology programs. Students can obtain engineering-related certificates that will assist in preparing them to enter into a school of engineering at the university-level. An Associate of Science for Transfer degree in Mathematics or A.S. in Math/Science is highly recommended for those students wanting to transfer into a school of engineering at a university. Students seeking an Associate of Science degree in Engineering Drafting and Design are positioned to enter straight into the workforce.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends will likely have several programmatic implications for the program in the next five years as follows.

- ▲ With advancements in 3D solid modeling (within CAD programming) and in 3D rendering software, the boundaries of drafting are achieving new dimensions.
- ▲ Virtual Reality is also becoming more utilized in the industry.
- ▲ Industry 4.0 is likely to dominate the engineering field for many years to come. Utilizing the IoT (Internet of Things), big data, new communication infrastructures with smart devices, and other technologies such as augmented reality to aid the engineering development process.
- ▲ Traditional engineering fields will stay in demand, but the nature of the work and education they require will change and also as new engineering fields continue to emerge.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Examine and revise program curriculum to meet current business/and industry needs to increase enrollment and student career success.	Strategic, Efficient Enrollment Growth	Student Experience and Success
	Retention, Persistence, Completion, Post- completion Success	
Increase VVC counseling staff awareness and knowledge of Engineering/Drafting programs to assist students' enrollment and successful progress/completions.	Retention, Persistence, Completion, Post- completion Success	Institutional Learning
Increase community and feed high school awareness and knowledge of the Engineering/Drafting program to support program growth.	Strategic, Efficient Enrollment Growth	Student Experience and Success



Create better articulated courses and programs with universities and private schools in the region to improve student transfer success.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence
Develop an Engineering AS-T program in collaboration with other departments at the college and facilitate engineering students' transfer to 4-year colleges and universities.	Strategic, Efficient Enrollment Growth	Student Experience and Success

## English

### Program Description

The study of English offers the student development of writing skills as well as an appreciation of literature. The discipline of reading and writing about the human experience is a vital foundation for all learning. Since English composition courses are designed to help the student write the kind of papers commonly required in college courses, the student's first course in composition should be taken during the first semester of college work and the second course during the second semester.

### On the Horizon

Current and projected policy changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the English program in the next five years as follows.

- ▲ The transferable skills English graduates possess mean they are well-suited for a range of industries and careers; the most common require a bachelor's degree therefore a prolific transfer pathway for English majors is essential.
- ▲ Industry 4.0 is spawning new occupations that draw from and integrate liberal arts disciplines, such as English, with technical disciplines. These occupations combine "soft skills" with technical expertise.
- ▲ Information and digital literacy skills are critically important in all fields of study as technology rapidly evolves/increases and providing opportunities for students to develop these skills is essential.
- ▲ The new generation of college students (Generation Z), who are digital natives, seek and prefer more technology/digital-enabled and career-connected learning and are many of the students taking English courses.
- ▲ AB 705, a key policy impacting English instruction, has initiated a re-thinking of which, how, and when English is taught; multiple approaches to students' self-assessment/placement, development of new teaching pedagogies and delivery modalities; and the implementation of multiple strategies for ensuring students' success.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Continue developing and enhancing assessment strategies that are responsive to higher education policies/trends and that produce improved student success outcomes.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence
Ensure adequate resources to support and scale the departments' English innovations and success strategies including smart classrooms/labs configured to support collaborative learning, embedded tutoring, and full-time faculty with ongoing professional development.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success



Collaborate with counselors, outreach, recruitment, and communications staff/webmaster to disseminate information and provide personalized guidance to students on self-placement and other innovations/strategies such as enhanced English courses.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Continue collecting and monitoring data on English innovations/strategies making necessary adjustments and replicating/scaling those demonstrated effective at increasing student success and diminishing equity gaps.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success  High Quality Practices/ Excellence

## ESL

### Program Description

English as a Second Language (ESL) is the study of English designed for non-native speakers of English. As the High Desert has become remarkably diverse both culturally and linguistically, the need for language and cultural orientation has grown. Non-native speakers of English need to develop academic language, vocational and technology skills necessary to accomplish their educational or vocational goals. The ESL Department at VVC seeks to help these students develop these skills.

### On the Horizon

Current and projected policy changes, shifting demographics, and other trends (refer to ESL and Adult Education-ESL in Supporting Documents) will likely have several programmatic implications for the ESL program in the next five years as follows.

- ▲ U.S. and California immigration has diminished and is expected to further decline with longer-settled immigrants being the majority, foreign-born population.
- ▲ AB 705 has initiated a re-thinking of ESL and when and how ESL is taught. Now, ESL is no longer considered basic skills or remedial instruction, but rather a foreign language.
- ▲ Community colleges have implemented multiple strategies that demonstrably increased ESL student success including: collaborative learning; co-requisite models; embedded support/tutoring; increasing access to learning centers; supplemental instruction; directed learning activities; integrating reading-writing assignments for ESL classes across a range of skill levels (from high-beginning through advanced courses that transition students to transfer-level English); providing multiple ways for students explore ways to select authentic texts; develop and scaffold meaningful, text-based prompts; and incorporating contextual, just-in-time language instruction.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Expand courses to include transfer level ESL 101 equivalent and vocational ESL courses to better meet the needs of students' educational goals.	Retention, Persistence, Completion, Post-completion Success  Strategic, Efficient Enrollment Growth	Student Experience and Success



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Implement multiple strategies for adequately assisting ESL students' enrollment and success in ESL courses including self-placement information/processes, CASAS testing, and collaborating with Counseling on ESL considerations for educational planning.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Establish centralized, consolidated ESL Open Lab facilities on the VVC campus to better support supplemental learning, enhanced language learning, and tutoring services to improve student success and diminish equity gaps.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Promote and provide professional development opportunities for faculty to improve pedagogies and teaching to align with new curriculum changes and improve student success.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence

## ESL-Noncredit

### Program Description

The ESL-Noncredit program is designed to facilitate English learnings for whom English is a second or foreign language to master English necessary to successfully advance to credit college transfer or Associate Degree applicable courses, enter vocational job training, or for job success or job advancement. The ESL noncredit program offers listening and speaking, reading writing, keyboarding, basic computer literacy, and citizenship courses.

The ESL noncredit program seeks to serve the community by offering courses that best fit working students and parents whose schedules prevent them from accessing traditional college schedules. Classes are offered Monday through Saturday. Times offered are morning, afternoons, and evening to best serve the community. Courses offered are from literacy to advanced level ESL courses. Newly distance education courses are also options for the ESL student population.

In that effort, the VVC-Non Credit ESL program continues to grow in the community with establishment a grant-funded Victor Valley Adult Education Regional Consortium. It was established in the Spring of 2014, bringing together adult education providers in K12 School Districts and Victor Valley Community College, to develop a regional comprehensive plan to better serve the educational needs of adults in our region. The consortium covers the Victor Valley high desert region and its membership is made up of Victor Valley Community College and the five school districts within the geographic boundaries of the college district.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop, implement vocational ESL courses to improve student's language acquisition and career success.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Implement multiple strategies for adequately assisting Adult Education ESL students enroll, succeed, and matriculate including a website language translator and providing matriculation, accessible laboratory resources, CASAS test score alignment with credit ESL scores, tutoring and other supportive services at off-campus sites.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success  High Quality Practices/ Excellence



## Fire Technology

### Program Description

The Fire Technology department at Victor Valley College provides training and educational opportunities for students to become eligible for employment as a part-time firefighter with a local agency, a seasonal firefighter with the United States Forest Service, a full-time firefighter with CAL FIRE, or a full-time firefighter with any municipal fire department in California and many states in the western United States.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the fire technology program in the next five years as follows.

- ▲ Demand for entry-level and supervisory fire safety professionals is expected to remain steady in the state of California for the coming decade.
- ▲ There has been a proliferation of online associate and bachelor’s degree programs directed at students who cannot attend on-campus either due to geographic or time limitations and because firefighters often manage 24-hour shifts, call-outs, and have other irregular hours: online education is proving to be an invaluable resource for continuing education.
- ▲ Many jurisdictions prefer firefighters who have undergone EMT training, therefore, the ongoing partnership between the Fire Technology and EMT programs at the college are beneficial for students’ employment prospects.
- ▲ Technologies are becoming increasingly important in the profession (e.g., smartphone-based communications platforms, wearable devices, video, and sensor data) and digital competence and literacy will be increasingly critical for program graduates while maintaining/strengthening the program’s technical and hands-on training.
- ▲ The Victor Valley College Regional Public Safety Training Center, coupled with demand for incumbent worker training, provides opportunities to utilize the Center for continuing education and other revenue-based activities.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Increase course offerings (and delivery modalities including online) and strategic timing to meet immediate employment demand and fire service partner needs including advanced training/technical rescue classes and Wildland Firefighter certificate courses (in winter term).	Strategic, Efficient Enrollment Growth  Distance, Digital Learning Expansion and Enhancements  Noncredit, Other Expanded Learning Options Development	Student Experience and Success
Conduct continuous program self-assessment to ensure program meets all Office of the State Fire Marshall accreditation requirements and graduates are recognized as completing an accredited program.	Retention, Persistence, Completion, Post- completion Success	High Quality Practices/ Excellence



Maintain academic and professional performance standards ensuring students become future fire service leaders.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence
--	---	------------------------------------

## Foreign Language

### Program Description

The mission of the Foreign Languages program at Victor Valley College is to provide students with 21st century communication skills within the three modes of communication: interpersonal, presentational and interpretative, as well as reading and comprehension of a foreign language at novice and intermediate levels, to broaden individual’s understanding of other peoples and cultures. The program supports student transfer to four-year educational institutions, and promotes culturally-sensitive citizenry.

### On the Horizon

Shifting demographics and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Foreign Languages program in the next five years as follows.

- ▲ Because we are living in a global society and with the growth of minority populations in the U.S. and California, multicultural awareness and understanding, as well as multilingualism, are increasingly important.
- ▲ Demand for bilingual employees is expected to rise over the next 10 years, with 70 percent of employers predicting Spanish-speaking skills will be highly sought after among job candidates.
- ▲ There are additional opportunities, and employment demand, to offer curriculum and co-curricular learning activities that increase employment opportunities for students as interpreters/translators.
- ▲ There is likely enough enrollment and employment demand to expand the program including short-term, immersive foreign language courses and programs, certificate programs, and a Global Studies ADT degree pathway including in multiple delivery modalities (e.g., online and noncredit/continuing education).
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled, career-connected, and socially/culturally- conscious learning and are many of the students taking French, Spanish, and ASL courses.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Strengthen and expand course offerings and modalities (including online) by ensuring courses supported by strong and diverse faculty available to instruct and provide support for student success.	Strategic, Efficient Enrollment Growth  Distance, Digital Learning Expansion and Enhancements	Student Experience and Success



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop new certificate/degree programs and specialized curriculum (e.g., Spanish for Medical Personnel and First Responders) to increase student career and transfer opportunities.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Establish noticeable, state-of-the-art campus presence providing courses and tutoring services in a centralized location and utilizing the technology available in the Advanced Technology Center.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence
Expand tutoring services to increase student success by leveraging space, facilities and human capital of the Math and English Tutoring Centers in the Advanced Technology Center.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success

## Geography

### Program Description

Geography is multifaceted and is considered a social science, a global science, and an earth science. Geography is a spatial science that explains and describes the Earth in terms of location and relationships. All Geographers ask questions about the earth focusing on the location of a place and how that location contributes to the attributes of that place. Place names serve as the framework for this exploration.

One of the primary tools used by geographers are maps which are now more electronic than on paper. These powerful maps show the locations, patterns and distribution of the earth features being examined. All geographers compare and contrast this locational information in order to explain the similarities and differences of the physical and cultural environments of the earth and its inhabitants. As a result, geographers are also called spatial analysts.

There are two broad categories of geography: physical and cultural. Physical geographers look at the earth's physical characteristics. Included are such topics that relate to the earth's natural environment such as earth-sun relationships, weather and climate, flora and fauna, rocks and minerals, earthquakes, volcanoes, mountain building, gradational forces, and landform distribution.

Cultural Geographers examine the present-day earth in terms of its people, their organizations, languages, religions, economic systems, population, and settlement patterns.

Geography courses are transferable to CSU, UC, and may be used to fulfill requirements for an Associate of Arts for Transfer with a major in Geography and/or Liberal Arts AA and /or various certificates.

### On the Horizon

Current and projected industry changes, shifting demographics, and other trends (refer to the Physical Sciences section in the Supporting Documents) will likely have several programmatic implications for the Geography program in the next five years as follows.

- ▲ Geography courses serve as both requirements and electives for other certificate and degree programs at the college; therefore, coordination with other departments (scheduling, examining/addressing course retention and success rates, and curriculum alignment) that geography courses support is critical for ensuring student success.



- ▲ Most geography-related careers require bachelors’ degrees or higher (particularly careers that pay family-sustaining wages with career advancement opportunities), therefore having strong transfer degree pathways for students pursuing geography careers is important.
- ▲ Information and digital literacy skills are increasingly important in an Industry 4.0 world, including for geography, as well as skills using 3D modeling and Virtual and Augmented Reality (coupled with modeling) as they are transforming geography and Geographic Information Systems (GIS).
- ▲ There are career opportunities for geography-related occupations requiring a two-year degree or less postsecondary education, such as surveying and mapping technicians, which are also are projected to grow in the next five years.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Expand the integration of GIS and geography science courses with other departments/programs at VVC including Agricultural and Natural Resources and Physical Sciences, and other STEM areas to increase enrollment and skills of students.	Retention, Persistence, Completion, Post-completion Success  Strategic, Efficient Enrollment Growth	High Quality Practices/ Excellence  Student Experience and Success
Integrate GIS in all geography courses to ensure students obtain skills that have become essential in industry and bachelor and advanced degree programs.	Retention, Completion, and Success Milestone	High Quality Practices/ Excellence  Student Experience and Success
Establish adequate lab facilities (including up-to-date technologies/equipment/materials) and smart classrooms to enable GIS integration in all courses and to expand course offerings and instructional activities.	Retention, Persistence, Completion, Post-completion Success  Strategic, Efficient Enrollment Growth	High Quality Practices/ Excellence  Student Experience and Success
Collaborate with counselors, outreach, recruitment, and communications staff/webmaster to disseminate information and provide personalized and strategic guidance to students.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence  Student Experience and Success

## Geology

### Program Description

Victor Valley College offers classes such as Physical Geography, Cultural Geography, the Geology of California, and the Geology of the Western National Parks. Students may also take geology laboratory courses.

Geology is a study of factors and processes that have created and shaped the earth's surface, the geologic structures that comprise it, and the minerals and rocks that form it. Field trips are scheduled to areas of representative local geology.



## On the Horizon

Current and projected industry changes, shifting demographics, and other trends (refer to the Supporting Documents) will likely have several programmatic implications in the next five years as follows.

- ▲ Geology courses serve as both pre-requisites and requirements for other certificate and degree programs at the college therefore coordination with other departments (scheduling, examining/addressing course retention and success rates, and curriculum alignment) that geology courses support is critical for ensuring student success.
- ▲ Most geology-related careers require bachelors’ degrees or higher (particularly careers that pay family-sustaining wages with career advancement opportunities) therefore having strong transfer degree pathways for students pursuing geology careers is important.
- ▲ Information and digital literacy skills will be increasingly important in an Industry 4.0 world for all physical science disciplines including geology.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are many of the students taking geology courses.

## Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Improve geology equity, innovation, and success in the classroom through implementation of evidence-based teaching strategies, quality instruction, technical support, and digital content/technologies.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence  Student Experience and Success

## History

### Program Description

History examines the processes that have made today's realities. History is an evolving record of emotion, aspiration, frustration, and success. Historians deal with the goals, fears, interests, opinions, and prejudices of people in the past. What made people the way they were? What is the impact of their thought and action on people today and what is their impact on people tomorrow? As a study of people, history offers both a necessary understanding of one's place in the human experience and the conceptual framework for a lifelong avocation.

### On the Horizon

Current and projected social-political changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the History program in the next five years as follows.

- ▲ Changing social-political dynamics provide ample conditions to address and real-world contexts that are useful for instructional purposes in History.



- ▲ To meet students' increasing expectations for career-connected programs and an expeditious path to their desired career, it will be essential for History to strategically and efficiently offer courses that are part of a streamlined, robust Associate Degree Transfer program.
- ▲ Information and digital literacy skills are critically important in all fields of study as technology rapidly evolves/increases and providing opportunities for students to develop these skills is essential. Additional skills that are important for history majors to build are critical thinking, communication, and writing.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled, career-connected, and socially/culturally-conscious learning and are most students taking history courses.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Expand existing course offerings and develop additional offerings (e.g., Chicano History)--with sufficient faculty, dedicated department space, and other resources--to meet enrollment demand and serve the needs of the college's diverse Latinx population.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Collect and monitor data (including real-time data), with Institutional Research support, on history degree-seeking students so strategies can be identified and implemented to increase student completion and transfer.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success  High Quality Practice/Excellence
Establish dedicated History offices and classroom spaces to address enrollment demand, foster collegiality with all History faculty (both full- and part-time) and enable dedicated space for a plethora of professional development activities unique to teaching and learning history.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post-completion Success	Institutional Learning Student  Experience and Success

## Kinesiology

### Program Description

Physical Education is an integral part of the total educational program. It contributes to the spiritual, intellectual, physical, social, and emotional growth and development of each student through physical activity, health, and dance. It is also an associate's degree requirement for Victor Valley College. It is the goal of this department to provide opportunities for students to become and remain active through a variety of activity courses as well as several more specialized lecture courses for those who may seek to transfer to a four-year college or university or a career in Kinesiology/Physical Education, Recreation, Dance, Exercise Science or Sport Studies.

### On the Horizon

Current and projected industry changes, shifting demographics, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Kinesiology program in the next five years as follows.



- ▲ Labor market demand for sports, exercise, physical fitness, and physical therapy positions is strong and growing. Additionally, public health and recreation and leisure studies are other career pathways for program development including certificate and transfer degree programs
- ▲ There is overlap between the skills and abilities of kinesiology, public health, and recreation and leisure services providing opportunities to create stacked and latticed certificate and degree programs that share courses and maximize efficiencies.
- ▲ The population age 60 and older will increase 201% by 2060 in San Bernardino County so there will be growing demand for occupations and associate instructional program(s) aimed at an older population, such senior fitness trainer.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are most students taking kinesiology courses.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop additional and stacked/latticed certificate and degree programs to meet market demand including Athletic Trainer Aide certificate and Public Health Science and Nutrition and Dietetics degree for transfer programs.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Develop and implement strategies for fostering high success rates in both lecture and lab classes.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Develop courses and activities in other delivery modalities such as noncredit (e.g., vocational health occupations) and community services such as activities for senior population.	Strategic, Efficient Enrollment Growth Noncredit, Other Expanded Learning Options Development	Student Experience and Success
Develop a dance instructor certificate program enabling graduates to obtain employment with community dance studios, recreation departments, high school/after school activities, and more.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post-completion Success	Student Experience and Success

## Library

### Program Description

The VVC Library supports student learning and success through collections, instructional programs, services, and a 2-story lakeside facility with wi-fi and computers. Learning resources include print and electronic books, online databases, streaming media, traditional and digital periodicals, DVDs and CDs, reserve textbooks, and a Local History collection. Off-campus access to online materials is available with MyVVC credentials at the library website's homepage. The website also provides tutorials and online guides to help students with research. The library offers individual seating and collaborative group study areas with wi-fi access, study rooms, cell-phone charging station, internet-accessible computers, a cash-only pay-to-print system and photocopiers. Librarians are on duty providing reference assistance in the library and online via



chat for 68 hrs/week, Monday through Saturday, during the fall and spring semesters; hours vary for summer and winter intersession.

Library instruction is designed to help students develop critical thinking and digital literacy skills that are essential for college success and applicable to workplace proficiencies and lifelong learning. VVC has a local graduation requirement for information competency, a library research tutorial to help students learn effective searching techniques for books, online databases and internet sources; develop skills for analyzing and evaluating information resources; and ethical use of information by avoiding plagiarism and citing sources.

### On the Horizon

Shifting demographics, technological changes, and other trends (refer to Supporting Documents) will likely have several programmatic implications for the library in the next five years as follows.

- ▲ The exponential growth of internet users, coupled with innovation in motion graphics animation, translates into expansive and unlimited growth for libraries.
- ▲ Students are seeking access to digital and information technologies and spaces to collaborate and the Library will play a crucial role in reimagining and transforming physical spaces and experiences on campus.
- ▲ Information and digital literacy skills will be of increasing importance in an Industry 4.0 and 5.0 world and the Library will play an important role to ensure all students develop them.
- ▲ Physical spaces and student experiences, including the Library's, will be of heightened importance to differentiate the college and to appeal to a broader student population. Generation Z students, particularly, are experience-driven.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop library instruction in a variety of formats (online, on-campus, credit or non-credit) to help students develop skills in research, information literacy, critical thinking, and digital proficiency to promote student learning and success.	Distance, Digital Learning Expansion and Enhancements  Retention, Persistence, Completion, and Post-Completion Success	Student Experience and Success  High Quality Practices/ Excellence  Institutional Learning
Expand learning resources in digital formats, including ebooks, streaming media and databases, to meet needs of diverse student populations and support distance and off-campus learners.	Distance, Digital Learning Expansion and Enhancements  Retention, Persistence, Completion, and Post-Completion Success	Student Experience and Success  High Quality Practices/ Excellence  Institutional Learning
Promote "Library Space as a Service Philosophy" by expanding collaborative workspace, equipping study areas with technology such as electronic white	Retention, Persistence, Completion, and Post-Completion Success	Student Experience and Success



boards and large monitors, checking out laptops, developing makerspace activities, and hosting innovative programs.

High Quality Practices/  
Excellence

Institutional Learning

## Mathematics

### Program Description

The Victor Valley College Mathematics department offers a variety of courses to meet the needs of a diverse student population. It is a vital and growing program, providing reasoning skills to help students function in a wide range of sciences: social, biological, physical, behavioral, and management. Mathematics is necessary for understanding and expressing ideas in science, engineering, and human affairs. Mathematics is integrally related to computer science and statistics, which have proven invaluable to advancing research and modern industrial technology. The Mathematics curriculum academically prepares the student to transfer to a 4-year university to complete a Baccalaureate degree; it is also an integral part of many certificates and degrees offered at VVC. In addition, VVC offers an AS-T in Mathematics!

### On the Horizon

Current and projected policy changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the mathematics program in the next five years as follows.

- ▲ The ability to use data sets, make sense of them, and work with peers to develop potential solutions are core competencies for success in all fields and, thus, is increasing the importance of math courses aligned with students' majors and of including assignments/projects where students collaboratively apply math skills and techniques to real-world scenarios.
- ▲ The rapid expansion of data science and data analytics will likely increase the number of students seeking mathematics degrees.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are many of the students taking mathematics courses.
- ▲ AB 705, a key policy impacting mathematics instruction, has initiated a re-thinking of which, how, and when mathematics is taught; development of new teaching pedagogies and delivery modalities; and the implementation of multiple strategies for ensuring students' success.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Ensure adequate resources to support and scale the departments' math innovations and success strategies including smart classrooms configured to support collaborative learning and full-time faculty with ongoing professional development.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Continue collecting and monitoring data on math innovations/strategies making necessary adjustments and replicating/scaling those demonstrated effective at increasing student success.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Collaborate with counselors, outreach, recruitment, and communications staff/webmaster to disseminate information and provide personalized guidance to students on math innovations/strategies such as college algebra for nursing, CTE-transferrable math course(s), and noncredit math option(s).	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Increase size/capacity of Math Success Center to address increased demand for math support resulting from AB 705.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success

## Music

### Program Description

Music is the study of the language of sound and its effect on the minds and souls of creator, performer, and listener. It is one of the few academic disciplines to deal extensively with the development of the creative side of personhood; in that sense it is one of the most wholly “human” of the humanities. The creative problem-solving skills and discipline of music studies prepare students for a wide range of life’s activities and pursuits.

The Music department offers a wide range of classes, providing opportunities for transfer majors, music for general studies students, and the opportunity for student and community musicians of all skill levels to participate in a wide variety performance ensembles.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Music program in the next five years as follows.

- ▲ Transformative changes and opportunities for music are occurring and more lie ahead both for artists and the industry. Many of these changes are due to new technologies and changing consumer tastes and wants.
- ▲ All these technology and industry changes ultimately are driven by increased importance of creating unique, personal, and immersive experiences.
- ▲ The “rise of the crowd”—stemming from access to high-speed internet, smart devices, and social media—enables musical artists to develop a career on their own without the need for backing by industry labels.
- ▲ Music-related employment in the greater San Bernardino, Riverside, and Ontario area will grow over the next five years, however, it is 15% below the national average.
- ▲ Occupations with the highest employment potential for VVC graduates, such as teaching, typically require a bachelor’s degree, therefore, having a robust transfer pathway is important for student career success. While market demand for technical music occupations do not support the development of certificate or degree program, because musicians are increasingly producing their own music including such an option within the degree program or offering non-credit courses in a workshop format may be warranted.
- ▲ There is wide distribution of student age groups taking music courses and the department will be one of the first at VVC to identify multi-generational strategies and practices necessary for ensuring student access, retention, and



success such as offering courses in different delivery modalities, utilizing non-traditional scheduling options, employing digitally-enhanced instruction, and implementing other strategies that work for multi-generations of learners.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Increase number of courses offered in an online/digital format to increase enrollment and course offering efficiencies.	Distance, Digital Learning Expansion and Enhancements	Student Experience and Success
Develop music technology-related (including commercial and digital music) options providing graduates with the skills necessary to produce their own music and increase interest (particularly among younger students) in the Music program.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Strengthen the Music AA-T program, including supporting resources, to increase the number of graduates and transfers.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Collaborate with counselors, outreach, recruitment, and communications staff/webmaster to market the Music program and disseminate up-to-date program information to increase enrollment.	Strategic, Efficient Enrollment Growth	High Quality Practice/Excellence

## Nursing

### Program Description

The Associate of Science Degree in Nursing program at VVC is approved by the California Board of Registered Nursing (BRN). Graduates are eligible to take the National Council for Licensure Examination for Registered Nursing (NCLEX-RN) and, upon successful completion, become eligible for licensure as a Registered Nurse in the state of California.

VVC Nursing faculty accept and operate within the framework of the philosophy and mission of Victor Valley College. The conceptual framework is based on systems and change theory using the nursing process. The components of the curriculum are arranged around the client’s bio-psycho-social and cultural/spiritual beliefs. The faculty believes that the student is an adult learner who is expected to take an active role in the learning process.

VVC nursing graduates are prepared to practice nursing at any entry level in a variety of settings, including medical/surgical, psychiatric, maternal/child, perioperative, geriatric, critical care, and oncology.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Nursing program in the next five years as follows.

- ▲ The aging population, which is projected in increase, will place greater demands on healthcare and presents a significant opportunity for incorporating gerontology related instruction and activities.
- ▲ There are many initiatives and industry actions that are focused on increasing the proportion of nurses with baccalaureate degrees. Therefore, seamless RN-to-BSN pathways will be increasingly demanded.



- ▲ Emerging technologies are reshaping healthcare in multiple ways—how consumers access it, how and which providers deliver it, and what health outcomes it achieves—and digital fluency is becoming essential for healthcare professionals.
- ▲ Given the accelerated pace of care and advanced technologies, nurses are expected to have an expanded set of competencies including leadership, health policy, system improvement, research and evidence-based practice, and teamwork and collaboration.
- ▲ A state initiative is currently underway (with industry partners, four-year institutions, and community colleges) to both create seamless pathways and have shared, standard, and streamlined curriculum.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Expand and strengthen program by mitigating conditions that limit enrollment including lack of Director and Assistant Director, reductions in full-time faculty, and limited clinical sites.	Strategic, Efficient Enrollment Growth	High Quality Practices/ Excellence
Revise curriculum in response to the statewide nursing pathways/curriculum initiative and simultaneously update articulation agreements that are in place to maintain congruity and transfer options for students.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence  Student Experience and Success
Strengthen the Nursing program to keep current with BRN accreditation and licensure requirements including keeping technology, equipment, and supplies up-to-date; revising the curriculum; and adopting newer technologies in response to BRN testing changes.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence  Student Experience and Success
Develop new, general topic courses (e.g., medical terminology) for students that can be taken if they are waiting for admittance into the program and to expand their employment/career opportunities.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success

## Oceanography

### Program Description

Students enrolled in oceanography will be introduced to this multidisciplinary subject, which includes information from chemistry, geology, geography, meteorology, biology, physics, and more. Courses cover the methods and techniques of ocean exploration, chemical properties of seawater, physical properties of currents, waves, and tides, and ocean topography, geography, and geology. Emphasis is placed on adaptations of organisms to marine environments. Also included are discussions on ocean resource management and the significance of the marine environment to man.

### On the Horizon

Current and projected industry changes, shifting demographics, and other trends (refer to the Supporting Documents) will likely have several programmatic implications for the Oceanography program in the next five years as follows.



- ▲ Oceanography courses serve as requirements for degree programs at the college transfer, therefore coordination with other departments (scheduling, examining/addressing course retention and success rates, and curriculum alignment) that oceanography courses support is critical for ensuring student success.
- ▲ Most oceanography-related careers require bachelors’ degrees or higher (particularly careers that pay family-sustaining wages with career advancement opportunities) therefore having strong transfer degree pathways for students pursuing oceanography careers is important.
- ▲ Information and digital literacy skills will be increasingly important in an Industry 4.0 world for all physical science disciplines including oceanography.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are many of the students taking oceanography courses.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	Key Priority Areas	District Goals
Improve oceanography equity, innovation, and success in the classroom through implementation of evidence-based teaching strategies, quality instruction, technical support, and digital content/technologies.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence  Student Experience and Success

## Paralegal

### Program Description

The Paralegal program is designed for students pursuing careers as paralegals. A paralegal works in a paraprofessional capacity as an assistant to an attorney in a private law firm, governmental agency, industry, or private association. By California law, a paralegal, also called a legal assistant, works under the supervision of an attorney and performs many tasks normally handled by an attorney, such as preparing forms, memoranda writing, interviewing clients, researching legal matters, managing the legal office, and a variety of other tasks. There are also self-employed paralegals who work for attorneys on request. The paralegal is not an attorney and, therefore, cannot give legal advice or represent another person in court, except under extremely limited circumstances provided by law.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the paralegal program in the next five years as follows.

- ▲ As law firms increase the use of technology, the demand for attorneys and paralegals to have information and digital competence will increase and paralegals with information technology skills will be highly valued and in demand.
- ▲ The increased automation of legal processes has also spawned a new cluster of cutting-edge occupations. For example, discovery rules have changed and now electronically stored information is discoverable in litigation, as a result a new and growing occupation of e-discovery specialist has emerged.



- ▲ Powerful mobile devices, “software-as-a-service”, and secure, web-based technology allow professionals to work from anywhere so legal professionals working remotely and virtual law offices will increase.
- ▲ Outsourcing is increasing and it is transferring work of attorneys, paralegals, and support professionals to external vendors.
- ▲ Virtual work, clients seeking direct services, and outsourcing provide opportunities for legal professionals to work independently.
- ▲ Job growth for paralegal positions in the greater San Bernardino, Riverside, and Ontario area is projected to grow and workforce demand exceeds supply so there are opportunities for enrollment expansion.
- ▲ There are many older students (over age 40) taking paralegal courses and targeted strategies and practices will be necessary for ensuring older student access, retention, and success such as offering courses in different delivery modalities, utilizing non-traditional scheduling options, employing digitally-enhanced instruction, etc.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop new and stacked certificate programs for emerging, in-demand occupations including an eDiscovery and mediation specialist certificates to increase student’s career and employment options.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post- completion Success	Student Experience and Success
Develop a Law, Public Policy, and Society AA-T degree program.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Implement multiple strategies (with supportive resources) to expand program enrollment, retention, and success including outreach/marketing; course sequencing; writing preparedness; intersession and short-term course scheduling; and matriculating students in the Pathway to Law program to name a few.	Retention, Persistence, Completion, Post- completion Success	Student Experience and Success

## Philosophy and Religious Studies

### Program Description

The study of philosophy provides an opportunity to explore the most fundamental concerns of human life. Students examine and assess the concepts of the world's major thinkers and most influential texts regarding such themes as human value, religious experience, political order, truth, and ultimate reality. Philosophical study helps to develop such valuable and transferable skills as analytical reading and writing, creative and critical thinking, and independent judgment.

The academic study of religion is an objective, factual, interdisciplinary study of the texts, symbols, myths, rituals, ideas, and values of the world’s many religious traditions. Students are encouraged to view religion multi-culturally as a means of understanding more deeply the spiritual dimensions of human nature, history, and society. Study in this field prepares students for life in a multicultural society and provides practice in such valuable skills as empathetic reading and listening, critical reflection, and descriptive and analytical writing.



## On the Horizon

An analysis of current and projected industry changes, shifting demographics, and other trends (refer to Environmental Scan in Supporting Documents) reveals several opportunities for programmatic changes, growth, and new delivery modalities as follows.

- ▲ Industry 4.0 is spawning new, “hybrid” occupations that draw from and integrate liberal arts disciplines, such as philosophy and religious studies, coupled with career technical disciplines.
- ▲ Philosophy and religious studies are integral for sense making in a rapidly changing world with shifting social-political dynamics.
- ▲ Developing instructional activities to ensure all students have requisite information and digital literacy skills will be increasingly important as technology rapidly evolves and increases.
- ▲ To meet students’ increasing expectations for career-connected programs and an expeditious path to their desired career, it will be essential for philosophy and religious studies to strategically and efficiently offer courses that complement students’ major choices in other disciplines and/or are part of a streamlined, robust Associate Degree for Transfer program.

## Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Close equity gaps within the next three years while analyzing and assessing how different classroom modalities (i.e. face to face, or online) can impact students in different ways.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Create a space--virtually or physically—for faculty to share ideas, resources, pedagogy; to collaborate on academic projects and colloquia that raise interest in Philosophy and Religious Studies; create a learning community of faculty and students that encourages critical thought as well as basic educational skills that will promote success (e.g. note-taking and the development of studying habits).	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence
Develop three new curricula in Philosophy and Religious Studies over the next three years that meet the needs of the students of the High Desert and are a) integrated with other divisions, b) transferable or relevant to furthering student degrees, and c) will attract students to VVC’s Philosophy and Religious Studies programs.	Strategic, Efficient Enrollment Growth	Institutional Learning

## Physics

### Program Description

The study of physics involves trying to understand, at the most fundamental level, our observations of natural phenomena. Inquiries extend from the most minute of subatomic particles; to nuclei, atoms, molecules, solids, liquids, gases; and plasmas, stars, and galaxies. Physics seeks to explain how, under the influence of some fundamental forces, nature behaves as it does. In a larger sense it tries to address questions about our universe, such as: Where did we come from? What will be our ultimate fate?



The Physics department at VVC offers courses for students in many majors and courses that fulfill the lower division requirements for students who plan to major in fields such as engineering or medicine. Additionally, the Physics Associate of Science for Transfer (AS-T) program prepares students to pursue advanced degrees in physics.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends will likely have several programmatic implications for the physics program in the next five years as follows.

- ▲ Because physics graduates have skills relating to numeracy, problem-solving, data analysis and the communication of complex ideas, as well as a wider understanding of how the world works on a scientific and human level, they are in high demand in diverse sectors.
- ▲ Essential knowledge, skills, and abilities physics programs now need to cover include physics; science; research and problem solving; fluency in using scientific equipment; mathematical skills; programming, modeling and simulation; and quality control protocols.
- ▲ In addition physics programs should also examine ways to incorporate the following in curriculum and co-curricular learning activities to ensure student academic and career success: research, data analytics, presentation of complex findings in compelling and consumable ways, knowledge of and access to experience recent breakthroughs in physics, and working collaboratively on teams to conduct research and develop applications/solutions.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are the majority of students taking physics courses.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	Key Priority Areas	District Goals
No program goals have been identified		

## Political Science

### Program Description

Political science is the study of the processes, principles, and structures of government and political institutions. This field includes an analysis of governments around the world and of international relations. This academic discipline leads toward an understanding of the institutions of government, the role of citizens and political leaders, and contemporary issues at every level of government.

Career opportunities, which may require advanced degrees, include attorney, campaign consultant, educator, foreign diplomat, government official/elected official, intelligence officer/analyst, journalist, law enforcement positions, legislative/executive assistant, lobbyist, and urban planner.

### On the Horizon

Socio-political dynamics, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Political Science program in the next five years as follows.



- ▲ Data analytics is driving new analytic- and strategy-related political science positions/roles and, thus, providing more lucrative career opportunities for individuals with these skills.
- ▲ Information and digital literacy skills will be increasingly important in an Industry 4.0 world for social sciences, including political science.
- ▲ Political science professionals have varied employment opportunities in multiple fields/industries and offer political science majors with additional specializations or education several, unique career options.
- ▲ Most political science careers require bachelors’ degrees or higher thus having a robust transfer pathway is of critical importance for students who wish to pursue these careers.
- ▲ Political science majors need strong research and communication skills, they will need to discover how to make convincing arguments backed it up with facts, and hone presentation and verbal communication skills as they share work.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are many of the students taking political science courses.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Expand curriculum—offering new courses, stacked certificates, and degrees—to meet increasing student demand and provide additional transfer and career opportunities. These additions include research methods course(s); Law, Public Policy, and Society AAT degree; Global Leadership Certificate; Global Competency Certificate; and a Public Administration/Local Government Certificate.	Retention, Persistence, Completion, Post-completion Success  Strategic, Efficient Enrollment Growth	Student Experience and Success
Increase online course offerings to increase enrollment and achieve greater scheduling efficiencies that can be redirected to expand face-to-face course offerings.	Strategic, Efficient Enrollment Growth  Distance, Digital Learning Expansion and Enhancements	High Quality Practice/Excellence
Increase student success rates by enhancing pedagogy for all modalities (i.e. face-to-face, online and hybrid) and further implementing multiple success strategies, including supplemental instruction.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Intensify outreach and marketing of departmental programs to the VVC student body, area high school and the community, to grow enrollments, expand student transfers, and further increase relevant pathways to employment.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Collaborate with counselors to disseminate information and provide personalized guidance to students on which/the sequence of Political Science courses to take and recommended preparation for them.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success



## Psychology

### Program Description

Psychology is the scientific study of the mind and behavior. A background in psychological science provides the undergraduate with many marketable skills such as: (1) the ability to critically analyze information to problem-solve, (2) an understanding of how to use data to make decisions, (3) an understanding that humans are impacted by both internal and external factors, and (4) an appreciation for the influence of culture on human cognition and behavior. Because these skills are valued in many industries, graduates in psychology are employed in a number of areas including education, research, government, and business. Advanced degrees are required to become therapists, psychologists, and scientists. Victor Valley College currently offers the AA-T in Psychology and the Applied Developmental Psychology Certificate of Achievement, a 12-unit certificate.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic change implications for the Psychology program in the next five years as follows.

- ▲ Real-world events and dynamics provide psychology instructors with ample opportunities for contextualizing course content (e.g., climate change, racial and social injustice, the COVID-19 pandemic).
- ▲ Industry 4.0 is spawning new, "hybrid" occupations that draw from and integrate liberal arts disciplines, such as psychology, coupled with career technical disciplines.
- ▲ There are career opportunities and occupational demand for entry-level Classroom Paraprofessionals and Behavior Therapists. These workers provide behavior change/support services under the supervision of licensed or credentialed professionals. Regional labor market analysis indicates that San Bernardino County currently needs qualified applicants for "teacher assistants" and projected employment for educational services is expected to grow over the next 10 years. Competitive applicants have some postsecondary education in Psychology (especially human development and applied behavior analysis) and excellent communication and interpersonal skills.
- ▲ To meet students' increasing expectations for career-connected programs and an expeditious path to their desired career, it will be essential for the psychology program to strategically and efficiently offer courses that complement students' major choices in other disciplines and/or are part of a streamlined, robust Associate Degree Transfer program.
- ▲ Information and digital literacy skills are critically important in all fields of study as technology rapidly evolves/increases and providing opportunities for students to develop these skills is essential.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning. Additionally, most students taking psychology courses are Generation Z students.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Modify the Applied Developmental Psychology (ADP) Certificate of Achievement to provide students with a practical educational repertoire and marketable skills for entry-level positions as classroom paraprofessionals and behavior therapists.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
	Strategic, Efficient Enrollment Growth	High Quality Practices/ Excellence
Streamline psychology course offerings in accordance with Guided Pathways Principles and embed the Applied Developmental Psychology (ADP) Certificate of Achievement within the 1st year program map for psychology.	Retention, Persistence, Completion, Post- completion Success	Student Experience and Success
	Strategic, Efficient Enrollment Growth	High Quality Practices/ Excellence
Expand and enhance distance education offerings in psychology.	Retention, Persistence, Completion, Post- completion Success	Student Experience and Success
	Strategic, Efficient Enrollment Growth	High Quality Practices/ Excellence
Collect and monitor data on psychology degree-seeking students so strategies can be identified and implemented to increase student completion and transfer.	Retention, Persistence, Completion, Post- completion Success	Student Experience and Success
	Strategic, Efficient Enrollment Growth	High Quality Practices/ Excellence
Develop courses that meet CSU's Race and Ethnicity requirement.	Retention, Persistence, Completion, Post- completion Success	Student Experience and Success
		High Quality Practices/ Excellence

## Respiratory Therapy

### Program Description

The Respiratory Therapy program at Victor Valley College prepares students for a career as a Registered Respiratory Therapist, an integral part of the healthcare team. Whether new in the workforce or changing careers, respiratory therapy provides the opportunity for life-long learning and financial security. Respiratory therapists care for a wide variety of clients of all ages that experience an array of cardiopulmonary disorders. Physical assessment, care plans, diagnostic testing, pulmonary treatments, and mechanical ventilation (life support) are a few of the primary responsibilities of a respiratory therapist in the clinical setting. For example, respiratory therapists are responsible for identifying the causes of and treatments for symptoms associated with lung diseases, such as emphysema, asthma, pneumonia, bronchitis, and fibrosis. Examples of assessment tools that may be used are basic physical assessment, bedside pulmonary function testing, and arterial blood gas sampling. Interpretation of the assessment data is used by the respiratory therapist in "therapist-driven" protocols in attempt to improve pulmonary function (or breathing). Likewise, in the event of a high-risk delivery, where a premature newborn may be at risk for breathing complications, respiratory therapists are responsible for assessing the newborn, assisting with ventilation when needed, working in conjunction with the neonatologist to devise a care plan, and implementing that care plan. These are just two examples of the important role respiratory therapists play in prevention, maintenance, and improvement toward quality of life in clients that experience cardiopulmonary complications. The program is accredited by the Commission on Accreditation for Respiratory Care (COARC).



## On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Respiratory Therapy program in the next five years as follows.

- ▲ The respiratory therapy field is continually evolving, due to changes in chronic disease management, technology, and healthcare delivery systems. Today, the field offers career opportunities ranging from permanent positions in acute care and outpatient settings to a variety of job possibilities for travel respiratory therapists.
- ▲ Respiratory therapists' responsibilities and scope of practice is expanding to include more public health-related services including patient education, disease management including for cardiopulmonary disorders, outpatient respiratory care, preventing and detecting disease with more respiratory diagnostics, and other community-based respiratory therapy services.
- ▲ New technologies and devices will increase the demand for professionals with digital fluency and experience working with state-of-the art equipment.
- ▲ Job growth for respiratory therapist positions in the greater San Bernardino, Riverside, and Ontario area is projected to grow and workforce demand exceeds supply so there are opportunities for enrollment expansion.
- ▲ The COVID pandemic has increased awareness of the respiratory therapist profession and could result in increased enrollment.

## Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Implement digital learning tools to supplement in-person instruction and co-curricular learning activities to increase student success and digital fluency and to maximize use of limited lab space.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Develop new Echocardiogram and Respiratory Therapy Case Management certificate programs to meet market demand for respiratory therapists with these skills also providing students with enhanced employment opportunities/success.	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Expand and provide quality laboratory space and learning environment (enabling program expansion) with adequate, sustained ventilator supply; and safe, piped gas and suction for use with ventilators and other respiratory therapy modalities.	Retention, Persistence, Completion, Post-completion Success  Strategic, Efficient Enrollment Growth	High Quality Practices/ Excellence  Student Experience and Success
Conduct continual assessment and alignment of the program's learning outcomes and COARC (accreditation) requirements by utilizing the National Board for Respiratory Care Self-Assessment Examination (SAE) as a final program exam.	Retention, Persistence, Completion, Post-completion Success	Institutional Learning



## Restaurant Management

### Program Description

The Restaurant Management program is dedicated to achieving success in training students. Education and hands-on experience produce knowledge needed to build successful careers in the Foodservice industry. A positive training environment creates "attitude" development and decision-making/program solving techniques making VVC students uniquely qualified in their pursuit of a career in Foodservice.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Restaraunt Management program in the next five years as follows.

- ▲ The restaurant industry is dynamic and constantly changing and innovation and re-invention in response will be necessary to meet consumer and industry needs.
- ▲ The use of technology and data will be applied to culinary arts, guest services, food sourcing, supply chain logistics, food safety, and more so information and digital literacy skills and data-informed decision making will be increasingly important.
- ▲ The off-premise market (carryout, delivery, drive-thru, and mobile units) will comprise the majority growth in the industry and will also impact occupational demand.
- ▲ The industry will also see increasing automation and occupations with highest probability of being impacted by automation are food prep and food processing workers.
- ▲ The restaurant and food service industry in the greater San Bernardino, Riverside, and Ontario area is projected to grow 11.6%, and for bakers to grow 8.6%, in the next five years and at a slightly higher rate than the rest of the state and nation.

### Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Expand course offerings and develop new, stacked certificate programs (including interdisciplinary options with other departments at VVC) to address industry changes and demand such as sustainability, entrepreneur, ServSafe Alcohol/Allergen, nutrition courses as well as customer service, kitchen fundamentals, catering, and baking/pastry certificate programs.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Develop new baking/pastry and AS-T Hospitality Management degree programs to meet market demand and provide additional career/employment opportunities for students.	Strategic, Efficient Enrollment Growth	Student Experience and Success
Develop and/or increase noncredit, continuing education, contract education, and community service courses especially for high-demand skills, including in partnership with other departments such as Agriculture and Natural Resources.	Strategic, Efficient Enrollment Growth  Noncredit, Other Expanded Learning Options Development	Student Experience and Success



PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Ensure responsiveness to industry and accreditation standards/requirements, increase interest in the program, and ensure students are adequately trained with state-of-the art equipment, facilities, and requisite faculty and professional development that reflects industry practices.	Strategic, Efficient Enrollment Growth  Retention, Completion, and Success Milestone	Student Experience and Success
Change department/program name and utilize naming nomenclatures for new certificate programs that are aligned with industry and occupation titles to reflect what the department offers and to increase both students' and employers' awareness/recognition of programs.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence

## Sociology

### Program Description

Sociology offers much more to the student who desires to understand the web and rhythm of human behavior. From intimate, personal, and family relationships to international corporation activities; from marginality, deviance, and crime to recreation, religion, and medicine, few disciplines have such broad scope and relevance.

Career opportunities, which may require advanced degrees, include: claims examiner, criminologist, educator, employment/personnel specialist, interviewer/researcher, law enforcement/probation or corrections officer, public relations consultant, social worker/counselor, statistician/population analyst, urban planning consultant, youth counselor/recreation specialist.

Sociology offers much more to the student who desires to understand the web and rhythm of human behavior. From intimate, personal, and family relationships to international corporation activities; from marginality, deviance, and crime to recreation, religion, and medicine, few disciplines have such broad scope and relevance.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Sociology program in the next five years as follows.

- ▲ Changing social-political dynamics provide ample conditions to address and real-world contexts that are useful for instructional purposes in sociology.
- ▲ Industry 4.0 is spawning new, “hybrid” occupations that draw from and integrate liberal arts disciplines, such as sociology, coupled with career technical disciplines.
- ▲ To meet students’ increasing expectations for career-connected programs and an expeditious path to their desired career, it will be essential for the Sociology program to strategically and efficiently offer courses that complement students’ major choices in other disciplines and/or are part of a streamlined, robust Associate Degree Transfer program.
- ▲ Information and digital literacy skills are critically important in all fields of study as technology rapidly evolves/increases and providing opportunities for students to develop these skills is essential.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are most students taking sociology courses.



## Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Increase department’s capacity to expand enrollment and course offerings/sections through dedicated/assigned space, sufficient full-time faculty, and in-demand scheduling strategies.	Strategic, Efficient Enrollment Growth	High Quality Practice/Excellence
Adopt new pedagogies and digital instructional technologies, along with faculty professional development, to provide learning modalities that serve a diverse, multi-generational student population especially younger students seeking more technology-enabled learning.	Retention, Persistence, Completion, Post- completion Success	Student Experience and Success
Collect and monitor data on department goals and strategies making necessary adjustments and replicating/scaling those demonstrated effective at increasing enrollment and student success.	Retention, Persistence, Completion, Post- completion Success	High Quality Practices/ Excellence

## Theater Arts

### Program Description

Theatre Arts is the essence of the humanities in that it is the only art form that incorporates all the other fine arts into its final product. The Theatre Arts program’s primary goal is to educate the whole person, to emphasize comprehensive education. Everyone should experience the dynamics of theatre and the Theater Arts ensemble technique teaches cooperation, teamwork, and communication. The skills learned in producing theatre are necessary in every occupational arena.

The Theater Arts department offers a wide range of classes providing opportunities for Fine Arts transfer students, general education requirements, and the opportunity for students to participate in a wide variety productions.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Environmental Scan in Supporting Documents) will likely have several programmatic implications for the Theater Arts program in the next five years as follows.

- ▲ Theater Arts is being transformed by demographic, culture/societal, and technology changes which are reflected in theatrical productions.
- ▲ All these technology and industry changes ultimately are driven by increased importance of creating unique, personal, and immersive experiences.
- ▲ More young people are being drawn to theater and changing how traditional stories are presented by seeking more unique and immersive experiences that new technologies such as digital media, sound/video design, robotics, etc. can provide.
- ▲ Theater technology can vastly improve and economize productions, therefore theater arts professionals, including actors, will need to learn how to fit artistic skills inside the parameters created by the inclusion of technology in the digital age. Therefore, digital fluency and skills are becoming essential for theater professionals.
- ▲ The new generation of college students (Generation Z) are digital natives who seek and prefer more technology/digital-enabled and career-connected learning and are many of the students taking theater arts courses.



## Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Develop Theater Arts (ADT) transfer degree program to increase student transfer options and success.	Retention, Persistence, Completion, Post-completion Success	Student Experience and Success
Collaborate with counselors, outreach, recruitment, and communications staff/webmaster to market the Theater Arts program to increase enrollment and awareness of theater productions.	Strategic, Efficient Enrollment Growth	High Quality Practice/Excellence
Strengthen co-curricular and community service activities that both enrich the cultural life of students, faculty and the community and keep students current with theater arts practices that increase their transfer and career success.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/Excellence  Student Experience and Success

## Welding

### Program Description

The VVC Welding program prepares students to enter welding-related occupations, offers retraining for those seeking a new career, and provides an opportunity for those employed in welding occupations to learn new skills and upgrade themselves in their positions. The department is a member of the American Welding Society's Educational Institution Program for entry-level welders and is entitled to all the privileges. This entry level welder program is part of the National Skills Standards Program, which is being enacted across a wide range of industries in the United States. The program prepares students to pass the written test and welding performance test necessary to acquire a welding license from the Los Angeles Department of Building and Safety.

### On the Horizon

Current and projected industry changes, shifting demographics, technological changes, and other trends (refer to Supporting Documents) will likely have several programmatic implications for the Welding program in the next five years as follows.

- ▲ Demand for welders is high and expected to remain relatively steady in the greater San Bernardino, Riverside, and Ontario metropolitan area for the next five years.
- ▲ Welding is significantly being impacted by Industry 4.0 which is combining the Internet of Things (IoT) with robotic welding, virtual reality, and machine intelligence.
- ▲ Digital solutions, connectivity, and automation are shaping the future of the welding industry but will also attract a new generation to the field and welding instruction will need to adopt new technologies to keep pace with the industry as well as to train workers who will need to be digitally/technically savvy.
- ▲ The Welding program appeals to multiple generations of learners including a large percentage over the age of 30. To meet the needs and learning preferences of welding students, the program will need to offer courses in different delivery modalities, utilize non-traditional scheduling options, employ digitally-enhanced instruction, and find other strategies that work for multi-generations of learners.



## Program Contribution to the VVC Educational Master Plan

The following program goals are identified for achievement in the next 3 to 5 years.

PROGRAM GOALS	KEY PRIORITY AREAS	DISTRICT GOALS
Restructure welding curriculum to increase student success including moving from an 8- to 16-week format and creating multiple stacked/latticed certificate programs aimed at specific industry/occupation specializations (e.g., pipefitter).	Strategic, Efficient Enrollment Growth  Retention, Persistence, Completion, Post-completion Success	Student Experience and Success  High Quality Practices/ Excellence
Establish online and digital/mobile elearning resources, open textbooks, courses, etc. to serve the multi-generational population of welding students, increase engagement and digital fluency utilizing technology platforms and tools.	Distance, Digital Learning Expansion and Enhancements	Student Experience and Success
Maintain American Welding Society (AWS) program standards through AWS-certified faculty (including ongoing professional development) and AWS-centered curriculum, thus increasing recognition of program and graduates' quality.	Retention, Persistence, Completion, Post-completion Success	High Quality Practices/ Excellence Institutional Learning

## ADMINISTRATIVE SERVICES

Given transformative changes happening in business/industry, technology, shifting demographics, and social-political dynamics, successful colleges of the future are ones that are nimble and focus on quality. The ability to adapt to changing conditions with flexible, just-in-time solutions; develop holistic financial and business models; leverage technologies; and provide exceptional experiences will be essential.

An aging population that will be seeking higher education and expanding numbers of non-traditional students are wanting more flexible services, at times that are convenient to working adults or, better yet, entirely online and via digital devices. Younger students, namely Generation Z students, are seeking more quality, personalized, and technology-mediated services.

For VVC, it will become increasingly important to be agile—including having the ability to streamline, simply, and change administrative policies, procedures, and processes. All with an eye on efficiency and service excellence.

Working “smarter” not harder will be key. An information technology infrastructure that allows for big data collection, data mining, and robust analytic tools and models is essential; along with learning and information management systems that do the same. Mobile phone technologies are accelerating the value of automated, self-service activities and are mechanisms for capturing student data making predictive analytics possible and enabling the redesign of administrative services to serve unique student segments. Student self-service tools, underpinned by “choice architectures”, are managing how options and recommendations are personalized and presented to students.

Technology-mediated solutions should be utilized to simplify processes and free-up staff from transaction processing to interfacing with students to offer more personalized and/or specialized services. This can be accomplished through accelerating the value of self-service mobile technologies. Video interfaces with explainer videos can also be utilized to handle routine questions or explain processes. The aim is for students to be able to handle routine transactions via