Bakersfield College
Comprehensive Program Review

Program Information:

Program Name: Fire Technology Program

Program Type: ☒ Instructional ☐ Student Affairs ☐ Administrative Service ☐ Other

> **_Bakersfield College Mission_**: Bakersfield College provides opportunities for students from diverse economic, cultural, and educational backgrounds to attain Associate and Baccalaureate degrees and certificates, workplace skills, and preparation for transfer. Our rigorous and supportive learning environment fosters students' abilities to think critically, communicate effectively, and demonstrate competencies and skills in order to engage productively in their communities and the world.

Describe how the program supports the Bakersfield College Mission:

Program Mission Statement: The mission of the Bakersfield College Fire Technology Program is to promote student success by providing quality instruction for degree, and academy graduates for entry level firefighting positions.

> **_Instructional Programs only:_**
> A. List the degrees and Certificates of Achievement the program offers
>   - Associate in Art, Fire Technology
> B. If your program offers both an A.A. and an A.S. degree in the same subject, please explain the rationale for offering both and the difference between the two. The AS Degree in Fire Technology was deleted, some students still have catalog rights and continue to graduate with this degree.
> C. If your program offers a local degree in addition to the ADT degree, please explain the rationale for offering both. N/ A

Progress on Program Goals, Future Goals, and Action Plans:

A. List the program's current goals. For each goal (minimum of 2 goals), discuss progress and changes. If the program is addressing more than two goals, please duplicate this section.

Current Program Goals	Which institutional goals from the 2015-2018 Strategic Directions for Bakersfield College will be advanced upon completion of this goal? (select all that apply)	Progress on goal achievement (choose one)	Comments
1. Implementation of Target Solutions for our Fire Departments.	☒ 1: Student Learning ☒ 2: Student Progression and Completion ☐ 3: Facilities ☒ 4: Oversight and Accountability ☐ 5: Leadership and Engagement	☐ Completed: _____ (Date) ☐ Revised: _____ (Date) ☐ Ongoing: _____ (Date)	This will allow us to keep track of training classes our fire departments are teaching. It will also allow us to see training modules as they are completed.
2. Wasco State	☒ 1: Student Learning	☐ Completed: _____ (Date)	We already have Kern County Fire

Firefighters included in our B66 in-service refresher training.	☐ 2: Student Progression and Completion ☐ 3: Facilities ☐ 4: Oversight and Accountability ☒ 5: Leadership and Engagement	☐ Revised: _____ (Date) ☐ Ongoing: _____ (Date)	and Bakersfield City Fire in our B66 In-service training now the prison firefighters are wanting to be included in our firefighter refresher training.

B. List the program's goals for the next three years. Ensure that stated goals are specific and measurable. State how each program goal supports the College's strategic goals. Each program must include an action plan.

Future Goals	Which institutional goals from the 2015-2018 Strategic Directions for Bakersfield College will be advanced upon completion of this goal? (select all that apply)	Action Plan	Timeline for Completion	Lead person for this goal
1. Meeting our curriculum needs. Identifying which curriculum needs to be revised. Identify new curriculum to meet our future needs.	☒ 1: Student Learning ☐ 2: Student Progression and Completion ☐ 3: Facilities ☒ 4: Oversight and Accountability ☐ 5: Leadership and Engagement	Work with the curriculum committee to meet deadlines for review and to revise courses as needed.	Ongoing	Christine Harker is Public Safety's representative to the curriculum committee.
2. Need for more classroom space as well as increase office space for our growing faculty and programs.	☒ 1: Student Learning ☒ 2: Student Progression and Completion ☒ 3: Facilities ☒ 4: Oversight and Accountability ☒ 5: Leadership and Engagement	New facilities are in the plan for the second five-year disbursement of measure J funds.	Completion before 2025.	Tim Capehart

Best Practices:
Programs often do something particularly well; usually they have learned through assessment – sometimes trial and error – what solves a problem or makes their programs work so well. These are often called Best Practices and can help others. Please share the practices your program has found to be effective.

Cal Fire donated to Bakersfield College Fire Technology Program, wildland personal protection clothing for training. We were given 129 brand new sets which, included jackets and pants that are made of fire retardant material, for a value of $45,537.00. The fire technology budget paid for travel up to the Davis office of CalFire, expense of approximately $190.00 for mileage, the savings to the College was $45,347.00. Wildland jacket costing $173.00 each and pants at $180.00 each x 129 sets equal a savings of $45,537. Our Student FFI Academy and Wildland Class B71 A and B will be using the donated equipment for training for many years to come.

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Year Program Analysis:
Take a look at your trend data. Provide an analysis of program data throughout the last three years (all programs should have some form of data that is used to look at changes over time) and report:

1. Changes in student demographics (gender, age and ethnicity).
    * No changes in the past five years, very consistent.
2. Changes in enrollment (headcount, sections, course enrollment, and productivity).
    * We saw a big change for Distance Ed from 710 students for 2013/2014 to 1,241 students for 2014/2015.
    * Traditional has been very consistent with no big changes in enrollment.
3. Changes in achievement gap and disproportionate impact. None.
4. Success and retention for face-to-face as well as online/distance courses.
    * Our success and retention for traditional face-to-face classes has been consistent at 99-100% during this period.
    * We have seen an improvement in our success and retention rates in our online/distance learning format from 81% retention and 56% success in 2013-14 to 90% retention and 80% success in 2016-17. These are well above the college-wide rates of 84% and 58%. This may be due to better orientation of online students and the switch to the more intuitive Canvas platform which our program participated in as an early adopter.
5. Any unplanned events that affected your program.
    * Yes, un-paralleled growth in this field, and the formation of a Public Safety Training Program, which now includes Fire, EMS, Law Enforcement, and Prison Firefighters.
6. Degrees and certificates awarded (three-year trend data for each degree and/or certificate awarded).

Full Name of Degree or Certificate	2014- 2015	2015- 2016	2016- 2017	TOTAL
Fire Technology AA	20	22	19	61
Deleted Chief Officer Cert	0	1	0	1
Fire Technology Cert	9	12	20	41

Wildland Fire Technology AS	1	1	4	6

Executive Chief Officer is a new certificate in 2015-16 so no previous data available. These awards should rise steadily in the next few years as more students complete the core requirements.

7. Reflect on any changes you would like to see in your program for the next 3 years.
   - Would like to see an increase in Chief Officer Cert. awards and Wildland Fire Tech AS.
8. List degrees and certificates awarded (three-year trend data for each degree and certificate awarded). Include targets (goal numbers) for the next three years.

Full Name of Degree or Certificate	2014- 2015	2015- 2016	2016- 2017	2016- 2017	2017- 2018	2018- 2019
Fire Technology AA	20	22	19	20	25	30
New Executive Chief Officer Cert.	0	0	0	0	0	15
Fire Technology Cert.	9	12	20	20	20	20
Wildland Fire Technology AS	1	1	4	5	10	15
New Firefighter 1 Academy Cert.	0	0	0	0	30	33
New Wildland Firefighting Cert.	0	0	0	0	14	18

Executive Chief Officer is a new certificate in 2015-16 so no previous data available. These awards should rise steadily in the next few years as more students complete the state fire marshal prerequisite, Company Officer, Chief Fire Officer, and then the Executive Chief Officer courses. All three are combined into one Executive Chief Officer new Certificate of Achievement.

What is reflected above are only the college certificates. This past year the fire technology program issued an additional **2,162** State Fire Marshal Certificates. This is a dramatic increase over last year total. This does account for and reflects the additional time and energy it takes to process and mail all of these certificates. This is detailed out in appendix "B".

Resource Request and Analysis:

Resource Request		Discuss How Effective Request is for Student Success?
Positions: *(Please include any replacements for retirements or open positions that need to be filled.)*	☒ 1: Classified Staff ☐ 2: Faculty Management Positions cannot be requested through the position request/program review process.	1. I am requesting one part time new department two assistant to help with the increased work load placed on our only department three assistant. 2. The program has grown from one fulltime faculty to five fulltime faculty, one program Director, and now three programs; Fire Technology, EMT/Paramedic, Prison Fire and EMS, and Law.

		Enforcement Academy. We have also taught EMS classes to Wonderful Farms safety teams.
Professional Development: *Describe briefly, the effectiveness of the professional development your program has been engaged in (either providing or attending) during the last cycle*	☐ 1: Provided Professional Development ☒ 2: Attended Professional Development	Program faculty has participated in professional development workshops and opportunities on-campus as well as off-campus by attending Canvas classes and other educational/professional meetings. Professional development is necessary for faculty to remain current in the fire service field. In addition, the faculty must be informed of changes to programmatic accreditation standards by both the State and national accrediting agencies. Both regular and nontraditional learners will benefit from faculty maintaining compliance for accreditation and licensure and to ensure that the curriculum meets industry standards. This will enable students to transition from the classroom and field environment to work. Information and practices learned in professional meetings are regularly disseminated to the program's advisory partners during advisory board meetings.
Facilities: *If your program is requesting a building remodel or renovation, additional furniture or beyond routine maintenance, please explain how this request or requests will impact your program and help contribute to student success.*	☒ 1: Space Allocation ☐ 2: Renovation ☐ 3: Furniture ☐ 4: Other ☐ 5: Beyond Routine Maintenance	With the increase of five new full-time faculty in the past two years to our department we have run out of room for office space. We are competing for rooms for our fire tech, EMS, and criminal justice programs. Nursing is also using our room space during the week making it more difficult to have rooms available for instruction. We were given a verbal OK from our BC President Christian regarding building a new Public Safety Building for our programs. Having to wait for the next five-year cycle is going to be very challenging for our faculty to have enough room to conduct lecture and lab.
Technology: *If your program is requesting technology (audio/visual – projectors, TV's, document cameras) and computers, how will this technology impact your program and help contribute to student success?*	☐ 1: Replacement Technology ☒ 2: New Technology ☐ 3: Software ☐ 4: Other_____	Purchase of Tech equipment for recording and documenting our paramedic student's skills. TV's with large screen monitors for all of our assigned classrooms for Fire and EMS programs. Purchasing Apple TV Devices that can display what the instructor see on their tablet. We also need a adapter for the sim man that will plug into our ZOLL Heart Monitors for training of both Fire and EMS Professionals. Our success rates are currently high, this equipment and technology will allow us to continue to maintain the current student success.

Resource Request		Discuss How Effective Request is for Student Success?
Other Equipment: *If your program is requesting equipment that is not considered audio/visual or computer equipment technology, please explain how these requests will impact your program and help contribute to student success.*	☐ 1: Replacement ☐ 2: New ☒ 3: Other: None_____	Not at this time
Budget: *Explain how your budget justifications will contribute to increased student success for your program.*		The technical equipment for our EMS classes will provide enhanced simulation for skills evaluation and more accurately document student performance. The large screen monitors will provide greatly improved display quality which will allow students to see class presentations better, and it will also free up whiteboard space for instructor use. Both of these results will yield a more productive learning environment. Expanded for facilities to accommodate classrooms, training and office space will allow us to handle a greater number of students, provide more training classes, and provide a safe, comfortable work environment for our students and instructors.

Conclusions & Snapshot:

Present any conclusions and findings about the program.

Fire Technology continues to be a successful CTE program. The program meets the California Community College Core Mission by preparing students for entry into a highly competitive employment field as well as providing education and training for skill maintenance and advancement of firefighters in our region. This is done by offering both an AA in Fire Technology, and AS in Wildland Firefighting, as well as several certification routes, and also a State Certified Firefighter 1 Academy. This education is key to preparing students for employment in the well- paid field of Fire Protection and Emergency Services as well as advancement within that field.

Course success and retention rates have remained high and compare favorably to college-wide performance on these measures. The program interfaces well with our local agencies to assess ongoing needs, and remain relevant to changing industry standards. Increased staffing has helped with the workload. We are looking forward to moving forward with facility improvements which will include offices, classrooms and training facilities to serve this expanding program.