

Bakersfield College 2018-2019 Comprehensive Program Review

Program Name: Bachelor of Science, Industrial Automation

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

Program Mission Statement: To prepare individuals for technical management careers in industries which utilize automation, including the petroleum, manufacturing, logistics and agriculture industry sectors, in order to improve the regional economy.

Describe how the program supports the Bakersfield College Mission: This is the first baccalaureate degree offered by the college and will provide preparation for employment in technical fields utilizing Industrial Automation. Upper division coursework will emphasize critical thinking, research, communication skills, and project based learning.

Instructional Programs only:

- A. List the degrees and Certificates of Achievement the program offers; Bachelor of Science, Industrial Automation
- 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.
- C. If your program offers a local degree in addition to the ADT degree, please explain the rationale for offering both.

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 (2) goals, please duplicate this section. Please provide an action plan for each goal that gives the steps to completing the goal and the timeline.

1. Program Goal: Continue to refine program/courses with advisory board input and graduate feedback.

List the institutional goals from the Bakersfield College Strategic Plan that will be advanced upon completion of this goal?

(Student Learning, Student Progression and Completion, Facilities, Leadership and Engagement)

Student Learning, Oversight and Accountability, Leadership and Engagement

Progress on goal achievement: This pilot program is entering its 3rd year or 3rd student cohort is beginning. There were major courses to program, scheduling, and courses over the past 2 years and we are still in the refining process. Based on our closed loop system, we examine our results and compare them to our mission statement. We then brought our ideas for change to our advisory board and sought approval. Industry leaders along with faculty decided to replace an Advanced Graphics course with an Advanced Robotics course; INDA B101 being replaced with INDA B121.

Status Update – Action Plan and any link to Resource Requests: Course outline for new course is written. New schedule to accompany the new students entering the program created. Unfortunately, the faculty member slated to develop course from the outline is no longer available. Faculty and administration are in process of finding replacement.

2. Program Goal: Increase enrollment through outreach, marketing, and pathway building.

List the institutional goals from the Bakersfield College Strategic Plan that will be advanced upon completion of this goal?

(Student Learning, Student Progression and Completion, Facilities, Leadership and Engagement)
Student Progression and Completion

Progress on goal achievement: This pilot program recently graduated 7 students from the first class. Our second class enrollment numbers have doubled to 14, however we are not at capacity for third year. Administration and faculty are struggling to tap college resources to support a new program. All areas of supporting departments are falling short; counseling, outreach, job development, advisors, graphics, media, and marketing have failed to embrace the extra work required to make a pilot program successful.

Status Update – Action Plan and link to Resource Requests: A program manager is being considered to be hired.

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.

1. Future Program Goal: To support program growth, we will develop pathways to our program through Dual Enrollment and Articulation. Our goal is to add at least one high school partnership to our lower division courses.

List the institutional goals from the Bakersfield College Strategic Plan that will be advanced upon completion of this goal?

(Student Learning, Student Progression and Completion, Facilities, Leadership and Engagement)
Student Progression and Completion

Action plan: Faculty will work with campus resources to facilitate discussions and assist with pathway developments.

Lead person for this goal: CTE Director

2. Future Program Goal: To support program growth, we will develop pathways to our program through Industry Outreach. Our goal is to add at least one Industry to our Advisory Board.

List the institutional goals from the Bakersfield College Strategic Plan that will be advanced upon completion of this goal?

(Student Learning, Student Progression and Completion, Facilities, Leadership and Engagement)
Leadership and Engagement

Action plan: Faculty members will utilize their Industry Knowledge to increase the circle of opportunities for students completing the program, by engaging with new businesses. This will allow more voices to guide curriculum review and more internships and job placements by exposing industry to our students and this program.

3. Lead person for this goal: Program Dean

3 Year Program Analysis: (All programs will answer the following questions unless otherwise indicated)

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 change
2. Changes in enrollment (headcount, sections, course enrollment, and productivity). *Instructional only-Head count increase between years 1 and 2 by 100%, however no growth for 3rd year. More outreach and marketing is needed.*
3. Changes in achievement gap and disproportionate impact. No change
 - o Please look for large differences, or gaps, between top performing groups and others. Consider how you could identify the reasons behind these gaps, and if there changes that could be made to reduce them. For in depth review of equity issues, and on changes that are being made campus-wide, please refer to the current [Bakersfield College Student Equity Plan](#).
4. Success and retention for face-to-face as well as online/distance courses. *Instructional only-Success and retention rate are above 85%*
5. Any unplanned events that affected your program/. A faculty member left the college who was slated to develop and teach a new course. Administration is planning on not hiring a replacement for a full year. This will severely impact our ability to continue refining and developing this pilot program. This also has sent a message to students and faculty that support for this program is lacking.
6. Degrees and certificates awarded (three-year trend data for each degree and/or certificate awarded). *Instructional only- 7 Bachelor of Science Degrees awarded.*
7. Reflect on any changes you would like to see in your program in the next 3 years. *Campus wide support must increase. New businesses are coming to Kern County and they expect a level of skilled workforce. Our students deserve an opportunity to gain knowledge and a degree for a fraction of the cost of a UC or CSU. This must come from the top. Faculty are not empowered or given release time to drive the change needed for outreach, marketing, hiring, or other support services.*
8. The college has embarked on significant efforts such as **Guided Pathways, affinity groups** and **completion coaching communities** to improve the success and completion rates of our students. Please describe what your program/department/office is planning/doing to contribute to these efforts. **Not sure, have not heard of these efforts.**
9. Explain your role if you are involved in Dual Enrollment, Inmate Education, or Rural Initiatives. We are dual enrolled at Independence High School and Articulated with the Regional Occupational Center. We are also Dual Enrolled in rural Delano as well as attempting to add sections of our lower division at the Delano Campus.
10. List degrees and certificates awarded (three-year trend data for each degree and certificate awarded). Include targets (goal numbers) for the next three years. *Instructional only-24 in the next 2 years*

Full Name of Degree or Certificate	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2019- 2020	2020- 2021
Bachelor of Science, Industrial Automation	0	0	7	14	14	14

Analysis of Received Resources from Previous Cycle

Discuss the type of resources you received and their Impact on program effectiveness?

Facilities:

If your program received a building remodel or renovation, additional furniture or beyond routine maintenance, please explain how this request or requests impacts your program and helps contribute to student success.

- 1: Space Allocation No new space from previous year.
- 2: Renovation No new renovation from previous year.
- 3: Furniture No new furniture from previous year
- 4: Other None
- 5: Beyond Routine Maintenance M&O and program lab assistant have completed extensive work in INDT 6 to support INDA B122. Old support systems were taken down and a new partial wall was built.

Technology:

If your program received technology (audio/visual – projectors, TV’s, document cameras) and computers, how does the technology impact your program and help contribute to student success?

- 1: Replacement Technology
- 2: New Technology IT and program lab assistant installed dual monitors in INDT7a to support INDA B110. Monitors were not new purchases, but used from older labs.
- 3: Software
- 4: Other _____

Other Equipment

If your program received equipment that is not considered audio/visual or computer equipment technology, please explain how these resources impact your program and help contribute to student success.

SWF grants have supported placement of 25 year old computer integrated manufacturing cell. This equipment will primarily be used in the lower division, however it will also serve as capstone senior projects for INDA B151

Conclusions:

Present any conclusions and findings about the program. This is an opportunity to provide a brief abstract or synopsis of your program’s current circumstances and needs. Consider this a snapshot of your program, if someone were to only read this portion of your Comprehensive Review.

In conclusion...

This pilot program is entering its 3rd year. While growth was observed between years one and two, we are in danger of stagnation and decline. Primary factors contributing to this are a lack of marketing and outreach. Other factors include lack of support from administration. Every aspect of this awesome endeavor, to allow a four year degree at a community college, has been delegated to personnel that have other duties. This causes focus and energy to be spent elsewhere.