

AB927 Implementation Processes for Kern Community College District

PRESENTED TO DISTRICT CONSULTATION COUNCIL

JANUARY 25, 2022



AB927 Passes on October 6, 2021!

- Planning Considerations
- Formed the KCCD Baccalaureate Degree Program Task Force with the goal of
 - 1) Providing support to district colleges in developing applications for a baccalaureate degree
 - 2) Evaluating applications prior to submission
- This team includes unique skill sets in curricular processes, assessing regional workforce needs, data analysis, and strategic analysis/reporting

KCCD BDP Task Force



Todd Coston,
Interim
Associate Vice
Chancellor
Planning and
Educational
Technology



Liz Rozell
Director,
Valley
Strong
Energy
Institute



Trudy Gerald,
Associate Vice
Chancellor-
Economic &
Workforce
Development



Bonita Steele,
Director,
Career
Pathways,
Programs
and
Compliance



Bob Ngo,
Executive
Director,
Institutional
Research
and
Reporting



Jessica Grimes,
Dean,
Economic and
Workforce
Development

Early Stages of the Process

- The Department faculty, faculty chair and the area Dean explore the viability of the proposed baccalaureate degree considering the following elements:
 - ✓ TOPs code cross-walked to a CID **not** offered in any CSU or UC
 - ✓ Existing associate degree pathway to the baccalaureate degree
 - ✓ Evidence of unmet workforce demand for the baccalaureate degree
 - ✓ Evidence of consultation with regional employers & workforce development boards
 - ✓ Provide relevant statewide and regional workforce data
 - ✓ Documentation of consultation with CSU and UC systems

College Processes

- Proposal is vetted through a defined College process.
- At Bakersfield College the process includes:
 - ✓ Program Review
 - ✓ Curriculum Committee
 - ✓ Budget Committee
 - ✓ Accreditation and Institutional Quality Committee (AIQ)
 - ✓ FCDC
 - ✓ President's Cabinet
 - ✓ Academic Senate
 - ✓ College Council
- At most one proposal submitted to KCCD by the College President
- Begin ACCJC Substantive Change Application

KCCD Processes

- BPD Task Force
 - ✓ Evaluate and analyze proposals
 - ✓ Present the task force report to District Consultation Council for discussion
- KCCD Chancellor recommends one proposal application to the KCCD Board of Trustees for final approval

State Timelines

Key Dates

BDP Interest Survey Submission Deadline	January 15, 2022
2022 BDP Application Cycle #1 Submission Deadline	January 15, 2022
2022 BDP Application Cycle #2 Available to CCCs	April 15, 2022
2022 BDP Application Cycle #1 Notification of Selected Colleges/Districts	May 31, 2022
2022 BDP Application Cycle #2 Submission Deadline	August 15, 2022
2023 BDP Application Cycle #1 Available to CCCs	September 15, 2022
2022 BDP Application Cycle #2 Notification of Selected Colleges/Districts	December 31, 2022

District Timelines

Submit proposal to KCCD for June BOT meeting	May
First read for BOT	June board meeting
Second read for BOT	July board meeting
Last day to submit proposal to CCCC0	August 15th
Submit proposal to KCCD for November BOT meeting	October
First read for BOT	November board meeting
Second read for BOT	December board meeting
Last day to submit proposal to CCCC0	January 15th

Future Plans for BDP

- Develop webpage for KCCD website
 - ✓ Resources
 - ✓ FAQs
 - ✓ Application Process
 - ✓ Informational Meeting Request Form
 - ✓ KCCD Application Form
- Develop a BDP Application Process Guide

January 15th Bachelor's Application

- October – Governor signs for the Bachelor's to be permanent
- December 17th – Email from state we can apply by Jan 15th
- Opportunity we couldn't pass up
- Original idea – Health Information Technology but problematic because of the short timeline
- Next option - ASL Interpreting but CSU's already offer this degree
- Based on NREL need, ultimately landed on Research Laboratory Technology
- By getting our application roughly laid out and submitting it, we can now work on the details and vetting
- Any college that submitted an application for January would have challenges
- The goal is to work through our processes over the next few months to solidify final details

Research Laboratory Technology Baccalaureate of Science

Bakersfield College's Baccalaureate Degree Program in Research Laboratory Technology will train students with key skills and a foundation in science theory and practice to equip them for technician careers utilizing

- modern instrumentation for qualitative and quantitative sample analyses,
- “good lab practice” cleaning and laboratory maintenance,
- documentation skills for OSHA and other laboratory regulations and standards,
- Computer systems for program management and reporting.

Occupational Demand

Science Technologies / Technicians
 Corresponding Program (TOP codes) & Occupations (SOC
 Codes) below

Total Jobs, Bakersfield Metropolitan Statistical Area			Year				
TOP Code	SOC Code	SOC Title	2017	2018	2019	2020	2021
TOP Code 192000 Ocean Technology	19-4042	Environmental Science and Protection Technicians, including Health	73	81	88	98	97
	19-4099	Life, Physical, and Social Science Technicians, All Other	108	124	138	192	193
<i>Top Code Total</i>			181	205	226	290	290
TOP Code 095500 Laboratory Science Technology	19-4021	Biological Technicians	49	49	44	44	46
	19-4031	Chemical Technicians	133	135	156	131	130
	51-9061	Inspectors, Testers, Sorters, Samplers, Weighers	744	826	991	985	977
	29-2018	Clinical Laboratory Technologists and Technicians	616	705	785	845	860
<i>TOP Code Total</i>			1542	1715	1976	2005	2013
Total			1723	1920	2202	2295	2303

Occupational Demand

Job Openings (new or vacated jobs)

2017-2019: All occupations showed aggressive growth (except Biological Technicians)

2020-2021: All occupations declined, most likely due to the COVID-19 pandemic.

167 average annual job openings over the next 10 years

Centers of Excellence Job Projections				
SOC Code	Occupational Title	2018 Jobs	2018-2028 Total Job Openings	Annual Job Openings
19-4031	Chemical Technicians	140	160	16
19-4091	Environmental Science and Protection Technicians, Including Health	80	100	10
19-4099	Life, Physical, and Social Science Technicians, All Other	130	180	18
29-2010	Clinical Laboratory Technologists and Technicians	690	560	56
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	620	670	67
Grand Total		1660	1670	167

Research Laboratory Technology

Regional Programs:

Certificates & Degrees Awarded

Bakersfield Certificates, 2-year degrees: None

Closest 2-year degree: Fresno City College

095500 Laboratory Science Technology

Central Valley 4-year degrees: None

Student Interest

Four feeder programs of study:

Biology, Chemistry, Geology, &
Environmental Science

2700 students in feeder programs of study

36% of students eventually transfer

This BS offers an alternate option for the 64% of students who do not transfer eventually

BS wage value adds from \$2k to \$27k / year over jobs without a BS requirement.

(\$2k / yr: Clinical Laboratory Technologist vs
\$27k / yr: Life Physical & Social Science Technician)

Research Laboratory Technology

4 program pathways:

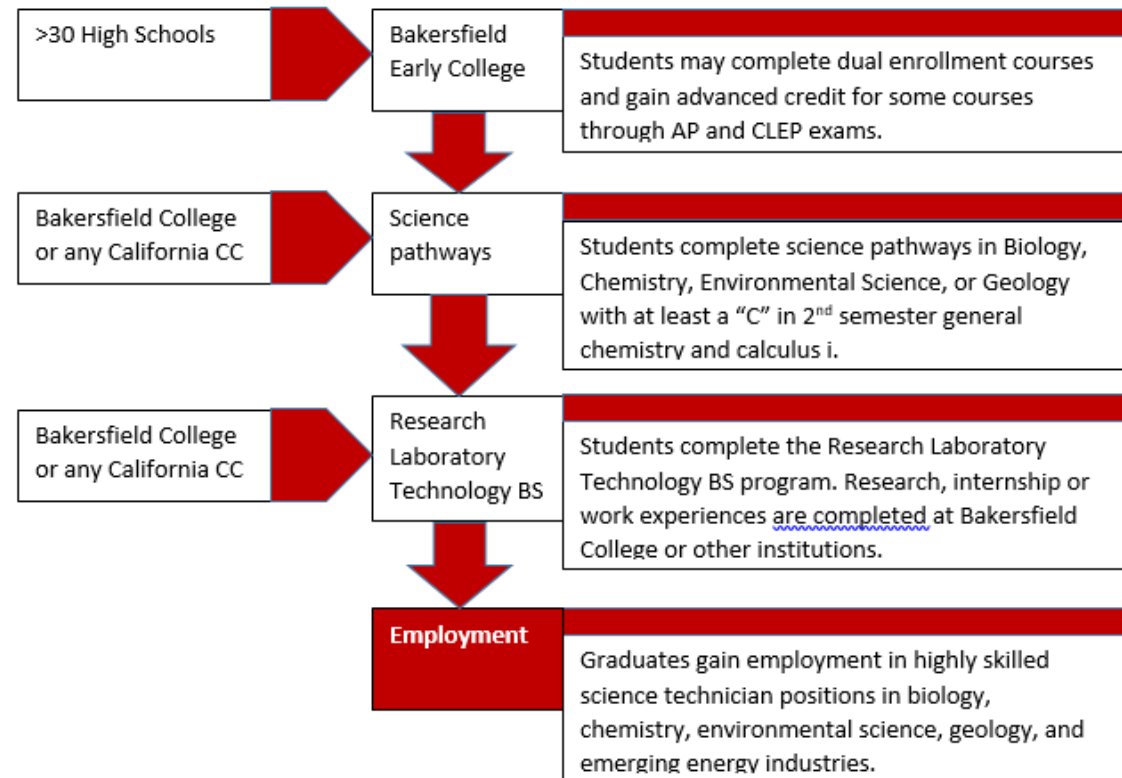
Biology, Chemistry, Geology, Environmental Science

Estimated revenue: \$1.9M

State apportionment FTES

Tuition @ \$84 / unit

Program Pathway Opportunities



Sample Curriculum

To demonstrate what might be possible, the upper-division curriculum combined the strengths of

1. existing BC upper-division (UD) courses
2. existing and new BC facilities (Measure J) and research-quality instrumentation (previous STEM grant)

Additionally, students could use lower-division courses as electives to reach 120 units.

- | | | |
|----|-------------------------------|----------|
| 1. | AS Degree | 60 units |
| 2. | BS GE existing courses | 9 units |
| 3. | BS potential required courses | 19 units |
| 4. | Any undergraduate electives | 32 units |

Sample Curriculum

Existing UD GE

PSYC B100 – Industrial and Organizational Psychology	3 units
PHIL B100 – Industry Ethics	3 units
ENGL B100 – Technical Writing	3 units

Existing UD Required Courses

INDA B132 – Project Management	3 units
INDA B140 – Quality Management	3 units

Sample Curriculum

The course code was tentatively set at RTEC, and sample courses met program goals and can be refined through the BC curriculum process.

RTEC B101 – Research Laboratory Safety and Materials Management	2 units
RTEC B102 – Inorganic/Metallic Laboratory Quantification	3 units
RTEC B103 – Biologic/Organic Laboratory Analysis	3 units
RTEC B110 – Research Instrument Maintenance	3 units
RTEC B140 – Research Project Design and Execution (senior project)	2 units

Personal Note: These courses support the technical skills in positions that I saw as a senior research investigator in industry for 7 years, a research scientist in an environmental health sciences center for 3 years, and a university professor for 4+ years. Having more input from faculty and industry leaders will have the best final program for our community.