



COLLEGE OF
SOUTHERN
IDAHO

Special Report—BAS Advanced Food Technology

College of Southern Idaho

March 2020

Table of Contents

Introduction.....	3
Bachelor of Applied Science in Advanced Food Technology.....	3
Appendix.....	7

Introduction

The College of Southern Idaho (CSI) launched a Bachelor of Applied Science Degree in Advanced Food Technology in the fall of 2019. This program, approved by the Northwest Commission on Colleges and Universities (NWCCU) on November 1, 2018, is the first baccalaureate level degree offered by the college. As such, in correspondence from NWCCU dated November 1, 2018, the college was instructed to “provide a Special Report in Spring 2020 (without a visit) addressing the implementation and progress of the degree offering.” This report fulfills that request.

Bachelor of Applied Science in Advanced Food Technology

Program and Curriculum

The Bachelor of Applied Science Degree in Advanced Food Technology is designed to educate students in the ability to evaluate the importance of sanitation, food safety, food quality, and equipment maintenance, in production of a consumer safe product. By the end of the program, students are able to demonstrate how different unit operations interact with automation to produce a consistent product. Students learn how to present technical data, how to manage direct reports, and how to provide leadership and guidance. Students also learn about legal and ethical issues in a business environment, how to analyze and troubleshoot manufacturing challenges, and the importance of taking corrective actions for continuous improvement.

At the end of the program, students are able to:

- Present technical data in a clear and concise manner.
- Demonstrate respect for others and effectively manage co-workers and direct reports in a manufacturing environment.
- Demonstrate the highest standards of integrity and ethics while providing leadership and guidance.
- Apply the skills learned in science, math, and program classes to analyze and troubleshoot manufacturing challenges.
- Summarize and critically discuss current affairs in food manufacturing and food science.
- Manage and apply business related skills to understand the legal and ethical issues in a business environment.
- Evaluate the importance of sanitation, food safety, food quality, and equipment maintenance in production of a consumer safe product.
- Demonstrate how different unit operations and instrumentation interact to produce a consistent product.
- Demonstrate the importance of corrective actions and continuous improvement.

Staffing, Faculty Qualifications, Facilities, and Location

The college has offered certificate and associate degree programs in Advanced Food Technology for several years. The Bachelor of Applied Science Program in Advanced Food Technology was launched with the intent of using current, well-qualified faculty to teach the program courses, while augmenting instruction with adjunct faculty where necessary and appropriate. However, shortly after the start of the fall semester, the lead faculty member in the Advanced Food Technology program announced that she would be departing the college at the beginning of 2020 to take a position with another institution. A

search for a new faculty member to lead the program was launched immediately and a new program manager was hired in January 2020. The new program manager is well-qualified with more than 20 years in the Food Processing Industry (Appendix A).

Advanced Food Technology courses are primarily located in the Applied Technology and Innovation Center on the main campus which is well equipped for the program.

Admissions, Enrollment, and Retention

Because candidates for the Advanced Food Technology Bachelor's Degree Program are typically working full-time in the food processing industry, and because many also have family obligations to consider, the college fully expected that early enrollments would be modest. Three courses were offered in the fall of 2019, the first semester of the program. Three students enrolled in FOOD 374 (Advanced Auditing of Food Plants), four students enrolled in FOOD 400 (Leadership and Ethics), and two students enrolled in FOOD 410 (Internship), with eighty percent of those students retained to the spring semester. In the spring of 2020, two students enrolled in FOOD 300 (Food Industry Law), two students enrolled in FOOD 350 (Advanced Food Quality Management), four students enrolled in FOOD 378 (Advanced Diagnostics and Troubleshooting) and two students enrolled in FOOD 410 (Internship) (Appendix B). To help students be successful in their educational goals, classes are being offered in a hybrid format, mixing both online and face-to-face course meetings.

While a modest beginning was expected, it will be necessary for enrollments to continue to grow in order to maintain the viability of the program.

Marketing and Recruitment

The launch of the Bachelor of Applied Science Degree in Advanced Food Technology has coincided with a vigorous marketing campaign designed to create awareness and to encourage students to apply for admission to the program. This campaign has included the following:

- Advertising via CSI social media platforms and the CSI webpage;
- Advertising via local radio;
- Paid advertising in the CSI Workforce Course Catalog, both in print and online;
- Face-to-face meetings and email follow-up with Technical Advisory Committees for the both the Food Processing and Automation Engineering programs;
- Face-to-face meetings with local high school agriculture teachers;
- Presentations at McCain Foods and Clif Bar employee meetings;
- Brochures distributed to local high school career days;
- Interviews with local newspapers and local TV channels.

<https://www.kmvt.com/content/news/CSI-sets-tuition-for-first-bachelors-degree-offered-at-a-community-college-508732681.html>

<https://www.kmvt.com/content/news/Food-Processing-Technology-program-at-CSI-offers-unique-educational-experience-527948581.html>

https://magicvalley.com/news/local/csi-launches-new-advanced-food-technology-bachelor-s-program/article_510ac6d0-8a6f-5bcd-99ea-2169d95a786f.html

Student Services

The college provides advising, financial aid, and registration services for students enrolled in the Bachelor of Applied Science Program. While some additional training has been required for Financial Aid staff, the direct impact on Student Services has been manageable.

Library and Information Resources

The Library provides access to several databases related to the courses required by the Advanced Food Technology BAS degree. These databases include Professional Development Collection, Regional Business News, Tablebase, Vocational and Career Collection, Business Insights: Global, Business Collection, Business Economics & Theory Collection, Communication and Mass Media Complete, Environmental Issues & Policy Collection, and GreenFILE. The Library also provides access to several general databases such as Academic Search Premier, Academic OneFile, CQ Researcher, Credo Researcher, and MasterFILE Premier. Electronic and print books relevant to food technology are also available within the Library collections. To date, no additional resources have been requested by the faculty for the program.

Budget

The initial cost to launch the Advanced Food Technology BAS degree has been minimal. Because the college has offered certificate and associate degree programs in Advanced Food Technology for several years, no additional equipment was needed to launch the BAS. Additionally, existing faculty were used during fall 2019 to teach the first set of offerings in the program. Revenue from student tuition for the program in the fall of 2019 was \$9,120. The only initial expenses for the program were additional salary and fringe benefits for the faculty member teaching the courses, which amounted to \$4,892.85, leaving a net revenue of \$4,227.15 for fall 2019.

Assessment and Evaluation

Because the program has only completed a single semester of instruction, there has not yet been time for full-scale assessment and evaluation at the program level. Course level assessment of student learning outcomes was completed at the completion of the fall 2019 semester and results are being used to improve instructional methods. Students were also given the opportunity for indirect assessment through an online course and faculty evaluation system. Data from fall 2019 courses indicates that students had a positive experience during the first semester of the program though very few student comments were submitted to the faculty evaluation system.

Successes and Challenges

The launch of the program itself marked a major success for the college as it established the first baccalaureate degree offered at a community college in the state of Idaho. While initial enrollments are modest, the small number of students who have entered the program are on their way to gaining the skills and knowledge they will need to move ahead in their careers, as they also work to fulfill a demonstrated workforce need in the college's service area.

At the same time, low enrollment numbers represent a challenge for the program. It will be critical for the college to find a way to get more students into the program in order to ensure viability. A major

barrier to initial enrollment numbers was the loss of the lead faculty member. The college is confident that the new program manager will be able to continue the program and expand it moving forward.

The college has also come to realize that the focus of the program may be too narrow. Rather than simply focusing on food manufacturing, the knowledge and skills addressed in the program can be applied to several other industrial manufacturing occupations. The college has begun to explore opportunities to adjust the curriculum to meet the learning outcomes already established, while also expanding the marketability of the program by making it relevant to a larger group of occupations.

Appendix

Appendix A: Bonna Cannon Vitae

Appendix B: Course Syllabi

Appendix C: Budget