# Bachelor of Applied Science in Technology and Management Oregon Tech Assessment Report 2019-20

# Program Description and History

The Bachelor of Applied Science in Technology and Management program (BAS) was a new degree Wabc# DD\$ 1220 DBAbc# DD\$ 1220 DBA

-based general education, business acumen and managerial skills in addition to the depth of technical knowledge found in the AAS. The BAS was designed to build on a core of 60 credits of career and technical education (CTE) courses taken as part of the AAS or AS degree, adding 65 credits of business, management, and information technology courses and 55 credits of broad-based general education courses to enable the BAS graduate to advance in the workplace or continue on to graduate school. The Bachelor of Applied Science in Technology and Management applied for first-time accreditation with the International Accreditation Council for Business Education (IACBE) in 2014. During the 2019-20 academic year, the BAS in Technology and Management articulated with the United States Air Force through the Air University Associate to Baccalaureate Cooperative degree completion program and the Base-to-B

care; integration of a new Enterprise Resource Planning (ERP) system for a local manufacturer; an improved safety communication plan for a major research and development/manufacturing firm; and a business plan to launch a construction materials business in southern Oregon.

#### Success Stories

The following represent a few of the success stories within the program:

A 2015 graduate became a systems analyst at Intel. She completed her Master's in Engineering and Technology Management in 2017. She is currently a Scrum Master/Technical Project Manager for ADP in Atlanta, GA.

A 2018 graduate is a Project Manager at IES Communications in Tualatin, OR.

A 2017 graduate, is pursuing her Master's in Public Administration at Idaho State University part-time while working as the GIS Director for Bannock County, ID.

A 2015 graduate completed his MS in Management Information Systems at Western Oregon University in 2020 and is a Senior Technical Support Analyst for the Oregon Department of Transportation.

A 2017 graduate was a Production Supervisor for a medical implant manufacturer until a recent Covid-19 layoff.

A 2018 graduate is the Manager of the Lincoln County Habit for Humanity while also President of EcoPhyte Consulting in Lincoln City.

A 2017 graduate completed her MBA at Northwest Christian University in 2018 and is the Nutrition Services Regional Manager for the Eugene School District 4J.

A 2016 graduate completed an MBA through Western Governors University in 2017 and is a business and management instructor at Cerritos College in California.

# Program Purpose

### Bachelor of Applied Science in Technology and Management Mission

The Bachelor of Applied Science in Technology and Management prepares students for advancement into supervisory and managerial positions in their technical career field and for admission to graduate study in management, education and law.

#### **Educational Objectives**

The Bachelor of Applied Science in Technology and Management degree produces graduates with a strong foundation in:

- 1. Fundamentals of management and supervision
- 2. Critical thinking necessary for managerial success
- 3. Communication and teamwork
- 4. Project management theory and applications
- 5. Professional ethics and social responsibility and
- 6. Technical skills needed to lead organizations in the digital age.

#### Management Department Student Learning Outcomes (SLO)

The Technology and Management degree consists of the five core Management Department student learning outcomes. Upon completion of this program, 0.98 Tf 792.52 235.82 Tm0 g.c gs8ocm0taf2es. Upon completi

5. Apply knowledge of business concepts and functions in an integrated manner.

# Program Student Learning Outcomes (PSLO)

Upon completion of this program, Technology and Management graduates will be able to:

1. Apply knowledge of approaches to operational performance improvement.

## Assessment Cycle

### Assessment Schedule

- 1. ESLOs are assessed on a six-year cycle. The ESLO assessment schedule may be found on the Oregon Tech website under Essential Student Learning Outcomes.
- 2. **Department Level Student Learning Outcomes**: IACBE requires all accredited institutions to complete a Public Disclosure of Student Achievement on an annual basis. In addition, all outcomes are assessed annually, with the full self-study for IACBE core student learning outcomes (Core SLOs 1-5) completed every seven years.

Outcomes:	Direct	Indirect
Communicate the major concepts in the functional areas of accounting, marketing, finance, information technology, and management.	Case Study Senior Project	Senior Exit Survey
Describe the legal, social, ethical, and economic environments of business in a global context.	Case Study Senior Project	Senior Exit Survey
Solve organization problems, individually and/or in teams, using quantitative, qualitative, and technology-enhanced approaches.	Case Study Senior Project	Senior Exit Survey
Demonstrate professional communication and behavior.	Case Study Senior Project	Senior Exit Survey
Apply knowledge of business concepts and functions in an integrated manner.	Case Study Senior Project	Senior Exit survey

3. Program Student Learning Outcomes: Program Based Annual Assessment Schedule and Activity

Outcomes:	Direct	Indirect
Apply knowledge of approaches	Senior Project	Senior Exit Survey
to operational performance		
improvement.		

Evidence of Improvement in Student Learning

1.

Demonstrate professional communication and behavior.

more accurately focus on the question's intent. During the 2019-20 academic year, there was improvements in the area of finance and accounting, which we believe more accurately reflects the program results.

**Qosing the Loop Activities**: The results of the exit survey for the 2019-20 year nearly met the 80% threshold for all SLOs which is an improvement from prior years. The word change to understanding did make an impact. The senior exit survey will be updated for the 20-21 year to include the new SLOs. As we move forward with the new SLOs, a comparison with the prior SLOS will be completed.

**Covid-19-** Faculty did notice that the Covid-19 pandemic did make a significant impact on the students in their senior year. The faculty plan to have further discussions regarding this new normal so we can offer flexibility and resiliency to better support students when uncertainties arise.

Operational Strategies and Improvements: Approximately three years ago the department developed an Action Plan document that is tied to our department's strategic plan. This plan directly supports the mission of Oregon Tech. The Action plan is broken into the following themes:

**College of Business**: The department is working to create a separate college at Oregon Tech to better support and highlight our programs. The plans for this area includes the development of a business plan, budget and balanced scorecard, as well as rebuilding our advisory board for college-level, and the development of showcase spaces on the campus. **Enrollment/Outreach/Retention/Marketing**: Work in this area includes the development and expansion of the very successful Jump into Business program. During the 2019-20 year, the program added five new high schools including one of the largest business clubs in the state. Other work in this area includes developing a formal retention program, and extending our marketing efforts.

Quality Programs/ Ourriculum: We continue to improve all of our 11 programs through program development, continual improvement, online standards and oversight. In the last two years the department added the Cybersecurity program. The department also expanded our Business Management program to online and is currently waiting for approval to expand Healthcare and Business Management to our Portland Metro campus. Moreover, during the 2019-20 year, the department streamlined course offerings to provide better communication with students. During 2019-

Action Plans for 2020-21: The following action plans will continue into the 2020-21 academic year:

- o Senior Project and updated SLOS Senior project faculty will work this year to review the rubric being used to ensure that it meets the needs of all programs and is closely mapped to department and program outcomes. In addition, the updated student learning outcomes will be incorporated into the department-level assessment. The main focus will be on the IACBE self-study for all majors in the department.
- o **Military partners:** The program director will continue to monitor the progress of the new articulation agreements with the military partners to determine students' transition into the program. Significant time will be focused on academic advising to ensure student success.
- o **Covid-19 Impact**: Since the program's inception in 2012, most of the students have been non-traditional. Most are part-time students, combining work and families with their college education. They are generally highly motivated to succeed. Some reluctantly aim to be B/C grade students, however, knowing they have the ability to be A/B students but lack the time. This is not a failure of the degree program but a rational choice made by students who have complicated and demanding lives outside of their courses. The added complexities brought by Covid-19, whether in the form of switching to remote learning, supervising their children's remote learning, changes in employment (including the need to work more or fewer hours, layoffs, or permanent job losses), plus health-related challenges, will make 2020-21 an even more challenging year for many BAS students. Several students who should have graduated in Spring 2020 or Summer 2020 are trying to complete their degrees this year as they have incompletes or had to drop classes. They will likely become future success stories but the data in 2019-20 and 2020-21 might give a different impression. It will take several years to be able to assess the impact of Covid-19, separate from assessing the students' academic accomplishments.