

Weber State University
Automotive Service Technology Program
External Review Visit: March 14, 2017

Prepared By:

- Justin Miller, Professor, Brigham Young University-Idaho
- Tim Border, Professor, Weber State University

External Review Report: April 7, 2017

- **Mission Statement**

The mission statement is clear, and it aligns itself with the outcomes of the department and the mission statements of the college and university. The program outcomes are mapped to the individual courses taught by the department and it is evident that the course work supports the overall mission.

Because the associate's and bachelor's degrees really do serve two different purposes and prepare students for two very different career paths, we suggest that the department craft meaningful outcomes for each type of degree individually, and not just for the program as a whole. This will also require methods of assessing the degree to which those outcomes are accomplished. By doing this, the department will be able to measure its success in preparing bachelor's degree program students specifically.

- **Curriculum**

The curriculum is designed so that it is consistent with the program's mission and is guided by NATEF standards. The department has shown responsiveness to the industry needs by recently developing and implementing a new electrical course as recommended by a curriculum review committee and advisory boards.

The courses are offered in a manner that provides students many scheduling options. One particular strong point is the fact that students' upper division courses are offered online, allowing students to complete their degrees even while they are working, possibly in remote locations.

The ever-changing automotive industry requires constant adaptation and growth. The faculty in the Weber State automotive program have responded to this challenge admirably. An example of this is that they are currently developing courses on autonomous vehicles and on hybrid drivetrains, two cutting-edge technologies.

Students strongly value the internship portion of the automotive curriculum. It provides them an opportunity to apply the skills and knowledge that are taught on campus and seems to compliment the coursework well.

The automotive program has great support from the college dean, who has provided resources needed to accomplish their goals. The program has strong industry support and a great reputation resulting in tremendous support from businesses and alumni. The program seems to have ample tools, equipment, vehicles, and space to provide experiential learning opportunities in the classrooms and labs.

- **Student Learning Outcomes and Assessment**

It is evident that faculty members are interested in measuring student gains. The program has clear and measurable outcomes that are aligned with the knowledge and skillsets that the industry expects of a graduate of this type of program. They have done a phenomenal job of collecting data from nationally standardized pre-and post-exams and analyzing this data to measure the gains of the students in each class. This clearly shows that the coursework is effective, while allowing the department to pinpoint areas that need improvement.

We recognize that this data collection is relatively new, and that in the past there was not sufficient data to guide decision-making. Now that more data exists, we suggest that the department faculty meet regularly use this data when making decisions about curriculum and coursework, and deliberately measure gains that result from specific changes.

To ensure that courses are accomplishing their purpose in the department's mission, we suggest that each course have specific, measurable outcomes that can be mapped to the program outcomes. Actual progress toward student outcomes usually occurs at the course level, so it is important to ensure that course curriculum is properly aligned with larger goals.

- **Academic Advisement**

We commend the automotive program for its innovative and aggressive efforts to provide quality advising to students. They have implemented a cohort-based system, employing talented and effective advisement personnel that communicate with and assist students in a variety of ways. This system has resulted in a significant increase and retention as well as a decrease in the number of semesters required for students to graduate. This appears to be a model that other departments in the university could use to increase efficiency and decrease costs.

We also recognize that the advising personnel are working very hard and that advising is a largely manual process that is difficult—if not impossible—to automate. We feel that this successful advising program will be difficult to sustain in the long term without additional resources from the university. We recommend increased funding for advisement personnel.

- **Faculty**

The automotive department has qualified and dedicated faculty. It was evident from our interviews that all of the faculty and staff are interested in the students' success. Students were especially appreciative of teachers who know and genuinely care about them.

The review committee's most significant concern regarding the current state of the program is the large student-to-faculty ratio. The faculty members are very dedicated and are putting in hours that are far beyond what is normally expected in order to keep up. While this effort is working at the current time, it is not sustainable and is definitely not recommended. Adjunct faculty members are helping to relieve the load, but qualified and willing adjunct teachers are a limited resource.

The committee strongly recommends that more full-time faculty resources be allocated to this department so that current faculty members do not become burned out.

Faculty diversity appears to be reflective of the average diversity within the industry and among qualified candidates. We believe that efforts to diversify the group should be continued, but also recognize that diversity will be limited by the candidates who apply and qualify for this position.

Another area of concern is that there appears to be no formal evaluation for non-tenured faculty. We recommend implementation of an evaluation process to correct, coach and encourage non-tenured faculty in their professional development.

- **Program Support**

The faculty members of the automotive program expressed appreciation for the financial support of the college dean. They feel that they have had the resources needed to create, improve, and deliver their curriculum.

As mentioned in Section E, the program is in dire need of additional faculty and staff. The capabilities of the current faculty and staff are excellent, but the numbers are not adequate to sustain the quality of the program that they have worked hard to achieve.

During interviews with students, faculty, and staff, it also became apparent that the facilities are sufficient to support the program. Two areas of concern came up that should be addressed: 1) there may not be enough female restrooms in the building, and 2) the computers in the computer labs are outdated and not maintained well.

- **Relationships with External Communities**

The automotive department at Weber State University has long maintained a great reputation and excellent relationships with external communities of interest. Much of this is the result of the internship program and an active effort place students in employment within the industry. Even while discontinuing some of the manufacturer-sponsored programs, the department has

managed to strengthen relationships and better prepare its students for corporate jobs with those same companies.

The department maintains multiple advisory committees that meet regularly, and has demonstrated a willingness adjust curriculum and equipment according to committee recommendations.

- **Program Summary**

Strengths

- Everyone seems to agree that the department has hard-working, dedicated, and caring faculty and staff.
- Financial support from the college has enabled the program to develop and administer first-class curriculum to the students.
- The hard work of the department chair has resulted in industry support for student research and capstone projects that are certain to bring positive recognition to the department and university.
- The advising program has produced significant increases in student retention and has reduced the time it takes for students to graduate. This is a model that other departments and universities should take note of.
- The mission statement and program outcomes are clear and aligned with the university's mission and the demands of the industry.
- Valuable assessment data that measures course effectiveness is being collected.

Areas for improvement

- The student-to-faculty ratio is extremely high for an automotive program. It is roughly three times higher than the average at other comparable colleges and universities. The department badly needs more faculty to sustain the quality of the program.
- More funding for advisement personnel is needed to continue to provide quality advising to students.
- Create and assess unique outcomes for each degree program so that two-year students aren't measured against the same outcomes as the four-year students.
- Ensure that the data that is being collected is used to guide and assess improvements to the program and coursework.

While reviewing the automotive department, we saw first-hand the great work that that is taking place, and were very impressed. The department chair has cultivated a culture of optimism and dedication. The faculty and staff respect his leadership tremendously. Individuals within the department take pride in their work and feel that they are a part of a great team. The students who have the opportunity to study in this department are very fortunate. We feel that this program is planted firmly on a path of growth and improvement.