Assessing Undergraduate Job Prospects

Abstract
Understanding job placement data among undergraduates is essential to assess workforce needs and ensure academic programs adequately prepare students for the workforce. The Oregon State University College of Engineering surveys undergraduates to determine anticipated employment, salary, type of work, and work location. Data are collected electronically and via self-report. Our questionnaire is administered well before students graduate and, therefore, underestimates their employment upon graduation. Still two-thirds of our 2012–2013 B.S. graduates had accepted a job or were planning to attend graduate school. Of those who accepted positions, most will earn a starting annual salary of more than $50K, enter the private sector, and work in Oregon or on the West Coast. In addition, the percentage of students entering business or industry over the last five years appears to be increasing relative to other job sectors.

Introduction and Methods
Understanding job placement data among undergraduates is essential to assess workforce needs and ensure academic programs adequately prepare students for the workforce. With proper alignment between learning outcomes and industry demand, students are able to directly apply their skills and add value to the economy. In turn, industry gains valuable employees who maintain and enhance an organization’s success. The Oregon State University College of Engineering surveys undergraduates to determine anticipated employment, salary, type of work, and work location. Data are collected electronically and via self-report.

Results and Discussion
A total of 53 percent of students responded to the 2012–2013 survey. The number of electrical engineering and computer science responses was disproportionately low. Although the questionnaire was administered during students’ final term of enrollment, already two-thirds were employed or planning to attend graduate school. Reported employment would likely be higher if participants were surveyed at graduation or six months after.

Of those reporting employment during academic year 2012–2013, the majority (75 percent) had a starting annual salary of more than $50K (see Figure 1). The overwhelming majority (86 percent) found employment in the private sector (see Figure 2). In fact, the percentage of students entering business or industry over other sectors during the last five years appears to be increasing (see Figure 3). Finally, 84 percent will work on the West Coast, of which 58 percent will work in Oregon (see Figure 4).
Figure 1: 2012-2013 Starting Salary Distribution

Percentage of Students

- $30,000: 5%
- $30,001-$40,000: 9%
- $40,001-$50,000: 11%
- $50,001-$60,000: 39%
- $60,001-$70,000: 25%
- $70,001+: 11%

Figure 2: 2012-2013 Employment Sector Analysis

- Business or Industry: 86%
- State or Local Government: 3%
- U.S. Government: 3%
- U.S. Military Service: 2%
- Other: 6%
Figure 3: Five-year Private Sector Growth Trend

Figure 4: 2012-2013 Employment Location

- Oregon: 58%
- West Coast: 26%
- U.S.A. (Other than above): 13%
- Overseas: 3%
This study provides a broad overview of 2012–13 undergraduate employment, potential earnings, and place and type of employment. Most students have viable plans for employment or graduate school well before they finish their undergraduate program, indicating our students are proactive about career planning. The fact that the overwhelming majority of employed students plan to stay in the region suggests that the West Coast offers particular appeal in the way of career opportunities, salary, and even livability. Investments in OSU engineering also has direct impact on the Oregon workforce.

**Conclusion**

Based on survey results from the 2012–2013 academic year, most College of Engineering undergraduates have secured employment or plan to attend graduate school by their final term. Of those employed, most will enter the private sector, earn more than $50K/year, and work in Oregon or on the West Coast. In addition, the percentage of students entering business or industry over the last five years appears to be increasing.

The results provide a snapshot of our undergraduate employment prospects and their anticipated contributions to the local, national, and international economy. For future studies, the College of Engineering is developing improved survey methods. This will allow us to obtain a more dynamic picture of our students — including employment information on both imminent and recent graduates.