## Oregon TECH

## 2016-17 Program Assessment Report

## Biology-Health Sciences B.S.

## Mission, Objectives \& Learning Outcomes

## Oregon Tech Mission

Oregon Institute of Technology, an Oregon public university, offers innovative and rigorous applied degree programs in the areas of engineering, engineering technologies, health technologies, management, and the arts and sciences. To foster student and graduate success, the university provides an intimate, hands-on learning environment, focusing on application of theory to practice. Oregon Tech offers statewide educational opportunities for the emerging needs of Oregonians and provides information and technical expertise to state, national and international constituents.

## Core Theme 1: Applied Degree Programs

Oregon Tech offers innovative and rigorous applied degree programs. The teaching and learning model at Oregon Tech prepares students to apply the knowledge gained in the classroom to the workplace.

## Core Theme 2: Student and Graduate Success

Oregon Tech fosters student and graduate success by providing an intimate, hands-on learning environment, which focuses on application of theory to practice. The teaching and support services facilitate students' personal and academic development.

## Core Theme 3: Statewide Educational Opportunities

Oregon Tech offers statewide educational opportunities for the emerging needs of Oregon's citizens. To accomplish this, Oregon Tech provides innovative and rigorous applied degree programs to students across the state of Oregon, including high-school programs, online degree programs, and partnership agreements with community colleges and universities.

## Core Theme 4: Public Service

Oregon Tech will share information and technical expertise to state, national, and international constituents.

## Program Alignment to Oregon Tech Mission and Core Themes <br> N/A

## Program Mission

The Bachelor of Science program in Biological - Health Sciences prepares undergraduate students for professional and graduate schools in the medical sciences (medicine, dentistry, pharmacy, veterinary sciences, physical therapy, physician assistant, etc.).

## Program Educational Objectives

- Provide an integrated foundation of knowledge in biological disciplines that includes morphological, cellular, molecular, physiological, developmental, and evolutionary principles.
- Train students to utilize the scientific method and develop skills in analysis, evaluation, and critical thinking. (as well as communication, team-building, and professionalism - may be added following more discussion).
- Prepare students for entrance into graduate schools and professional health schools, including preparation for national admissions examinations such as the Graduate Record Examination (GRE), Medical College Admission Test (MCAT), Dental School Admissions Test (DAT), and similar examinations, or qualify them for entry level positions in biology and health-related occupations.


## Program Faculty Review

Program Student Learning Outcomes and Objectives were reviewed by program faculty during Fall Convocation Program Assessment Meeting.

## Showcase Learning Opportunities

N/A

## Program History \& Vision

## Program History

The Biology - Health Sciences program offered on the Klamath Falls campus serves all OIT students wishing to major in a course of study that prepares for entry into professional programs in medicine, dentistry, pharmacy, veterinary medicine, physical therapy, physician assistant, optometry, and related health fields.

Biology - Health Sciences was originally called Health Sciences but renamed in 2012-2013. The Health Sciences program was implemented in 1996. It is a popular program with an enrollment of approximately 150 students. The number of students graduating from the Biology - Health Sciences was 15 in 2012-2013, 17 in 2013-2014, 27 in 2014-2015, and 20 in 2015-2016.

The number of students graduating in past years when the program was called Health Sciences was 8 (1999-2000), 2 (2000-2001), 9 (2001-2002), 10 (2002-2003), 10 (2003-2004), 11 (2004-2005), 7 (20052006), 1 (2006-2007), 3 (2007-2008), 2 (2008-2009), 2 (2009-2010), 1 (2010-2011), 6 (2011-2012), 1 (2012-2013), and 0 (2013-2014).

The Biology program was implemented in 2006-2007 and removed from the catalog in 2012-2013. The number of students graduating in past years were 10 (2006-2007), 8 (2007-2008), 18 (2008-2009), 14 (2009-2010), 12 (2010-2011), 13 (2011-2012), 2 (2012-2013), 5 (2013-2014), 2 (2014-2015), and 1 (20152016).

We have limited information regarding employment rates and salaries, as most students go on to graduate school and are not employed for two to four years while working on their graduate degrees. Many take a year off while applying to graduate schools, making follow up more difficult, and generally only a low percentage of students complete the exiting senior surveys.

## Meeting with Advisory Board

Program faculty held a meeting with their Advisory Board during the academic year.

## Advisory Board Review

The Advisory Board reviewed the Program Mission and Objectives during the academic year.

## Program Enrollment

Practically speaking, program enrollment has remained essentially steady in recent years ( $\sim 150$ students in 3 of the past 4 years)

Attachment 1_Enrollment_5_Year_History_by_Major

## Program Graduates

Despite enrollment remaining steady, we have seen an increase in graduation rates in recent years ( $\sim 20$ in the past two years, up from $\sim 10$ four years ago, the first year of this program in its current)

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Attachment 2_Graduates_10_Year_History_by_Major
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## Employment Rates and Salaries

It is difficult to draw firm conclusions regarding employment rates and salaries, as most students go on to graduate school and are not employed for two to four years while working on their graduate degrees. Many take a year off while applying to graduate schools, making follow up more difficult.

Attachment 3_Grad_Data_First_Destination_3_Year_History_by_Major

Pass Rates on Board and Licensure Exam
N/A

Results of Board or Licensure Exam
N/A

Other Program Assessment Data
N/A

## Closing the Loop

Describe any actions taken and re-assessment done during this academic year in response to assessment findings from prior academic years.
N/A

Changes Implemented
N/A

Assessment Findings
N/A

Program Student Learning Outcomes Assessment Cycle

| PROGRAM STUDENT LEARNING OUTCOMES <br> 3-Year Cycle <br> Biology-Health Sciences B.S. | $\mathbf{2 0 1 6 - 1 7}$ | $2017-18$ | $2018-19$ |
| :--- | :--- | :--- | :--- |
| OIT-BBHS 2016-17.1 Students will demonstrate scientific <br> knowledge and understanding. | BIO 211 |  |  |
| OIT-BBHS 2016-17.2 Students will be proficient in <br> scientific reasoning and critical thinking. |  |  |  |
| OIT-BBHS 2016-17.3 Students will be able to effectively <br> find and use resources from the literature. |  |  |  |
| OIT-BBHS 2016-17.4 Students will demonstrate effective <br> oral, written and visual communication. | BIO 209 <br> BIO 409 |  |  |
| OIT-BBHS 2016-17.5 Students will demonstrate <br> mathematical knowledge and skills in the biological <br> sciences. |  |  |  |

## Assessment Map \& Measure

F - Foundation - introduction of the learning outcome, typically at the lower-division level,
P - Practicing - reinforcement and elaboration of the learning outcome, or
C-Capstone - demonstration of the learning outcome at the target level for the degree
For each outcome, programs should identify at least 2 direct measures (student work that provides evidence of their knowledge and skills), and 1 indirect measure (student self-assessment of their knowledge and skills) for each outcome.

For every program, data from the Student Exit Survey will be an indirect measure at the capstone level.

OIT-BBHS 2016-17.1 Students will demonstrate scientific knowledge and understanding

| Course/Event | BIO 211 |
| :--- | :--- |
| Legend | F-Foundation |
| Assessment Measure | Direct - Exam Questions (multiple choice type) |
| Criterion | For the 6 multiple choice questions ("Demonstrate foundational knowledge <br> in the natural sciences"): exemplary: 6/6 correct proficient: $4-5 / 6$ correct <br> partially proficient: 2-3/6 correct Does not meet expectations: 0-1/6 correct |
| Assessment Measure | Direct - Exam Questions (essay or problem) |
| Criterion | For the short answer question (question \#28, diatomaceous earth) ("Apply <br> scientific principles to biological and/or medical examples or contexts") <br> exemplary - 9-10/10 pts proficient 7-8/10 pts partially proficient 4-6/10 pts <br> Does not meet expectations: less than 4/10 pts |
| Course/Event | Student Exit Survey |
| Legend | C-Capstone |


| Assessment Measure | Indirect - Student Exit Survey |
| :--- | :--- |
| Criterion | None |

OIT-BBHS 2016-17.4 Students will demonstrate effective oral, written and visual communication.

| Course/Event | BIO 209 |
| :--- | :--- |
| Legend | F - Foundation |
| Assessment Measure | Direct - Oral Presentation |
| Criterion | See 2016-17 ESLO Communication Rubric |
| Assessment Measure | Direct - Term Paper |
| Criterion | See 2016-17 ESLO Communication Rubric |
|  |  |
| Course/Event | BIO 409 |
| Legend | P - Practice |
| Assessment Measure | Direct - Oral Presentation |
| Criterion | See 2016-17 ESLO Communication Rubric |
| Assessment Measure | Direct - Term Paper |
| Criterion | See 2016-17 ESLO Communication Rubric |
|  |  |
| Course/Event | Student Exit Survey |
| Legend | C - Capstone |
| Assessment Measure | Indirect - Student Exit Survey |
| Criterion | None |

## Analysis of Results

OIT-BBHS 2016-17.1 Students will demonstrate scientific knowledge and understanding.

| Criterion | Met |
| :--- | :--- |
| Summary | N/A |
| Improvement Narrative | N/A |

OIT-BBHS 2016-17.4 Students will demonstrate effective oral, written and visual communication.

| Criterion | Met |
| :--- | :--- |
| Summary | N/A |
| Improvement Narrative | N/A |

## References

Program Assessment Coordinator: Travis Lund, Assistant Professor, Natural Sciences

Office of Academic Excellence

Majors History, Fall 4th Week
November 30, 2016
The following data represents majors declared by student as of Fall 4th week. Students with multiple/dual majors have been reported
under each major in which they enrolled; therefore the student headcount will be duplicated. A small number of students that declared
a third major have now been included in this report. Data reported is combined for all levels and all locations.
Some programs may have had name changes such as CLS and have been reported as they were (historically).

| Description | Fall 2012 | Fall 2013 | Fall 2014 | Fall 2015 | Fall 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ABA Course Series | 0 | 0 | 3 | 0 | 0 |
| Accounting Certificate | 0 | 0 | 0 | 0 | 1 |
| Allied Health | 0 | 0 | 0 | 0 | 3 |
| Allied Health Management | 11 | 5 | 3 | 2 | 1 |
| Applied Behavior Analysis | 0 | 0 | 0 | 10 | 17 |
| Applied Mathematics | 41 | 38 | 47 | 42 | 33 |
| Applied Psychology | 146 | 149 | 122 | 96 | 110 |
| Automat, Robot, \& Cntrl Engr | 0 | 0 | 0 | 0 | 1 |
| Biology | 15 | 8 | 1 | 1 | 0 |
| Biology-Health Sciences | 136 | 150 | 150 | 138 | 151 |
| Civil Engineering | 127 | 121 | 110 | 120 | 118 |
| Clinical Lab Science-Earlyadm | 6 | 10 | 35 | 22 | 0 |
| Clinical Laboratory Science | 62 | 85 | 94 | 95 | 2 |
| Communication Studies | 55 | 42 | 39 | 47 | 40 |
| Computer Engineering Tech | 82 | 82 | 81 | 86 | 63 |
| Dental Hygiene | 226 | 240 | 211 | 221 | 202 |
| Diagnostic Medical Sonography | 86 | 104 | 95 | 102 | 112 |
| Dispute Resolution Certificate | 1 | 1 | 2 | 4 | 2 |
| Echocardiography | 121 | 119 | 123 | 122 | 128 |
| Electrical Engineering | 76 | 120 | 146 | 164 | 197 |
| Electronics Engineering Tech | 67 | 58 | 51 | 37 | 32 |
| Embedded Systems Eng Tech | 24 | 25 | 32 | 35 | 57 |
| Emergency Medical Services Mgt | 0 | 0 | 17 | 20 | 34 |
| EMT - Paramedic | 29 | 30 | 29 | 28 | 28 |
| Environmental Sciences | 49 | 49 | 51 | 48 | 42 |
| General Studies | 495 | 736 | 632 | 1,031 | 1,414 |
| Geomatics | 1 | 0 | 0 | 0 | 0 |
| Geomatics-option in GIS | 13 | 14 | 10 | 10 | 7 |
| Geomatics-option in Surveying | 49 | 39 | 26 | 31 | 30 |
| Health Care Mgmt-Admin Mgmt | 0 | 10 | 14 | 19 | 18 |
| Health Care Mgmt-Clinical Mgmt | 0 | 4 | 10 | 11 | 25 |
| Health Care Mgmt-Rad Science | 0 | 3 | 6 | 12 | 12 |
| Health Informatics | 0 | 0 | 0 | 20 | 38 |
| Health Sciences | 1 | 1 | 0 | 1 | 2 |
| Information Technology | 0 | 0 | 0 | 56 | 114 |
| IT Accounting Option | 8 | 4 | 2 | 1 | 1 |
| IT Applications Dev Opt | 91 | 75 | 71 | 48 | 20 |
| IT Bus/Systems Analysis Opt | 58 | 59 | 69 | 51 | 28 |
| IT Health Informatics Opt | 54 | 68 | 59 | 32 | 17 |
| Magnetic Resonance Imagng Spec | 0 | 0 | 0 | 0 | 4 |
| Manufacturing Engineering Tech | 129 | 99 | 109 | 107 | 101 |
| Marriage and Family Therapy | 0 | 0 | 0 | 0 | 10 |
| Mechanical Engineering | 208 | 303 | 331 | 323 | 354 |
| Mechanical Engineering Tech | 145 | 112 | 121 | 121 | 104 |
| Medical Lab Science-Earlyadm | 0 | 0 | 0 | 0 | 17 |
| Medical Laboratory Science | 0 | 0 | 0 | 0 | 86 |
| Mgmt Info Sys/Mgmt Acc Option | 1 | 0 | 0 | 0 | 0 |
| Mgmt/Accounting Option | 32 | 38 | 35 | 32 | 19 |
| Mgmt/Marketing Option | 34 | 34 | 36 | 34 | 37 |
| Mgmt/Small Bus Mgmt Option | 54 | 43 | 38 | 37 | 33 |
| MIT Applicant | 0 | 0 | 1 | 2 | 0 |
| Nuclear Medicine Technology | 47 | 51 | 48 | 48 | 49 |
| Nursing | 50 | 49 | 52 | 61 | 69 |
| Operations Management | 61 | 66 | 65 | 69 | 70 |
| Optical Engineering | 0 | 0 | 3 | 3 | 3 |
| Picture Archive/Comm Sys Spec | 0 | 0 | 1 | 2 | 3 |
| Polysomnographic Technology | 19 | 13 | 6 | 12 | 5 |
| Population Health Management | 0 | 0 | 3 | 24 | 31 |
| Pre-Clinical Lab Science | 0 | 8 | 1 | 20 | 2 |
| Pre-Dental Hygiene | 62 | 65 | 35 | 37 | 48 |
| Pre-Medical Imaging Tech | 273 | 287 | 253 | 237 | 226 |
| Pre-Medical Lab Science | 0 | 0 | 0 | 0 | 27 |
| Pre-Nursing | 56 | 60 | 53 | 69 | 78 |
| Pre-Paramedic Education | 0 | 3 | 3 | 7 | 0 |
| Pre-Renewable Energy Eng | 111 | 0 | 0 | 0 | 0 |
| Pre-Respiratory Care | 11 | 12 | 8 | 11 | 9 |
| Radiologic Science | 164 | 163 | 154 | 160 | 152 |
| Renewable Energy Engineering | 110 | 206 | 203 | 180 | 166 |
| Respiratory Care | 85 | 84 | 88 | 103 | 117 |
| Sleep Health-Polysom Tech Opt | 0 | 0 | 4 | 6 | 17 |
| Software Engineering Tech | 260 | 268 | 289 | 309 | 285 |
| Spec in Entrepreneur/Small Bus | 0 | 0 | 0 | 1 | 2 |
| Specialization in Accounting | 0 | 0 | 0 | 2 | 2 |
| Specialization in Marketing | 0 | 0 | 1 | 1 | 1 |
| Specialization Travel/Tourism | 0 | 1 | 0 | 0 | 0 |
| System Engr \& Technical Mgmt | 0 | 0 | 2 | 3 | 0 |
| Technology and Management | 16 | 30 | 43 | 46 | 46 |
| Vascular Technology | 88 | 95 | 80 | 93 | 98 |
| Total (Duplicated) | 4,146 | 4,539 | 4,407 | 4,923 | 5,371 |
| Total (Unduplicated) | 4,001 | 4,414 | 4,273 | 4,786 | 5,232 |


| 5 Year Difference | 5 Year \% Change |
| :---: | :---: |
| 0 |  |
| 1 |  |
| 3 |  |
| -10 | -90.9\% |
| 17 |  |
| -8 | -19.5\% |
| -36 | -24.7\% |
| 1 |  |
| -15 | -100.0\% |
| 15 | 11.0\% |
| -9 | -7.1\% |
| -6 | -100.0\% |
| -60 | -96.8\% |
| -15 | -27.3\% |
| -19 | -23.2\% |
| -24 | -10.6\% |
| 26 | 30.2\% |
| 1 | 100.0\% |
| 7 | 5.8\% |
| 121 | 159.2\% |
| -35 | -52.2\% |
| 33 | 137.5\% |
| 34 |  |
| -1 | -3.4\% |
| -7 | -14.3\% |
| 919 | 185.7\% |
| -1 | -100.0\% |
| -6 | -46.2\% |
| -19 | -38.8\% |
| 18 |  |
| 25 |  |
| 12 |  |
| 38 |  |
| 1 | 100.0\% |
| 114 |  |
| -7 | -87.5\% |
| -71 | -78.0\% |
| -30 | -51.7\% |
| -37 | -68.5\% |
| 4 |  |
| -28 | -21.7\% |
| 10 |  |
| 146 | 70.2\% |
| -41 | -28.3\% |
| 17 |  |
| 86 |  |
| -1 | -100.0\% |
| -13 | -40.6\% |
| 3 | 8.8\% |
| -21 | -38.9\% |
| 0 |  |
| 2 | 4.3\% |
| 19 | 38.0\% |
| 9 | 14.8\% |
| 3 |  |
| 3 |  |
| -14 | -73.7\% |
| 31 |  |
| 2 |  |
| -14 | -22.6\% |
| -47 | -17.2\% |
| 27 |  |
| 22 | 39.3\% |
| 0 |  |
| -111 | -100.0\% |
| -2 | -18.2\% |
| -12 | -7.3\% |
| 56 | 50.9\% |
| 32 | 37.6\% |
| 17 |  |
| 25 | 9.6\% |
| 2 |  |
| 2 |  |
| 1 |  |
| 0 |  |
| 0 |  |
| 30 | 187.5\% |
| 10 | 11.4\% |
| 1,225 | 29.5\% |
| 1,231 | 30.8\% |

## Oregon TECH

10 Year History By Major and Degree Type
As of September 5, 2016

Specializations

|  | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Picture Archive/Comm Sys Spec | - | - - | - | - | - |  | 4 | 4 | 3 |  |
| Specialization in Accounting | - | - | - | - | - |  | - | 1 |  |  |
| Specialization in Marketing | - | - | - | - | - | - | - | 2 | - |  |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 7 | 3 | 0 |

Certificates

|  | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accounting Certificate | - | - |  |  |  | - |  |  |  |  |
| Dispute Resolution Certificate | 1 | 2 | 1 | 2 | 4 | 1 | 6 | 11 | 1 | 2 |
| Marketing Certificate | - | - | - | - | - | - | - | - |  |  |
| Polysomnographic Technology | - | - | 4 | 14 | 13 | 11 | 8 | 6 | 3 | 9 |
| Total | 1 | 2 | 5 | 16 | 17 | 12 | 14 | 17 | 4 | 11 |


|  | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Associate of Arts | 13 | 8 | 2 | 5 |  | 1 |  |  | 1 | 1 |
| Computer Engineering Tech | 7 | 5 | 3 | 2 | 3 |  | 5 | 7 | 6 | 6 |
| Dental Hygiene | 25 | 26 | 22 | 25 | 18 | 27 | 18 | 23 | 21 | 9 |
| Electronics Engineering Tech | 3 | 1 | 2 | 1 | - | - | - | - |  |  |
| EMT - Paramedic | 19 | 21 | 22 | 25 | 27 | 17 | 28 | 26 | 26 | 29 |
| Office Systems Technology | - | 2 | 2 | - | - |  |  | - |  |  |
| Polysomnographic Technology | - | - | 1 | 2 | 3 | 5 | 6 | 2 | 4 |  |
| Respiratory Care | 23 | 16 | 15 | 17 | - | - | - | - | - |  |
| Sleep Health-Polysom Tech Opt | - | - | - | - | - | - | - | - | - | 3 |
| Software Engineering Tech | 7 | 2 | 3 | 2 | 2 | - | - | 2 | 9 | 2 |
| Total | 97 | 81 | 72 | 79 | 53 | 50 | 57 | 60 | 67 | 50 |


|  | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Allied Health Management | - | - | - | 1 | 2 | 4 | 3 | 2 | 1 |  |
| Applied Environmental Science | 1 | - | - | - | - | - |  |  | - |  |
| Applied Mathematics |  | - | 7 | 1 | 5 | 4 | 7 | 4 | 4 | 5 |
| Applied Psychology | 46 | 42 | 37 | 30 | 36 | 38 | 30 | 40 | 37 | 31 |
| Biology | 10 | 6 | 16 | 14 | 11 | 11 | 3 | 4 | 1 | 2 |
| Biology-Health Sciences | - | - | - | - | - | - | 10 | 14 | 20 | 18 |
| Civil Engineering | 23 | 23 | 29 | 28 | 20 | 14 | 23 | 17 | 15 | 25 |
| Clinical Laboratory Science | 23 | 24 | 24 | 22 | 22 | 35 | 27 | 34 | 49 | 46 |
| Communication Studies | 13 | 13 | 9 | 10 | 13 | 8 | 19 | 13 | 4 | 8 |
| Computer Engineering Tech | 15 | 7 | 14 | 8 | 13 | 3 | 4 | 3 | 3 | 3 |
| Dental Hygiene | 35 | 38 | 45 | 55 | 49 | 54 | 51 | 76 | 62 | 65 |
| Diagnostic Medical Sonography | 21 | 24 | 21 | 27 | 29 | 24 | 19 | 31 | 25 | 24 |
| Echocardiography | 6 | 4 | 16 | 9 | 21 | 32 | 31 | 32 | 29 | 35 |
| Electrical Engineering | - | - |  | 6 | 11 | 9 | 11 | 17 | 17 | 26 |
| Electronics Engineering Tech | 18 | 17 | 13 | 10 | 18 | 16 | 11 | 10 | 10 | 13 |

Page 2 of 2

Bachelors

|  | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Embedded Systems Eng Tech |  |  |  | 1 | 2 | 2 | 4 | 1 | 5 | 3 |
| Emergency Medical Services Mgt | - | - | - | - | - | - | - | - |  | 1 |
| Environmental Sciences | 1 | 1 | 3 | 1 | 5 | 5 | 4 | 5 | 11 | 14 |
| Geomatics | 10 | 8 | 5 | 5 | 1 | - | - | - | - |  |
| Geomatics-option in GIS | - |  | 2 | 1 | 1 | 3 | 3 | 5 | 1 | 2 |
| Geomatics-option in Surveying | - | - | 1 | 11 | 13 | 14 | 10 | 13 | 1 | 12 |
| Health Care Mgmt-Admin Mgmt | - | - | - | - |  |  | - |  | 1 | 2 |
| Health Care Mgmt-Clinical Mgmt | - | - | - |  |  |  |  |  | 1 |  |
| Health Sciences | 1 | 3 | 2 | 2 | 2 | 6 | 1 | 1 | - |  |
| Industrial Management | - | - | - | 1 | - | - | - | - | - |  |
| Information Technology | 4 | 4 | 1 | 2 | - | 1 | - | - | - |  |
| IT Accounting Option |  | 1 | 2 | 1 | 1 | 2 | 1 | 2 |  |  |
| IT Applications Dev Opt | 8 | 5 | 13 | 5 | 6 | 8 | 21 | 12 | 8 | 11 |
| IT Bus/Systems Analysis Opt | 1 | 1 | 4 | 10 | 12 | 6 | 12 | 14 | 13 | 8 |
| IT Health Informatics Opt | - | - | - | - | 2 | 4 | 9 | 6 | 14 | 7 |
| Management Information System | 12 | 2 | 8 | 3 | - | 2 | - | - |  |  |
| Manufacturing Engineering Tech | 30 | 15 | 16 | 18 | 18 | 9 | 13 | 5 | 11 | 12 |
| Mechanical Engineering | 3 | 3 | 17 | 12 | 11 | 19 | 14 | 27 | 23 | 45 |
| Mechanical Engineering Tech | 31 | 19 | 31 | 23 | 24 | 19 | 24 | 18 | 17 | 21 |
| Mgmt Info Sys/Mgmt Acc Option |  | 3 |  |  |  |  |  |  | - |  |
| Mgmt/Accounting Option | 8 | 4 | 3 | 8 | 4 | 9 | 9 | 12 | 5 | 8 |
| Mgmt/Marketing Option | 9 | 7 | 5 | 5 | 7 | 8 | 7 | 4 | 7 | 7 |
| Mgmt/Small Bus Mgmt Option | 9 | 11 | 11 | 18 | 8 | 6 | 8 | 12 | 4 | 7 |
| Nuclear Medicine Technology | 18 | 18 | 16 | 15 | 16 | 16 | 15 | 14 | 14 | 15 |
| Operations Management | 8 | 6 | 3 | 15 | 7 | 14 | 16 | 13 | 19 | 18 |
| Optical Engineering | - | - | - | - |  | - | - |  | 1 | 1 |
| Population Health Management | - | - | - |  |  | - |  |  |  | 5 |
| Radiologic Science | 47 | 51 | 50 | 53 | 51 | 50 | 48 | 55 | 45 | 56 |
| Renewable Energy Engineering | - | - | 6 | 9 | 29 | 35 | 60 | 35 | 29 | 29 |
| Renewable Energy Systems | - | - | 1 | - |  | - |  |  |  |  |
| Respiratory Care | 5 | 8 | 6 | 7 | 10 | 21 | 21 | 21 | 27 | 22 |
| Software Engineering Tech | 44 | 36 | 27 | 27 | 31 | 29 | 41 | 31 | 35 | 47 |
| System Engr \& Technical Mgmt | - | - | - | - | - | - |  |  |  | 3 |
| Technology and Management | - | - | - |  |  | - | 1 | 1 | 11 | 8 |
| Ultrasound/Diag Med Sono Opt | 1 | - | - |  |  | - | - |  |  |  |
| Ultrasound/Vascular Option | 1 | - |  |  |  |  |  |  | - |  |
| Vascular Technology | 30 | 30 | 26 | 23 | 23 | 25 | 21 | 28 | 19 | 24 |
| Total | 492 | 434 | 490 | 497 | 534 | 565 | 612 | 632 | 599 | 689 |

Masters

|  | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Civil Engineering | - | - |  |  |  | - |  |  | 2 | 6 |
| Manufacturing Engineering Tech | 3 | 4 | 7 | 2 | 6 | 8 | 12 | 4 | 8 | 9 |
| Renewable Energy Engineering | - | - | - | - | - | - |  | 1 | 11 | 9 |
| Total | 3 | 4 | 7 | 2 | 6 | 8 | 12 | 5 | 21 | 24 |

Grand Total

|  | $2006-07$ | $2007-08$ | $2008-09$ | $2009-10$ | $2010-11$ | $2011-12$ | $2012-13$ | $2013-14$ | $2014-15$ | $2015-16$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Grand Total | 593 | 521 | 574 | 594 | 610 | 635 | 699 | 721 | 694 | 774 |

Attachment 3_Grad_Data_First_Destination_3_Year_History_by_Major
Oregon Tech Graduate Outcome Data

| a=2013/2014/2015 combined | \% Employed |  | \% Continuing Ed |  | \% Looking for Work |  | \% Not Looking |  | Success Rate |  | Median Salary |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{b}=2014 / 2015 / 2016$ combined | a | b | a | b | a | b | a | b | a | b | a |  | b |
| \% among those reporting outcomes | 83.3 | 87.6 | 6.1 | 6.7 | 9.4 | 4.9 | 1.2 | 0.8 | 90.6 | 95.1 | \$ 54,000 | \$ | 56,000 |
| Biology-Health Sciences | 36 | 38 | 60 | 62 | 4 | 0 | 0 | 0 | 96 | 100 | \$ 20,750 | \$ | 33,000 |
| Civil Engineering | 83 | 92 | 11 | 8 | 6 | 0 | 0 | 0 | 94 | 100 | \$ 50,000 | \$ | 51,540 |
| Communication Studies | 60 | 67 | 13 | 11 | 27 | 22 | 0 | 0 | 73 | 78 | \$ 27,000 | \$ | 28,500 |
| Computer Engineering Technology | 89 | 93 | 0 | 0 | 0 | 0 | 11 | 7 | 100 | 100 | \$ 63,000 | \$ | 64,000 |
| Dental Hygiene | 86 | 96 | 4 | 1 | 9 | 2 | 1 | 1 | 91 | 98 | \$ 53,000 | \$ | 57,500 |
| Diagnostic Medical Sonography | 97 | 98 | 3 | 2 | 0 | 0 | 0 | 0 | 100 | 100 | \$ 60,000 | \$ | 60,868 |
| Echocardiography | 95 | 93 | 0 | 3 | 5 | 3 | 0 | 0 | 95 | 97 | \$ 60,500 | \$ | 64,000 |
| Electrical Engineering | 87 | 83 | 0 | 10 | 13 | 7 | 0 | 0 | 87 | 93 | \$ 60,000 | \$ | 60,000 |
| Electronics Engineering Technology | 73 | 82 | 7 | 5 | 20 | 14 | 0 | 0 | 80 | 86 | \$ 54,250 | \$ | 66,750 |
| Embedded Systems Engineering Tech | 80 | 83 | 0 | 17 | 20 | 0 | 0 | 0 | 80 | 100 | \$ 58,250 | \$ | 60,000 |
| EMT/Paramedic | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | \$ 48,000 | \$ | 52,000 |
| Environmental Sciences | 67 | 76 | 11 | 18 | 22 | 6 | 0 | 0 | 78 | 94 | \$ 39,800 | \$ | 40,000 |
| Geomatics: GIS | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | \$ 42,000 | \$ | 42,000 |
| Geomatics: Surveying | 69 | 64 | 0 | 9 | 31 | 27 | 0 | 0 | 69 | 77 | \$ 40,500 | \$ | 43,000 |
| Health Care Management | 75 | 80 | 25 | 20 | 0 | 0 | 0 | 0 | 100 | 100 | \$ 52,000 |  | na |
| Health Informatics | 75 | 79 | 10 | 11 | 15 | 11 | 0 | 0 | 85 | 89 | \$ 53,000 | \$ | 52,000 |
| Information Technology | 84 | 88 | 0 | 2 | 16 | 10 | 0 | 0 | 84 | 90 | \$ 55,000 | \$ | 55,000 |
| Management: Accounting | 78 | 83 | 6 | 6 | 17 | 11 | 0 | 0 | 83 | 89 | \$ 32,000 | \$ | 32,250 |
| Management: SmBus/Entrepreneurs\| | 77 | 87 | 15 | 13 | 8 | 0 | 0 | 0 | 92 | 100 | \$ 33,000 | \$ | 40,900 |
| Management: Marketing | 82 | 93 | 0 | 0 | 18 | 7 | 0 | 0 | 82 | 93 | \$ 39,250 | \$ | 48,500 |
| Manufacturing Engineering Technolo | 77 | 85 | 5 | 4 | 13 | 11 | 0 | 0 | 87 | 89 | \$ 62,500 | \$ | 60,000 |
| Mathematics, Applied | 60 | 71 | 20 | 29 | 0 | 0 | 20 | 0 | 100 | 100 | na |  | na |
| Mechanical Engineering | 71 | 82 | 12 | 9 | 10 | 5 | 7 | 4 | 90 | 95 | \$ 60,000 | \$ | 60,000 |
| Mechanical Engineering Technology | 86 | 100 | 7 | 0 | 7 | 0 | 0 | 0 | 93 | 100 | \$ 60,000 | \$ | 62,500 |
| Medical Laboratory Science | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | \$ 53,750 | \$ | 55,000 |
| Nuclear Medicine Technology | 87 | 86 | 0 | 3 | 13 | 11 | 0 | 0 | 87 | 89 | \$ 57,000 | \$ | 57,846 |
| Nursing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Operations Management | 83 | 83 | 11 | 14 | 6 | 3 | 0 | 0 | 94 | 97 | \$ 63,000 | \$ | 63,000 |
| Polysomnographic Technology | 83 | 100 | 0 | 0 | 17 | 0 | 0 | 0 | 83 | 100 | \$ 50,000 | \$ | 40,500 |
| Population Health Management | na | 75 | na | 25 | na | 0 | na | 0 | na | 100 | na | \$ | 42,000 |
| Psychology, Applied | 54 | 66 | 24 | 26 | 15 | 5 | 6 | 3 | 85 | 95 | \$ 30,000 | \$ | 30,000 |
| Radiologic Science | 92 | 97 | 1 | 0 | 6 | 3 | 1 | 1 | 94 | 97 | \$ 47,000 | \$ | 50,000 |
| Renewable Energy Engineering | 76 | 83 | 6 | 8 | 18 | 9 | 0 | 0 | 82 | 91 | \$ 57,000 | \$ | 56,500 |
| Respiratory Care | 97 | 98 | 0 | 0 | 3 | 2 | 0 | 0 | 97 | 98 | \$ 56,000 | \$ | 56,000 |
| Software Engineering Technology | 93 | 91 | 0 | 0 | 3 | 7 | 3 | 3 | 97 | 93 | \$ 62,250 | \$ | 66,750 |
| Technology and Management | 100 | 88 | 0 | 0 | 0 | 12 | 0 | 0 | 100 | 88 | na |  | na |
| Vascular Technology | 92 | 91 | 0 | 0 | 8 | 9 | 0 | 0 | 92 | 91 | \$ 64,602 | \$ | 62,000 |

## Additional Notes:

Numbers may not add to 100 due to rounding
na=not reported, or not available due to small sample size
METHODOLOGY
Sample Frame 2016: 781 degrees awarded per FAST
Survey Response Rate: 49\% Total Knowledge Rate 2016: 75\%
Sources: Data collected from a variety of sources. Below, for 2016, in chronological order:
Grad Fair paper survey
Faculty senior exit survey
Career Services survey
Career Services followup with non-respondents
Faculty information from their contact with students
LinkedIn Profiles
Salaries of \$2,500 and below and \$250,000 and above were deleted.
Students with dual majors are included under each major
Known Outcomes 2016: 587
Known Outcomes 2013/2014/2015 combined N=1008
Known Outcomes 2014/2015/2016 combined N=1244

