



2016-17 Program Assessment Report

Health Informatics 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

Oregon Tech's Management program is designed to develop business professionals by combining a strong business core with hands-on projects. The Health Informatics program are able to design, implement, and support the computer systems needed in all aspects of healthcare including information management, medical education and research, disease diagnosis and treatment, patient monitoring and reporting.

Program Mission

The Health Informatics degree fully prepares students to assume positions in information technology departments to enhance quality and operations for the health industry.

Program Educational Objectives

- The Health Informatics degree program prepares students to interpret health policy and systems, with the ability to integrate policies into the healthcare agency.
- The Health Informatics program prepares students to analyze, design and develop information systems that enhance operational efficiencies and strategic goals of the organization.
- The Health Informatics program prepares students to analyze data utilize analytic technologies to improve the organization efficiencies and operational effectiveness.

Program Faculty Review

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

Department and program outcomes were reviewed by faculty during September 2016. During the 2016-17 academic year, the department significantly reviewed and updated the core business outcomes. Additionally, faculty also simplified department assessment assignments to better focus efforts. Two assignments - senior project and the case study - will now assess all department outcomes. No changes were made to the HI assessment plan.

Showcase Learning Opportunities

Other learning opportunities include:

- Industry internships prior to senior project experience
- Professional development skills workshops
- Hands-on community projects incorporated into program courses
- Senior project – an integrated capstone experience that requires project management, research and analysis to develop a solution for an actual business problem

Program History & Vision

Program History

Prior to Fall 2015, the Management department offered a degree in Information Technology – Option in Health Informatics. As of Fall 2015 new students are being transitioned into the B.S. of Health Informatics. The Health Informatics Bachelor of Science degree was first offered at OT in 2015. The data within this report summarizes assessment activities for both the Information Technology – Health Informatics Option and the B.S. Health Informatics degrees.

The Health Informatics undergraduate program, the first of its kind in the Oregon University System, is an option within the Department of Information Technology at Oregon Tech. Health Informatics prepares students for a career as information and computing specialists in the health care field.

The Health Informatics program gives students a strong background in business management, information systems, computing science and health care providing you with the necessary knowledge

and skills in the field of health informatics. Oregon Tech's Health Informatics program is designed to fit the lifestyle of working adults by offering evening and weekend classes and to provide the maximum opportunity for employment and promotion. Many courses are also available via online distance education.

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.

On November 2, 2016, the advisory board met with program faculty. The 2015-16 department and program assessment results were reviewed with the board. Overall, the results showed improvement in several areas of senior project. While last year we had six department level assessments, as a group we found this amount of data was not helpful in determining how to make improvements. Therefore, beginning in 2016-17, we will be simplifying our plan and only assessing senior project and the strategic case study at the department level. The board supported this change. Additionally, the faculty shared the results from the business core update. The board supported proposed changes of the business core to maintain skills and knowledge that today's employers are seeking.

Program Enrollment

The Health Informatics degree is offered at the Klamath Falls, Wilsonville, and Online. Enrollment for the 2016-17 year was 38 students.

[*Attachment 1_Enrollment_5_Year_History_by_Major*](#)

Program Graduates

No students graduated with a degree in HI in June of 2016, since it was a new degree. Seven (7) students graduated from the Information Technology, HI option in 2016.

[*Attachment 2_Graduates_10_Year_History_by_Major*](#)

Employment Rates and Salaries

Based on data from the last three years, 79% are employed (employers include Asante, Kaiser Permanente, Cambia Health Solutions, Legacy Health, Limelight Health) and 11% have continued their education. Reported starting salaries average \$52,000.

[*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

Desired 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.

Program Faculty implemented actions during the academic year based on assessment findings from previous assessment cycles.

We have gathered assessment data following changes that indicates improvement in student learning.

We have gathered assessment data following changes that indicated further action is needed.

Changes Implemented

Case Study & Senior Project: During the 2016-17 academic year, the department streamlined assessment efforts focusing on the BUS478 Strategic Management Case Study and Senior Project. This focused assessment effort allowed faculty to work on the areas that needed improvement.

Student Exit Survey: The main goal of the senior exit survey is to assess confidence and satisfaction rates of the program. The previous year's survey, students are asked how the management department has prepared them regarding each specific SLOs and PSLOs. This year we changed the question to ask students to rate their proficiency regarding with each specific SLO and PSLO. This question focuses more on students' ability rather than their satisfaction with faculty. Note that separate questions have been included regarding faculty and advising.

Program Student Learning Outcomes:

- Hired additional faculty to support campuses.
- Re-designed MIS 118 launched GUI based OOP structure, removed DOS style Development.
- MIS 218 revamped to add SQL Server, LINQ, I/O and focus on Data Management.
- Assigned course owners to courses to work on ensuring courses are equivalent.

Assessment Findings

Case Study: In 2015-16, the Case Study assignment only assessed department outcome 1, 2, and 5. The results for 15-16 had the department meeting measurement goal of 80%. During the 2016-17 academic year, the case study assignment was modified to encompass all department-level outcomes. The department met goals in outcomes 1 and 4, and did not meet in outcomes 2, 3, and 5. HI performed well in nearly all areas.

Senior Project: In 2015-16, faculty teaching senior project adopted a common project management approach using similar materials and process. During 16-17 academic year, the senior project faculty again met to discuss process, successes, and challenges. The faculty agreed that the common structured approach was yielding better results. The department assessment results for senior project continue to improve in all areas. In 2016-17, in the three areas that results were not met, there was an

improvement from the prior years. HI had a significant improvement from prior years due to consistent teaching model and instructors.

Student Exit Survey: Despite the survey redesign, the results of the student exit survey have not changed from previous years. Overall students feel confident of their learning.

PSLO Interpret health policy and systems:

Students performed well meeting and exceeding the objective.

PSLO Design and implement information systems:

- Students performed well identifying the objective
- Students were weakest in their ability to complete a written report and conducting the project management process.
- Faculty will continue to develop the structure of the sr. project management process and writing expectations.
- Continue working on education of sr. project requirements and finding places to re-enforce project management and writing skills throughout the entire curriculum.
- An online bridge course will be designed in how to enforce communication skills within the curriculum. The communications department will be consulted in the design of the course.

Department Student Learning Outcomes Assessment Cycle

DEPARTMENT STUDENT LEARNING OUTCOMES Yearly Cycle Management Department	2016-17
OIT-MGT 2016-17.1 Communicate the major concepts in the functional areas of accounting, marketing, finance, information technology, and management.	BUS 478 MIS 498 Student Exit Survey
OIT-MGT 2016-17.2 Describe the legal, social, ethical, and economic environments of business in a global context.	BUS 478 MIS 498 Student Exit Survey
OIT-MGT 2016-17.3 Solve organization problems, individually and/or in teams, using quantitative, qualitative, and technology-enhanced approaches.	BUS 478 MIS 498 Student Exit Survey
OIT-MGT 2016-17.4 Demonstrate professional communication and behavior.	BUS 478 MIS 498 Student Exit Survey
OIT-MGT 2016-17.5 Apply knowledge of business concepts and functions in an integrated manner.	BUS 478 MIS 498 Student Exit Survey

Program Student Learning Outcomes Assessment Cycle

PROGRAM STUDENT LEARNING OUTCOMES Yearly Cycle Health Informatics B.S.	2016-17
OIT-BHI 2016-17.1 Interpret Health Systems and Policy.	MIS345 MIS498 Student Exit Survey
OIT-BHI 2016-17.2 Design and Implement Information Systems.	MIS442 MIS498 Student Exit Survey
OIT-BHI 2016-17.3 Apply statistical concepts to analyze data.	N/A

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-MGT 2016-17.1 Communicate the major concepts in the functional areas of accounting, marketing, finance, information technology, and management.	
Course/Event	BUS 478
Legend	C – Capstone
Assessment Measure	Direct – Case Analysis
Criterion	80% of students score a 3 or 4 on each learning outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	MIS 498
Legend	C – Capstone
Assessment Measure	Direct – Senior Project
Criterion	80% of students score a 3 or 4 on each learning outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	Student Exit Survey
Legend	C – Capstone
Assessment Measure	Indirect – Student Exit Survey
Criterion	80% of graduates indicate a 4, 5, or 6 rating (scale 1-6).

OIT-MGT 2016-17.2 Describe the legal, social, ethical, and economic environments of business in a global context.	
Course/Event	BUS 478
Legend	C – Capstone
Assessment Measure	Direct – Case Analysis
Criterion	80% of students score a 3 or 4 on each learning outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	MIS 498
Legend	C – Capstone
Assessment Measure	Direct – Senior Project
Criterion	80% of students score a 3 or 4 on each learning outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	Student Exit Survey
Legend	C – Capstone
Assessment Measure	Indirect – Student Exit Survey
Criterion	80% of graduates indicate a 4, 5, or 6 rating (scale 1-6).

OIT-MGT 2016-17.3 Solve organization problems, individually and/or in teams, using quantitative, qualitative, and technology-enhanced approaches.	
Course/Event	BUS 478
Legend	C – Capstone
Assessment Measure	Direct – Case Analysis
Criterion	80% of students score a 3 or 4 on each learning outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	MIS 498
Legend	C – Capstone
Assessment Measure	Direct – Senior Project
Criterion	80% of students score a 3 or 4 on each learning outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	Student Exit Survey
Legend	C – Capstone
Assessment Measure	Indirect – Student Exit Survey
Criterion	80% of graduates indicate a 4, 5, or 6 rating (scale 1-6).

OIT-MGT 2016-17.4 Demonstrate professional communication and behavior.	
Course/Event	BUS 478
Legend	C – Capstone
Assessment Measure	Direct – Case Analysis
Criterion	80% of students score a 3 or 4 on each learning outcome-related performance criteria (using a 1-4 proficiency scale).

Course/Event	MIS 498
Legend	C – Capstone
Assessment Measure	Direct – Senior Project
Criterion	80% of students score a 3 or 4 on each learning outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	Student Exit Survey
Legend	C – Capstone
Assessment Measure	Indirect – Student Exit Survey
Criterion	80% of graduates indicate a 4, 5, or 6 rating (scale 1-6).

OIT-MGT 2016-17.5 Apply knowledge of business concepts and functions in an integrated manner.	
Course/Event	BUS 478
Legend	C – Capstone
Assessment Measure	Direct – Case Analysis
Criterion	80% of students score a 3 or 4 on each learning outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	MIS 498
Legend	C – Capstone
Assessment Measure	Direct – Senior Project
Criterion	80% of students score a 3 or 4 on each learning outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	Student Exit Survey
Legend	C – Capstone
Assessment Measure	Indirect – Student Exit Survey
Criterion	80% of graduates indicate a 4, 5, or 6 rating (scale 1-6).

OIT-BHI 2016-17.1 Interpret Health Systems and Policy.	
Course/Event	MIS 498
Legend	C – Capstone
Assessment Measure	Direct – Senior Project
Criterion	80% of students score a 3 or 4 on each learning-outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	MIS 345
Legend	C – Capstone
Assessment Measure	Direct – Project (Group)
Criterion	80% of students score a 3 or 4 on each learning-outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	Student Exit Survey

Legend	C – Capstone
Assessment Measure	Indirect – Student Exit Survey
Criterion	80% of graduates indicate a 4, 5, or 6 rating (scale 1-6).

OIT-BHI 2016-17.2 Design and Implement Information Systems.	
Course/Event	MIS 498
Legend	C – Capstone
Assessment Measure	Direct – Senior Project
Criterion	80% of students score a 3 or 4 on each learning outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	MIS 442
Legend	C – Capstone
Assessment Measure	Direct – Project (Group)
Criterion	80% of students score a 3 or 4 on each learning-outcome-related performance criteria (using a 1-4 proficiency scale).
Course/Event	Student Exit Survey
Legend	C – Capstone
Assessment Measure	Indirect – Student Exit Survey
Criterion	80% of graduates indicate a 4, 5, or 6 rating (scale 1-6).

Analysis of Results

OIT-MGT 2016-17.1 Communicate the major concepts in the functional areas of accounting, marketing, finance, information technology, and management.	
Criterion	Met
Summary	Case Study: Met 85% Senior Project: Met 100% Exit Survey: Met 80%
Improvement Narrative	N/A

OIT-MGT 2016-17.2 Describe the legal, social, ethical, and economic environments of business in a global context.	
Criterion	Met
Summary	Case Study: Not Met 71% Senior Project: Met 100% Exit Survey: Met 90%
Improvement Narrative	N/A

OIT-MGT 2016-17.3 Solve organization problems, individually and/or in teams, using quantitative, qualitative, and technology-enhanced approaches.	
Criterion	Met
Summary	Case Study: Met 85% Senior Project: Met 100% Exit Survey: Met 96%
Improvement Narrative	N/A

OIT-MGT 2016-17.4 Demonstrate professional communication and behavior.	
Criterion	Met
Summary	Case Study: Met 87% Senior Project: Met 87% Exit Survey: Met 96%
Improvement Narrative	N/A

OIT-MGT 2016-17.5 Apply knowledge of business concepts and functions in an integrated manner.	
Criterion	Met
Summary	Case Study: Met 80% Senior Project: Met 100% Exit Survey: Met 94%
Improvement Narrative	N/A

OIT-BHI 2016-17.1 Interpret health systems and policy.	
Criterion	Met
Summary	Senior Project: Met 83% Community Project: Met 100% Exit Survey: 100%
Improvement Narrative	N/A

OIT-BHI 2016-17.2 Design and implement information systems.	
Criterion	Met
Summary	Senior Project: Met 83% System Design Project: Met 83% Exit Survey: Met 100%
Improvement Narrative	N/A

References

Program Assessment Coordinator: Jeff Dickson, Associate Professor, Management

Department Assessment Coordinator: Sharon Beaudry, Assistant Professor, Management

Office of Academic Excellence

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	5 Year Difference	5 Year % Change
ABA Course Series	0	0	3	0	0	0	-
Accounting Certificate	0	0	0	0	1	1	-
Allied Health	0	0	0	0	3	3	-
Allied Health Management	11	5	3	2	1	-10	-90.9%
Applied Behavior Analysis	0	0	0	10	17	17	-
Applied Mathematics	41	38	47	42	33	-8	-19.5%
Applied Psychology	146	149	122	96	110	-36	-24.7%
Automat, Robot, & Cntrl Engr	0	0	0	0	1	1	-
Biology	15	8	1	1	0	-15	-100.0%
Biology-Health Sciences	136	150	150	138	151	15	11.0%
Civil Engineering	127	121	110	120	118	-9	-7.1%
Clinical Lab Science-Earlyadm	6	10	35	22	0	-6	-100.0%
Clinical Laboratory Science	62	85	94	95	2	-60	-96.8%
Communication Studies	55	42	39	47	40	-15	-27.3%
Computer Engineering Tech	82	82	81	86	63	-19	-23.2%
Dental Hygiene	226	240	211	221	202	-24	-10.6%
Diagnostic Medical Sonography	86	104	95	102	112	26	30.2%
Dispute Resolution Certificate	1	1	2	4	2	1	100.0%
Echocardiography	121	119	123	122	128	7	5.8%
Electrical Engineering	76	120	146	164	197	121	159.2%
Electronics Engineering Tech	67	58	51	37	32	-35	-52.2%
Embedded Systems Eng Tech	24	25	32	35	57	33	137.5%
Emergency Medical Services Mgt	0	0	17	20	34	34	-
EMT - Paramedic	29	30	29	28	28	-1	-3.4%
Environmental Sciences	49	49	51	48	42	-7	-14.3%
General Studies	495	736	632	1,031	1,414	919	185.7%
Geomatics	1	0	0	0	0	-1	-100.0%
Geomatics-option in GIS	13	14	10	10	7	-6	-46.2%
Geomatics-option in Surveying	49	39	26	31	30	-19	-38.8%
Health Care Mgmt-Admin Mgmt	0	10	14	19	18	18	-
Health Care Mgmt-Clinical Mgmt	0	4	10	11	25	25	-
Health Care Mgmt-Rad Science	0	3	6	12	12	12	-
Health Informatics	0	0	0	20	38	38	-
Health Sciences	1	1	0	1	2	1	100.0%
Information Technology	0	0	0	56	114	114	-
IT Accounting Option	8	4	2	1	1	-7	-87.5%
IT Applications Dev Opt	91	75	71	48	20	-71	-78.0%
IT Bus/Systems Analysis Opt	58	59	69	51	28	-30	-51.7%
IT Health Informatics Opt	54	68	59	32	17	-37	-68.5%
Magnetic Resonance Imagng Spec	0	0	0	0	4	4	-
Manufacturing Engineering Tech	129	99	109	107	101	-28	-21.7%
Marriage and Family Therapy	0	0	0	0	10	10	-
Mechanical Engineering	208	303	331	323	354	146	70.2%
Mechanical Engineering Tech	145	112	121	121	104	-41	-28.3%
Medical Lab Science-Earlyadm	0	0	0	0	17	17	-
Medical Laboratory Science	0	0	0	0	86	86	-
Mgmt Info Sys/Mgmt Acc Option	1	0	0	0	0	-1	-100.0%
Mgmt/Accounting Option	32	38	35	32	19	-13	-40.6%
Mgmt/Marketing Option	34	34	36	34	37	3	8.8%
Mgmt/Small Bus Mgmt Option	54	43	38	37	33	-21	-38.9%
MIT Applicant	0	0	1	2	0	0	-
Nuclear Medicine Technology	47	51	48	48	49	2	4.3%
Nursing	50	49	52	61	69	19	38.0%
Operations Management	61	66	65	69	70	9	14.8%
Optical Engineering	0	0	3	3	3	3	-
Picture Archive/Comm Sys Spec	0	0	1	2	3	3	-
Polysomnographic Technology	19	13	6	12	5	-14	-73.7%
Population Health Management	0	0	3	24	31	31	-
Pre-Clinical Lab Science	0	8	1	20	2	2	-
Pre-Dental Hygiene	62	65	35	37	48	-14	-22.6%
Pre-Medical Imaging Tech	273	287	253	237	226	-47	-17.2%
Pre-Medical Lab Science	0	0	0	0	27	27	-
Pre-Nursing	56	60	53	69	78	22	39.3%
Pre-Paramedic Education	0	3	3	7	0	0	-
Pre-Renewable Energy Eng	111	0	0	0	0	-111	-100.0%
Pre-Respiratory Care	11	12	8	11	9	-2	-18.2%
Radiologic Science	164	163	154	160	152	-12	-7.3%
Renewable Energy Engineering	110	206	203	180	166	56	50.9%
Respiratory Care	85	84	88	103	117	32	37.6%
Sleep Health-Polysom Tech Opt	0	0	4	6	17	17	-
Software Engineering Tech	260	268	289	309	285	25	9.6%
Spec in Entrepreneur/Small Bus	0	0	0	1	2	2	-
Specialization in Accounting	0	0	0	2	2	2	-
Specialization in Marketing	0	0	1	1	1	1	-
Specialization Travel/Tourism	0	1	0	0	0	0	-
System Engr & Technical Mgmt	0	0	2	3	0	0	-
Technology and Management	16	30	43	46	46	30	187.5%
Vascular Technology	88	95	80	93	98	10	11.4%
Total (Duplicated)	4,146	4,539	4,407	4,923	5,371	1,225	29.5%
Total (Unduplicated)	4,001	4,414	4,273	4,786	5,232	1,231	30.8%

Attachment 2_Graduates_10_Year_History_by_Major



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

Associates

	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

Bachelors

	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

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	
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