

Docket Item:

University Program Approval: Oregon State University (OSU), M.S. in Data Analytics.

Summary:

OSU proposes a new degree program leading to a Master of Science in Data Analytics. Higher Education Coordinating Commission (HECC) staff completed a review of the proposed program. After analysis, HECC staff recommends approval of the program as proposed.

Staff Recommendation:

The HECC recommends the adoption of the following resolution:

RESOLVED, that the Higher Education Coordinating Commission approve the following program: M.S. in Data Analytics at Oregon State University, effective Fall 2016.



Oregon State University seeks the Oregon Higher Education Coordinating Commission's approval to offer an instructional program leading to a M.S. degree in Data Analytics.

1. *Describe the purpose and relationship of the proposed program to the institution's mission and strategic plan.*

Oregon State University is proposing a new M.S. in Data Analytics. The program will be delivered entirely online via Ecampus. The proposed graduate program responds to an increasing demand for new approaches in data management and analysis to more effectively deal with ever-increasing amounts of data. The terms "big data" and "analytics" are now commonly used to describe the vast amounts of data currently being generated and analyzed in many areas of science, education, business and government. The objective of the proposed programs is to produce trained professionals with data analytic skills. The core courses of the M.S. program are in statistics and computer science, but the program also recognizes that some of the demand for data analytic skills comes from biology and the health professions. The Department of Statistics will offer a Graduate Option in Health Analytics.

The Department of Statistics is located in both the College of Science and College of Agricultural Sciences. The Education and General budget for the Department of Statistics is from the College of Science. Three core courses offered in the M.S. program will be delivered by the College of Engineering, School of Electrical Engineering and Computer Science. The Department of Statistics currently offers an M.S. and a Ph.D. in Statistics. These new programs are designed to be more applied and describe the tools used to manipulate, analyze and visualize large data sets. The OSU Strategic Plan states that the University must be on the "forefront of new ideas, research and innovation." The Department of Statistics' mission is committed to teaching, research and outreach and engagement to promote economic, social, cultural and environmental progress for the people of Oregon, the nation and the world. This mission is achieved by producing graduates competitive in the global economy. With the increasing ability of society to collect and store data, many disciplines are now facing the challenges on how to extract patterns and trends from large sets of data to advance their research programs and uncover new opportunities.

2. *What evidence of need does the institution have for the program?*

One of three focus areas in OSU's Strategic Plan is Promoting Economic Growth and Social Progress, and the goal includes "an expanding institutional culture of innovation and

collaboration.” Making effective use of big data is essential not only to academic researchers and industry who are seeking these skill sets, but also to health providers, managers of ecological resources, transportation experts, and professionals in countless other fields. The proposed programs are cutting-edge programs in data analytics, and the multidisciplinary nature of the M.S. program in particular will help to advance OSU’s burgeoning culture of collaboration and the growing need for a graduate program in data analytics.

3. *Are there similar programs in the state? If so, how does the proposed program supplement, complement, or collaborate with those programs?*

There are no similar programs in Oregon. Oregon Health & Science University (OHSU) has a Department of Medical Informatics and Clinical Epidemiology and offers degrees and certificates in clinical informatics. The OHSU program does not include any statistics classes and focuses more on the practical understanding of the role of information in health care. The Data Analytics program represents a collaboration with the Department of Electrical Engineering and Computer Science (EECS), in the OSU College of Engineering which will provide course offerings in the program.

4. *What new resources will be needed initially and on a recurring basis to implement the program? How will the institution provide these resources? What efficiencies or revenue enhancements are achieved with this program, including consolidation or elimination of programs over time, if any?*

The Department of Statistics is currently in the process of hiring two new additional faculty and is planning to hire another faculty member for next year. As the budget analytics has indicated, the programs will be sustainable by the end of the third year following implementation of the program. Proposed classes will be developed and taught by existing faculty. The Department of Statistics anticipates revenue generated from tuition will provide support for the GTAs that may be needed if larger classes require the need for grading assistance. For the initial program, current classified staff will assist in the program management. As the program grows, revenue generated from tuition will support additional staff needs, if required. There is no anticipated need for library resources.

All appropriate University committees and the Statewide Provosts Council have approved the proposed program. The Oregon State University’s Board of Trustees approved the program on March 31, 2016.

Recommendation to the Commission

The Statewide Provosts Council recommends that the Oregon Higher Education Coordinating Commission authorize Oregon State University to establish an instructional program leading to a Master of Science degree in Data Analytics, effective Fall 2016.

Institution: Oregon State University
Program: M.S. in Data Analytics

Action: At the May 5, 2016 meeting, the Statewide Provosts Council approved a new graduate program for Oregon State University, M.S. in Data Analytics, to move forward to the Oregon Higher Education Coordinating Commission for its review/approval. The OSU Board of Trustees approved it at their March 31, 2016 meeting.

Eastern Oregon University

Sarah Witte, provost

Approved
 Opposed
 Abstained



Oregon Health & Science University

Jenny Mladenovic, provost

Approved
 Opposed
 Abstained



Oregon State University

Sabah Randhawa, provost

Approved
 Opposed
 Abstained



Oregon Tech

Brad Burda, provost

Approved
 Opposed
 Abstained



Portland State University

Sona Andrews, provost

Approved
 Opposed
 Abstained



Southern Oregon University

Susan Walsh, provost

Approved
 Opposed
 Abstained



University of Oregon

Scott Coltrane, provost

Approved
 Opposed
 Abstained



Western Oregon University

Steve Scheck, provost

Approved
 Opposed
 Abstained

