VII. STANDING COMMITTEES

A. Academic and Student Affairs Committee

Establishing the Master of Science in Data Science

RECOMMENDED ACTION

It is the recommendation of the administration and the Academic and Student Affairs Committee that the Board of Regents grant authority to the Interdisciplinary Data Science Group in the Graduate School to offer the Master of Science in Data Science degree program, effective Autumn Quarter 2016. This will be a fee-based program offered in coordination with UW Professional and Continuing Education. The degree program will have provisional status with a review to be scheduled for the 2021-2022 academic year. At such time that continuing status is granted, a ten-year review cycle would begin.

BACKGROUND

In October 2014, the Graduate School established the Interdisciplinary Data Science Committee at the request of Graduate Faculty from the Departments of Applied Mathematics, Biostatistics, Computer Science and Engineering, Human Centered Design and Engineering, Statistics, and from the Information School. The Graduate School then received notification of intent to plan the Master of Science in Data Science from the Interdisciplinary Committee in December 2014. After campus-wide stakeholder comment, the faculty developed a full proposal that was submitted to the Graduate School in July 2015. The program anticipates enrolling 55 new, primarily part-time students per year at maturity.

The proposed program responds to the need for a new category of data scientist with expertise in managing, modeling, and visualizing the massive, noisy, and heterogeneous datasets that arise across many areas of science and industry. These data scientists will be trained to understand core principles in data management, statistics, machine learning, visualization, and human-centered design, while possessing the software engineering experience to produce practical and usable tools. The program will be distinct nationally due to its interdisciplinary structure and the technical rigor of the curriculum.

In recent years, the University of Washington has displayed a clear commitment to data science. This is evidenced by the Provost’s initiative for Data-Driven Discovery that supplied faculty lines in support of interdisciplinary data science across many fields, as well as the recent amplification of the UW eScience Institute’s mission in data science education and research through multiple major grants. The UW is now recognized as a national leader in almost every aspect of research and education in data science and big data. The proposed program capitalizes on the breadth and depth of existing data science activities and our
A. Academic and Student Affairs Committee

**Establishing the Master of Science in Data Science** (continued p. 2)

extraordinary faculty expertise in the relevant fields of statistics, biostatistics, computer science, applied math, information, and human-centered design and engineering to advance our position as a national hub for data science.

In July and August 2015, the Vice Provost and Dean of the Graduate School appointed two outside reviewers to evaluate the degree proposal. The reviewers both supported approval of the degree program. Each reviewer also made specific recommendations for improving the program, to which the program provided detailed responses.

The Graduate School Council met on October 15, 2015, to discuss the degree proposal. The Council recommended that the proposal be forwarded to the Board of Regents for final approval. The Vice Provost and Dean of the Graduate School concurred with this recommendation.

The Vice Provost and Dean of the Graduate School and the Provost have reviewed and approved the recommendation to approve the Master of Science in Data Science.

*Attachment*
New Graduate Degree Proposal – UW Seattle
New Graduate Degree Proposal – UW Seattle

IDEA STAGE
Conversations with:
• Faculty/Deans/Chancellors;
• PCE (fee based programs);
• Office of Planning & Budgeting & Provost office;
• Other stakeholders.

PLANNING NOTICE OF INTENT (PNOI)
• Faculty lead contacts the Office of Academic Affairs and Planning (OAAP) in the Graduate School for proposal guidelines;
• Submit PNOI to OAAP.

PNOI COMMENT PERIOD
• 10 day stakeholder comment period (all three campuses);
• includes UW Libraries, Registrar’s Office and GEMS.

EXTERNAL REVIEW
• Unit submits revised proposal to OAAP;
• OAAP sends proposal to external reviewers;
• Unit responds to reviewers’ comments.

FULL PROPOSAL DEVELOPMENT
• Addresses stakeholders feedback;
• Includes tuition tier (state-funded programs) or draft of MOA (fee based programs);
• Unit contacts Student Financial Aid;
• Submit preliminary draft to OAAP for review and comment.

GRADUATE SCHOOL
• Graduate School Dean authorizes proposal development

GRADUATE SCHOOL COUNCIL
• Council considers proposal including final MOA;
• After presentation, unit incorporates feedback, if needed;
• Graduate Dean authorizes sending proposal to Board of Regents.

BOARD OF REGENTS
• Degree approval;
• Provost confirms Regents’ approval.

CREATE CODE
OAAP directs Registrar to create new program code.

PROGRAM LAUNCH
• Unit works with Graduate Enrollment Management Services to create academic profile;
• Degree Program 5 year review cycle begins.