Director of Academic Data Analysis and Visualization

Pay Range:\$136,000 - \$165,000

Position Summary:

- 1. Work collaboratively with university leadership, data stewards across campus, and staff at all levels of the colleges and academic support areas to coordinate the design, development, and management of reporting and visualization tools to facilitate the data informed decision making including a performance budgeting system.
- 2. This work will include: the extraction, cleaning and loading (ECL) of the enrollment, teaching, research and scholarship, financial, and a broad range of other institutional data anticipated to be integrated into the performance budgeting information system; connecting this data to clear, user friendly, visualization tools that enable department, college and university managers to see and understand current outcomes in the context of past trends and future goals; and to guide college and university leaders in the use of this tool to inform major resource allocation decisions that move the institution as a whole in the desired strategic direction.
- 3. Develop tools for using data, analysis, and research to develop actionable solutions to operational problems or inefficiencies. These tools include the mining of warehoused but previously unanalyzed data or the collection and the creation of new academic databases where needed to effectively connect existing datasets.
- 4. Document and maintain metadata standards for any new data collected, and will recommend and pursue strategies for improving the accuracy of academic data collected while lowering the administrative burden of data collection on academic units.
- 5. Serve as academic liaison to key campus groups and external partners to foster relationships that encourage productive sharing of data among organizations for the overall continuous improvement of the university.
- 6. Define new strategies to understand and optimize institutional activities through analytics and statistical modeling and will serve as an exemplar in upholding the value of responsible data management and reproducible data analysis for evidence-based policy making.
- 7. Develop long-range plans for academic and academic support data analysis to further continuous institutional improvement. This includes the strategic planning, consultation and coordination of major software purchases within the academic division to optimize the interoperability of the data collected by those systems.

Required Qualifications:

A master's degree in statistics, computer science, business information technology, decision science, industrial systems engineering, or a quantitative social science.

Five years of professional experience in a higher education setting in the following:

- Institutional research, data analysis, business intelligence, data mining, or decision support;
- Performing strategic consulting, analytical problem solving, project planning and implementation, and consultation;
- Development of tools within a business intelligence software both open source and proprietary (such as Microstrategy, Tableau, and SAS Visual Analytics) with an understanding of data security, and implementing web-based reporting tools;

- Leading a multi-person, multi-disciplinary, and multi-site team of professionals in the development of data visualization tools;
- Leading a multi-person and multi-disciplinary, multi-site team in the extraction, cleaning and loading of complex student, faculty and financial data to create tools that inform management decision making;
- Leading multi-person and multi-disciplinary teams in the development of data analytics products for broad institutional use addressing data security, implementation, end-user training and desktop and web-based applications and self-service reporting tools;
- Working with executive leadership to solicit business questions (such as capacity planning and enrollment forecasting) and the related information needs and developing answers and solutions specific to the higher education management environment;
- Building collaborative relationships with diverse colleagues in a large and distributed organization; and
- Data governance duties, including defining and developing key metrics and database management of outcomes in those metrics.
- Demonstrated expertise in current principles and procedures of higher education strategic planning, decision support and assessment including five or more years of experience in a higher education setting working with executive leadership on strategic plans, decision support efforts, and institutional continuous improvement efforts.
- Excellent communication skills both written and verbal, as well as highly developed data visualization skills and presentation skills with a demonstrated commitment to accuracy, details, and deadlines.