Masters of Professional Studies in Insurance Analytics & Management

College of Professional Studies
October 20, 2021

EXECUTIVE SUMMARY

The College of Professional Studies (CPS) proposes to develop a Masters in Professional Studies in Insurance Analytics & Management (MPS INS) program to inspire and prepare professionals for success in the (re)insurance industry, one of the world's most essential for sustained economic security and prosperity. The program curriculum appeals to a range of individuals including recent bachelor degree graduates, people currently working in the industry, and people who have worked in related fields outside of insurance.

This program addresses the mounting need for talent in the insurance industry with focus on disruptive trends and the inherent challenges, accelerated by the COVID pandemic, this industry sector faces. These trends and challenges include the need to:
- Incorporate Analytics and Artificial Intelligence to deliver personalized and flexible customer experience.
- Develop forward-thinking digital leadership behaviors.
- Embed Data Quality Management and Data Integration plans to manage operations and to provide appropriate reporting across business units.
- Explore automatization of the insurance claims lifecycle to process claims with better speed and accuracy.
- Respond to a complex, shifting global regulatory environment.
- Apply decision science concepts to strategic vision.
- Sharpen communication skills.
- Develop a broader recognition of domain knowledge across industry core segments.

This program recognizes the work of analytics, machine learning (ML), and artificial intelligence (AI) professionals and the increasing need for strong ML and AI competencies and skills. The program seeks to bring together and train students in those competencies and skills that are most critical to an enterprise: data management and analysis, data visualization, problem-solving, advanced analytical tools, and emotional and psychological intelligence. To meet the needs of learners and the insurance industry, this degree program will include coursework from appropriate CPS MS/MPS degrees, including Leadership, Analytics, Applied Machine Intelligence, and Project Management.

ALIGNMENT WITH UNIVERSITY MISSION

The University has sought to provide opportunities for applied learning for working professionals. This program offers operational immersion in hands-on data manipulation and analysis of data to extract insights in the insurance industry. It involves statistical analyses, machine learning techniques, artificial intelligence, and data management to impact the way future graduates perform in the workplace.

PROGRAM DIFFERENTIATION AND ENROLLMENT FORECAST

Being at danger of falling behind in the digital transformation, the industry's branding issues hampers their success of keeping/attracting talent while experiencing a shortage of talent and an aging workforce. Furthermore, the insurance industry/companies are underserved for underwriting needs (economics, risk management, predictive analytics, understanding of distributions channels) and price-finding support (return on equity).

Based on thorough market research (available upon request), the changing job market in the insurance industry will be defined by the need for talent experienced with the application of technology and analytics across the enterprise who also have a strong understanding of the relationship between units and across the company. The changing risk landscape also requires a workforce not only experienced with the adoption of advanced technologies, but who also possess the social and emotional skills to bridge the gap between AI and machine learning and the human client.

These challenges and market needs provide the contextual approach for a flexible master degree program that is experiential in nature and focused on skills and competencies that are in high demand by the industry, and talent acquisition rather than degree completion. This program has been developed in close collaboration with select industry leaders to meet current needs with a clear eye to the future of the insurance industry, as well as to create excitement about the career potential for learners.

Market research suggests a very strong demand for this program. New student intakes have been *conservatively* projected at 25 students in year 1, increasing to 100 intakes annually in year 4. The program begins generating positive contribution in year 2; total projected direct contribution to overhead over 4 years is $2.1M.

RESOURCES TO SUPPORT THE PROGRAM

Based on reaching target enrollment goals, the program will seek to hire a full-time faculty member to teach and be the Faculty Lead for the MPS INS program in year two. Program management prior to this hire will be included in the workload of a faculty member on staff.

Currently, there are a number of full and part-time faculty who already teach within the programs mentioned above who would either continue to teach the existing courses or teach one of the potentially few new courses being added. We will continue to add new part-time faculty as needed, which is at the discretion of the Faculty Lead member who oversees the program.

This program will require support from marketing and enrollment management.