REQUIRED COURSES:

**ITM500: BUSINESS TECHNOLOGY STRATEGY (3 CREDITS)**

This course introduces strategic and operational planning for the application of information systems with heavy emphasis on the alignment of information strategy to business strategy. An introduction to the four schools of strategic thought and how they relate to strategic planning and decision-making is identified. A review of the application of strategic models for the purpose of deploying corporate strategy is explored.

**ITM505: ETHICS IN IT (3 CREDITS)**

This course explores real-world information technology dilemmas and frameworks to identify ethical problems and reach ethical decisions. Its objective is to use these skills, grounded in ethical theory, to make informed decisions within fast-paced and emerging business environments.

**ITM510: RESEARCH IN INFORMATION TECHNOLOGY (3 CREDITS)**

As part of a research project identify the critical role IT plays in organizational development. This course will explore how to employ action learning to improve the competitiveness of the organization. Defining IT challenges from an operational and strategic perspective the class will explore adaptive learning technique by offering proven educational theories and practices to foster the required changes in your staff. Research of existing organizational learning theories and the historical problems that occur with companies will be conducted to understand how to research these issues and provide solutions for technology enablement of the business.

**ITM545: IT PROJECT MANAGEMENT (3 CREDITS)**

This course identifies how to deliver on new ideas and strategies by practicing traditional and agile methodologies and processes that help bring new products and services to the market. It builds on differing strategic approaches and project management techniques to manage innovation so that competitive strategy and new ideas can be realized. An understanding of the DevOps model that facilitates an effective organization and how it relates to delivering new products and how to leverage it will be explored.

**ITM560: DATA SCIENCE AND DATA ANALYTICS (3 CREDITS)**

This course looks at a managerial approach to understanding business intelligence (BI) systems. Its objective is to help future managers use and understand analytics by providing a solid foundation of BI that is reinforced with hands-on practice. This includes an introduction of business intelligence, data analytics and data science. It explores descriptive, predictive and prescriptive analytics. It identifies big data concepts and tools. It also describes future trends, privacy and managerial considerations in Analytics.
REQUIRED COURSES:

ITM562: BUSINESS STATISTICS (3 CREDITS)
This course in data analysis and statistical inference requires no background in statistics. Its objective is to provide individuals the basic statistical tools for analyzing and interpreting data. It will explore how to define and collect data. It will provide guidance in organizing and visualizing variables, defining numerical descriptive measures and understanding statistical probability. It will look at testing techniques such as Hypothesis Testing, Two sample and one-way ANOVA tests, Chi-Square Tests, Simple Linear Regression and Multiple Regression. A review of Descriptive, Predictive and Prescriptive Analytics and how it is supported by statistical inference will be reviewed.

ITM564: PROGRAMMING FOR ANALYSTS (3 CREDITS)
This course in programming provides for a broad range of students who need to work with data. It uses the open-source R statistical package. It introduces the programming of statistical graphics simulation methods, numerical optimization, and computational linear algebra.

ITM566: BUSINESS INTELLIGENCE AND DECISION SUPPORT SYSTEMS (3 CREDITS)
This course provides an introduction to decision support systems (DSS) for business intelligence (BI). It looks at decision-making, data components, model components and the use of user interfaces. It explores designing a DSS using object-oriented technologies and implementing it with a recognition of how to evaluate a deployed system. Executive information and dashboards coupled with group decision support systems will be identified.

ITM568: BIG DATA ANALYTICS (3 CREDITS)
This class will explore various aspects of Big Data Analytics. It will look at the tools, technology, applications, use cases and research directions in the field. Initially it will explore challenges in big data and big data analytics. The Big Data Reference Model will be examined. A look at big data analytic tools such as Hadoop, Spark and Splunk will be completed. Looking at predictive models used in analytics and a framework for minimizing data leakage will be explored. Storing big data will be examined plus a study of big data cluster analysis will be done. Finally, non-linear extraction of big data analytics will be described along with data mining and large-scale data clustering.

ITM555: CAPSTONE (3 CREDITS)
This course integrates knowledge learned throughout the program. Demonstrate an understanding of content obtained by completing a research paper addressing an issue in an industry. Ethically incorporate technical and business knowledge skills through identifying key issues by doing a thorough search of academic and practitioner knowledge to support a stated thesis. This course draws upon current work, training or internship experience.