

**SCIENCE IN INFORMATION SYSTEMS AND  
BUSINESS ANALYTICS (MIS) /MASTER OF  
SCIENCE IN ENGINEERING MANAGEMENT  
2022-2023**

Student's Name: \_\_\_\_\_  
 Entrance Date: \_\_\_\_\_  
 B.A. or B.S. in: \_\_\_\_\_  
 From: \_\_\_\_\_

<b>MIS DEGREE REQUIREMENTS</b>				<b>36</b>
___	MIS	510	Statistics & Quantitative Methods	3
___	MIS	515	Engineering Analysis I	3
___	MIS	520	Management Information Systems	3
___	MIS	525	Business Analytics	3
___	MIS	530	Data Analysis & Visualization	3
___	MIS	535	Engineering Project Management	3
___	MIS	540	Database Management & Applications	3
___	MIS	545	Applied Data Mining	3
___	MIS	550	Development of Support Networks	3
___	MIS	555	Project in Engineering Management	3
___	MIS	560	Special Topics in MIS	3
___	MIS	565	Speical Topics in MIS/Business Analytics	3

<b><u>MSEM DEGREE REQUIREMENTS</u></b>				<b>21</b>
___	MSEM	500	Managing Engineers, Scientists and Technical	3
___	MSEM	505	Economic Analysis in Engineering Planning	3
___	MSEM	510	Organizational Behavior	3
___	MSEM	520	Contract Law and the Engineering Enterprise	3
___	MSEM	540	Seminar in Contemporary Issues in Engineerir	3
___	MSEM		Elective	3
___	MSEM		Elective	3

\* MIS/MSEM portfolio requirement. Please see second page.

# Program Objectives

## **M.S in Information Systems and Business Analytics**

**Upon successful completion of this program, a student will be able to:**

- 1 Students will be able to formulate strategic planning process for organizational information technology and business analytics.
- 2 Students will be able to choose appropriate information system management and business analytics components.
- 3 Students will be able to consider organizational goals and/or objectives and select appropriate information technology and business analytics tools to achieve them.
- 4 Students will be able to intergrate and evaluate project management techniques and tools.

## **Master of Business Administration (MBA)**

**Upon successful completion of this program, a student will be able to:**

- 1 Recognize management issues that impact technology-based firms.
- 2 Be able to optimize the allocation of resources across multiple projects.
- 3 Gain the skills needed to evaluate, implement and operate engineering projects.
- 4 Deal with the complex technical, ethical, and legal issues facing the engineering industry.
- 5 Gain the skills needed to optimize the use of financial principles in decision-making.
- 6 Achieve expertise in engineering projects through an in-depth study of such projects.

A student portfolio will be used as proof of meeting the criteria of the MIS/MSEM program objectives and is a requirement. Student portfolios must contain at least one artifact per course. The following is an array of artifacts that a student may consider using for courses: research papers, presentations, assignments, case studies and other pertinent materials related to the course. Only one artifact is required to meet the criterion pertaining to a program objective. If applicable, one artifact may be used to meet the criteria of one or two program objectives.