# MS-LSE DEGREE PLAN AND SAMPLE PLAN OF STUDY

### MASTER OF SCIENCE IN LOGISTICS SYSTEMS ENGINEERING (MS-LSE)

The Master of Science in Logistics Systems Engineering is a joint program between the College of Technology, Architecture and Applied Engineering and the College of Business. This degree requires 30 credit hours from three areas. The core consists of 15 credit hours; 9 credit hours from engineering and 6 credit hours from supply chain management. At least 18 credit hours of 6000 or higher level courses must be taken. Synthesis hours cannot be taken without the consent of advisor and graduate coordinator.

#### Core Courses (15 hours)

- □ LSE 5020- Logistics Transportation Systems
- □ LSE 5030- Logistics Distribution Systems
- □ MBA 5420- Integrated Logistics Planning and Analysis
- □ MBA 6040- Supply Chain Management
- □ LSE 6750- Logistics Systems Design and Analysis

### Elective Courses (9-12 Credit Hours)

- □ LSE 6760- Healthcare Systems Engineering
- □ MBA 5450- Demand Driven Supply Chain Planning and Operations
- □ MHSA 6450- Quality Management in Healthcare Delivery
- □ MSA 5020-Regression Analysis
- □ MSA 6440 or CS 6440 or STAT 6440- Data Mining
- □ QS 6160- Quality Culture Assessment
- □ QS 6270- Lean Systems Analysis
- □ SCM 6010- Category Management and Strategic Sourcing
- □ TECH 6500- Sustainability
- □ TECH 6200 or SCM 6030- Project Management
- □ TECH 6710- Automation and Robotics in Manufacturing
- LSE 5700- Study Abroad Experience or TECH 6890- Graduate Internship
- □ Other courses as approved by Graduate Coordinator

## Synthesis Courses (3-6 hours) -Either Plan I or Plan II

#### Plan I: Thesis

The thesis option is a major project of original research, conducted under the supervision of the student's major advisor. Students electing this option must register for no fewer than six credit hours of thesis research as part of their degree program.

□ TECH 6990- Thesis Research (6 hours)

## Plan II: Capstone Project

Students choosing this option will conduct an applied project with a company to address a real world problem using skills learned from various program courses. The students will write a project report and present the findings.

TECH 6960- Supervised Practicum in Applied Engineering (3 hours)

### MS-LSE Degree Plan 2021-2022

## SAMPLE PLAN OF STUDY: CAPSTONE PROJECT OPTION

Year 1/Semester 1	Year 1/Semester 2	Year 2/Semester 1	Year 2/Semester 2
LSE 5020	LSE 5020	LSE 6750	TECH 6960*
MBA 5420	MBA 6040	Elective III	
Elective 1	Elective II	Elective IV	

# \* A student may take TECH 6960 in Year 2/Semester 1 and finish this program in 1.5 years

# SAMPLE PLAN OF STUDY: THESIS RESEARCH OPTION

Year 1/Semester 1	Year 1/Semester 2	Year 2/Semester 1	Year 2/Semester 2
LSE 5020	LSE 5020	LSE 6750	TECH 6990
MBA 5420	MBA 6040	Elective III	
Elective 1	Elective II	TECH 6990	