ENGINEERING MANAGEMENT PROGRAM

OVERVIEW OF THE PROGRAM:

The Engineering Management degree at Fairmont State University has been designed to address the the needs of business and industry. It prepares graduates for a wide range of career options in engineering fields as managers, supervisors, corporate executive officers, or as a senior lead analyst. Some advanced responsibilities of engineering managers include operations management, project management, research and development, and determining project feasibility.

Engineering management is a career field that combines engineering knowledge and technological expertise with planning abilities to coordinate complex enterprises from conception to completion. Engineering managers have practical experience as engineers that enables them to apply technological expertise to a project. Equally important, engineering managers have the skills necessary to organize and direct projects, as well as manage personnel like scientists, engineers, technologists, and support staff.

Engineering managers can plan, direct, and supervise research, product development, production, or other engineering activities. Job duties may include:

- Designing innovative engineering solutions for machinery, equipment, products, or systems
- Improving productivity, quality, and competitiveness in engineering and technology endeavors
- Developing solutions to cost management, risk assessment, and product management
- Coordinating with other organizational units, such as management, financial, occupational safety, or marketing

EMPLOYMENT OPPORTUNITIES:

A large percentage of current positions are in manufacturing industries (35%), and approximately 34% can be found in scientific, professional, and technical service areas. The average salary for individuals working in engineering/technology management positions with a master of science degree is \$96,000, and the median national annual salary for engineering managers is in excess of \$140,000.

FAIRMONTSTATE.EDU/collegeofscitech



FAIRMONT STATE UNIVERSITY

College of Science & Technology



ENGINEERING MANAGEMENT PROGRAM

MASTER OF SCIENCE IN ENGINEERING MANAGEMENT

Based on a full-time student **MODEL SCHEDULE**

FALL SEMESTER	
MSET 5400 LEADERSHIP IN ENGINEERING AND TECHNOLOGY MANAGEMENT	. 3
MSET 5500 ORGANIZATIONAL PERFORMANCE AND CHANGE MANAGEMENT	3
MSET 5600 CROSS-CULTURAL TRAINING AND PERFORMANCE IMPROVEMENT	3
TECH 6000 RESEARCH METHODS IN ENGINEERING TECHNOLOGY	3
	TOTAL 12
SPRING SEMESTER	
MSET 6100 ENGINEERING ECONOMIC ANALYSIS	3
MSET 6200 ENGINEERING AND TECHNOLOGY MANAGEMENT	3
MSET 6300 ENGINEERING PROJECT MANAGEMENT I	3
MSET 6400 ENGINEERING IN PRODUCTION SYSTEMS	3
	TOTAL 12
SUMMER SEMESTER	
MSET 6500 TOTAL QUALITY MANAGEMENT AND POLICY	3
TECH 6700 ACTION RESEARCH IN ENGINEERING AND TECHNOLOGY	3
OR	
TECH 6998 THESIS	3
•	FOTAL 6

Note: The above courses are offered in an online distance education format. They may be available in an on-campus format if enough students elect to meet in that fashion. Please contact the Graduate Program Coordinator for additional information.

FAIRMONT STATE UNIVERSITY"

College of Science & Technology

FAIRMONTSTATE.EDU/collegeofscitech

CONTACT INFORMATION

Ragavanantham Shanmugam, PhD. Chair, Department of Engineering Technology 302B Engineering Technology Building Ragavanantham.Shanmugam@fairmontstate.edu Phone: (304) 367-4887