

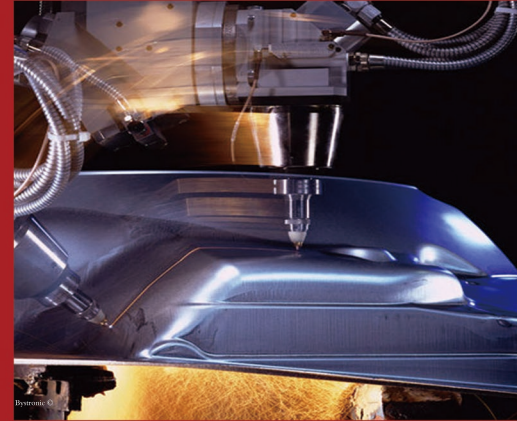
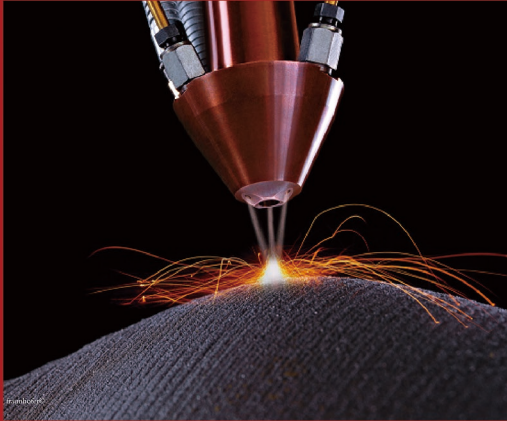


**TEXAS TECH**  
UNIVERSITY.

Whitacre College of Engineering

# Master of Science in Manufacturing Engineering

Department of Industrial, Manufacturing  
& Systems Engineering



## Core Courses:

- IE5351 Advanced Manufacturing Processes
- IE5352 Advanced Manufacturing Engineering
- IE5355 Computer-Aided Manufacturing
- IE5356 Biomedical Design and Manufacturing
- IE5357 Manufacturing Facilities Planning and Design

## Available Technical Tracks:

(including but not limited to)

- Chemical Engineering as Chemical and Petroleum Process
- Electrical Engineering as Integrated Circuit Manufacturing
- Industrial Engineering as Production Management
- Mechanical Engineering as Design for Manufacturing
- Information System as Management

## Employment Opportunity:

**Average Starting Salary:**  
\$79,963

### Potential Careers:

- Manufacturing Engineer
- Production Engineer
- Industrial Engineer
- Facilities Engineer
- Mechanical Engineer
- Project Manager

## Program Overview

Manufacturing is a rapidly growing global enterprise. To respond to the need of high-tech work force in both local and global regions, the Whitacre College of Engineering at Texas Tech University has launched a Master of Science Program in Manufacturing Engineering (MSMfgE). The MSMfgE is a multi-disciplinary program which is directly administrated by the Department of Industrial, Manufacturing & Systems Engineering and is supported by the Stinson Advanced Manufacturing Technology Lab. This program aims to prepare outstanding students to assume key positions in high-tech oriented manufacturing firms by giving them a unique set of cross-disciplinary skills. The program objectives are:

- To combine theoretic and practical knowledge to prepare world-class engineers for a successful career
- To provide graduate level education and training in the interdisciplinary engineering of primary interest to the student
- To prepare engineers to improve quality and efficiency of manufacturing systems
- To advance the knowledge and methodologies for manufacturing system design, analysis, operation, and control

## Program Features

The program is notable for its interdisciplinary and experiential approach. To help students to meet self-defined goals, the program provides two optional degree plans:

### 30-hour thesis program

- 15 credit hours for 5 core courses
- 9 credit hours for selective courses
- 6 credit hours of master's thesis

### 30-hour non-thesis program

- 15 credit hours for 5 core courses
- 15 credit hours for selective courses

## Employment Opportunities

•**Equipment and Automation:** Boeing, General Motors, Ford, Tesla, Cummins, Caterpillar, John Deere, 3M, Texas Instruments, Cameron, and more!

•**Energy:** Exxon, Emerson, GE Energy, Siemens, Chevron, and more!

•**Additive manufacturing:** 3D Systems, HP, Stratasys, FormLabs, and more!

•**Semiconductors:** Apple, Applied Materials, X-FAB, ASML, Intel, AMD, Micron Technology, Qualcomm, and more!

•**Healthcare:** GE Healthcare, Johnson & Johnson, St. Jude Medical, and more!