

# Master of Manufacturing Systems Engineering (M.M.S.E. Degree)

2009-2010 Catalog

Name: \_\_\_\_\_

Degree Courses	Completed	Future	Sem/Year
<b>Core Courses (All Required) - 30 Credits</b>			
ETLS 501 Production Operating Systems			
ETLS 502 Manufacturing Processes			
ETLS 504 Excellence in Operations			
ETLS 505 Managerial Accounting and Performance Management			
ETLS 506 Statistical Methods for Manufacturing Quality			
ETLS 601 Program/Project/Team Management			
ETLS 701 Design of Experiments			
ETLS 771 Materials Engineering			
ETLS 550 Leveraging Leadership for a Lifetime I (1 Credit) – early in program			
ETLS 650 Leveraging Leadership for a Lifetime II (1 Credit) – mid program			
ETLS 850 Leveraging Leadership for a Lifetime III (1 Credit) – late in program			
ETLS 808 Capstone Course			
<b>Process, Assembly and Product Engineering (1 Course Required) – 3 Credits</b>			
ETLS 672 Excellence in Product Design			
ETLS 770 Automated Control of Manufacturing Processes			
ETLS 777 Finite Element Analysis			
<b>Choose one of the following options - 3 or 6 credits</b>			
ETLS 881 Engineering Project Credits AND Completion of Engineering Project/Written Paper and Presentation (45 Credits)			
ETLS 777 Finite Element Analysis AND One Additional Elective Course (48 Credits)			
<b>Electives (3 courses required) Courses may be selected from any graduate program - 9 credits</b>			
ETLS 520 Design and Manufacturing in the Medical Device Industry			
ETLS 551 Strategic Quality Management			
ETLS 552 Supply Chain Synchronization			
ETLS 570 Purchasing, Logistics and Distribution			
ETLS 571 Automation Systems in the U.S. and Overseas			
ETLS 600 Designing Corrective and Preventive Action Systems			
ETLS 640 Lean Six Sigma			
ETLS 670 Masterful Leaders and Leadership			
ETLS 671 Human Aspects of Technical Management			
ETLS 673 Enhanced Product Realization			
ETLS 674 Managing for Improved Profitability			
ETLS 677 Sustainable Development Strategies			
ETLS 682 Safety Health and Environmental Considerations in Manufacturing			
ETLS 699/799 Selected Topics			
ETLS 720 Anatomy and Physiology for Medical Devices			
ETLS 721 Medical Device - Regulatory Submissions			
ETLS 722 Medical Device - Quality Systems			
ETLS 723 Biomaterials in the Design of Medical Devices			
ETLS 730 Cardiovascular Anatomy, Physiology and Medical Devices			
ETLS 752 Technology Forecasting and Strategic Prospective			
ETLS 772 Injection Molding, Die Casting & Related Net Shape Processes			
ETLS 773 Principles of MEMS Product Development			
ETLS 775 Polymers in Design			
ETLS 776 Advanced Engineering Materials			
ETLS 778 Process Design and Improvement – Computer Based Tools			
ETLS 785 Simulation of Logistics and Industrial Systems			
ETLS 815 Leadership and Technology			
ETLS 840 Technology Transfer/Contemporary Problems			
ETLS 851 Enterprise Information Systems			
ETLS 852 Technology Risk Management			
ETLS 853 Introduction to Intellectual Property Law			
ETLS 854 Management of Technology and Innovation			
ETLS 855 Implementing Innovation			
ETLS 880 Directed Studies			

Advisor: \_\_\_\_\_ Date \_\_\_\_\_