

Master of Science in Engineering and Technology Management

Course Work Only Curriculum

Contact: Beth Hegab 318-257-3107 bhegab@latech.edu

| Engineering Management Concentration | | | Management of Technology Concentration | | | Construction Concentration | | | Data Science Concentration | | | Aviation Management Concentration | | |
|--------------------------------------|---|----|---|---|---|---|--|---|---|---------------------------------------|---|---|---------------------------------------|---|
| Core Courses | | 24 | Core Courses | | 6 | Core Courses | | 6 | Core Courses | | 6 | Core Courses | | 6 |
| EMGT 5073 | Engineering Administration | 3 | EMGT 5183 | Project Management | 3 | EMGT 5183 | Project Management | 3 | EMGT 5183 | Project Management | 3 | EMGT 5183 | Project Management | 3 |
| EMGT 5093 | Economics and Decision Making | 3 | INEN 5143 | Statistical Analysis for Six Sigma | 3 | INEN 5143 | Statistical Analysis for Six Sigma | 3 | INEN 5143 | Statistical Analysis for Six Sigma | 3 | INEN 5143 | Statistical Analysis for Six Sigma | 3 |
| EMGT 5183 | Project Management | 3 | Quantitative Analysis and Management (Pick 3 Courses) | | 9 | Quantitative Analysis and Management (Pick 3 Courses) | | 9 | Quantitative Analysis and Management (Pick 3 Courses) | | 9 | Quantitative Analysis and Management (Pick 3 Courses) | | 9 |
| EMGT 5253 | Engineering Finance | 3 | EMGT 5073 | Engineering Administration | 3 | EMGT 5073 | Engineering Administration | 3 | EMGT 5073 | Engineering Administration | 3 | EMGT 5073 | Engineering Administration | 3 |
| INEN 5023 | Operations Research Methods | 3 | EMGT 5093 | Economics and Decision Making | 3 | EMGT 5093 | Economics and Decision Making | 3 | EMGT 5093 | Economics and Decision Making | 3 | EMGT 5093 | Economics and Decision Making | 3 |
| INEN 5053 | Manufacturing and Operations Analysis | 3 | EMGT 5253 | Engineering Finance | 3 | EMGT 5253 | Engineering Finance | 3 | EMGT 5253 | Engineering Finance | 3 | EMGT 5253 | Engineering Finance | 3 |
| INEN 5113 | Theory and Application of Lean Manufacturing and Management | 3 | INEN 5023 | Operations Research Methods | 3 | INEN 5023 | Operations Research Methods | 3 | INEN 5023 | Operations Research Methods | 3 | INEN 5023 | Operations Research Methods | 3 |
| INEN 5143 | Statistical Analysis for Six Sigma | 3 | INEN 5043 | Systems Simulation | 3 | INEN 5043 | Systems Simulation | 3 | INEN 5043 | Systems Simulation | 3 | INEN 5043 | Systems Simulation | 3 |
| | | | INEN 5053 | Manufacturing and Operations Analysis | 3 | INEN 5053 | Manufacturing and Operations Analysis | 3 | INEN 5053 | Manufacturing and Operations Analysis | 3 | INEN 5053 | Manufacturing and Operations Analysis | 3 |
| | | | INEN 5203 | Six Sigma Black Belt Project | 3 | INEN 5203 | Six Sigma Black Belt Project | 3 | INEN 5203 | Six Sigma Black Belt Project | 3 | INEN 5203 | Six Sigma Black Belt Project | 3 |
| | | | INEN 5663 | Six Sigma and Quality Control | 3 | INEN 5663 | Six Sigma and Quality Control | 3 | INEN 5663 | Six Sigma and Quality Control | 3 | INEN 5663 | Six Sigma and Quality Control | 3 |
| | | | MGMT 5373 | Human Resource Management | 3 | MGMT 5373 | Human Resource Management | 3 | MGMT 5373 | Human Resource Management | 3 | MGMT 5373 | Human Resource Management | 3 |
| | | | MGMT 5713 | Organizational Behavior | 3 | MGMT 5713 | Organizational Behavior | 3 | MGMT 5713 | Organizational Behavior | 3 | MGMT 5713 | Organizational Behavior | 3 |
| | | | PSYC 5133 | Organizational Psychology | 3 | PSYC 5133 | Organizational Psychology | 3 | PSYC 5133 | Organizational Psychology | 3 | PSYC 5133 | Organizational Psychology | 3 |
| | | | PSYC 5163 | Industrial Psychology | 3 | PSYC 5163 | Industrial Psychology | 3 | PSYC 5163 | Industrial Psychology | 3 | PSYC 5163 | Industrial Psychology | 3 |
| | | | STAT 5073 | Design and Analysis of Experiments | 3 | STAT 5073 | Design and Analysis of Experiments | 3 | STAT 5073 | Design and Analysis of Experiments | 3 | STAT 5073 | Design and Analysis of Experiments | 3 |
| | | | Science, Engineering, and Entrepreneurship (Pick 3 Courses) | | 9 | Construction and Civil (Pick 3 Courses) | | 9 | Data Science | | 9 | Aviation Management | | 9 |
| | | | ELEN 5353 | Advanced Topics in Microelectronics | 3 | CVEN 5023 | Infrastructure Management | 3 | CSC 5303 | Database Theory | 3 | PRAV 5013 | The Aviation System | 3 |
| | | | ENGR 5543 | Modern Energy Grand Challenges | 3 | CVEN 5033 | Urban Hydrosystems Engineering | 3 | STAT 5093 | Statistical Learning | 3 | PRAV 5023 | Human Error in Aviation | 3 |
| | | | ENTR 5013 | Technology Transfer and Commercialization | 3 | CVEN 5053 | Buried Structures - Rehab and Management | 3 | Select one of the following two courses | | | Select one of the following three courses | | |

| | | | | | | | | | | | | | | | |
|----------------------------|---|---|---------------------------------------|---|---|---------------------------------------|---|---|-------------------------------------|---|---|-------------------------------------|---|---|---|
| | | | ENTR 5103 | Entrepreneurship and New Venture Creations | 3 | CVEN 5063 | Above Ground Structures: Assessment and Rehabilitation | 3 | CSC 5763 | Data Analytics Tools and Applications | 3 | PRAV 5033 | Regulatory Process of Aviation | 3 | |
| | | | ENTR 5603 | Innovative Venture Research | 3 | CVEN 5423 | Sustainable Construction | 3 | INEN 5213 | Introduction to Cognitive Systems Engineering | 3 | PRAV 5043 | Current Issues in Aviation | 3 | |
| | | | MEMT 5083 | Finite Element Analysis | 3 | CVEN 5803 | Trenchless Technology | 3 | | | | PRAV 5053 | Legal Issues in Aviation | 3 | |
| | | | MSE 5013 | Fundamentals of Fabrication Processes | 3 | MEMT 5083 | Finite Element Analysis | 3 | | | | | | | |
| | | | MSE 5023 | Microsystems Principles | 3 | Other courses approved by the advisor | | | | | | | | | |
| | | | MSE 5053 | Nanotechnology Priciples | 3 | | | | | | | | | | |
| | | | MSNT 5183 | Molecular Biotechnology | 3 | | | | | | | | | | |
| | | | Other courses approved by the advisor | | | | | | | | | | | | |
| Electives (Pick 3 Courses) | | | 9 | Electives (Pick 3 Courses) | | 9 | Electives (Pick 2 Courses) | | 6 | Electives (Pick 2 Courses) | | 6 | Electives (Pick 2 Courses) | | 6 |
| BUSN 5013 | Global Perspectives in Business Management | 3 | ACCT 5053 | Accounting Analysis for Decision Making | 3 | ACCT 5053 | Accounting Analysis for Decision Making | 3 | ACCT 5053 | Accounting Analysis for Decision Making | 3 | ACCT 5053 | Accounting Analysis for Decision Making | 3 | |
| CIS 5063 | Advanced Business Analytics | 3 | BUSN 5013 | Global Perspectives in Business Management | 3 | BUSN 5013 | Global Perspectives in Business Management | 3 | BUSN 5013 | Global Perspectives in Business Management | 3 | BUSN 5013 | Global Perspectives in Business Management | 3 | |
| CIS 5213 | Introduction to Information System Assurance | 3 | CIS 5063 | Advanced Business Analytics | 3 | CIS 5063 | Advanced Business Analytics | 3 | CIS 5063 | Advanced Business Analytics | 3 | CIS 5063 | Advanced Business Analytics | 3 | |
| ENTR 5013 | Technology Transfer and Commercialization | 3 | CIS 5213 | Introduction to Information System Assurance | 3 | CIS 5213 | Introduction to Information System Assurance | 3 | CIS 5213 | Introduction to Information System Assurance | 3 | CIS 5213 | Introduction to Information System Assurance | 3 | |
| ENTR 5103 | Entrepreneurship and New Venture Creation | 3 | FINC 5153 | Financial Management | 3 | ENTR 5013 | Technology Transfer and Commercialization | 3 | ENTR 5013 | Technology Transfer and Commercialization | 3 | ENTR 5013 | Technology Transfer and Commercialization | 3 | |
| ENTR 5603 | Innovative Venture Research | 3 | INEN 5113 | Theory and Application of Lean Manufacturing and Management | 3 | ENTR 5103 | Entrepreneurship and New Venture Creation | 3 | ENTR 5103 | Entrepreneurship and New Venture Creation | 3 | ENTR 5103 | Entrepreneurship and New Venture Creation | 3 | |
| INEN 5043 | Systems Simulation | 3 | INEN 5153 | Logistics Planning | 3 | ENTR 5603 | Innovative Venture Research | 3 | ENTR 5603 | Innovative Venture Research | 3 | ENTR 5603 | Innovative Venture Research | 3 | |
| INEN 5153 | Logistics Planning | 3 | INEN 5213 | Introduction to Cognitive Systems Engineering | 3 | FINC 5153 | Financial Management | 3 | FINC 5153 | Financial Management | 3 | FINC 5153 | Financial Management | 3 | |
| INEN 5203 | Six Sigma Black Belt Project | 3 | INEN 5573 | Design for Six Sigma | 3 | INEN 5113 | Theory and Application of Lean Manufacturing and Management | 3 | INEN 5113 | Theory and Application of Lean Manufacturing and Management | 3 | INEN 5113 | Theory and Application of Lean Manufacturing and Management | 3 | |
| INEN 5213 | Introduction to Cognitive Systems Engineering | 3 | MKTG 5303 | Marketing Management | 3 | INEN 5153 | Logistics Planning | 3 | INEN 5153 | Logistics Planning | 3 | INEN 5153 | Logistics Planning | 3 | |
| INEN 5573 | Design for Six Sigma | 3 | PSYC 5233 | Leadership and Decision Making | 3 | INEN 5213 | Introduction to Cognitive Systems Engineering | 3 | INEN 5213 | Introduction to Cognitive Systems Engineering | 3 | INEN 5213 | Introduction to Cognitive Systems Engineering | 3 | |
| INEN 5663 | Six Sigma and Quality Control | 3 | Other electives approved by advisor | | | INEN 5573 | Design for Six Sigma | 3 | INEN 5573 | Design for Six Sigma | 3 | INEN 5573 | Design for Six Sigma | 3 | |
| MGMT 5373 | Human Resource Management | 3 | | | | MKTG 5303 | Marketing Management | 3 | MKTG 5303 | Marketing Management | 3 | MKTG 5303 | Marketing Management | 3 | |
| MGMT 5713 | Organizational Behaviour | 3 | | | | PSYC 5233 | Leadership and Decision Making | 3 | PSYC 5233 | Leadership and Decision Making | 3 | PSYC 5233 | Leadership and Decision Making | 3 | |
| MKTG 5303 | Marketing Management | 3 | | | | Other electives approved by advisor | | | Other electives approved by advisor | | | Other electives approved by advisor | | | |

| | | | | | | | | | | | | | | |
|-------------------------------------|------------------------------------|----|-------|--|----|-------|--|----|-------|--|----|-------|--|----|
| PSYC 5133 | Organizational Psychology | 3 | | | | | | | | | | | | |
| PSYC 5163 | Industrial Psychology | 3 | | | | | | | | | | | | |
| PSYC 5233 | Leadership and Decision Making | 3 | | | | | | | | | | | | |
| STAT 5073 | Design and Analysis of Experiments | 3 | | | | | | | | | | | | |
| Other electives approved by advisor | | | | | | | | | | | | | | |
| Total | | 33 | Total | | 33 | Total | | 33 | Total | | 33 | Total | | 33 |