



**Pittsburg State University, College of Technology**  
**MASTER of SCIENCE in TECHNOLOGY (MST) – 30 Credit Hours**  
*Plan of Study (starting from Spring 2022)*

**1. CORE COURSES – MANDATORY FOR ALL MST STUDENTS (12 HOURS)**

| AREA                                 | COURSE           | COURSE NAME                              | Cr.         |
|--------------------------------------|------------------|--|-------------|
| Research<br>(select 1)               | GRT 891          | Research Methods in Technl.              | 3cr         |
|                                      | TTED 891         | Methods of Research                      |             |
|                                      | HRD 891          | Methods of Research                      |             |
| Stat.Based<br>Analysis<br>(select 1) | ETECH 899        | Quantitat.Decision Making in Indstr.     | 3 cr        |
|                                      | GRT 887          | Statist. Applicatns. & Data Analysis     |             |
|                                      | TTED 887         | Statist. Applicatns. & Data Analysis     |             |
| Leadership                           | HRD 804 (or) 706 | Leadership Management                    | 3cr         |
| Glob. Issues                         | GRT 750          | Technology & Society                     | 2 cr        |
| <b>Assessment</b>                    | <b>GRT 895</b>   | <b>Comp. Exam (in the last semester)</b> | <b>1 cr</b> |

| NOTES  |
|--|
| <ul style="list-style-type: none"> <li>International students enrolled in 9cr on campus may take additional online courses if their total GPA=3.00 or higher.</li> <li>A maximum of six hours of 500/600 level coursework may apply towards MST Emphasis-Elective courses.</li> <li><u>Track1 Curriculum:</u> 12Core +18Emp.Electives</li> <li><u>Track2 Curriculum:</u> 12Core+18Emp.Electives (for international students <b>if</b> they select Internship GRT700).</li> </ul> |

**2. TECHNICAL EMPHASES ELECTIVES - APPROVED BY ADVISORS (18 HOURS):**

- International Students must take GRT799;
- Double MST Emphasis requires additional 12cr of graduate courses approved by academic advisors
- GRT700 is mandatory for students on Track2;
- Change in Emphasis requires REAPPLYING to MST and will need a new transcript evaluation by academic advisers.

|                                       |                                      |  |       |           |   |     |
|---------------------------------------|--------------------------------------|--|-------|-----------|---|-----|
| Automotive<br>Technology              | AT722                                | Alternative Fuels in Tran                  | 3cr   | ETECH809  | Engineering Project Management                    | 3cr |
|                                       | AT795                                | Special Topics in AT                       | 1-3cr | ETECH831  | Value Engineering                                 | 3cr |
|                                       | AT879                                | Emrg/Ftr Pwr Sys Tran Ind                  | 3cr   | ETECH 807 | System Engineering and Analysis                   | 3cr |
|                                       | AT890                                | Tran Ind Srv Mgmt Prod Srv                 | 3cr   | ETECH 804 | Quality: Management & Control                     | 3cr |
|                                       | AT700/800                            | Electives (Adviser approval needed)        | 3-6cr | HRD706    | Strat for Dev HR                                  | 3cr |
|                                       | GRT700                               | Internship for Technologist                | 3cr   | HRD796    | HRD Foundations                                   | 3cr |
|                                       | GRT799                               | Prof Dev for Technologists                 | 3cr   | HRD879    | Creating Connect Through Presentations            | 3cr |
|                                       | GRT 788                              | Lean Manufacturing and Quality Control     | 3cr   |           |   |     |
| STEM<br>College<br>Teaching           | HRD879                               | Creating Connect Through Presentations     | 3cr   | TE 892    | College Teaching Internship                       | 3cr |
|                                       | TE882                                | Instructional Strategies for T&EE          | 3cr   | TE753     | Studies in Technology Education (Assessment)      | 3cr |
|                                       | TE796                                | Organization/Management for TE             | 3cr   | TE 893    | Seminar in Technology Education (Lesson Dev.)     | 3cr |
|                                       | TE881                                | Orientation to College Teaching            | 3cr   | 700-level | Education Related Electives with advisor approval | 3cr |
| GRAPHICS<br>Design (or)<br>Management | GIT810                               | Special Topics                             | 3-6cr | ETECH831  | Value Engineering                                 | 3cr |
|                                       | GIT880                               | Graphics Administration                    | 3cr   | ETECH807  | System Engineering and Analysis                   | 3cr |
|                                       | GIT890                               | Graphic Arts Seminar                       | 3cr   | ETECH 804 | Quality: Management & Control                     | 3cr |
|                                       | GRT700                               | Internship for Technologist                | 3cr   | HRD706    | Strat for Dev HR                                  | 3cr |
|                                       | GRT799                               | Prof Dev for Technologists                 | 3cr   | HRD796    | HRD Foundations                                   | 3cr |
|                                       | ETECH809                             | Engineering Project Management             | 3cr   | HRD879    | Creating Connect Through Presentations            | 3cr |
|                                       | GRT 788                              | Lean Manufacturing and Quality Control     | 3cr   |           |   |     |
| Human<br>Resources                    | HRD706                               | Statistical for Dev HR                     | 3cr   | GRT700    | Internship for Technologist                       | 3cr |
|                                       | HRD796                               | HRD Foundations                            | 3cr   | GRT710    | Industrial Organization and Management            | 3cr |
|                                       | HRD879                               | Creating Connect Through Presentations     | 3cr   | ETECH804  | Quality: Management & Control                     | 3cr |
|                                       | GRT799                               | Professional Development for Technologists | 3cr   | ETECH809  | Engineering Project Management                    | 3cr |
|                                       | GRT 788                              | Lean Manufacturing and Quality Control     | 3cr   | ETECH831  | Value Engineering                                 | 3cr |
| Information<br>Technology             | GRT 713                              | Computer Programming Languages             | 3cr   | ETECH831  | Value Engineering                                 | 3cr |
|                                       | GRT 714                              | Network Administration Concepts            | 3cr   | GRT 710   | Industrial Organization and Management            | 3cr |
|                                       | CIS615/715                           | Database Management                        | 3cr   | ETECH 804 | Quality : Management & Control                    | 3cr |
|                                       | CIS625/725                           | Advanced Database Management               | 3cr   | GRT799    | Prof Dev for Technologists                        | 3cr |
|                                       | CIS640/740                           | E-Business Applications and Development    | 3cr   | GRT700    | Internship for Technologist                       | 3cr |
|                                       | CIS690                               | Special Topic                              | 3-6cr | GRT 788   | Lean Manufacturing and Quality Control            | 3cr |
|                                       | CIS801                               | Special Topic                              | 3-9cr | ETECH809  | Engineering Project Management                    | 3cr |
| Technology<br>Management              | TM606                                | Industrial Supervision                     | 3cr   | GRT700    | Internship for Technologist                       | 3cr |
|                                       | ETECH804                             | Quality: Management & Control              | 3cr   | GRT799    | Prof Dev for Technologists                        | 3cr |
|                                       | ETECH831                             | Value Engineering                          | 3cr   | HRD706    | Strat for Dev HR                                  | 3cr |
|                                       | GRT 710                              | Industrial Organization and Management     | 3cr   | HRD796    | HRD Foundations                                   | 3cr |
|                                       | ETECH 807                            | System Engineering and Analysis            | 3cr   | HRD879    | Creating Connect Through Presentations            | 3cr |
|                                       | ETECH 809                            | Engineering Project Management             | 3cr   | GRT 788   | Lean Manufacturing and Quality Control            | 3cr |
|                                       |                                      |  |       |           |   |     |
| No<br>Emph.                           | <b>Graduate Technology Electives</b> |  | 9cr   | ETECH809  | Engineering Project Management                    | 3cr |
|                                       | GRT799                               | Prof Dev for Technologists                 | 3cr   | ETECH831  | Value Engineering                                 | 3cr |
|                                       | GRT700                               | Internship for Technologist                | 3cr   | ETECH 804 | Quality Management and Control                    | 3cr |
|                                       |                                      |  |       | GRT 788   | Lean Manufacturing and Quality Control            | 3cr |