| MODEL ROUTE | | | | | | | | | | | | | |
|------------------------|---|--------------------------------|---|------------------|--------------------------|------------|-------------|--|--|--|--|--|--|
| School: | School of Engineering Technology & Applied Sciences - AMAT | Program Number: | 3703 | | | | | | | | | | |
| Program Title: | Mechanical Engineering Technology - Design | Credential: | ☐ Certificate ☐ Graduate Certificate ☐ Diploma ☐ Advanced Diploma ☐ Degree | | | | | | | | | | |
| Delivery Mode: | ☑ Non Co-Op ☐ Co-Op ☐ Fast Track | Duration: | ☐ 2 Semesters ☐ 3 Semesters ☐ 4 Semesters ☐ 6 Semesters ☐ 8 Semesters ☐ 9 Semesters | | | | | | | | | | |
| Intake: | Fall 2022 & Winter 2023 | | | | | | | | | | | | |
| Course Code | Course Title | Pre-Requisite (Course Code) | Lab Hours | Lecture Hours | Total Weekly Hours | Weeks (14) | Total Hours | | | | | | |
| Semester 1 | | | | | | | | | | | | | |
| MT-102 | Properties of Material | | 1 | 2 | 3 | 14 | 42 | | | | | | |
| MT-103 | Machine Shop | | 3 | 1 | 4 | 14 | 56 | | | | | | |
| MT-106 | CAD I/Blueprint Reading | | 3 | 2 | 5 | 14 | 70 | | | | | | |
| PHYS-100 | Physics | | 0 | 3 | 3 | 14 | 42 | | | | | | |
| MATH-170 | Technology Math 2 | | 0 | 3 | 3 | 14 | 42 | | | | | | |
| COMM-160/161 | College Communications 1 | | 0 | 3 | 3 | 14 | 42 | | | | | | |
| GNED | General Education Elective | | 0 | 3 | 3 | 14 | 42 | | | | | | |
| Samastar 2 | | Winter 2023 & Summ | or 2022 | | | Total | 336 | | | | | | |
| Semester 2 MT-121 * | Applied Statics | PHYS-100 | er 2023 0 | 4 | 4 | 14 | 56 | | | | | | |
| MT-153 | CAD II | MT-106 or (MT-151 & MT-152) | 4 | 0 | 4 | 14 | 56 | | | | | | |
| MT-237 ♦ | Manufacturing Processes | WIT 100 OF (WIT 151 & WIT 152) | 0 | 3 | 3 | 14 | 42 | | | | | | |
| MT-256 | Applied Electricity | MATH-140 or MATH-170 | 2 | 2 | 4 | 14 | 56 | | | | | | |
| MATH-180 * | Technology Math 3 | MATH-170 | 0 | 3 | 3 | 14 | 42 | | | | | | |
| GNED-500 | Global Citizenship: From Social Analysis to Social Action | | 0 | 3 | 3 | 14 | 42 | | | | | | |
| COMM-170/171 | College Communications 2 | COMM-160/161 | 0 | 3 | 3 | 14 | 42 | | | | | | |
| | | | | | | Total | 336 | | | | | | |
| Semester 3 | | Fall 2023 | 1 | | İ | | | | | | | | |
| MT-201 | CAD/CAM and CNC Programming | MT-103 & MATH-170/140 | 4 | 0 | 4 | 14 | 56 | | | | | | |
| MT-204 * | Strength of Materials | MT-121 & MATH 170 | 1 | 3 | 4 | 14 | 56 | | | | | | |
| MT-318 * | Fluid Mechanics 1 | MATH-170 or MT-204 | 1 | 3 | 4 | 14 | 56 | | | | | | |
| MATH-231 * | Diff. Calc. & Analyt. Geometry | MATH-180 | 0 | 4 | 4 | 14 | 56 | | | | | | |
| MATH-316 | Statistics Applied Ethics in Technology & the | MATH-170 | 2 | 2 | 4 | 14 | 56 | | | | | | |
| AMEG-212 ♦ | Environment | | 0 | 2 | 2 | 14 | 28 | | | | | | |
| Semester 4 | | Winter 2024 | | | | Total | 308 | | | | | | |
| MT-224 * | Applied Dynamics | MT-121 | 0 | 4 | 4 | 14 | 56 | | | | | | |
| MT-225 | Hydraulics & Pneumatics | 122 | 2 | 2 | 4 | 14 | 56 | | | | | | |
| MT-228 | Tool Design | MT-153 | 2 | 2 | 4 | 14 | 56 | | | | | | |
| MT-257 | Quality Assurance | | 1 | 2 | 3 | 14 | 42 | | | | | | |
| MATH-232 | Integral Calculus | MATH-231 | 0 | 4 | 4 | 14 | 56 | | | | | | |
| ENGL-250 | Report Writing in a Technical Environment | COMM-170/171 | 0 | 2 | 2 | 14 | 28 | | | | | | |
| | | | | | | Total | 294 | | | | | | |

| MODEL ROUTE | | | | | | | | | | | | |
|--|--|---------------------------------|---|------------------|-------------------------------|------------|-------------|--|--|--|--|--|
| School: | School of Engineering Technology & Applied Sciences - AMAT | Program Number: | 3703 | | | | | | | | | |
| Program Title: | Mechanical Engineering Technology - Design | Credential: | ☐ Certificate ☐ Diploma ☐ Degree | | ☐ Gradu ☑ Advar | | | | | | | |
| Delivery Mode: | ☑ Non Co-Op ☐ Co-Op ☐ Fast Track | Duration: | ☐ 2 Semesters ☐ 4 Semesters ☐ 8 Semesters | | ☐ 3 Sem ☑ 6 Sem ☐ 9 Sem | | | | | | | |
| Intake: | Fall 2022 & Winter 2023 | | | | | | | | | | | |
| Course Code | Course Title | Pre-Requisite (Course Code) | Lab Hours | Lecture Hours | Total Weekly Hours | Weeks (14) | Total Hours | | | | | |
| Semester 5 | Fall 2024 | | | | | | | | | | | |
| MT-258 | Project: Design & Construction | MT-153 & MT-204 or FT Code | 4 | 0 | 4 | 14 | 56 | | | | | |
| MT-305 | Dynamics of Machines & Mechanisms | MT-224 | 0 | 3 | 3 | 14 | 42 | | | | | |
| MT-309 | Thermodynamics 1 | ESET-221 or MT-318 | 1 | 3 | 4 | 14 | 56 | | | | | |
| MT-335 | Machine Design 1 | MT-204 or FT Code | 0 | 4 | 4 | 14 | 56 | | | | | |
| MT-338 | Fluid Mechanics 2 | MT-318 | 1 | 3 | 4 | 14 | 56 | | | | | |
| MTID-311 ♦ | Operational Excellence | | 0 | 4 | 4 | 14 | 56 | | | | | |
| | | | | | | Total | 322 | | | | | |
| Semester 6 | | Winter 2025 | | | | | | | | | | |
| MT-300 | FEA Applications | MT-153 & MT-335 | 3 | 0 | 3 | 14 | 42 | | | | | |
| MT-323 ♦ | Instrumentation & Control | MT-256 & MT-318 | 1 | 2 | 3 | 14 | 42 | | | | | |
| MT-324 | Advanced Project: Design & Construction | MT-258 | 6 | 0 | 6 | 14 | 84 | | | | | |
| MT-339 | Thermodynamics 2 | MT-309 | 0 | 4 | 4 | 14 | 56 | | | | | |
| MT-342 | Machine Design 2 | MT-335 | 0 | 4 | 4 | 14 | 56 | | | | | |
| GNED | General Education Elective | | 0 | 3 | 3 | 14 | 42 | | | | | |
| | | | | | | Total | 322 | | | | | |
| | | | | | Total Prog | ram Hours: | 1918 | | | | | |
| Notes: | | | | | | | | | | | | |
| Minimum Progran | n GPA of 2.00 is required for graduation | | | | | | | | | | | |
| ♦ This course may | be offered in one of the following modalit | ies: Online, Hybrid, or Blended | | | | | | | | | | |
| * Minimum C grade required for Technologist graduation | | | | | | | | | | | | |
| | 0 ((2): | | | | | | | | | | | |
| Signature: | Donald Wang | | April 12, 2022 | | | | | | | | | |