| Program: | MTT.AAS Machine Tool Technology AAS (66 credits) | | Division: STEM |
|---|---|---|---|
| Student: | | ID#: | Catalog Year: 2024-2025 |

| Developmental Education Courses (if required) | | | | | | | |
|---|---|---|---|---|---|---|---|
| ☐ | EAP-018 | Intensive Academic English | ☐ | MAT-020 | Basics of College Math | ☐ | COM-017/019 | Foundational Reading/Writing |
| ☐ | EAP-020/040 | EAP Reading I and Writing I | ☐ | MAT-03_ | | ☐ | COM-097 | Academic Literacy I |
| ☐ | EAP-050/060 | EAP Writing II and Reading II | | | | ☐ | COM-098 | Academic Literacy II |

**SEMESTER BY SEMESTER MAP FOR FULL-TIME STUDENTS**

Courses are listed in preferred order of completion. Plans may be modified by adding more semesters.

| SEMESTER 1 – Fall (17 credits) | | | | | |
|---|---|---|---|---|---|
| | Course# | Course Name | Cr. | Pre-requisites/ Co-requisites | Semesters |
| M | MTT-100 | Basic CNC Machine Operation – OSHA Certification | 5 | MAT-020 | ALL |
| M | MTT-105 | Introduction to Machining | 3 | MAT-020 | ALL |
| M | MTT-110 | Basic Machine Tools | 3 | MAT-020 | ALL |
| G | CSS-103* | College Success Strategies | 3 | | All & OL |
| G | COM-121* | English Composition | 3 | COM-098 or EAP-050 and EAP-060 | All & OL |

| SEMESTER 2 – Spring (15 credits) | | | | | |
|---|---|---|---|---|---|
| | Course# | Course Name | Cr. | Pre-requisites/ Co-requisites | Semesters |
| M | MTT-132 | Blueprint Reading | 3 | MTT-105, MTT-110 | ALL |
| M | MTT-157 | Turning Technology - Level 1 | 3 | MTT-105 | ALL |
| M | MTT-158 | Milling Technology - Level 1 | 3 | MTT-105 | ALL |
| G | MAT-165 | Trigonometry | 3 | MAT-160 or by math placement score | All &OL |
| G | SOC-130 | Sociology | 3 | COM-098 or EAP-050 and EAP-060 | All & OL |

| SEMESTER 3 – Fall (17 credits) | | | | | |
|---|---|---|---|---|---|
| | Course# | Course Name | Cr. | Pre-requisites/ Co-requisites | Semesters |
| M | MTT-107 | Engineering Graphics | 2 | MTT-132 | ALL |
| M | MTT-180 | CNC Programming | 3 | MAT-165 | ALL |
| M | MTT-185 | CNC Milling - Level 1 | 3 | Co-requisite:    MTT-212 | ALL |
| M | MTT-212 | Milling Technology - Level 2 | 3 | MTT-158 | ALL |
| G | COM-141 | Technical Writing | 3 | COM-121* with "C" or better | All |
| G | IFT-110* | Microcomputer Applications | 3 | MAT-020; COM 098 or EAP 050 & EAP 060 | ALL & OL |

| SPRING SEMESTER 4 – Spring (16-19 credits) | | | | | |
|---|---|---|---|---|---|
| | Course# | Course Name | Cr. | Pre-requisites/ Co-requisites | Semesters |
| M | MTT-225 | Turning Technology - Level 2 | 3 | MTT-157 | ALL |
| M | MTT-272 | CNC Milling - Level 2 | 3 | MTT-185 | ALL |
| M | MTT-288 | CAM Programming | 3 | MTT-180 | ALL |
| G | Humanities | ART-111, ART-201, COM-110, ENG-125*, MUS-221, PHI-271*, PHI-275* or THR-120 | 3 | COM-098 or EAP-050 and EAP-060 or COM-121* with "C" or better | All & OL |
| G | PHY-150 | Applied Physics | 4 | MAT-110, COM-098 or EAP-050 and EAP-060 | Fall/Spring |
| E | MTT/MET Elective | See below | Var. | | |

| Electives: choose one | | | | | |
|---|---|---|---|---|---|
| | Course# | Course Name | Cr. | Pre-requisites/ Co-requisites | Semesters |
| E | MTT-265 | CNC Fixture Design | 2 | MTT-132, MTT-107, MAT-165 | ALL |
| E | MTT-276 | Advanced CNC Turning | 3 | MTT-180 | ALL |
| E | MET-111 | Fundamentals of Manufacturing | 1 | MAT-035 with a "C" or better | ALL |
| E | MTT-221 | Grinding Technology | 3 | MTT-110, MTT-158 | ALL |

| Date created: September 2019 | Updated: June 2024 | All = Fall/Spring/Summer; OL = Online |
|---|---|---|
| | | M = Major; E = Elective; G = GenEd |

*Sections of these courses offered in the Honors Program, check https://www.racc.edu/academics/honors-program for details.  **Online (OL)** may not be offered every semester.  Please check the schedule.