| Program: | MET.AAS Mechatronics Engineering Technology (69 credits) | | Division: STEM |
|----------|--|------|-------------------------|
| Student: | | ID#: | Catalog Year: 2023-2024 |

| Dev | 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.

| SEN | SEMESTER I – Fall (17 credits) | | | | | | |
|-----|--------------------------------|--|-----|--|-----------|--|--|
| ٧ | Course# | Course Name | Cr. | Pre-requisites/ Co-requisites | Semesters | | |
| | CSS-103* | College Success Strategies | 3 | | All & OL | | |
| | IFT-110 | Microcomputer Applications | 3 | MAT 020; COM-098 or EAP-050 and EAP-060 | All | | |
| | MET-120 | Industrial Mechanics I | 5 | MAT-035 with a "C" or better | All | | |
| | MET-130 | Industrial Electrical Systems | 4 | MAT 030 or MAT-035 with a "C" or better or by placement test | All | | |
| | MET-140A | Intro to Programmable Logic Controllers I | 2 | MET-130 | All | | |

| SEN | SEMESTER 2 – Spring (20 credits) | | | | | | |
|-----|----------------------------------|---|-----|--|-----------|--|--|
| ٧ | Course# | Course Name | Cr. | Pre-requisites/ Co-requisites | Semesters | | |
| | MAT-160 | College Algebra | 3 | MAT-110 | All & OL | | |
| | COM-121* | English Composition I | 3 | COM-098 or EAP-050 and EAP-060 (C or better) | All & OL | | |
| | MET-140B | Intro to Programmable Logic Controllers II | 2 | MET-140A | All | | |
| | MET-150 | Industrial Mechanics II | 6 | MET-120 | All | | |
| | MET-160 | Rotating Electrical Machines | 3 | MET-130 | All | | |
| | MET-101 | Fundamentals of Shop Machinery | 3 | MAT-035 with a "C" or better | All | | |

| SEN | SEMESTER 3 – Fall (16 credits) | | | | | | |
|-----|--------------------------------|-------------------------------------|-----|------------------------------------|-------------|--|--|
| ٧ | Course# | Course Name | Cr. | Pre-requisites/ Co-requisites | Semesters | | |
| | COM-141 | Technical Writing | 3 | COM-121 or COM-122 ("C" or better) | All & OL | | |
| | PHY-240 | Physics I | 4 | COM 098 or EAP 050 and EAP 060 | Fall/Spring | | |
| | | | | MAT 160 or MAT 110 and EUT 110 | | | |
| | MET-220 | Advanced PLCs (Control Logix or S7) | 4 | MET-140A and MET-140B | All | | |
| | MET-200 | Robotics and Motion Control | 4 | MET-140A, MET-140B, MET-160 | All | | |
| | MET-111 | Fundamentals of Manufacturing | 1 | MAT-035 with a "C" or better | All | | |

| SI | SEMESTER 4 – Spring (16 credits) | | | | | | |
|----|----------------------------------|---|-----|--|-----------|--|--|
| ٧ | Course# | Course Name | Cr. | Pre-requisites/ Co-requisites | Semesters | | |
| | Humanities | ART-111 or 201, COM-110, ENG-125*, PHI-271*, or PHI-275* | 3 | COM-098 or EAP-050 and EAP-060 ("C" or better) | All & OL | | |
| | STEM Elective | BIO-150, CHE-150, or PHY-245 *BIO-150 or CHE-150 can be substituted with BIO-120 (Biological Concepts) or CHE-120 (Principles of Chemistry) | 4 | CHE-120 if taking BIO-150 or CHE 150 PHY-240 if taking PHY-245 | All & OL | | |
| | SOC-130* | Sociology | 3 | COM-098 or EAP-050 and EAP-060 | All & OL | | |
| | MET-210 | Process Control & Instrumentation | 3 | MET-130, MAT-160 | All | | |
| | MET-240 | Mechatronics Application Project | 3 | MET-150, MET-200, MET-210, MET-220 | All | | |

^{*}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.

| Date created: September 2019 | Updated: May 2023 | All = Fall/Spring/Summer |
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Advisor's Contact Information:

| | Office | Phone | Extension | E-Mail |
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