



Program Completion Guide

ASSOCIATE IN APPLIED SCIENCE - MECHATRONICS ENGINEERING TECHNOLOGY (A40350)

Automation & Robotics Engineering Technician

Student Name: _____ ID #: _____ Date of Enrollment: _____

Advisor Name: _____ Contact Information: _____

Note: Developmental coursework may be required. Please refer to the Developmental Education Guide for additional information.

A. Mechatronics Engineering Technology Certificate (C40350) Course Requirements 16 credit hours: Complete Section A.

| Courses | Cr. | Recommended Semester | Prerequisites/ Corequisites | Semester Registered/ Planned | Semester Completed/ Grade |
|---------------------------------|-----|-------------------------------|----------------------------------------|------------------------------------|---------------------------------|
| ELC 117 Motors and Controls* | 4 | 1 st year – spring | Pre: ELC 112 or ELC 131 | | |
| ELC 131 Circuit Analysis I* | 4 | 1 st year – fall | Pre: MAT 003 Tier 2 or BSP 4003 Tier 2 | | |
| ELC 213 Instrumentation* | 4 | 2 nd year – spring | Pre: ELC 128 or ELN 260 | | |
| ELN 260 Prog Logic Controllers* | 4 | 2 nd year – fall | Pre: ELC 112 or ELC 131 | | |

B. Mechatronics Engineering Technology Associate in Applied Science Degree (A40350) Course Requirements 73-74 credit hours: Complete Section B.

| Courses | Cr. | Recommended Semester | Prerequisites/ Corequisites | Semester Registered/ Planned | Semester Completed/ Grade |
|------------------------------------------------------------------------------|-----|-------------------------------|----------------------------------------------------------|------------------------------------|---------------------------------|
| ACA 122 College Transfer Success | 1 | 1 st year – fall | None | | |
| CIS 110 Introduction to Computers* | 3 | 1 st year – fall | None | | |
| ELC 112 DC/AC Electricity* | 5 | 1 st year – fall | Pre: MAT 003 or BSP 4003 | | |
| or ELC 131 Circuit Analysis I* | 4 | | Pre: MAT 003 Tier 2 or BSP 4003 Tier 2 | | |
| ENG 111 Writing and Inquiry | 3 | 1 st year – fall | Pre: ENG 011 Co: None | | |
| MAT 171 Precalculus Algebra | 4 | 1 st year – fall | Pre: MAT 003 Tier 3 or BSP 4003 Tier 3 or MAT 071 | | |
| ELC 117 Motors and Controls* | 4 | 1 st year – spring | Pre: ELC 112 or ELC 131 | | |
| ELN 229 Industrial Electronics | 4 | 1 st year – spring | Pre: ELC 112 or ELC 131 | | |
| HYD 110 Hydraulics/Pneumatics I* | 3 | 1 st year – spring | Pre: MAT 003 or BSP 4003 | | |
| ISC 112 Industrial Safety* | 2 | 1 st year – spring | None | | |
| MAT 172 Precalculus Trigonometry | 4 | 1 st year – spring | Pre: MAT 171 with a grade of "C" or better. | | |
| ENG 112 Writing/Research in the Disciplines or COM 231 Public Speaking | 3 | 1 st year – summer | Pre: ENG 111 with a grade of "C" or better None | | |
| DFT 151 CAD I* | 3 | 2 nd year – fall | Pre: MAT 003 or BSP 4003, ENG 002 or BSP 4002 or ENG 111 | | |
| ELN 260 Prog Logic Controllers* | 4 | 2 nd year – fall | Pre: ELC 112 or ELC 131 | | |
| ISC 132 Manufacturing Quality Control | 3 | 2 nd year – fall | None | | |
| MEC 130 Mechanisms* | 3 | 2 nd year – fall | Pre: MAT 003 or BSP 4003 | | |
| PHY 131 Physics-Mechanics* | 4 | 2 nd year – fall | Pre: MAT 121 or MAT 171 | | |



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|----------------------------------------------|---|-------------------------------|--------------------------------------------------------------------------------------|--|--|
| or PHY 151 College Physics I* | | | Pre: ENG 002 or BSP 4002 or ENG 111, MAT 171 or MAT 271 | | |
| ATR 112 Intro to Automation* | 3 | 2 nd year – spring | Pre: ELN 260 | | |
| ATR 120 Intro to Autonomous Vehicles | 3 | 2 nd year – spring | Pre: ELC 128 or ELN 260 | | |
| ELC 213 Instrumentation* | 4 | 2 nd year – spring | ELC 128 or ELN 260 | | |
| MEC 110 Introduction to CAD/CAM | 2 | 2 nd year – spring | None | | |
| MNT 240 Industrial Equip Troubleshooting | 2 | 2 nd year – spring | Pre: ELC 112 or ELC 131 Co: ELC 128 or ELN 260 | | |
| or WBL 111 Work-Based Learning I | 1 | | Pre: 9 or 14 SHC in the major core courses depending on program Co: WBL 115 | | |
| and WBL 115 Work-Based Learning Seminar I | 1 | | Pre: 9 or 14 SHC in the major core courses depending on program Co: WBL 111 | | |

Electives: (All degree seeking students must take one Humanities/Fine Arts and one Social/Behavioral Sciences elective from lists below unless a specific course is required above.)

| Humanities/Fine Arts Electives (3 credit hours)** Courses with the following prefixes will satisfy this requirement: ART, DRA, ENG (literature courses only), HUM, MUS, PHI, REL, and SPA (Intermediate Spanish I only). | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------------|--------------------------|
| Courses offered at RCC: ART 111, DRA 111, ENG 231, ENG 232, MUS 110, PHI 240, REL 211, REL 212 | | | |
| Course | Recommended Semester | Semester Registered/Planned | Semester Completed/Grade |
| | 1st year – summer | | |

| Social/Behavioral Sciences Electives (3 credit hours)** (Courses with the following prefixes will satisfy this requirement: ANT, ECO+, GEO, HIS, POL, PSY, and SOC) +Some business and accounting curricula require economics and do not accept ECO courses as fulfillment of this elective requirement. | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------------|--------------------------|
| Courses offered at RCC: ANT 220, HIS 111, HIS 112, HIS 131, HIS 132, PSY 150, PSY 241, SOC 210, SOC 213 | | | |
| Course | Recommended Semester | Semester Registered/Planned | Semester Completed/Grade |
| | 1st year – summer | | |

NOTES: *All courses must be completed with a grade of “C” or better.

**See course catalog for prerequisite and/or corequisite requirements.

Students please read the following and sign below.

I understand that as an RCC student, I am ultimately responsible for my schedule. I understand that I must complete each course with a grade of “C” or better and follow the established course sequence or my ability to graduate on time may be affected.

My advisor has information regarding other colleges and transfer opportunities that I can investigate after completing my degree/diploma/certificate, and I understand that if I would like more information I can schedule an appointment with him/her.

Student Name: _____ Student Signature: _____ Date: _____

Advisor Name: _____ Advisor Signature: _____ Date: _____

Student Name: _____ Student Signature: _____ Date: _____

Advisor Name: _____ Advisor Signature: _____ Date: _____

Student Name: _____ Student Signature: _____ Date: _____

Advisor Name: _____ Advisor Signature: _____ Date: _____

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