

## Program Completion Guide ASSOCIATE IN APPLIED SCIENCE - MECHATRONICS ENGINEERING TECHNOLOGY (A40350) Automation & Robotics Engineering Technician

Student Name: \_\_\_\_\_ 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 <sup>st</sup> year – spring	Pre: ELC 112 or ELC 131		
ELC 131 Circuit Analysis I*	4	1 <sup>st</sup> year – fall	Pre: MAT 003 Tier 2 or BSP 4003 Tier 2		
ELC 213 Instrumentation*	4	2 <sup>nd</sup> year – spring	Pre: ELC 128 or ELN 260		
ELN 260 Prog Logic Controllers*	4	2 <sup>nd</sup> 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 <sup>st</sup> year – fall	None		
CIS 110 Introduction to Computers*	3	1 <sup>st</sup> year – fall	Pre: ENG 002 or BSP 4002 or ENG 111		
ELC 112 DC/AC Electricity*	5		Pre: MAT 003 or BSP 4003		
or ELC 131 Circuit Analysis I*	4	1 <sup>st</sup> year – fall	Pre: MAT 003 Tier 2 or BSP 4003 Tier 2		
ENG 111 Writing and Inquiry	3	1 <sup>st</sup> year – fall	Pre: ENG 011 Co: None		
MAT 171 Precalculus Algebra	4	1 <sup>st</sup> year – fall	Pre: MAT 003 Tier 3 or BSP 4003 Tier 3 or MAT 071		
ELC 117 Motors and Controls*	4	1 <sup>st</sup> year – spring	Pre: ELC 112 or ELC 131		
ELN 229 Industrial Electronics	4	1 <sup>st</sup> year – spring	Pre: ELC 112 or ELC 131		
HYD 110 Hydraulics/Pneumatics I*	3	1 <sup>st</sup> year – spring	Pre: MAT 003 or BSP 4003		
ISC 112 Industrial Safety*	2	1 <sup>st</sup> year – spring	None		
MAT 172 Precalculus Trigonometry	4	1 <sup>st</sup> year – spring	Pre: MAT 171 with a grade of "C" or better.		
ENG 112 Writing/Research in the Disciplines or	3	1 <sup>st</sup> year – summer	Pre: ENG 111		
COM 231 Public Speaking			None		
DFT 151 CAD I*	3	2 <sup>nd</sup> year – fall	Pre: MAT 003 or BSP 4003, ENG 002 or BSP 4002 or ENG 111		
ELN 260 Prog Logic Controllers*	4	2 <sup>nd</sup> year – fall	Pre: ELC 112 or ELC 131		
ISC 132 Manufacturing Quality Control	3	2 <sup>nd</sup> year – fall	None		
MEC 130 Mechanisms*	3	2 <sup>nd</sup> year – fall	Pre: MAT 003 or BSP 4003		
PHY 131 Physics-Mechanics*	4	2 <sup>nd</sup> year – fall	Pre: MAT 121 or MAT 171		



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 <sup>nd</sup> year – spring	Pre: ELN 260	
ATR 120 Intro to Autonomous Vehicles	3	2 <sup>nd</sup> year – spring	Pre: ELC 128 or ELN 260	
ELC 213 Instrumentation*	4	2 <sup>nd</sup> year – spring	ELC 128 or ELN 260	
MEC 110 Introduction to CAD/CAM	2	2 <sup>nd</sup> year – spring	None	
MNT 240 Industrial Equip Troubleshooting	2		Pre: ELC 112 or ELC 131 Co: ELC 128 or ELN 260	
or			Pre: 9 or 14 SHC in the major core courses depending on	
WBL 111 Work-Based Learning I and	1	2 <sup>nd</sup> year – spring	program Co: WBL 115	
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 RC	C:				
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:
Student Name:	Student Signature:	Date:
Academic Year: 2023 -2024		Revised 8/16/202

