

### **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:					
Section I: Developmental Courses (	(if needed)					
Courses	Scores	Cr.	Prerequisites/ Corequisites	Grade	Notes/Semester	
DMA 010 Operations with Integers	<7 on DAP	1	Pre: None			
DMA 020 Fractions and Decimals	<7 on DAP	1	Pre: DMA 010			
DMA 030 Propor/Ratio/Rate/Percent	<7 on DAP	1	Pre: DMA 010-020			
DMA 040 Express/Lin Equat/Inequal	<7 on DAP	1	Pre: DMA 010-030 or MAT 060			
DMA 050 Graphs/Equations of Lines	<7 on DAP	1	Pre: DMA 010-040 or DMA 040 and MAT 060			
DMA 060 Polynomial/Quadratic Appl (Required if taking MAT 171)	<7 on DAP	1	Pre: DMA 010-050 or MAT 060 and MAT 070			
DMA 070 Rational Express/Equation (Required if taking MAT 171)		1	Pre: DMA 010-060 or MAT 060 and MAT 070			
DMA 080 Radical Express/Equations (Required if taking MAT 171)		1	Pre: DMA 010-070 or MAT 060 and MAT 070			
DRE 096 Integrated Reading and Writing	104-116	3	Pre: None Co: CIS 070			
DRE 097 Integrated Reading Writing II	117-135	3	Pre: DRE 096 Co: CIS 070			
DRE 098 Integrated Reading Writing III	136-150	3	Pre: DRE 097 Co: CIS 070			

#### Section II:

### A. Mechatronics Engineering Technology Certificate (C40350) Course Requirements 16 credit hours: Complete Section I (as required) and Section II, A.

Courses	Cr.	Recommended Semester	Prerequisites/ Corequisites	Semester Registered/ Planned	Semester Completed/ Grade
Courses	cı.	Semester	Corequisites	Flaillieu	Graue
ELC 117 Motors and Controls*	4	1 <sup>st</sup> year – spring	Pre: DMA 010-080 or MAT 080		
ELC 131 Circuit Analysis I*	4	1 <sup>st</sup> year – fall	Pre: DMA 010-050 or MAT 070 Co: DRE 096		
ELC 213 Instrumentation*	4	2 <sup>nd</sup> year – spring	None		
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 72-73 credit hours: Complete Section I (as required) and Section II, A and B.

		Recommended	Prerequisites/	Semester Registered/	Semester Completed/
Courses	Cr.	Semester	Corequisites	Planned	Grade
ACA 122 College Transfer Success	1	1st year – fall	None		
CIS 110 Introduction to Computers*	2	1st year – fall	Pre: DRE 097		
Cis 110 introduction to computers		1 year – Tali	Co: DRE 098		
ELC 112 DC/AC Electricity*	5		Pre: DMA 010		
or.		1st year – fall	Pre: DMA 010-050 or MAT		
or ELC 131 Circuit Analysis I*	4	1 year - Iali	070		
ELC 131 Circuit Analysis i	4		Co: DRE 096		

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		194.	
ENG 111 Writing and Inquiry	3	1 <sup>st</sup> year – fall	Pre: DRE 098 or ENG 090 & RED 090 Co: ACA 122
ELC 117 Motors and Controls*	4	1st year – spring	Pre: ELC 112 or ELC 131
ELN 133 Digital Electronics	4	1 <sup>st</sup> year – spring	Pre: ELC 112 or ELC 131
LLN 133 Digital Electroffics	4	1" year — spring	
HYD 110 Hydraulics/Pneumatics I*	3	1 <sup>st</sup> year – spring	Pre: DMA 010-030 or MAT 060
ISC 112 Industrial Safety*	2	1st year – spring	None
MAT 172 Precalculus Trigonometry	4	1st year – spring	Pre: MAT 171
ENG 112 Writing/Research in the Disciplines or	3	1 <sup>st</sup> year – summer	Pre: ENG 111
COM 231 Public Speaking			Pre: DRE 098
DFT 151 CAD I*	3	2 <sup>nd</sup> year – fall	Pre: DMA 010-030 or MAT 060, DRE 097 or RED 080
ISC 132 Manufacturing Quality Control	3	2 <sup>nd</sup> year – fall	None
MEC 130 Mechanisms*	3	2 <sup>nd</sup> year – fall	Pre: DMA 010-020 or MAT 060
PHY 151 College Physics I*	4	2 <sup>nd</sup> year – fall	Pre: DRE 098 or RED 090, MAT 171 or MAT 271
ATR 112 Intro to Automation*	3	2 <sup>nd</sup> year – spring	Pre: ELN 260
ELC 213 Instrumentation*	4	2 <sup>nd</sup> year – spring	None
MEC 110 Intro to CAD/CAM	2	2 <sup>nd</sup> year – spring	Pre: DMA 010-020 or MAT 060
MEC 180 Engineering Materials	3	2 <sup>nd</sup> year – spring	None
MNT 240 Industrial Equip Troubleshooting	2	2 <sup>nd</sup> year – spring	Pre: ELC 112 or ELC 131 Co: ELC 128 or ELN 260

Electives: (All degree seeking students <u>must</u> 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).
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Courses offered at RCC:

ART 111, DRA 111, ENG 131, ENG 231, ENG 232, MUS 110, PHI 240, REL 211, REL 212, SPA 211

7.11. 111, 5.11. 111, 2.10 151, 2.10 151, 2.10 151, 1.10 115, 1.11 115, 1.21 111, 1.21 111						
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.

#### 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:

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<sup>\*\*</sup>See course catalog for prerequisite and/or corequisite requirements.



Advisor Name:	Advisor Signature:	Date:
Student Name:	Student Signature:	Date:
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