



**Program: Mechatronics Engineering Technology AAS (75 credits) Division: Science/Math**

Student:	ID#:	Catalog Yr: 2016-17
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**GENERAL EDUCATION REQUIREMENTS –AAS (28 credits)**

√	Course#	Course Name	Cr.	Req.	Pre-requisites	Sem.	Code <sup>^</sup>
	ORI-103*	College Success Strategies	3	X		All & OL	
	COM-121*	English Composition I	3	X	COM-061 or ESL-060 and COM-050/1 or ESL-050 (C or higher)	All & OL	WC/IL
	COM-141	Technical Writing	3	X	COM-121 or COM-122 (C or better)	F/Sp & OL	OC
	IFT-110*	Microcomputer Applications	3	X	MAT-020 and COM-061 or ESL-060	All & OL	TC

**ARTS AND HUMANITIES: 3 credits**

<b>Select 1 course from the following:</b>							
	ART-111	Introduction to Drawing	3	X	COM-061 or ESL-060 and COM-050/1 or ESL-050	All	AU
	ART-201	Art Appreciation	3		COM-121 or COM-122	All & OL	AU
	COM-110	Intro. to Creative Writing	3		COM-061 or ESL-060 and COM-050/1 or ESL-050	F/SP & OL	AU
	ENG-125*	Introduction to Literature	3		COM-121 or COM-122 (C or higher)	All	AU
	PHI-271*	Philosophy	3		COM-121 or COM-122	All & OL	AU
	PHI-275*	Ethics	3		COM-121 or COM-122	Fall/Sp	AU

**MATHEMATICS: 3 credits**

	MAT-165	Trigonometry	3	X	MAT-160 or by assessment	All & OL	QR/CA
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**NATURAL/PHYSICAL SCIENCES: 7 credits**

	PHY-150	Applied Physics	4	X	COM 061 or ESL 060, MAT 110	Fall/Sp	SR
	ENV-130*	The Environment	3	X	COM 061 or ESL 060	All & OL	

**SOCIAL SCIENCES: 3 credits**

	SOC-130*	Sociology	3	x	COM-061 or ESL-060 and COM-050/1 or ESL-050	All & OL	CU
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\*Sections of these courses offered in the Honors Program, check <http://www.racc.edu/Academics/Honors/courses.aspx> for details.

**Online (OL)** may not be offered every semester. Please check the schedule.

<sup>^</sup> Code	This course fulfills the Core Competency for:
WC/IL	Written Communication/Information Literacy
OC	Oral Communication
QR/CA	Quantitative Reasoning/Critical Analysis
CU	Cultural Understanding
AU	Aesthetic Understanding
SR	Scientific Reasoning
TC	Digital/Technical Competence



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**MAJOR REQUIREMENTS (47 credits)**

√	Course#	Course Name	Cr.	Req.	Pre-requisites	Sem.	Grade
	NET-106	Installation and Maintenance of PCs I	3	X	IFT-110	Spring	
	MET-100	Intro to Shop Machinery	3	X	MAT 035 with a "C" or higher, COM 021	All	
	MET-110	Manufacturing Fundamentals	1	X	MAT 035 with a "C" or higher, COM 021	All	
	MET-120	Industrial Mechanics I	5	X	MAT-110	All	
	MET-130	Industrial Electrical Systems	4	X	MAT-110	All	
	MET-140A	Intro to Programmable Logic Controllers I	2	X	MET-130	All	
	MET-140B	Intro to Programmable Logic Controllers II	2	X	MET-140A	All	
	MET-150	Industrial Mechanics II	6	X	MET-120, PHY-150	All	
	MET-160	Rotating Electrical Machines	4	X	MET-130	All	
	MET-200	Robotics and Motion Control	4	X	MET-140A, MET-140B, MET-160	All	
	MET-210	Process Control & Instrumentation	3	X	MET-130, PHY-150	All	
	MET-220	Advanced PLCs (ControlLogix or S7)	4	X	MET-140A, MET-140B (Co-requisites: MET-200, MET-210)	All	
	MET-230	Integrated Manufacturing Systems	3	X	MET-200, MET-220, NET-206	All	
	MET-240	Mechatronics Application Project	3	X	MET-150, MET-200, MET-210, MET-220	All	

**Advisor's Contact Information:**

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