



<b>Program: Mechatronics Engineering Technology AAS (75 credits)    Division: Science/Math</b>		
Student:	ID#:	Catalog Yr: 2015-16

**GENERAL EDUCATION REQUIREMENTS –AAS (25 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
	IFT-110	Microcomputer Applications	3	X	MAT-020	All & OL	TC
<b>HUMANITIES: 6 credits</b>							
<b>Select 1 course from the following:</b>							
	COM-141	Technical Writing	3	X	COM-121 or COM-122 (C or better)	F/Sp & OL	OC
<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	Fall/Sp	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	AU
	PHI-275*	Ethics	3		COM-121 or COM-122	Fall/Sp	AU
<b>MATHEMATICS: 3 credits</b>							
	MAT-165	Trigonometry	3	X	MAT-160 or by assessment	All	QR/CA
<b>NATURAL/PHYSICAL SCIENCES: 4 credits</b>							
	PHY-150	Applied Physics	4	X	COM 061 or ESL 060, MAT 110	Fall/Sp	SR
<b>SOCIAL SCIENCES: 3 credits (Select 1 course)</b>							
	ANT-140	Cultural Anthropology	3	X	COM-061 or ESL-060 and COM-050/1 or ESL-050	All	CU
	HIS-110	US History to 1877	3		COM-061 or ESL-060 and COM-050/1 or ESL-050	Fall	CU
	HIS-115	US History since 1865	3		COM-061 or ESL-060 and COM-050/1 or ESL-050	Sp	CU
	PSY-130*	General Psychology	3		COM-061 or ESL-060 and COM-050/1 or ESL-050	All & OL	CU
	SOC-130*	Sociology	3		COM-061 or ESL-060 and COM-050/1 or ESL-050	All & OL	CU

\*Sections of these courses offered in the Honors Program, check <http://www.racc.edu/Academics/Honors/courses.aspx> for details.

<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



Program: Mechatronics Engineering Technology AAS (MET.AAS) Division: Science/Math

Student:

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**MAJOR REQUIREMENTS (51 credits)**

√	Course#	Course Name	Cr.	Req.	Pre-requisites	Sem.	Grade
	ENV-130	The Environment	3	X	COM-061 or ESL-060		
	NET-106	Installation and Maintenance of PCs I	3	X	IFT-100, IFT-110		
	Students are granted credit for Mechatronics Engineering Technology (MET) courses by articulation after completion of the course competencies through courses offered by RACC's Workforce and Economic Development/Community Education Division. Students should contact that division to obtain information on course offerings.						
	MET-100	Intro to Shop Machinery	1	X			
	MET-110	Manufacturing Fundamentals	3	X	COM-061 or ESL-060, MAT-110		
	MET-120	Industrial Mechanics I	5	X	MAT-110		
	MET-130	Industrial Electrical Systems	4	X	MAT-110		
	MET-140A	Intro to Programmable Logic Controllers I	2	X	MET-130		
	MET-140B	Intro to Programmable Logic Controllers II	2	X	MET-140A		
	MET-150	Industrial Mechanics II	6	X	MET-120, PHY-150		
	MET-160	Rotating Electrical Machines	4	X	MET-130		
	MET-200	Robotics and Motion Control	4	X	MET-140A, MET-140B, MET-160		
	MET-210	Process Control & Instrumentation	3	X	MET-130, PHY-150		
	MET-220	Advanced PLCs (ControlLogix or S7)	4	X	MET-140A, MET-140B (Co-requisites: MET-200, MET-210)		
	MET-230	Integrated Manufacturing Systems	3	X	MET-200, MET-220, NET-206		
	MET-240	Mechatronics Application Project	3	X	MET-150, MET-200, MET-210, MET-220		

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