Student Name: Colleague #: Date:

Mechatronics Technology (2014–2016)

(722) Associate of Science
North

First Semester		Credits	Term Taken	CCAC Grade	TRF/CBE* CLEP/AP*
EET-103	Introduction to Electronics	3	_____	_____	_____
MAT-108	Intermediate Algebra[1] **or**	4	_____	_____	_____
MAT-191	Mathematics for the Industries	3	_____	_____	_____
MEC-100	Mechatronics Safety & Quality	3	_____	_____	_____
MEC-102	Mechatronics Industrial Processes	3	_____	_____	_____
MET-181	Mechanical Systems	3	_____	_____	_____
Second Semester					
EET-179	Electrical Power Distribution	3	_____	_____	_____
EET-245	Electrical Motor Control	3	_____	_____	_____
MIT-103	Fundamentals of Microprocessors	3	_____	_____	_____
PSY-101	Introduction to Psychology[1] **or**	3	_____	_____	_____
PSY-116	Organizational Psychology	3	_____	_____	_____
RBT-235	Programmable Logic Controllers	4	_____	_____	_____
Third Semester					
ENG-101	English Composition 1	3	_____	_____	_____
MET-170	Fluid Power Systems	4	_____	_____	_____
SPH-101	Oral Communication	3	_____	_____	_____
	Restricted Elective[2]	3–4	_____	_____	_____
	Restricted Elective[2]	3–4	_____	_____	_____
Fourth Semester					
ENG-102	English Composition 2[1] **or**	3	_____	_____	_____
ENG-103	Technical Communications	3	_____	_____	_____
MEC-220	Mechatronics Practicum	3	_____	_____	_____
PHY-141	Physics 1[1] **or**	4	_____	_____	_____
PHS-161	Physical Science for the Industries	3	_____	_____	_____
	Restricted Electives[2]	3-4	_____	_____	_____
Minimum Credits to Graduate:		**60-64**			

[1]Students planning on transferring to a four-year institution should take the following courses:

ENG-102	English Composition	3
MAT-108	Intermediate Algebra	4
PHY-141	Physics 1	3
PSY-101	Introduction to Psychology	3

[2]There are three tracks of specialization that students may pursue through the choice of restricted electives: A. Robotics & Automation, B. Instrumentation & Process Controls and C. Supply Chain Technology. See page 2 for recommended restricted electives for each track.

(continued)

* TRF=Transfer Credit CBE=Credit by Exam CLEP=College Level Examination Program AP=Advanced Placement Examination

This advising/graduation checksheet lists the program requirements for students entering CCAC in the academic year indicated. A continuing student may graduate with the requirements in effect the year the student entered CCAC. All students must earn 30 college level credits in CCAC classes (this includes distance education courses) and have a minimum institutional GPA of 2.0. Mathematics electives must be at the 100 level. The remaining program credits may include transfer credit, credit by examination, CLEP, or AP examinations. Institutional credits and GPA are used to determine eligibility for graduation.

Mechatronics Technology (2015–present)

(722) Associate of Science
North

A. Robotics & Automation

The use of automated equipment is common in advanced manufacturing today, particularly for such industrial processes as assembly, machining, inspection and packaging. To prepare for a career in this field, technicians will build upon their Mechatronics foundation with specialized skills in robotics and automation equipment such as flexible manufacturing and motion control devices.

Recommended Restricted Electives (minimum of 9 to 12 credits required):

MET-106	Geometric Dimensioning & Tolerancing	1
RBT-225	Robotics & Controls	4
RBT-230	Automated Equipment	3
RBT-238	Advanced Programmable Logic Controls (PLC)	3
SET-105	Technical Computing	3

B. Instrumentation & Process Controls

Automated instrumentation is used in the processing of natural gas and other renewable energies, chemicals and power generation to measure such variables as pressure, flow, level, temperature and other chemical and electrical properties. To prepare for careers in these fields, technicians will build upon their Mechatronics foundation with specialized skills in electronics and process control devices.

Recommended Restricted Electives (minimum of 9 to 12 credits required):

CHM-109	Introduction to Chemistry	4
EDD-100	Blueprint Reading	3
MEC-205	Troubleshooting Advanced Motor Controls	3
MEC-204	AC/DC Electronic Drives	3
MEC-211	Process Control	3
MET-130	Introduction to Renewable Energy Systems	4
MET- 220	Green and Sustainable Buildings	4

C. Supply Chain Technology

Automated warehousing is becoming a staple of supply chain management to increase the efficiency of product inventory, handling and distribution. To prepare for a career in this field, technicians will build upon their Mechatronics foundation with specialized skills in welding, schematics and automated equipment such as conveyor systems and motion control devices.

Recommended Restricted Electives (minimum of 9 to 12 credits required):

BUS 103	Principles of Management	3
BUS 200	Principles of Supervision	3
EDD-100	Blueprint Reading	3
RBT-225	Robotics & Controls	4
RBT -230	Automated Equipment	3
SET-105	Technical Computing	3
WLD-221	Brazing and Welding	3

Comments:_____
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