

Mechatronics Engineering Technology AAS (A40350) – 67 Credit Hours

2022-2023

Fall – 1 st Year				
Course Number	Course Name	Lec	Lab	Credit
CIS 110	Introduction to Computers (A)	2	2	3
DFT 151	CAD I (A)	2	3	3
ENG 111	Writing and Inquiry	3	0	3
MAC 124	CNC Milling	1	3	2
ELC 213	Instrumentation	3	2	4
MAT 171	Precalculus Algebra	3	1	4
Total				19

Fall – 2 nd Year				
Course Number	Course Name	Lec	Lab	Credit
ATR 112	Intro to Automation	2	3	3
DFT 154	Intro Solid Modeling ★ (A)	2	3	3
ELC 131	Circuit Analysis I <i>and</i>	3	3	4
ELC 131A	Circuit Analysis I Lab	0	3	1
MEC 145	Mfg. Materials I	2	3	3
PHY 151	College Physics I	3	2	4
Total				18

Major Electives (Select 3 credit hours minimum)				
Course Number	Course Name	Lec	Lab	Credit
BPR 115	Elc/Fluid Power Diagrams	1	2	2
BUS 135	Principles of Supervision	3	0	3
BUS 139	Entrepreneurship I	3	0	3
WBL 110	World of Work	1	0	1
WBL 111	Work-Based Learning I (<i>and</i>)	0	0	1
WBL 115	Work-Based Learning Seminar I	1	0	1
CSC 151	JAVA Programming	2	3	3
DFT 152	CAD II (A)	2	3	3
ELC 215	Electrical Maintenance	2	3	3

Spring – 1 st Year				
Course Number	Course Name	Lec	Lab	Credit
ELC 117	Motors and Controls (A)	2	6	4
HYD 110	Hydraulics/Pneumatics I (A)	2	3	3
MEC 130	Mechanisms	2	2	3
	Communications Elective	3	0	3
	Humanities/Fine Arts Elective	3	0	3
Total				16

Spring – 2 nd Year				
Course Number	Course Name	Lec	Lab	Credit
ELC 128	Intro. to PLC	2	3	3
ISC 112	Industrial Safety ★★ (A)	2	0	2
MEC 161	Manufacturing Processes I	3	0	3
	Social/Behavioral Sciences Elective	3	0	3
	Major Elective			3
Total				14

Major Electives (Select 3 credit hours minimum)				
Course Number	Course Name	Lec	Lab	Credit
ELN 131	Analog Electronics I	3	3	4
ELN 133	Digital Electronics	3	3	4
ISC 132	Manufacturing Quality Control	2	3	3
MAC 114	Introduction to Metrology	2	0	2
MAC 132	Blueprint Reading/Mach II	1	2	2
MEC 260	Fundamentals of Machine Design	2	3	3
CTI 120	Network and Security Foundation (A)	2	2	3
WLD 112	Basic Welding Processes	1	3	2

- ★ - Designates classes preparing students to sit for SolidWorks CSWA exam
- ★★ - Designates classes preparing students to sit for OSHA basic safety certification tests
- (A) – Students may receive credit for this course by successfully completing the articulated non-credit course, or submitting evidence of an articulated industry certification. See: <https://spcc.edu/credit-articulation-at-spcc/>