

## Mechanical Engineering Technology - Engineering Pathway (A40320B) – 68 Credit Hours

2020-2021

This degree is aligned with the BSET in Mechanical Engineering Technology offered at UNC Charlotte

Fall – 1 <sup>st</sup> Year				
Course Number	Course Name	Lec	Lab	Credit
DFT 151	CAD I (A)	2	3	3
MAT 171	Precalculus Algebra	3	2	4
MAC 111	Machine Technology I (A)	2	12	6
ELC 131	Circuit Analysis I and	3	3	4
ELC 131A	Circuit Analysis I Lab	0	3	1
<b>Total</b>				<b>18</b>

Fall – 2 <sup>nd</sup> Year				
Course Number	Course Name	Lec	Lab	Credit
DFT 154	Intro to Solid Modeling ★ (A)	2	3	3
EGR 250	Statics and Strength of Materials	4	3	5
MEC 145	Mfg. Materials I	2	3	3
PHY 151	College Physics I	3	2	4
CHM 151	Chemistry	3	0	4
<b>Total</b>				<b>19</b>

Major Electives (Select 3 credit hours minimum)				
Course Number	Course Name	Lec	Lab	Credit
ATR 112	Intro to Automation	2	3	3
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 (and)	0	0	1
WBL 115	Work-Based Learning Seminar I	1	0	1
CSC 151	JAVA Programming	2	3	3
ELN 131	Analog Electronics I	3	3	4

- ★ - Designates classes preparing students to sit for SolidWorks CSWA exam  
 (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/>

Spring – 1 <sup>st</sup> Year				
Course Number	Course Name	Lec	Lab	Credit
HYD 110	Hydraulics/Pneumatics (A)	2	3	3
MEC 130	Mechanism	2	2	3
MAT 172	Precalculus Trigonometry	3	0	4
	Communications Elective	3	0	3
	Humanities/Fine Arts Elective	3	0	3
<b>Total</b>				<b>16</b>

Spring – 2 <sup>nd</sup> Year				
Course Number	Course Name	Lec	Lab	Credit
MEC 161	Manufacturing Processes I	3	0	3
ENG 111	Writing and Inquiry	3	0	3
CSC 134	C++ Programming (A)	2	2	3
	Major Elective			3
	Social/Behavioral Science Elective	3	0	3
<b>Total</b>				<b>15</b>

Major Electives (Select 3 credit hours minimum)				
Course Number	Course Name	Lec	Lab	Credit
ELN 133	Digital Electronics	3	3	4
ISC 132	Manufacturing Quality Control	2	3	3
MAC 151	Machining Calculations	1	2	2
<b>MAT 271</b>	<b>Calculus I</b>	<b>3</b>	<b>0</b>	<b>3</b>
<b>MAT 272</b>	<b>Calculus II</b>	<b>3</b>	<b>0</b>	<b>3</b>
MEC 180	Engineering Materials	2	3	3
MEC 260	Fundamentals of Machine Design	2	3	3
<b>PHY 152</b>	<b>College Physics II</b>	<b>3</b>	<b>2</b>	<b>4</b>
CTI 120	Network and Security Foundation (A)	2	2	3
WLD 112	Basic Welding Process	1	3	2

*Electives shown in bold are highly recommended for students seeking to complete the BSET in Mechanical Engineering Technology offered at UNC Charlotte.*