

## D 50 21 0 Computer Integrated Machining – Diploma (Offered only at COA - Currituck)

First Year Fall Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
MAC 111 Machining Technology I	Pre-Requisites: None Co-Requisites: MAC 171, 172	2	12		14	6
MAC 131 Blueprint Reading/Mach I	Pre-Requisites: None	1	2		3	2
MAC 151 Machining Calculations	Pre-Requisites: None	1	2		3	2
MAC 121 Intro to CNC	Pre-Requisites: None	2			2	2
MAC 171 Measure/Material & Safety	Pre-Requisites: None		2		2	1
MAC 172 Job Plan, Bench & Layout	Pre-Requisites: None		2		2	1
COM 101 Workplace Communication		3			3	3
<b>TOTAL SEMESTER HOURS</b>		<b>9</b>	<b>20</b>		<b>29</b>	<b>17</b>
First Year Spring Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
MAC 112 Machining Technology II	Pre-Requisites: MAC 111, 131	2	12		14	6
MAC 122 CNC Turning (2 <sup>nd</sup> 8 wks)	Pre-Requisites: MAC 111, 121, 131	1	3		4	2
MAC 124 CNC Milling (1 <sup>st</sup> 8 wks)	Pre-Requisites: MAC 111, 121, 131	1	3		4	2
MAC 132 Blueprint Reading/Mach II	Pre-Requisites: MAC 131	1	2		3	2
MEC 110 Intro to CAD/CAM	Pre-Requisites: MAC 121, 131	1	2		3	2
MAT 110 Math Measurement & Literacy	Pre-Requisites: MAT 003 Tier 1 Co-Requisites: MAT 010	2	2		4	3
WBL 110 (World of Work) or WBL 111 (Work-Based Learning I)		0-1		0-10	1-10	1
<b>TOTAL SEMESTER HOURS</b>		<b>8-9</b>	<b>24</b>	<b>0-10</b>	<b>33-42</b>	<b>18</b>

Continued on next page

First Year Summer Semester Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
MAC 113 Machining Technology III	Pre-Requisites: MAC 112, MEC 110	2	12		14	6
<b>TOTAL SEMESTER HOURS</b>		<b>2</b>	<b>12</b>		<b>14</b>	<b>6</b>
<b>TOTAL SEMESTER HOURS REQUIRED FOR DIPLOMA</b>						<b>41</b>

**C 50 21 0 I Computer Integrated Machining – Certificate I**  
(Offered only at COA - Currituck)

Certificate Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
MAC 111 Machining Technology I	Pre-Requisites: None Co-Requisites: MAC 171, 172	2	12		14	6
MAC 131 Blueprint Reading/Mach I	Pre-Requisites: None	1	2		3	2
MAC 151 Machining Calculations	Pre-Requisites: None	1	2		3	2
MAC 121 Introduction to CNC	Pre-Requisites: None	2			2	2
MAC 171 Measure/Material & Safety	Pre-Requisites: None		2		2	1
MAC 172 Job Plan, Bench & Layout	Pre-Requisites: None		2		2	1
<b>TOTAL SEMESTER HOURS</b>		<b>6</b>	<b>20</b>		<b>26</b>	<b>14</b>
<b>TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE</b>						<b>14</b>

**C 50 21 0 II Computer Integrated Machining – Certificate II**  
 (Offered only at COA - Currituck)

Certificate Course Number and Title	Pre-Requisites and Co-Requisites	Class Hours	Lab Hours	Clinical Hours	Total Contact Hours	Total Credit Hours
MAC 112 Machining Technology II	Pre-Requisites: MAC 111, 131	2	12		14	6
MAC 122 CNC Turning	Pre-Requisites: MAC 111, 121, 131	1	3		4	2
MAC 124 CNC Milling	Pre-Requisites: MAC 111, 121, 131	1	3		4	2
MAC 132 Blueprint Reading/Mach II	Pre-Requisites: MAC 131	1	2		3	2
MEC 110 Intro to CAD/CAM	Pre-Requisites: MAC 121, 131	1	2		3	2
<b>TOTAL SEMESTER HOURS</b>		<b>6</b>	<b>22</b>		<b>28</b>	<b>14</b>
<b>TOTAL SEMESTER HOURS REQUIRED FOR CERTIFICATE</b>						<b>14</b>