

TECHNICAL & VOCATIONAL PROGRAMS

Machining Technology

D 50 30 0 Diploma

The Machining Technology curriculum is designed to develop skills in the theory and safe use of hand tools, power machinery, computerized equipment, and sophisticated precision inspection instruments. Students learn to interpret blueprints, set up manual and CNC machines, perform basic and advanced machining operations, and make decisions to insure that work quality is maintained. Employment opportunities for machining technicians exist in manufacturing industries, public institutions, governmental agencies, and in a wide range of specialty machining job shops.

General Education Courses

<i>Courses</i>	<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
ENG 102 Applied Communications II		F1	3	0	3

<i>Courses</i>	<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
MAT 101 Applied Mathematics I	[MAT 060]	S1	3	0	3

Major Courses: Core

<i>Courses</i>	<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
MAC 111 Machining Technology I		F1	2	12	6
MAC 112 Machining Technology II	[MAC 111]	S1	2	12	6
MAC 113 Machining Technology III	[MAC 112]	SS1	2	12	6
BPR 111 Blueprint Reading		F1	1	2	2
BPR 121 Blueprint Reading: Mech.		F1	1	2	2
MAC 121 Introduction to CNC		F1	2	0	2
MAC 122 CNC Turning		S1	1	3	2
MAC 124 CNC Milling		S1	1	3	2
MEC 180 Engineering Materials		S1	2	3	3

Other Required Hours

<i>Courses</i>	<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
CIS 111 Basic PC Literacy		F1	1	2	2
COE 111 Co-op Work Experience I	[2.0 GPA/9 CrHrs in Major]	S1	0	10	1
or					
COE 110 World of Work		S1	1	0	1

Total Semester Hours Required for Diploma:

40

The following list course requirements for certificate programs. Please note that courses listed are not order based on semester.

Machining Technology

C 50 30 0I Certificate: Entry Level I

Major Courses: Core

<i>Courses</i>	<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
BPR 111 Blueprint Reading		F1	1	2	2
BPR 121 Blueprint Reading: Mech.		F1	1	2	2
MAC 111 Machining Technology I		F1	2	12	6
MAC 121 Introduction to CNC		F1	2	0	2

Other Required Courses

CIS 111 Basic PC Literacy		F1	1	2	2
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Total Semester Hours Required for Certificate:

14

C 50 30 0II Certificate: Entry Level II

Major Courses: Core

<i>Courses</i>	<i>[prerequisite]</i>	<i>Seq</i>	<i>Class</i>	<i>Lab</i>	<i>Credits</i>
MAC 112 Machining Technology II	[MAC 111]	S1	2	12	6
MAC 122 CNC Turning		S1	1	3	2
MAC 124 CNC Milling		S1	1	3	2

Other Required Courses

MEC 180 Engineering Materials		S1	2	3	3
MAT 101 Applied Mathematics	[MAT 060]	S1	3	0	3

Total Semester Hours Required for Certificate:

16



College of The Albemarle
 Machining Technology (D 50 30 0)
 Graduation Check Sheet – 2009-2011 Catalog

Listed below are the requirements for your degree program. It is your responsibility to keep this sheet up-to-date and review it with your advisor to know what you need to graduate. Complete the Graduation Application one semester prior to the intended date of graduation.

Title	Sequence	Credit	Grade	Semester
I. GENERAL EDUCATION COURSES				
Communications				
ENG 102 Applied Communications II	F1	3	_____	_____
Natural Science/Mathematics				
MAT 101 Applied Mathematics I	S1	3	_____	_____
II. MAJOR COURSES: CORE				
MAC 111 Machining Technology I	F1	6	_____	_____
MAC 112 Machining Technology II	S1	6	_____	_____
MAC 113 Machining Technology III	SS1	6	_____	_____
BPR 111 Blueprint Reading	F1	2	_____	_____
BPR 121 Blueprint Reading Mech.	F1	2	_____	_____
MAC 121 Introduction to CNC	F1	2	_____	_____
MAC 122 CNC Turning	S1	2	_____	_____
III. OTHER REQUIRED HOURS				
MAC 124 CNC Milling	S1	2	_____	_____
MAC 180 Engineering Materials	S1	3	_____	_____
CIS 111 Basic PC Literacy	F1	2	_____	_____
COE 111 Co-op Work Experience I [P=2.0 GPA/9 CrHrs in Major]				
Or	S1	1	_____	_____
COE 110 World of Work				
Total Semester Hours Required for Diploma		40		



College of The Albemarle
 Machining Technology-Certificate (C 50 30 0 I)
 Graduation Check Sheet – 2009-2011 Catalog

Listed below are the requirements for your degree program. It is your responsibility to keep this sheet up-to-date and review it with your advisor to know what you need to graduate. Complete the Graduation Application one semester prior to the intended date of graduation.

Title	Sequence	Credit	Grade	Semester
II. MAJOR COURSES: CORE				
BPR 111 Blueprint Reading	F1	2	_____	_____
BPR 121 Blue Print Reading Mech	F1	2	_____	_____
MAC 111 Machining Technology I	F1	6	_____	_____
MAC 121 Introduction to CNC	F1	2	_____	_____
Other Major Hours				
CIS 111 Basic PC Literacy	F1	2	_____	_____
Total Semester Hours Required for Diploma		14		



College of The Albemarle
Machining Technology (C 50 30 0 II)
Graduation Check Sheet – 2009-2011 Catalog

Title	Sequence	Credit	Grade	Semester
II. MAJOR COURSES: CORE				
MAC 112 Machining Technology II	S1	6	_____	_____
MAC 122 CNC Turning	S1	2	_____	_____
MAC 124 CNC Milling	S1	2	_____	_____
Other Major Hours				
MEC 180 Engineering Materials	S1	3	_____	_____
MAT 101 Applied Mathematics	S1	3	_____	_____
Total Semester Hours Required for Diploma		16		