



## APPLIED TECHNOLOGIES

### Albuquerque Technical Vocational Institute Graduation Evaluation Checklist 2005 - 2006 Catalog

#### MANUFACTURING TECHNOLOGY

#### ADVANCED MANUFACTURING CONCENTRATION

#### CERTIFICATE AND DEGREE REQUIREMENTS

___ ELEC 103A	(4 credit hours)	Electronics Fundamentals A (ELEC 103L 8 credit hrs)
___ ELEC 103B	(4 credit hours)	Electronics Fundamentals B (ELEC 103L 8 credit hrs)
___ ELEC 104	(4 credit hours)	Electronics Mathematics
___ ELEC 105A	(3 credit hours)	Digital Circuits I (ELEC 105L)
___ ELEC 105B	(3 credit hours)	Digital Circuits II
___ ENG 101	(3 credit hours)	College Writing (ENG 102 is acceptable substitution)
___ MATT 102	(2 credit hours)	Metals Blueprint Reading I
___ MATT 103L	(2 credit hours)	Basic Lathe Principles
___ MATT 104L	(2 credit hours)	Basic Milling Machine Principles
___ MATT 105L	(2 credit hours)	Basic Supporting Machine Tool Principles
___ MEMS 101	(3 credit hours)	Introduction to MEMS (Formerly PC 210)
___ MT 105	(4 credit hours)	Manufacturing Concepts
___ MT 281	(3 credit hours)	Statistical Controls

**TOTAL FOR CERTIFICATE..... 39**

#### ADDITIONAL ASSOCIATE DEGREE REQUIREMENTS

___ CHEM 121/121L	(4 credit hours)	General Chemistry I/Lab
___ MATH 121	(3 credit hours)	College Algebra
<i>or</i> ___ MATH 145	(3 credit hours)	Introduction to Probability and Statistics
<i>or</i> ___ MATH 150	(4 credit hours)	Advanced Algebra
<i>or</i> ___ MATH 162	(4 credit hours)	Calculus I
<i>or</i> ___ MATH 180	(3 credit hours)	Elements of Calculus I

____ ENG 119	(3 credit hours)	Technical Communications (ENG 219 is acceptable substitution)
or ____ COMM	(3 credit hours)	Communications elective
____ ELEC 118L	(6 credit hours)	Electromechanical Devices (ELEC 118A & 118B)
____ MATT 108L	(2 credit hours)	Basic Measurement and Inspection
____ MATT 214	(2 credit hours)	Machine Tool Technology CAD
____ MT 290	(3 credit hours)	Materials Science I
____ MT 291	(3 credit hours)	Materials Science II
____ SMT 204/204L	(5 credit hours)	Semiconductor Manufacturing Technology/Lab (SMT 201/201L) & (SMT 211/211L)
____ HUM/SOC	(3 credit hours)	Humanities or Social/Behavioral Science Elective
____ TECH ELEC	(3 credit hours)	Technical Elective

**TOTAL FOR ASSOCIATE DEGREE..... 76-77**

**TECHNICAL ELECTIVES**

____ CP 278A	(3 credit hours)	C++ Programming I
____ ELEC 114L	(6 credit hours)	Semiconductor Devices (ELEC 114A & 114B)
____ ELEC 205L	(4 credit hours)	Analog Circuits
____ ELEC 275L	(3 credit hours)	Soldering Techniques (or ELEC 276L & ELEC 277L)
____ ELEC 296	(2-8 credit hours)	Topics
____ ELEC 297	(2-8 credit hours)	Special Problems
____ ELEC 298	(3 credit hours)	Internship
____ ELEC 299	(3 credit hours)	Cooperative Education
____ MATT 101	(2 credit hours)	Metals Math I
____ MATT 113	(2 credit hours)	Metals Blueprint Reading II
____ MATT 202	(2 credit hours)	Metallurgy
____ MT 205	(6 credit hours)	Applied Science
____ PC 201	(4 credit hours)	Electromechanical Systems Trouble Shooting
____ PHOT 101L	(4 credit hours)	Introduction to Photonics and Photonics Safety (ELEC 111L/98-01)

**CHECK CATALOG FOR SPECIFIC PREREQUISITES,  
CREDITS AND CREDIT HOUR REQUIREMENTS**

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**STUDENT'S FULL LEGAL NAME (PRINT)**

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**STUDENT I.D. NUMBER**

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**DEPARTMENT APPROVAL SIGNATURE**

\_\_\_\_\_  
**DATE**

8/16/05

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**ACADEMIC ADVISOR/COUNSELOR SIGNATURE DATE**

569/1/05