# **Precision Machining Certificate**

Advisors - Ayers Campus: Peyton Amberson, Precision Machining Building (256.835.5417)

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East Broad Campus: Daniel Anderson, Machine Technology Building (256.549.8644) danderson@gadsdenstate.edu;

The courses in this program of study may not be offered every semester. It is important to consult with your advisor to determine course schedules to stay on track to graduate.

NOTICE(s): For the certificate in Precision Machining, the student must complete at least 47 credit hours—at least 41 in technical courses and at least 6 in general education courses. Technical courses, which may vary to meet student needs and to provide options, must be selected from those listed below. Admission Requirement: High school diploma or GED. The student is responsible for verifying the transferability of credit in this program to a senior institution with the appropriate senior institution advisor.

### Area I — Written Composition

Item #	Title	Hours
ENG 101	English Composition I	3
	Sub-Total Credits	3

#### Area III — Natural Sciences and Mathematics

Item #	Title	Hours
	MTH 100: Intermediate College Algebra OR numerically higher	3
	Sub-Total Credits	3

### Area V - Required Technical Courses

Item #	Title	Hours
MTT 121	Basic Print Reading for Machinists	3
MTT 139	Basic Computer Numerical Control	3
MTT 147	Introduction to Machine Shop I	3
MTT 148	Introduction to Machine Shop I Lab	3
ORI 101	Orientation to College	1
WKO 101	Workplace Skills Development I	1
	Sub-Total Credits	14

# Additional Coursework:

Choose 27 credit hours from the following list.

Item #	Title	Hours
CIS 146	Computer Applications	3
MDT 105	Introduction to Computer-Aided Design (CAD)	3
MTT 107	Machining Calculations I	3
MTT 123	Engine Lathe Lab I	3
MTT 127	Metrology	3
MTT 128	Geometric Dimensioning and Tolerancing I	3
MTT 134	Lathe Operations I	3
MTT 137	Milling I	3
MTT 140	Basic Computer Numerical Control Turning Programming I	3
MTT 141	Basic Computer Numeric Control Milling Programming I	3
MTT 149	Introduction to Machine Shop II	3
MTT 150	Introduction to Machine Shop II Lab	3
MTT 154	Metallurgy	3
MTT 162	Precision Grinding	3
MTT 181	Special Topics in Machine Tool Technology	3
MTT 221	Advanced Blueprint Reading for Machinists	3
MTT 242	CNC Milling Lab II	3
MTT 244	CNC Turning Lab II	3
MTT 270	Machining Skills Application	3
MTT 286A	Co-Op	1
MTT 286B	Co-Op	1
MTT 286C	Co-Op	1
MTT 288	Co-Op	2
MTT 291	Cooperative Education in Machine Tool Technology	3
SPH 106	Fundamentals of Oral Communication	3
	Sub-Total Credits	68
		47