Interpreter Education Certificates (C55300)

The certificates listed below can be earned in the Interpreter Education Program.

Admissions

- Completion of a high school diploma or equivalent is required.
- Many courses have prerequisites; check the Course Descriptions section for details.

Additional Information

Contact Information

For more information, call 704.330.4887, 704.330.4811, or visit our website at www.cpcc.edu/professional_careers.

Interpreter Education Certificate with a Specialization in Introduction to American Deaf Community (C55300-C1)

This certificate is designed to prepare individuals in their given careers to communicate at an introductory level with and have a basic understanding of the American Deaf community. This certificate can be applied toward the Interpreter Education Degree program.

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
ASL 111 Elementary ASL I	3	0	0	0	3
ASL 181 ASL I Lab	0	2	0	0	1
ASL 112 Elementary ASL II	3	0	0	0	3
ASL 182 ASL II Lab	0	2	0	0	1
IPP 112 Comparative Cultures	4	0	0	0	4
Total Credit Hours					**12**

Interpreter Education Certificate with a Specialization in ASL Studies (C55300-C2)

This certificate is designed to prepare individuals in their given careers to communicate at and interact with the American Deaf community for the purpose of giving and gathering information pertinent to their jobs. This certificate can be applied toward the Interpreter Education Degree program.

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
IPP 112 Comparative Cultures	4	0	0	0	4
IPP 150 Linguistics of ASL	2	0	0	0	2
IPP 151 ASL Numbers & Fingerspelling	0	2	0	0	1
IPP 152 ASL/English Translation	3	0	0	0	3
IPP 153 Introduction to Discourse Analysis	1	4	0	0	3
Total Credit Hours					**13**

Interpreter Education Certificate with a Specialization in Consecutive Interpreting (C55300-C3)

This certificate is designed to prepare individuals to interpret consecutively between American Sign Language and English users in situations where there is no time limit or parameters imposed on the completion of the task. This skill would be applicable to interpreting forms and basic interviews. This certificate can be applied toward the Interpreter Education Degree program.

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
IPP 111 Introduction to Interpretation	2	0	0	0	2
IPP 130 Analytical Skills for Interpreting	1	4	0	0	3
IPP 150 Linguistics of ASL	2	0	0	0	2
IPP 161 Consecutive Interpret.	2	6	0	0	5
COE 111 Co-op Work Experience I	0	0	0	10	1
COE 115 Work Experience Seminar I	1	0	0	0	1
Total Credit Hours					**14**

Interpreter Education Certificate with a Specialization in Simultaneous Interpreting (C55300-C4)

This certificate is designed to prepare individuals to interpret simultaneously at an entry-level of skill between American Sign Language and English users. This would be applicable to interpreting in interview and interactive settings. This certificate can be applied toward the Interpreter Education Degree program.

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
IPP 240 Ethical Standards & Practices	3	0	0	0	3
IPP 221 Simultaneous Interpreting I	2	6	0	0	5
IPP 222 Simultaneous Interpreting II	2	6	0	0	5
COE 121 Co-op Work Experience II	0	0	0	10	1
COE 125 Work Experience Seminar II	1	0	0	0	1
Total Credit Hours					**15**

Interpreter Education Certificate with a Specialization in Foreign Language Interpreting (C55300-C5)

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
IPP 111 Introduction to Interpretation	2	0	0	0	2
IPP 240 Ethical Standards Practices	3	0	0	0	3
IPP 130 Analytical Skills for Int.	1	4	0	0	3
IPP 153 Intro. to Discourse Anal.	1	4	0	0	3
HSE 110 Intro to Human Services	3	0	0	0	3
OR					
HSE 120 Interpersonal Relationships	3	0	0	0	3
Total credit hours					**14**

Law Enforcement Training, Basic

See **Basic Law Enforcement Training**

Machining Technology (A50300)

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 will 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.

The Machining Technology Program at CPCC provides students the opportunity to expand their knowledge and skills in CNC programming and a broader knowledge in CNC Graphics

Programming. All projects are performed on full-scale industrial equipment used in local industry.

Degree Awarded

The Associate in Applied Science Degree-Machining Technology will be awarded by the College upon completion of the program.

Admissions

- High school diploma or equivalent is required.
- CPCC placement tests are required in English and mathematics. Developmental mathematics and English courses are available for students to build skills and knowledge.
- A counseling/orientation appointment follows placement testing.
- Many courses have prerequisites or corequisites; check the Course Descriptions section for details.

Additional Information

Notes

Students who do not take program-related courses for two consecutive semesters must reenter the program under the Catalog in effect at the time of reentry.

Contact Information

The Machining Technology Program is in the Engineering Technologies Division. For more information, call 704.330.6608.

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
MAC 111X Machining Technology I	1	6	0	0	3
MAC 111Y Machining Technology I	1	6	0	0	3
MAC 112X Machining Technology II	1	6	0	0	3
MAC 112Y Machining Technology II	1	6	0	0	3
MAC 113X Machining Technology III	1	6	0	0	3
MAC 113Y Machining Technology III	1	6	0	0	3
MAC 121 Introduction to CNC	2	0	0	0	2
MAC 122 CNC Turning	1	3	0	0	2
MAC 131 Blueprint Reading/ Machining I	1	2	0	0	2
MAC 132 Blueprint Reading/ Machining II	1	2	0	0	2
MAC 114 Introduction to Metrology	2	0	0	0	2
MAC 151 Machining Calculations	1	2	0	0	2
MAC 152 Advanced Machining Calculations	1	2	0	0	2
MAC 124 CNC Milling	1	3	0	0	2
MAC 222 Advanced CNC Turning	1	3	0	0	2
MAC 224 Advanced CNC Milling	1	3	0	0	2
MAC 231 CNC Graphics Programming-Turning	1	4	0	0	3
MAC 232 CNC Graphics Programming-Milling	1	4	0	0	3
. MEC 172 Introduction to Metallurgy	2	2	0	0	3
DFT 111 Technical Drafting I	1	3	0	0	2
EGR 120 Engineering & Design Graphics	2	2	0	0	3
Technical Electives					
(The following are suggested electives)	3	0	0	0	3
					55
DFT 121 Introduction to Geometric Dimensioning and Tolerancing	1	2	0	0	2
ISC 132 Manufacturing Quality Control	2	3	0	0	3
WLD 112 Basic Welding Process	1	3	0	0	2
COE 112 Cooperative Education I	0	0	0	20	2
COE 122 Cooperative Education II	0	0	0	20	2
General Education Core Requirements					
ENG 111 Expository Writing	3	0	0	0	3
ENG 114 Professional Research and Reporting	3	0	0	0	3
COM 110 Introduction to Communication	3	0	0	0	3
+MAT 115 Mathematical Models	2	2	0	0	3
Students must choose a minimum of three (3) credit hours from the list of approved humanities courses listed at the end of this section of the catalog	3	0	0	0	3
Students must choose a minimum of three (3) credit hours from the list of approved behavioral and social sciences courses listed at the end of this section of the catalog.	3	0	0	0	3
					18
Total Credit Hours					**73**

+ MAT 121 Algebra/Trigonometry may substitute for MAT 115.

Machining Technology Diploma (D50300)

The Machining Technology Diploma gives individuals the opportunity to gain entry-level employment in the metal working industries. A basic knowledge of conventional machine tools, CNC programming and CNC operations is provided by hands-on activities on equipment commonly used in industry. Coursework will apply toward the Machining Technology AAS Degree program.

Degree Awarded

A Diploma in Machining Technology is awarded by the College upon completion of this program.

Admissions

- Completion of a high school diploma or equivalent is encouraged as a foundation of a career in this area.
- Many courses have prerequisites or corequisites; check the Course Descriptions section for details.

Additional Information

Notes

Students who do not enroll in program-related courses for two consecutive semesters must reenter the program under the Catalog in effect at the time of reentry.

Contact Information

The Machining Technology program is in the Engineering Technologies Division. For more information, call 704.330.6608.

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
MAC 111X Machining Technology I	1	6	0	0	3
MAC 111Y Machining Technology I	1	6	0	0	3
MAC 112X Machining Technology II	1	6	0	0	3
MAC 112Y Machining Technology II	1	6	0	0	3

MAC 113X Machining Technology III	1	6	0	0	3
MAC 113Y Machining Technology III	1	6	0	0	3
MAC 121 Introduction to CNC	2	0	0	0	2
MAC 122 CNC Turning	1	3	0	0	2
MAC 131 Blueprint Reading/ Machining I	1	2	0	0	2
MAC 132 Blueprint Reading/ Machining II	1	2	0	0	2
MAC 114 Introduction to Metrology	2	0	0	0	2
MAC 151 Machining Calculations	1	2	0	0	2
MAC 152 Advanced Machining Calculations	1	2	0	0	2
MAC 124 CNC Milling	1	3	0	0	2
MAC 222 Advanced CNC Turning	1	3	0	0	2
MAC 224 Advanced CNC Milling	1	3	0	0	2
MEC 172 Introduction to Metallurgy	2	2	0	0	3
General Education Requirements:					
+*ENG 101 Applied Communications	3	0	0	0	3
Students must choose 3 credit hours from the list of approved humanities courses or from the list of behavioral and social sciences listed at the end of this section of the catalog.	3	0	0	0	3
					6
Total Credit Hours					**47**

+ ENG 111 Expository Writing may be substituted for ENG 101

*Any student who has completed a diploma level general education course must take the appropriate associate degree general education course if he or she chooses to pursue the higher credential.

Machining Technology Certificates (C50300)

Machining Technology Certificate with a Specialization in CNC Programming and Operations (C50300-C1)

This certificate provides study in CNC programming and machining operations. Coursework includes manual programming, set-up and operation, and provides in-depth study in both 2-D and 3-D Graphics programming. Coursework will apply toward the Machining Technology AAS degree program.

Certificate Awarded

A certificate is awarded in CNC Programming and Operations upon completion of this program.

Admissions

- Completion of a high school diploma or equivalent is required as a foundation of a career in this area.
- Individuals entering this certificate program should have a basic knowledge of manual machining and/or minimum experience with CNC machine tools.
- Many courses have prerequisites or corequisites; check the Course Descriptions section for details.

Additional Information

Contact Information

The Machining Technology Program is in the Engineering Technologies Division. For more information, call 704.330.6608.

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
MAC 121 Introduction to CNC	2	0	0	0	2
MAC 122 CNC Turning	1	3	0	0	2
MAC 124 CNC Milling	1	3	0	0	2
MAC 222 Advanced CNC Turning	1	3	0	0	2
MAC 224 Advanced CNC Milling	1	3	0	0	2
MAC 231 CNC Graphics Prog -Turning	1	4	0	0	3
MAC 232 CNC Graphics Prog-Milling	1	4	0	0	3
Total Credit Hours					**16**

Machining Technology Certificate with a Specialization in Fundamentals of Machine Tools Certificate (C50300-C2)

This certificate provides the graduate with enhanced skills in the set up and operation of conventional machine tools. Course work will apply toward the Machining Technology AAS Degree Program.

Certificate Awarded

A certificate is awarded in Fundamental of Machine Tools by the College upon completion of this program.

Admissions

- Completion of a high school diploma or equivalent is encouraged as a foundation of a career in this area.
- Some courses have prerequisites; check the Course Description section for details.

Contact Information

The Machining Technology Program is in the Engineering Technologies Division. For more information, call 704.330.6608.

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
MAC 111X Machining Technology I	1	6	0	0	3
MAC 111Y Machining Technology I	1	6	0	0	3
MAC 114 Introduction to Metrology	2	0	0	0	2
MAC 131 Blueprinting Reading/ Machining I	1	2	0	0	2
MAC 151 Machining Calculations	1	2	0	0	2
MAC 112X Machining Technology II-A	1	6	0	0	3
MAC 112Y Machining Technology II-B	1	6	0	0	3
Total Credit Hours					**18**

Machining Technology Certificate with a Specialization in Basic Machining Skills (C50300-C3)

This certificate enables the graduate to enter the machining profession on an entry-level. This program will include basic hands-on activities on equipment commonly used in industry. Coursework will apply toward the Machining Technology AAS Degree Program.

Certificate Awarded

A certificate is awarded in Basic Machining Skills by the College upon completion of this program.

Admissions

Completion of a high school diploma or equivalent is encouraged as a foundation of a career in this area.

Additional Information

Contact Information

The Machining Technology Program is in the Engineering Technologies Division. For more information, call 704.330.6608.

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
MAC 111X Machining Technology I (Basic Lathe)	1	6	0	0	3
MAC 111Y Machining Technology I (Basic Milling)	1	6	0	0	3
MAC 114 Introduction to Metrology	2	0	0	0	2
MAC 131 Blueprinting Reading/ Machining I	1	2	0	0	2
MAC 151 Machining Calculations	1	2	0	0	2
Total Credit Hours					**12**

Machining Technology Certificate with a Specialization in Motorsports Machining Certificate I (C50300-C4)

This certificate provides the graduate with basic skills in the set-up and operation of conventional and computer numerical control machine tools used in the Motorsports machining labs.

Certificate Awarded

A certificate is awarded in Motorsports Machining by the College upon completion of the program.

Admissions

- Completion of a high school diploma or equivalent is encouraged as a foundation of a career in this area.

Additional Information

Contact Information

The Machining Technology Program is in the Engineering Technologies Division. For more information, call 704.330.6608.

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
MAC 111X Machining Technology I	1	6	0	0	3
MAC 111Y Machining Technology I	1	6	0	0	3
MAC 114 Introduction to Metrology	2	0	0	0	2
MAC 121 Introduction to CNC	2	0	0	0	2
MAC 122 CNC Turning	1	3	0	0	2
MAC 124 CNC Milling	1	3	0	0	2
MAC 151 Machining Calculation I	1	2	0	0	2
Total Credits Hours:					**16**

Machining Technology Certificate with a Specialization in Advanced Machine Tool Operations (C50300-C5)

This certificate provides the graduate with advanced skills in the set-up and operation of conventional machines tools used in the Motorsports machining labs.

Certificate Awarded

A certificate is awarded in Advanced Machine Tool Operations by the College upon completion of the program.

Admissions

- Completion of a high school diploma or equivalent is encouraged as a foundation of a career in this area.

Contact Information

The Machining Technology Program is in the Engineering Technologies Division. For more information, call 704.330.6608.

Major and Related Course Requirements

	Class	Lab	Hours Clinical	Work Exper.	Credits
MAC 113X Machining Technology III	1	6	0	0	3
MAC 113Y Machining Technology III	1	6	0	0	3
MAC 132 Blueprint Reading/ Machining II	1	2	0	0	2
MAC 152 Advanced Machining Calculations	1	2	0	0	2
MEC 172 Introduction to Metallurgy	2	2	0	0	3
Total Credits Hours:					**13**

Manufacturing Technology (A50320)

The Manufacturing Technology curriculum provides an introduction to the principles and practices of manufacturing in today's global marketplace. The student will be exposed to valuable high-tech concepts applicable in a variety of industries such as plastics, metals, furniture, textiles, and electronics. Students will gain real-world knowledge in manufacturing management practices, manufacturing materials and processes, research and development, and quality assurance.

Course work will include machining processes, CAD/CAM, CNC principles, and other computerized production techniques.

Graduates should qualify for employment as a manufacturing technician, quality assurance technician, CAD/CAM technician, team leader, or research and development technician. The student will be able to advance in the worldplace and develop with new technologies.

Degree Awarded

The Associate in Applied Science Degree - Manufacturing Technology is awarded by the College upon completion of this program.

Admissions

- A high school diploma or equivalent is required. High school students preparing for this program should complete courses in algebra and geometry. Skills and proficiencies should be developed in writing, computer literacy, and science.
- Placement tests in English and mathematics determine the entry-level courses that match individual needs. Developmental Studies mathematics and English courses are available for students to build basic skills and knowledge.
- A counseling/orientation appointment follows placement testing.
- Many courses have prerequisites or corequisites; check the Course Descriptions section for details.

Additional Information

Notes

The Manufacturing Technology curriculum at Central Piedmont Community College is a comprehensive program featuring extensive hands-on instruction in practical application of both fundamental and highly specialized manufacturing technology principles. Students advance from basic courses to specialized manufacturing, industrial, and mechanical technology courses that provide concentrated study in the practical application of project management encountered in today's modern manufacturing facilities.