



DEGREE CODES:

AAS 770C
AC (CNC) 0725
BC (QA) 0729
BC (CNC) 0724

PATHWAY: Manufacturing Technology: CNC Machining

Visit your College Advisor, ccc.edu, or your college's Transfer Center for more information.

This is an **example course sequence** for students interested in earning a degree in Manufacturing Technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Quality Assurance (QA), a Basic Certificate and an Advanced Certificate (AC) in Computerized Numerical Control (CNC) Machining, and an Associate in Applied Science (AAS) in Manufacturing Technology. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

The AAS degree program in Manufacturing Technology offers the technologies required for maintenance mechanics in the manufacturing or service industries and covers theory and practical projects. The program is appropriate for career changers, high school graduates, general education diploma holders, and machining workers with a need to enhance their careers.

The Advanced Certificate program in Computerized Numerical Control is designed for the study of the basic principles of machine tool technology incorporating basic computer applications to the manufacturing industry, including CNC programming and computer integrated manufacturing (CAD/CAM).

Choose your courses with your College Advisor.

Communications and mathematics pre-credit requirements. Placements based on current placement instrument, ACT or department chair recommendation.			College-level courses that can be taken while in pre-credit courses.	
ENGLISH PLACEMENT	READING PLACEMENT	MATHEMATICS PLACEMENT	REQUIRED PROGRAM CORE	ELECTIVE COURSES
<input type="checkbox"/> ESL/FS Writing	<input type="checkbox"/> ESL/FS Reading	<input type="checkbox"/> FS Mathematics I	<input type="checkbox"/> Manufacturing 111	<input type="checkbox"/> INTDSP 102
<input type="checkbox"/> ESL/English 98	<input type="checkbox"/> ESL/Reading 99	<input type="checkbox"/> FS Mathematics II	<input type="checkbox"/> Manufacturing 112	
<input type="checkbox"/> ESL 99	<input type="checkbox"/> ESL Reading 100	<input type="checkbox"/> Mathematics 98	<input type="checkbox"/> Manufacturing 139	
<input type="checkbox"/> ESL/English 100	<input type="checkbox"/> Reading 125	<input type="checkbox"/> Mathematics 99	<input type="checkbox"/> Manufacturing 141	

SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students by adding more semesters.

D	AC ^{CNC}	BC ^{QA}	BC ^{CNC}	SEMESTER 1	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
●	●	●	●	Manufacturing 111—Machining Processes I (3)	Required Program Core	DO THIS —Meet with advisor to discuss academic goals and plan coursework *Required for BC 724, but not the AAS
●	●	●	●	Manufacturing 112—Machining Processes II (3)	Required Program Core	
●	●	●	●	Manufacturing 139—Print Requirements and Quality Assurance (3)	Required Program Core	
●	●	●	●	Manufacturing 141—Manufacturing Materials and Processes (3)	Required Program Core	
●	●	●	●	Interdisciplinary Studies 102—Career Development and Decision Making (1)	Required Program Core*	
●	●	●	●	Art 103—Art Appreciation (3)	Fine Arts & Humanities	
16 CREDIT HOURS						
D	AC ^{CNC}	BC ^{QA}	BC ^{CNC}	SEMESTER 2	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
●	●	●	●	Manufacturing 138—Introduction to SolidWorks (3)	Required Program Core	ALMOST halfway through Associate in Applied Science degree DO THIS —Meet with advisor to confirm plans
●	●	●	●	Manufacturing 140—CNC Fundamentals (3)	Required Program Core	
●	●	●	●	Manufacturing 142—Geometric Dimensioning and Tolerancing (3)	Required Program Core	
●	●	●	●	Manufacturing 143—Advanced Metrology (3)	Required Program Core	
●	●	●	●	Mathematics 125—Introductory Statistics (4)	Mathematics	
16 CREDIT HOURS						
D	AC ^{CNC}	BC ^{QA}	BC ^{CNC}	SEMESTER 3	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
●	●	●	●	Manufacturing 123—CNC Milling Operations and Programming (3)	Required Program Core	COMPLETION of Basic Certificate in CNC Machining COMPLETION of Basic Certificate in Quality Assurance DO THIS —Go to Career Center to explore both continued education and employment options DO THIS —Mid-term check-in with advisor
●	●	●	●	Manufacturing 137—CNC Turning Operations and Programming (3)	Required Program Core	
●	●	●	●	Manufacturing 144—Wire Electrical Discharge Machining (3)	Required Program Core	
●	●	●	●	Manufacturing 207—Introduction to MasterCAM (3)	Elective	
●	●	●	●	Manufacturing 104—Statistical Process Control (3)	Required Program Core	
15 CREDIT HOURS						

CITY COLLEGES OF CHICAGO 2019–20 ACADEMIC CATALOG

ADVANCED MANUFACTURING

D	ACCNC	BC ^{OA}	BC ^{CNC}	SEMESTER 4	CATEGORY	ACHIEVEMENTS & NEXT ACTIONS
•	•	•	•	Manufacturing 191–Industrial Electricity (4)	<i>Required Program Core</i>	COMPLETION of Associate in Applied Science degree in Manufacturing Technology COMPLETION of Advanced Certificate in CNC Machining
•	•	•	Manufacturing 292–Principles of Mechanisms (3)	<i>Required Program Core</i>		
•	•	•	English 101–Composition I (3)	<i>Communications</i>		
•	•	•	Sociology 207–Sociology of Sex and Gender (3)	<i>Social & Behavioral Sciences</i>		
•	•	•	History 215–History of Latin America (HD) (3)	<i>General Education (HD)</i>		
					16 CREDIT HOURS	
DEGREE MINIMUM: 62 CREDIT HOURS // PATHWAY TOTAL: 63 CREDIT HOURS						

D = DEGREE // AC = ADVANCED CERTIFICATE // BC = BASIC CERTIFICATE

Programs offered at:



Computer Numeric Control Machining BC (724) and AC (725) are offered at Wright College.