



# Advanced Manufacturing and Fabrication AAS

(98 quarter credits)

2022-2023



## Program Prerequisites:

- Placement into MTH 98 Quantitative Math (4 credits)
- Placement into WR 115 Introduction to Expository Writing (4 credits)

## Coursework:

Course Number	Course Title	Prereqs	Credits
<b>Fall Term</b>			<b>17</b>
MFG 150	Manufacturing Processes	Pre/co: MFG 195	3
MFG 155	Blueprint Reading	Pre/co: MFG 195	3
MFG 195	Welding Technology I	none	3
MTH 98	Quantitative Math	place into IRW 115 or WR 115; place into MTH 98	4
WR 115	Introduction to Expository Writing	Placement into WR 115 or completion of WR 90	4
<b>Winter Term</b>			<b>15</b>
MFG 151	Fabrication Processes 1	MFG 150	3
MFG 156	Integrated Manufacturing 1	MFG 155	3
MFG 280	Aluminum GTAW/TIG Welding	WLD 195, MFG 150	3
MFG 281	Aluminum GTAW/TIG Fabrication Processes 1	Co-req: MFG 280	3
MFG 285	Stainless Steel GTAW/TIG Welding	WLD 195, MFG 150	3
<b>Spring Term</b>			<b>15</b>
MFG 152	Fabrication Processes 2	MFG 151	3
MFG 157	Integrated Manufacturing 2	MFG 156	3
MFG 282	Aluminum GTAW/TIG Fabrication Processes 2	MFG 281	3
MFG 286	Stainless Steel GTAW/TIG Fabrication 1	MFG 285	3
MFG 287	Stainless Steel GTAW/TIG Fabrication 2	Co-req: MFG 286	3
<b>Fall Term</b>			<b>17</b>
MFG 201	Tube and Pipe Fabrication 1	MFG 150 and MFG 155	3
MFG 210	Introduction to Computer Aided Design and Tolerancing	MFG 155	3
MFG 220	Production Manufacturing 1	MFG 157	3
WR 121	College Composition	IRW 115 or WR 115 or place	4
	General Education	place into MTH 65 or MTH 98; pre/co: WR 121	4

<b>Winter Term</b>			17
MFG 202	Tube Fabrication	MFG 201	3
MFG 211	CAD Design for CNC Manufacturing 1	MFG 210	3
MFG 221	Production Manufacturing 2	MFG 220	3
	General Education	place into MTH 65 or MTH 98; pre/co: WR 121	4
	General Education	place into MTH 65 or MTH 98; pre/co: WR 121	4
<b>Spring Term</b>			17
MFG 203	Pipe Fabrication and Welding	MFG 201	3
MFG 212	CAD Design for CNC Manufacturing 2	MFG 211	3
MFG 222	Production Manufacturing 3	MFG 221	3
MFG 290	Student Production Manufacturing Lab 1	Pre/co: MFG 212, 222	4
	General Education	place into MTH 65 or MTH 98; pre/co: WR 121	4
<b>Total Quarter Credits</b>			98

## General Education Requirements

Students must earn a minimum of 16 credits of General Education taken from the list of approved courses. They must include at least one course with a minimum of 3 credits from each of the following categories. Economics courses meet 8 Social Science credits for the AAS: Accounting.

- **Arts and Letters:** Art\*, Communication, English Literature, Language, Music\*, Philosophy, Theater\*, Writing\*, Women's Studies
- **Social Sciences:** Anthropology, Economics, History, Political Science, Psychology, Sociology, Women's Studies
- **Science and Math:** Biology, Chemistry, Environmental Science, General Science, Geology, Math\*

\*See list of General Education Electives in current Catalog, as not all courses within discipline will meet requirement.

## Comprehensive Degree Requirements

- All candidates must earn a minimum of 90 credits which count toward an associate degree.
- Credit courses numbered below 100 cannot be used to fulfill the 90 credit minimum requirement for any degrees.
- All candidates for a degree must have at least a 2.0 minimum cumulative grade point average ("C" average).
- All degree candidates must accumulate at least 30 credits of satisfactory work at CGCC to establish residency. Nontraditional credit, credit transferred from another institution or challenge credit may not be used to establish residency. 24 of the credits earned at CGCC must apply to the specific associate degree requirements the student is pursuing.
- Transfer credits accepted for letter grade C- or better. Transfer grades of "pass" accepted if no letter grade required
- A maximum of 3 credits of physical education (PE) courses may be used as electives.
- Credit courses with passing grades may only be applied once in meeting a degree or certificate requirement (unless approved to be repeated). In addition, repeated courses are only counted once in accumulated hour and point totals.
- No more than 12 credits of Cooperative Education courses may be used.
- No more than 9 credits of experimental courses can be used (course numbers 199-199Z and 299-299Z).
- A maximum of 24 credits of "P" (pass) grades will apply to degree.
- No Management/Supervisory Development workshops will apply.

**This form is intended for advising purposes only. See your declared catalog for a complete list of degree requirements.**

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