Machine Technology CNC Programmer AAS Degree - 71 credits

Program Area: Integrated Manufacturing Machine Tool (Fall 2020)

******REMEMBER TO REGISTER EARLY******

Program Description

The CNC Machine Programmer program is designed to prepare the student for employment as a CNC Machinist/-Programmer. Skill development includes performing basic floor programming to produce a part to specifications, setup and operation of CNC machines, instruction in inspection and statistical process control, and program parts designed using a CAD/CAM computer system.

Program Outcomes

- Perform a basic setup and operate different types of manual metal working machines
- Write basic programs and operate different types of CNC metal working machines
- Perform mathematical calculation of shop problems
- Use basic CAD and CAM computer programs to generate CNC programs to be used on machine tools
- Interpret all basic drawings and blueprints
- Build basic machine parts and tools

Pre-program Requirements

Successful entry into this program requires a specific level of skill in the areas of English, mathematics, and reading. Program entry will depend, in part, on meeting the prerequisites listed below:

English/Reading:

- A score of 250 or higher on the reading portion of the Accuplacer, or
- Completion of ENGL/READ 0950 or 0955 (or equivalent course or higher). ENGL/READ 0955 may be taken concurrently with Semester I coursework.

Mathematics:

- A score of 250 or higher on the Arithmetic portion of the Accuplacer.

There are other ways to qualify. Visit LSC Accuplacer (lsc.edu/Accuplacer) to find out more.

Required Courses

Number	Name	Credits	Term
CADE 1468	SolidWorks I	3	
INMG 1400	Introduction to Manufacturing Technology	4	
INMG 1410	Mechanical Blueprint Reading	3	
INMG 1420	Design Application Concepts I	3	
WLDG 1560	Gas Metal Arc Welding I	3	
INMG 1412*	Advanced Mechanical Blueprint Reading	3	
INMG 1422	Design Application Concepts II	3	
MTCC 1432	Quality Methods	2	
MTCC 1505*	Surface Grinder	2	
MTCC 1620	CNC Basic Programming	2	
MTCC 2504*	CAD CAM	3	
MTCC 1600	Engineering Materials	1	
MTCC 1603*	Turning	2	
MTCC 1604*	Milling	2	
MTCC 2502*	CNC Turning	3	
MTCC 2540*	CNC Machine Center 3 Axis	3	
MTCC 2564*	CNC Horizontal 4 Axis	3	
MTCC 2560*	Advanced CNC Mill 4 Axis	3	
MTCC 2562*	CNC Mill/Turn Live Tooling	3	
MTCC 2570	Wire EDM	2	
MTCC 2572*	Swiss Automatic	3	
General Education Electives	*Choose from at least 3 of the goals areas of the Minnesota Transfer Curriculum Goal Areas 1-10*	15	
Total Credits		**71**	

***Requires a prerequisite or a concurrent course**

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For interpretation of test results and selection of appropriate coursework;
or general information about the program, admissions, financial aid, and getting started at LSC,
contact the professional advising team (pat@lsc.edu) or 218-733-7601

Program Articulations

This program has excellent articulation agreements in place with various colleges and universities that allow the student to transfer most (if not all) of their credits earned in the program to Minnesota State University Moorhead, BS in Operations Management

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For more information about the Machine Technology CNC Programmer AAS Degree including course descriptions, course prerequisites, and potential career opportunities,
see the program website (https://degrees.lsc.edu/cnc/)

or

Contact Faculty Advisor Max Udovich (max.udovich@lsc.edu) at 218-733-7732

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LSC Major ID: 5394

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