



Introduction to Manufacturing Processes Program

2019-2020 Academic Year

This program meets on WCC's campus

Fall 2019 Dates

Start Date | August 26 2019

No Classes | September 2-3 2019

No Classes | November 27-December 1 2019

End Date | December 15 2019

Winter 2020 Dates

Start Date | January 13 2020

No Classes | January 20 2020

No Classes | February 24-29 2020

End Date | May 4 2020

About the Program

In this program, students interested in exploring the manufacturing industry will learn fundamentals in manufacturing including blueprint reading, 3D modeling systems and output files used to control manufacturing systems. In these entry level courses, students will learn setup and operation procedures at CNC computerized mills and lathes, control process at CNC mills and lathes to produced quality parts as well as fundamentals for writing programs.

After successful completion of this program, students will earn 16 college credits with a certificate of completion and the ability to continue taking courses for an Associate's Degree in Mechatronics.

This program meets on Monday - Friday from 12:30 pm to 3:30 pm on WCC's campus.

Semester I

3D Modeling and Blueprint Reading [MEC 101 – 2 credits]

In this course students create 3D models used to output files used in manufacturing products. Students are exposed to software used in the manufacturing and design of products and process, as well as drawing, viewing, types, dimensioning systems, first and third angle projections and many of the symbols used in manufacturing and assembly.

Introduction to Computerized Machining (CNC) – I [NCT 101 – 2 credits]

Students are exposed to various aspects of automated machining centers used in automated manufacturing. Studies include an introduction to controllers, fundamentals of set-up and operation, programming CNC controllers, CAD CAM software and simulation software.

College Reading and Study Skills [ACS 107 – 4 credits]

In this course, students will identify and develop the essential skills for academic success. Instructional units include the essentials for academic success: comprehensive textbook reading skills, vocabulary development, learning styles, time management, note-taking, reading rate strategies, test-taking and 21st century literacies.

Semester 2

Machining for the Technologies [MTT 102 – 2 credits]

This course provides an introduction to basic machine tool operations. Emphasis is placed on shop safety. Topics include inch and metric precision measurement tools, tool identification, cutting speed calculations, drilling and tapping. Lab projects cover the basic operation contour band saw, vertical milling machine and turning on lathe

Introduction to Computerized Machining (CNC) – II [NCT 110 – 2 credits]

This class focuses on the set-up and operation of CNC mills and lathes in the laboratory. Different parts will be machined, to specification, through variations of set-up interactions with the machine tool controllers. Students will be able to operate the CNC vertical mills and CNC lathes in the lab after successful completion of this class.

Critical Reading and Thinking [ACS 108 – 4 credits]

In this course, higher order thinking strategies necessary for the interpretation and evaluation of reading content are refined and expanded. Students will develop critical reading and thinking skills needed in order to comprehend, analyze and interpret college-level materials as well as materials they encounter in the outside world. Students will develop language proficiency and become independent learners.

Admission Requirements

Students who wish to apply for the Introduction to Manufacturing Processes Program will need to complete the WCC Dual Enrollment Admissions in addition to completion of this packet.

Apply online at www.wccnet.edu/apply

The WCC student ID @ number (@xx-xx-xxxx) will be emailed to the email address provided on the application. Included will be instructions on how to create your WCC Gateway account. You will also receive a letter in the mail with this information.

Create your WCC Gateway account and View your Applicant Checklist

Use your student ID @ number to create your WCC Gateway account. This will give you access to your MyWCC, Blackboard, student email, etc. Once logged in, click on MyWCC to view your 'My Checklist.'

Entry Assessment

Submit a copy of your SAT scores. If you have not taken the SAT or your SAT scores do not meet the minimum requirement you will need to take the ACCUPLACER test on campus at WCC. Students need to have a minimum of a Level 3 in Reading and a Level 3 in Writing.

Orientations

Online - Click on the "online orientation" link that is embedded in the paragraph below the "My Checklist." Once complete, schedule an In-Person Orientation (Connect Session).

In Person- After the Online Orientation is complete, a drop down box will be available under the "My Checklist" to schedule an In-Person Orientation on campus at WCC. Arrive early with a government issued ID.

Proof of Age/Grade

Submit a Driver's License, State ID card or high school transcript. This can be submitted through email, studrec@wccnet.edu, at the Student Connection counter at WCC or by Fax 734.677.5408

Complete Consent Forms *Included in this packet*

Minor Student Enrollment – Parental Consent Form

Dual Enrollment Student – Principal Consent Form

Student Statement (250 Words) *Included in this packet*

Submit a statement from student on reason(s) for wanting to complete the Introduction to Manufacturing Processes program.

Student Interview

Interviews will be held with a faculty member of the Manufacturing Program. Once you have completed and submitted your Introduction to Manufacturing packet, you will be contacted to set up an interview.

Submit this form prior to admission to the College.

As the parent (or legal guardian) of _____
(Student's Name – please print clearly)

I hereby consent to his/her enrollment as a student at Washtenaw Community College ("College"). In addition to such consent, I hereby acknowledge and accept the following conditions of enrollment:

My child will be subject to the rules, regulations, and policies of the College.

My child will be interacting socially with adult college students, and the College is not responsible for these social interactions.

My child may be exposed to discussions, readings, and visual materials of a mature nature and will be expected to conform to the same performance standards as any other college student as set forth in course outlines and syllabi.

The College and its employees, faculty, agents, students, and trustees shall not be responsible for the supervision and individual monitoring of my child while in attendance at the College.

Student's WCC ID Number: _____

Parent (or legal guardian) Information:

Name: _____
(Please print clearly)

Address: _____

Phone Number: _____

Signature: _____ Date: _____

Submit this form prior to admission to the College.

Student Name: _____
(Please print clearly)

Student's WCC ID Number: _____

Dual enrolled high school student must meet all WCC admission criteria.

Completion of this form gives permission for the above mentioned student to be dual enrolled at Washtenaw Community College. It does **not** authorize WCC to bill the high school for tuition and fees.

If the high school will be responsible for the tuition and fees, a separate payment authorization www.wccnet.edu/hs-authorization must be submitted to WCC Cashier's office by the payment deadline.

High School Information:

Name: _____

Address: _____

Phone Number: _____

Principal's Name: _____

(Please print clearly)

Principal's Signature: _____ Date: _____

Explain the reason(s) you want to complete the WCC Introduction to Manufacturing Processes program (250 words).

Frequently Asked Questions

Where do I submit this packet?

Once you and your high school counselor have determined that you are eligible for the program, submit the completed packet to your high school counselor. They will send the completed packet to the Admissions Office at WCC.

Where is this program located?

This program is located on Washtenaw Community College's campus.

If my high school doesn't have school, do I still have to go?

This program will run off of WCC's schedule. That means even if you don't have classes at your high school, you will still be required to come to your WCC classes.

How long is this program?

This program is two semesters (a year) long. There will be classes in the Fall and then a new classes in the Winter.

How do I register for this program?

Once you have completed the packet **and** the WCC dual enrollment admissions checklist, you will be registered into the program. Once you've been registered, you can view your schedule in your MyWCC account.

Are these college classes?

These are college classes and will be added to your WCC transcript once you've completed.

What if I don't want to be in the program anymore?

If you feel like you no longer wish to be in the program, speak to your high school counselor and the program instructor. You will also need to drop the course(s) through your MyWCC account by the appropriate drop deadlines.



Academic Levels and Course Placement
Effective March 1, 2019

Reading

Your Academic Reading Level	Reading Courses For your Level	You earned one of these test scores* or successfully completed** this course or have the minimum high school GPA					
		ACCUPLACER	Next Gen ACCUPLACER	SAT	ACT	High School GPA \geq 3.0+	Successfully Completed Course**
<3	Referral to Adult Transitions	<34	<223	<18	<12		
3	ACS 107	34	223	18	12		
5	ACS 108	64	242	22	18		ACS 107
6	<i>None Required</i>	80	253	24	19	*	ACS 108

Writing

Your Academic Writing Level	Writing Courses For your Level	You earned one of these test scores* or successfully completed** this course or have the minimum high school GPA					
		ACCUPLACER	Next Gen ACCUPLACER	SAT	ACT	High School GPA \geq 3.0+	Successfully Completed Course**
2	ENG 050	<50	<237	<21	<14		
3	ENG 090	50	237	21	14		ENG 051
6	ENG 100/107/111	80	250	24	20	*	ENG 091

Math

Your Academic Math Level	Math Courses For your Level	You earned one of these test scores* or successfully completed** this course or have the minimum high school GPA				
		ALEKS	SAT	ACT	High School GPA \geq 3.0+	Successfully Completed Course**
1	MTH 067	<14	<470	<18		
2	MTH 094/097	14	470	18		MTH 067
3	MTH 125/148/160/167/169	30	530	21	*	MTH 094 or 097
4	MTH 176/181	46	560	23		MTH 169
5	MTH 178/180/182	61	610	26		MTH 176
7	MTH 191	76	650	28		MTH 180

*If the college has more than one assessment for the student in its records, such as the ACCUPLACER, ACT, SAT, or ALEKS, and particular classes, the College uses the highest scores or class(es) to assign the Academic Level to the student.

**Successful completion of the course listed in the "completed course" column (or one of the test scores listed next to it) will bring the student to the academic level listed next to it. Successful completion requires a minimum grade of "C" or "S" or "P."

+ Cumulative high school GPA of 3.0 or higher calculated after completion of 11th grade or later.