

# Mechatronics Technician Practical EXAM Part 1 Henry Ford College

## Practice Day and Equipment drop off info:

**Date:** June 15

**Time:** 8am – 12:00pm

**Location:** Henry Ford College, 5101 Evergreen Rd Dearborn, MI 48128

**Room:** Building E Machine Lab room E-167

- **June 15<sup>th</sup>** - From 8am to 3pm apprentices taking the practical exam at Henry Ford College on June 10<sup>th</sup> and 11<sup>th</sup> are allowed optional practice time to:
  - Practice on the manual machining equipment
  - Check tooling available, pneumatic connections, and plug connections for use and accessibility for the day of testing
  - Set up and practice commissioning their test cabinets

Please label equipment, tools. Drop off all material/tools in an organized and neat manner, Practical equipment should be set up in “exam ready” state (not-powered up, but proper assembly according to yellow) when you leave or store at the test site if you are not testing first.

## Additional resources that should be brought to and used during the practical exam:

- Non-communicable, non-programmable, battery-operated calculator with trig capabilities – a basic calculator will be available in the test platform
- Blue Mechanical and Metal Trades Handbook and for Mechatronics also the Red Electrical Engineering Handbook
- A collection of formulas (one single-sided 3x5 index card of formulas that you believe might be necessary during the exam such as feeds and speeds, force...etc)
- Pen, Pencil and Drawing tools
- Clean hard copy of your yellow preparation documentation

**NO PHONES Allowed during testing**

## Test Date and TIMES info:

**Date:** June 16-17

**Time:** MT Part 1 7:45am start - please arrive 30 min before start to check-in

**Location:** Henry Ford College, 5101 Evergreen Rd Dearborn, MI 48128

**Room:** Building E Machine Lab room E-167

First Name	Last Name	Company	Practical Start
Ian	Ferguson	Brose North America, Inc.	Tues. June 16 @ 7:45am ET
Daniel	Romanski	Brose North America, Inc.	Tues. June 16 @ 7:45am ET

Bryan	Hernandez	Brose North America, Inc.	Tues. June 16 @ 7:45am ET
Precious	Jackson	Dürr Systems, Inc.	Tues. June 16 @ 7:45am ET
Joshua	Brooks	EMAG LLC	Tues. June 16 @ 7:45am ET
Ethan	Capotosto	SW North America, Inc.	Tues. June 16 @ 7:45am ET
Kayden	Grant	Brose North America, Inc.	Wed. June 17 @ 7:45am ET
Malik	Henderson	Brose North America, Inc.	Wed. June 17 @ 7:45am ET
Vance	Spielman	Brose North America, Inc.	Wed. June 17 @ 7:45am ET
Chance	Anderson	Dürr Systems, Inc.	Wed. June 17 @ 7:45am ET
Larry	Lane III	Henkel Corporation	Wed. June 17 @ 7:45am ET
Evan	Kastl	SW North America, Inc.	Wed. June 17 @ 7:45am ET

Practical Exam Agenda and TEST DAY info continued on next pages...

## PRACTICAL EXAM AGENDA

**MT Practical Exam Part 1 – Part 1 7:45am Start (6.5 hours)** Please arrive at least 30 minutes prior to your official start time to double check your equipment is still in a ready state.

- 7:15 am**      **Part 1** arrival, sign in, apprentice final check and prep of equipment
- 7:45 am**      **Part 1 Drafting Instructions** provided - apprentices receive the drafting assignment
- ~8:00am**      **Part 1 Start of Drafting** – approx. 30 min. Each apprentice will have a supplied timer. The amount of time you take to complete your drafting will be deducted from your total 6.5 hours. Start and end time must be written on your drafting. Timer must be stopped by board when you turn in your drafting. Drafting must be turned in before group instructions continue for the work assignment
- ~8:30am**      **Part 1 Start instructions of Work Assignment** – entire work assignment packet distributed – possible staggered start
- ~8:45am**      **Part 1 START of 6 hour (remaining time) practical task** – At any point during this time the exam board will ask you technical questions related to your project. This is part of the “technical discussion” portion of your exam. Each apprentice will keep their supplied timer in a visible spot during testing.
- ~11:30 am**    **30-minute lunch break.** All must break at the same time. For the sake of time, please bring your own lunch!
- ~12:00 pm**    **Resume exam** (*remember to expect to need 1-2 hours of your exam time for commissioning. Commissioning is crucial. Even if you are not able to complete the entire mechatronics assembly and get it up and running as hoped, complete a commissioning in “as is” condition with the exam board!*) Your exam time will be stopped should an Exam Board member not be available to walk through the commissioning of your system with you and you must wait.
- ~3:00pm**      **Part 1 Exam end** expected end time, timers will hold official end time - Apprentices finish, clean up, unless your time was stopped due to limited exam board resources available, in that case you will have time remaining. *Once an apprentice is finished and equipment checked by the exam board, the apprentice will be instructed to return their equipment to yellow level (if it is going to be reused) removing machined and/or assembled mechanical parts for exam board inspection. Do not leave until an Exam Board member has dismissed you. Plan to stay as late as 5:30pm.*

**~6:15pm**

**Extended Time Part 1 Exam end** expected end time, timers will hold official end time - Apprentices finish, clean up, unless your time was stopped due to limited exam board resources available, in that case you will have time remaining. *Once an apprentice is finished and equipment checked by the exam board, the apprentice will be instructed to return their equipment to yellow level (if it is going to be reused) removing machined and/or assembled mechanical parts for exam board inspection. Do not leave until an Exam Board member has dismissed you.*