

Mechatronics Technician

Practical EXAM Part 1 and 2

Hennepin Technical College – Brooklyn Park Campus

Practice Day, Equipment drop off, and Pre-Exam set up:

Date: June 8

Time: 8am-3pm

Location: Hennepin Tech College, Brooklyn Park Campus – 9000 Brooklyn Blvd, Brooklyn Park, MN 55445

Room: C-140 and B100

- **June 8th** – From 8am to 3pm apprentices taking the practical exam at Hennepin on June 9th and 10th 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, and binders. Drop off all material/tools in an organized and neat manner, (including part 2 binders with all your preparation work and drawings for the practical exam). 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 Handbooks 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
- Part 1 - Clean hard copy of your yellow preparation documentation
- Part 2 – binder with updated yellow documentation and other relevant docs – to be checked by exam board.

NO PHONES Allowed during testing

TEST DATES and TIMES info:

Date: June 9-10

Time: **MT Part 1 8am or Part 2 8:15am start** - please arrive 30 min before start to check-in

Location: Hennepin Tech College, Brooklyn Park Campus – 9000 Brooklyn Blvd, Brooklyn Park, MN 55445

Room: C-140 and B100



First Name	Last Name	Company	Practical Start
Vincent	Sportel	Bühler Inc.	Tues. June 9 @ 8am CT
Patrick	Burns	Bühler Inc.	Tues. June 9 @ 8am CT
Isiah	Engesser	Bühler Inc.	Wed. June 10 @ 8am CT
Yahir	Mendoza	Bühler Inc.	Wed. June 10 @ 8am CT
Owen	Adwan	Bühler Inc.	Tues. June 9 @ 8:15am CT
Logan	Plese	Bühler Inc.	Tues. June 9 @ 8:15am CT
Tyler	Swanson	Bühler Inc.	Wed. June 10 @ 8:15am CT
Jaiden	Garland	Bühler Inc.	Wed. June 10 @ 8:15am CT

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

PRACTICAL EXAM AGENDAS

MT Practical Exam Part 1 and Part 2 Agenda – Part 1, (6.5 hours) or Part 2 (6 hours). Please arrive at least 30 minutes prior to your official start time to double check your equipment is still in a ready state.

- 7:00am** Set up – final preparation for apprentices and equipment check
- 7:45 am** **Part 1 and Part 2** sign in, apprentice final check and prep of equipment
Part 2 Apprentices must have their exam binders and be prepared to show and save your PLC program as a PDF to send to GACC representative on site. The Exam Board will check your binders once more before you begin.
- 8:00 am** **Part 1 Drafting Instructions** provided - apprentices receive the drafting assignment
- ~8:15am** **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. Drafting must be turned in before instructions continue for the work assignment
- 8:15 am** **Part 2** - Instructions provided - apprentices receive their work assignment for the day.
- 8:30 am** **Part 2** - **START** of 6-hour practical task. Each apprentice will have a supplied timer.
- ~8:45am** **Part 1 Start instructions of Work Assignment** – entire work assignment packet distributed
- ~9:00am** **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. Exam board will deduct or add time for Part 1 apprentices depending on the amount of drafting time that was used.
- ~12:00pm** **30-minute lunch break** determined by exam board. All break at the same time.
- ~12:30pm** **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 2** expected end time, timers will hold official end time - Apprentices finish, 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 for as late as 5:30pm.*
- ~3:30pm** **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 for as late as 5:30pm.*
- ~4:00 pm** **Extended time expected end time (timers will still hold official time)**
- ~5:45 pm** **Exam board wrap-up evaluations**

