# MTT – 122: Machine Practice 1

1. **Project 1 – Layout 1**
   1. Applied Skills
      1. Basic layout techniques
         1. Use of layout tools
         2. Application of layout dye
         3. Proper use of combination set
         4. Semi-precision measurement tools
      2. Band saw operations
2. **Project 2 – Layout 2**
   1. Applied Skills
      1. Intermediate layout techniques
         1. Use of vernier height gage
         2. Semi-precision measurement tools
      2. Band saw operations
3. **Project 3 – Benchwork 1**
   1. Applied Skills
      1. Intermediate layout techniques
      2. Band saw operations
      3. Semi-Precision measurement
         1. Use of combination set
      4. Power tool operation
         1. Use of power drill
      5. Use of tap/drill chart
         1. Drill bit selection
4. **Project 4 – Benchwork 2**
   1. Applied Skills
      1. Intermediate layout techniques
      2. Band saw operations
      3. Precision measurement
         1. Use of vernier height gage
      4. Power tool operation
         1. Use of power drill
      5. Use of tap/drill chart
         1. Drill bit selection
5. **Project 5 – Drill Press 1**
   1. Applied Skills
      1. Intermediate layout techniques
      2. Band saw operations
      3. Semi-Precision measurement
         1. Use of combination set
      4. Drill press operations
         1. Feed and speed calculation for drill press
            1. Selection of feeds and speeds
         2. Drilling
         3. Tapping procedure
         4. Counter-bores and counter-sinks
6. **Project 6 – Drill Press 2**
   1. Applied Skills
      1. Intermediate layout techniques
      2. Band saw operations
      3. Precision measurement
         1. Use of vernier height gage
      4. Drill press operations
         1. Feed and speed calculation for drill press
            1. Selection of feeds and speeds
         2. Drilling
         3. Reaming
         4. Tapping procedure
         5. Counter-bores and counter-sinks
7. **Project 7 – Lathe Turning 1**
   1. Applied Skills
      1. Lathe operations
         1. Turning
         2. Facing
         3. Threading
         4. Drilling
         5. Tapping
         6. Grooving
      2. Feed and speed calculations for the lathe
         1. Feed and speed selection
      3. Precision measurement
         1. Micrometers
         2. Dial calipers
8. **Project 8 – Lathe Turning 2**
   1. Applied Skills
      1. Lathe operations
         1. Turning
         2. Facing
         3. Threading
         4. Grooving
         5. Knurling
      2. Feed and speed calculations for the lathe
         1. Feed and speed selection
      3. Precision measurement
         1. Micrometers
         2. Dial calipers

*\*\*Continue to list additional topics and subtopics as necessary\*\**