

## Tool and Die/Moldmaking (BP) Diploma

### Semester Sequence - Part-Time

#### Offered at Brooklyn Park Only

#### First Semester

|          |                                      |   |
|----------|--------------------------------------|---|
| MACH1056 | Blueprint Reading I                  | 3 |
| MACH1100 | Introduction to Machining Technology | 3 |
| MACH1105 | Drilling and Sawing Processes        | 2 |

#### Total Credits 8

#### Second Semester

|          |                      |   |
|----------|----------------------|---|
| MACH1110 | Turning Technology I | 3 |
| MACH1125 | Milling Technology I | 3 |
| MACH1135 | Precision Grinding   | 2 |

#### Total Credits 8

#### Summer Semester

|                             |   |
|-----------------------------|---|
| Technical Studies Electives | 3 |
|-----------------------------|---|

#### Total Credits 3

#### Third Semester

|          |                                      |   |
|----------|--------------------------------------|---|
| MACH1120 | Turning Technology II                | 3 |
| MACH1130 | Milling Technology II                | 3 |
| MACH2425 | Geometry/Trigonometry for Machinists | 2 |

#### Total Credits 8

#### Fourth Semester

|          |                     |   |
|----------|---------------------|---|
| MACH1140 | Introduction to CNC | 3 |
| MACH2410 | CAD/CAM             | 3 |
| MACH2450 | Fundamentals of EDM | 2 |

#### Total Credits 8

#### Summer Semester

|                             |   |
|-----------------------------|---|
| Technical Studies Electives | 3 |
|-----------------------------|---|

#### Total Credits 3

#### Fifth Semester

|          |                         |   |
|----------|-------------------------|---|
| MACH2400 | CNC Setup and Operation | 3 |
| MACH2406 | CNC Programming         | 3 |
| MACH2415 | CNC Milling             | 3 |

#### Total Credits 9

#### Sixth Semester

|          |                   |   |
|----------|-------------------|---|
| MACH2455 | Die/Mold Design   | 3 |
| MACH2460 | Die Construction  | 3 |
| MACH2465 | Mold Construction | 3 |

#### Total Credits 9

## Seventh Semester

|          |                                       |   |
|----------|---------------------------------------|---|
| MACH2420 | Blueprint Reading II for Machinists   | 2 |
| MACH2500 | Introduction to Swiss-Style Machining | 3 |
|          | Technical Studies Electives           | 3 |

## Total Credits 8

### Technical Studies Electives

Recommended:

|          |   |       |
|----------|---|-------|
| MACH1145 | Machinists Reference Materials          | 1     |
| MACH1900 | Specialized Lab                         | 1 - 4 |
| MACH2430 | CNC Machining Centers                   | 3     |
| MACH2435 | CNC Turning Centers                     | 3     |
| MACH2440 | Quality Assurance                       | 2     |
| MACH2600 | Introduction to Quality Assurance       | 3     |
| MACH2610 | Inspection Processes                    | 3     |
| MACH2615 | Inspection Equipment and Techniques     | 3     |
| MACH2620 | Quality Systems                         | 3     |
| MACH2625 | Computer Analysis of Manufacturing Data | 2     |
| METS1000 | Computers in Manufacturing              | 3     |
| ENGC1050 | Additive Manufacturing                  | 3     |
| ENGC1250 | SOLIDWORKS I                            | 4     |

## Choose a Total of: 9 Credits

### Graduation (64 Credits)

Semester listings reflect the recommended sequence. Due to circumstances beyond our control, the information herein is subject to change without notice.

3/2/2023 : BP 4307 / EP