Utica Community Schools in partnership with

Macomb Community College

Presents: School Day - **Dual Enrollment for Product Development**

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| **Year 1** | **Year 2** |
| **Fall Student Costs about $350** | **Fall** |
| PRDE 1010 - Design Principles  Credit Hours: 4.00 | ATDD 1900 – Drafting-Machine Tool Blueprint Reading  Credit Hours: 2.00  PRDE 2000 – Product Development Process  Credit Hours: 3.00 |
| **Winter Student Costs about $350** | **Winter** |
| PRDE 1520 - NX Fundamentals  Credit Hours: 4.00 | PRDE 2520 - NX Advanced  Credit Hours: 4.00 |

**PRDE 1010 - Design Principles:** The student will gain a strong knowledge of theoretical design. Main topics that will be discussed are descriptive geometry, orthographic projection, assembly and detail drawings.

**PRDE 1520 - NX Fundamentals:** This course is designed for a new user of NX. The student will be introduced to Sketcher, Part Modeling, Assemblies, and Drafting.

**ATDD 1900 – Drafting-Machine Tool Blueprint Reading:**  This course is an introduction to blueprint reading. The student will gain an understanding of the fundamental components of a working blueprint, including their various symbology and industrial specifications, as well as different types of working blueprints. The industrial structures and mechanical systems found on working blueprints are also major components of this course.

**PRDE 2000 – Product Development Process:** This course provides students with an overall understanding of the Product Development Process used in a variety of industries. The student will gain an understanding of planning, specifications, development processes, and economics.

**PRDE 2520 - NX Advanced:** This course is designed for a current/educated user of NX. The student will develop parts using expressions, interpart relations, surfacing features, and develop assemblies using advanced techniques.

**These courses are designed to prepare students for success in careers in advanced manufacturing across many industries**, including automotive die/mold, medical, aerospace, defense, renewable energy, “green” technologies, and consumer products. This program is ideal for those who enjoy working with their hands.

**Students are required to drop two UCS courses to participate in this School Day - Dual Enrollment for Product Development. Transportation will be provided by UCS, and you be back at your high school prior to the end of the school day.**