

## **Upon graduation, the graduates of the Product and Process Technology program will be able to:**

- Interpret and explore the impact of new global and social applications in the manufacturing forum.
- Identify & complete design and its processes, concept to completion.
- Identify the major functions of a manufacturing system, their characteristics and relationship to Design, process routing and lean manufacturing.
- Demonstrate Computer competency required for CAM applications including CNC programming, set up, data transmission and use of CAD-CAM edit software.
- Analyze, apply and qualify engineering specs for parts machined, prototyped or fabricated.
- Analyze, design and/or add or remove material for physical systems in emerging fields, including medical applications, using alloyed metals, composites and exotic materials.
- Demonstrate competency in higher math including trigonometry required for process solutions.
- Plan, design and implement the sequence of operations including tooling, machines, time studies, automation and robotic integrated manufacturing
- Communicate and problem solve in multi -disciplinary groups and teams and increase knowledge through lifelong learning disciplines
- Demonstrate knowledge of flexible manufacturing, lean manufacturing principals, design constraints influenced by ROI.