Division of Science, Technology, Engineering and Mathematics

Computer-Aided Design Certificate

This program prepares graduates to gain employment as a drafter or a CNC programmer in the mechanical, manufacturing or architecture industries. Upon completion, this program will provide students with skills to use a variety of computer-aided design (CAD) software and advanced manufacturing tools.

Successful graduates of the program will be able to:

1. Demonstrate proficiency in advanced CAD skills by creating complex drawings using various CAD software such as SolidWorks or Revit;
2. Develop a solution to an engineering problem that satisfies given parameters including feasibility, manufacturability and safety;
3. Produce professionally-detailed 2D and 3D engineering drawings through computer-aided design;
4. Collaborate effectively with peers and perform in multidisciplinary teams;
5. Apply analytical reasoning, creative processes, and knowledge of CAD technology to solve design problems;
6. Produce effective projects, such as physical models, and documentation, such as engineering drawings and reports;
7. Critically read and evaluate research about mechanical engineering innovation, tools and applications.