



**Internal Certificate 2012-2013**

**Drafting  
Racine Campus**

**CAD/CAM  
CERTIFICATE  
(90-606-1)**

**16 Credits**

Upon completion of this certificate, students will have gained an understanding of Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM) systems and how they work together to produce a finished part. The student will be able to construct a drawing from scratch, verify it by creating a 3-D prototype of the part and then transfer that data into a CNC program that can be used by various machine tools to construct the part. This certificate offers an introduction into two of the most popular CAD systems as well as an understanding of machine tools and measuring instruments.

**REQUIRED COURSES**

<b><u>Course Number</u></b>	<b><u>Course Title</u></b>	<b><u>Credits</u></b>
628-100	Automated Manufacturing Concepts/Intro	2
628-110	CNC/CAM Programming	3
623-189	Metrology	3
606-122	Geometric Dimensioning & Tolerances	2
606-126	AutoCAD/ Introduction to	2
606-128	CAD Solidworks	2
606-111	Blueprint Reading	<u>+ 2</u>
		16

NOTE: Students must complete a certificate program with a minimum of a 2.0 Program GPA.  
NOTE: Prerequisites can be waived with departmental approval.