Macomb Community College
Windmill Design
Jim Carlson
Dr. Harry Buhalis
Peter Klein
PRDE 1300
(Manufacturing Processes)

Students will:

• Understand gear cutting techniques
• Methodology of Blade Processes
PRDE 1400 / 1500 /1600
(Intro to Solid Works) (Intro to Unigraphics) (Intro to Catia)

Students will:

• Model gearbox components
• Apply mat’l & analyze properties
• Design a gearbox housing
PRDE 1700
(TeamCenter Engineering)

Students will:

• Build the gearbox assy
• Release parts for manufacturing
• Load assy’s using variance & alternates
PRDE 2000
(Product Development Process)

Students will:

- Identify windmill specifications
- Design a concept
- Manage economics for completion
Qual 2400
(Project Management)

Students will:

• Develop project plan
• Establish a timeline for production
• Create an Economic breakdown
PRDE 2420
(Capstone)

Students will:

• Develop a timeline for production
• Design a component
• Build a concept of the design
• Manufacture the part
• Build a windmill
• Generate power
Thank You