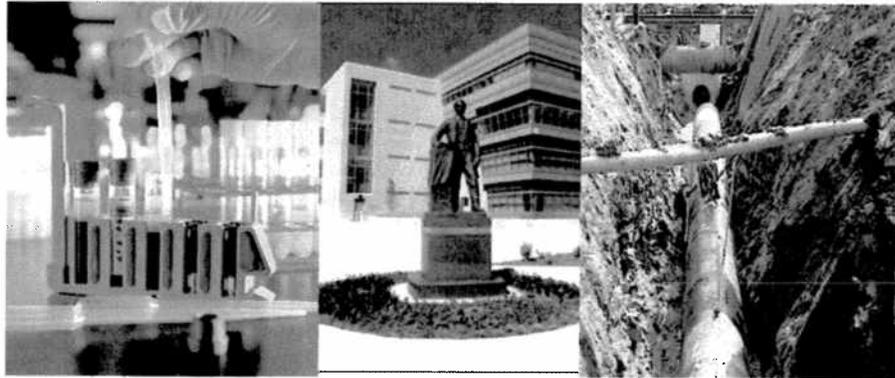# Ferris State University

Career Trends for the Next Decade

Careers with Great Potential

- Healthcare
  - Pharmacy
  - Medical Information Technology
  - Nuclear Medicine
- Computer Information Systems
  - Bioinformatics
- Green Jobs
  - Alternative Energy
  - Energy Efficiency

- Telecommunications Technology
  - Cell Phone Technologies and Applications
- Gerontology
- Material Science
  - Wind Turbines
  - Nanotechnologies
- Infrastructure
  - Highways and Civil Engineering
- Finance
  - Rebuilding Personal Investment
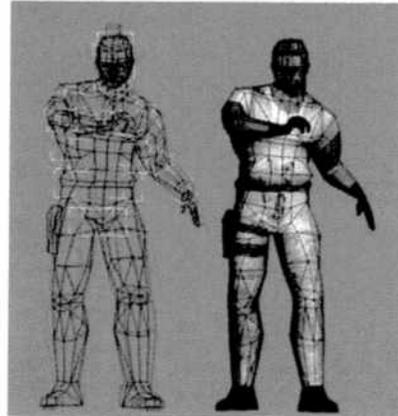 - Rebuilding the Banking Industry
- Entrepreneurship

Digital Animation and Video Game Design

• Projected growth between 2006 – 2016 is 26% by the U.S. Department of Labor

• According to PricewaterhouseCoopers, portable software sales for the "Family Entertainment" genre should reach $48.8 billion by 2011. Reported by the Entertainment Software Association. http://www.theesa.com/

•Research and Markets, an industry performance reporting firm, has announced the addition of the "Global Animation Industry: Strategies, Trends and Opportunities 2009" report to their offerings, saying it is one of the fastest growing industries today. Reported by Business Week.com. BusinessWeek.Com, April 23, 2009

• Ferris State University provides the degree in Digital Animation and Game Design in Grand Rapids and partners with five community colleges on student articulation
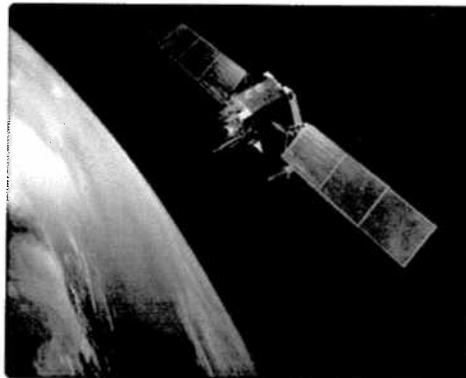

Survey Engineering

• Projected growth between 2006 – 2016 is 20% by the U.S. Department of Labor

• Much of Survey Engineering job growth is due to increased demand in Global Information and Global Positioning Systems

• Ferris State University is currently creating a Certificate for Global Information Systems that will be available within the Survey Engineering degree

• Along with construction surveying and cartography, Survey Engineers are employed in community development, natural resource preservation, coastal navigation and communications

Digital Media Software Engineering

• Software Engineers design interactive programming and algorithms for animation, videogame design, telecommunications, robotics, geology, satellite, web applications, and drone operations. The United States Department of Labor reports Software Engineering will be one of the fastest growing occupations over the next decade, projected to grow between 28 and 45% depending on specialization

• Software Engineering tops the list of best jobs for the next decade with high pay, great job growth and opportunities for creativity.
Wulfhorst, Ellen. Reuters.com. Apr. 12, 2006

• Software Engineering has been a relatively recent addition to the curriculum at Ferris State University. Faculty are beginning work on articulation agreements with a number of community colleges across the state
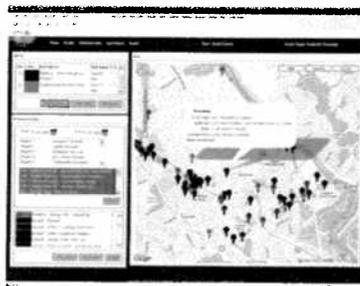
Information Security and Intelligence

• Projected Growth between 2006 – 2016 is 18% for Security Analysts per the U.S. Department of Labor

• Ferris State University has worked with the Central Intelligence Agency, National Security Agency, Federal Bureau of Investigation and major corporations in the creation of the ISI degree program

• Ferris State University is currently providing Information Security and Intelligence in partnership with Northwestern Michigan College (Traverse City), Grand Rapids Community College and will begin this fall at Delta College (Bay City/Saginaw).
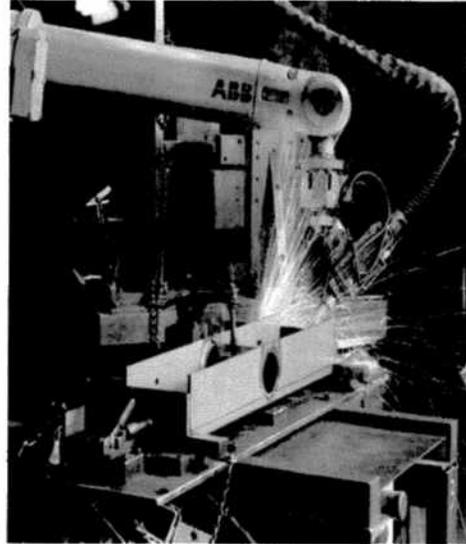
• Today, nearly every crime we investigate involves some kind of digital evidence. It is usually a cell phone. Eventually, every police agency will need someone in computer forensics.
Thomas Betro, Director, Naval Criminal Investigative Service (NCIS). April 29, 2009

Welding Engineering Technology

• Project Growth between 2006 – 2016 is 10% by the U.S. Department of Labor

• The Wall Street Journal reports demand for Welding Engineering Technicians will outstrip supply by next year. Wall Street Journal Online. August 15, 2006.

• With industry's transition to automated systems, Welding Engineering Technicians employing robotic welders.

Architectural and Environmental Design

• Project Growth between 2006 – 2016 is 18% by the U.S. Department of Labor

• LEED stands for Leadership in Energy and Environmental Design. LEED certification is administered by the U.S. Green Building Council.

• in August, the U.S. House of Representatives approved the Green Jobs Act of 2007. This will help grow sustainable job opportunities.

• Per capita, Michigan has more LEED certified buildings than any other region of the country. The Right Place of West Michigan. http://www.rightplace.org/west-michigan-advantage/regional-rankings/

Environmental Engineering

• Projected Growth between 2006 – 2016 is 25% as reported by the U.S. Department of Labor

• Environmental Engineering was ranked as one of the top ten jobs for the next decade and beyond. Reported by WorldWideLearn.com. May, 2009 http://www.worldwidelearn.com/online-education-guide/top-ten-job-trends.htm

•Ferris State University's program will concentrate on hydrology with two areas of study; potable water and industrial reclamation. Potability will have a global perspective while industrial reclamation will concentrate on serving industry in the State of Michigan

•FSU is currently working with Northwestern Michigan College in the creation of this degree program and will be collaborating with Lansing Community College as well

Molecular Diagnostics

• Projected Growth between 2006 – 2016 is 15% as reported by the U.S. Department of Labor

• Advancing technologies are pushing the diagnostics industry to the fore, and the molecular diagnostics industry in particular is emerging as a powerful health care player with tremendous potential. The Info Shop, a market research portal. November, 2005. http://www.the-infoshop.com/study/cd34420-molecular-diagnostics.html

• Ferris State University has collaborated with The Cleveland Clinic and Sequenom, a California maker of genetic tests in the development of the degree program

• Signaling an increased interest in Molecular Diagnostics, Novartis AG created its own in-house Molecular Diagnostics division.   Devise Link.com. May, 2009