



## *IT Essentials Certificate*

**Department of Mathematics, Computer Science, and Statistics  
Ellis College of Arts and Sciences**

Required Number of Hours: 12

Description of certificate: (Include an introductory paragraph and certificate plan of study.) Students completing the requirements for this certificate will have firm understanding of the hardware and software components that make up modern computing machinery. They will also have a robust understanding of the security concerns and counter measures that can be taken to secure a Windows-based system. Students will have a basic knowledge of Microsoft Word and PowerPoint and advanced knowledge of the two most technical pieces of software in the Microsoft Office suite (Excel and Access).

Student Learning Outcomes: Upon successful completion of the certificate, the student will have acquired an understanding of the following concepts.

- Basic Computer Literacy
- Microsoft Office
- Database Concepts
- Computer Hardware
- Computer Software
- Backup and Recovery
- Network Security
- Application Security

Required Courses:

- CSC 2003 – Introduction to Computers
- CSC 2013 – Windows Security Fundamentals
- CSC 2163 – Microcomputer Applications (Microsoft Access)
- CSC 2163 – Microcomputer Applications (Microsoft Excel)

**Contact information:**

*Jim Harper, Director of Computer Science*

*870.230.5039*

*E-Mail: harperj@hsu.edu*