Program Description:

The Associate in Applied Science (AAS) in Computer Technology program is designed to provide information and training on the use, application, and technological developments of computers in a changing electronic environment. Course work is aimed primarily at students interested in developing skills in the business or personal computing environment. Specifically, the courses provide instruction in the following areas: computer applications in the business environment and current trends and developments in computers; graphical applications; electronic spreadsheets; database; word processing; and computer operating systems.

Program Competencies:

CCL in Advanced Computer Usage and Applications (5218)

1. Define terms related to microcomputer usage and applications. (CIS105, CIS113DE, CIS114DE, CIS117DM, CIS121AE)
2. Identify microcomputer hardware and software components. (CIS105, CIS121AE)
3. Apply microcomputer operation skills: care and handling of diskettes, powering up the computer, keyboarding (required speed development: 25 words per minute), and powering down the computer. (CIS105)
4. Evaluate and select microcomputer hardware and software for specific applications. (CIS105)
5. Describe basic graphics, sound, process control, and other special capabilities of a microcomputer. (CIS105, CIS118AB)
6. Demonstrate skills for using commercial software programs including electronic spreadsheets, micro word processing, and database management. (CIS113DE, CIS114DE, CIS117DM)
7. Demonstrate use of a computer operating system. (CIS121AE)
8. Use suitable software to generate charts, graphs and graphics for business use. (CIS118AB)
9. Explain the use various Internet communication, resource discovery, and information retrieval tools. (CIS133AA, CIS133BA, CIS133CA, CIS133DA)
10. Use enhanced word processing software features such as math functions, columns, macros, style libraries, graphics, outlines and table of contents. (CIS213DE)
11. Utilize PowerPoint software to incorporate sound and time-based data into presentations. (CIS118BB)
12. Demonstrate advanced use of an operating system. (CIS122AE)
13. Use project management software to plan and schedule a project. (CIS124AA, CIS124BA)
14. Describe the process for modifying, tracking, updating, and consolidating projects. (CIS124BA)
Program Competencies (continued):

15. Demonstrate advanced spreadsheet skills including importing/exporting data, formatting techniques and macros. (CIS214DE)
16. Utilize advanced database concepts such as database design, key selection, and table relationships. (CIS217AM)
17. Differentiate between crosstab, parameter, and action query. (CIS217AM)
19. Summarize effective techniques for internal and external business communications. (GBS233)

OR

CCL in Digital Design (5525)
1. Define terms related to microcomputer usage and applications. (CIS105, CIS113DE, CIS114DE, CIS117DM, CIS121AE)
2. Identify microcomputer hardware and software components. (CIS105, CIS121AE)
3. Apply microcomputer operation skills: care and handling of diskettes, powering up the computer, keyboarding (required speed development: 25 words per minute), and powering down the computer. (CIS105)
4. Evaluate and select microcomputer hardware and software for specific applications. (CIS105)
5. Describe basic graphics, sound, process control, and other special capabilities of a microcomputer. (CIS105, CIS118AB)
6. Demonstrate skills for using commercial software programs including electronic spreadsheets, micro word processing, and database management. (CIS113DE, CIS114DE, CIS117DM)
7. Demonstrate use of a computer operating system. (CIS121AE)
8. Use suitable software to generate charts, graphs and graphics for business use. (CIS118AB)
9. Explain the use various Internet communication, resource discovery and information retrieval tools. (CIS133AA, CIS133BA, CIS133CA, CIS133DA)
10. Utilize electronic techniques to create, manipulate, and edit images, text, abstract art, graphic design, color graphics, and business charts. (CIS120DB, CIS120DF)
11. Use project management software to plan and schedule a project. (CIS124AA, CIS124BA)
12. Describe the process for modifying, tracking, updating, and consolidating projects. (CIS124BA)
13. Create, design, and publish various desktop publications using Adobe InDesign. (CIS138DA)
14. Define multimedia technology. (CIS/MMT140)
15. Describe various hardware devices and software tools used in developing and delivering multimedia. (CIS/MMT140)
16. Describe the process of analysis and design of a multimedia application. (CIS/MMT140)
17. Use advanced features of Adobe Photoshop, including filters, typography, painting, image compilation, and color and text manipulation. (CIS220DF)
18. Design and publish an electronic portfolio, showcasing one's best work and providing evidence of one's knowledge, skill, and learning. (CIS288)

OR
Program Competencies (continued):

**CCL in Networking: Design and System Support (5215)**

1. Define terms related to microcomputer usage and applications. (CIS105, CIS113DE, CIS114DE, CIS117DM, CIS121AE)
2. Identify microcomputer hardware and software components. (CIS105, CIS121AE)
3. Apply microcomputer operation skills: care and handling of diskettes, powering up the computer, keyboarding (required speed development: 25 words per minute), and powering down the computer. (CIS105)
4. Evaluate and select microcomputer hardware and software for specific applications. (CIS105)
5. Describe basic graphics, sound, process control, and other special capabilities of a microcomputer. (CIS105, CIS118AB)
6. Demonstrate skills for using commercial software programs including electronic spreadsheets, micro word processing, and database management. (CIS113DE, CIS114DE, CIS117DM)
7. Demonstrate use of a computer operating system. (CIS121AE)
8. Use suitable software to generate charts, graphs and graphics for business use. (CIS118AB)
9. Explain and use various Internet communication, resource discovery and information retrieval tools. (CIS133AA, CIS133BA, CIS133CA, CIS133DA)
10. Explain technical aspects of the computer including the system setup and basic hardware/software configuration troubleshooting. (BPC170, BPC270)
11. Describe basic computer architecture. (BPC170, BPC270)
12. Demonstrate installation and troubleshooting techniques. (BPC170, BPC270)
13. Demonstrate the process for completing hardware, operating systems, peripherals, mobile devices, networking, and security repairs. (BPC270)
14. Identify and describe components of a customer-focused organization. (CIS102)
15. Demonstrate advanced use of an operating system. (CIS122AE)
16. Identify current issues, terminology and products related to local area networks. (CIS190)
17. Describe network security threats, vulnerabilities, attacks, and strategies (CIS270).

**OR**

**CCL in Web Design: User Interface (5216)**

1. Define terms related to microcomputer usage and applications. (CIS105, CIS113DE, CIS114DE, CIS117DM, CIS121AE)
2. Identify microcomputer hardware and software components. (CIS105, CIS121AE)
3. Apply microcomputer operation skills: care and handling of diskettes, powering up the computer, keyboarding (required speed development: 25 words per minute), and powering down the computer. (CIS105)
4. Evaluate and select microcomputer hardware and software for specific applications. (CIS105)
5. Describe basic graphics, sound, process control, and other special capabilities of a microcomputer. (CIS105, CIS118AB)
6. Demonstrate skills for using commercial software programs including electronic spreadsheets, micro word processing, and database management. (CIS113DE, CIS114DE, CIS117DM)
7. Demonstrate use of a computer operating system. (CIS121AE)
8. Use suitable software to generate charts, graphs and graphics for business use. (CIS118AB)
AAS in Computer Technology
Program Competencies

Academic Plan Code: 3217    CIPS Code: 11.1006    GB Date: 12/13/16    Program Credits: 61-64

Program Competencies (continued):

9. Explain the use various Internet communication, resource discovery and information retrieval tools. (CIS133AA, CIS133BA, CIS133CA, CIS133DA)
10. Practice basic animation techniques for creating, manipulating, and editing flash animation graphics. (CIS120DC)
11. Utilize electronic techniques to create, manipulate, and edit images, text, abstract art, graphic design, color graphics and business charts. (CIS120DF)
12. Use project management software to plan and schedule a project. (CIS124AA)
13. Define multimedia technology. (CIS/MMT140)
14. Describe various hardware devices and software tools used in developing and delivering multimedia. (CIS/MMT140)
15. Describe the process of analysis and design of a multimedia application. (CIS/MMT140)
17. Summarize e-Commerce, its uses and common components in web sites. (CIS235)
18. Design and publish an electronic portfolio, showcasing one's best work and providing evidence of one's knowledge, skill, and learning. (CIS288)