

CAREER CLUSTER - PATHWAY FRAMEWORK

Career Cluster: Information Technology

PATHWAY OPTIONS:

- ☐ Information Support & Services
- ☐ Network Systems
- ☒ Programming & Software Development
- ☐ Web & Digital Communications

PATHWAY: *Programing and Software Development*

DESCRIPTION:

Careers in programing and software development involve the design, development, implementation, and maintenance of computer systems and software, requiring knowledge of computer operating systems, programming languages, and software development.

ALTERNATIVE OCCUPATIONS:

Applications Engineer
Game Programmer
Operating Systems Designer
Operating Systems Engineer

OCCUPATIONAL GOAL

Computer Programmer

Pathway Specific Knowledge & Skills

- I. Identify and analyze customer/organizational network system needs.
- II. Analyze a network system.
- III. Design a network system.
- IV. Perform network system installation.
- V. Perform network administration.
- VI. Perform network maintenance.

Knowledge & Skills

- I. Academic Foundations
- II. Communications
- III. Problem-solving and Critical Thinking
- IV. Information Technology Applications
- V. Systems
- VI. Safety, Health, and Environmental
- VII. Leadership and Teamwork
- VIII. Ethics and Legal Responsibilities
- IX. Employability and Career Development
- X. Technical Skills

Approved
Course
Sequence