



CIS Standards

(Updated November 2016)

IT Fundamentals

for all Programs of Study

Please select the IT Fundamentals standards that match the program of study to make sure you have the correct standard reference number.

Page 2 – Data Science Program of Study

Page 3 – IT Operations Management Program of Study

Page 4 – Web Development Program of Study

Page 5 – Information Technology Program of Study

IT Fundamentals

Course Description

Students are introduced to the proper use of information technologies (IT). In addition, they will be introduced to hardware and software selection and use, technology resource support, and ethical issues. Students will investigate information technology careers and certifications in networking, programming, and IT support services. Units would include, but not be limited to, exploring concepts in networking, programming, and support services, computer hardware components and peripherals, system and application software, and impact of technology on society.

Course Code: 270504

Endorsements to teach:

BMIT, IT

Programs of Study to which this Course applies:

Data Science, IT Operations Management, Web Development, Information Technology

Standards and Indicators

CIS. HS. 5. 1

Identify the basic components of computer networks.

- CIS. HS. 5. 1. a Define basic networking terminology.
- CIS. HS. 5. 1. b Identify the purpose of networks and their functionality.
- CIS. HS. 5. 1. c Develop strategies to make an effective transition from school to career.

CIS. HS. 5. 2

Demonstrate an understanding of programming and its usage in business and industry.

- CIS. HS. 5. 2. a Explain the purpose and function of software development.
- CIS. HS. 5. 2. b Demonstrate the use of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), programming languages, and common webpage formats.

CIS. HS. 5. 3

Demonstrate an understanding about providing technology support to maintain service.

- CIS. HS. 5. 3. a Apply strategies for identifying and solving routine hardware and software problems.
- CIS. HS. 5. 3. b Understand security, privacy, and risk management policies and procedures for information technology.

CIS. HS. 5. 4

Describe current and emerging hardware.

- CIS. HS. 5. 4. a Identify hardware components.
- CIS. HS. 5. 4. b Develop criteria for purchasing or upgrading computer system hardware.

CIS. HS. 5. 5

Identify, evaluate, and customize applications, operating system software, and utilities.

- CIS. HS. 5. 5. a Compare and contrast the functions, features, and limitations of different operating systems and utilities (e.g., open source, mobile proprietary operating systems)
- CIS. HS. 5. 5. b Manage files and folders.
- CIS. HS. 5. 5. c Identify productivity software appropriate for specific task.

CIS. HS. 5. 6

Research current Information Technology careers.

- CIS. HS. 5. 6. a Investigate Information Technology careers in each of the six career clusters to determine school, salary, and job market outlook in each career.
- CIS. HS. 5. 6. b Compare job opportunities and responsibilities.

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Standards and Indicators

CIS. HS. 6. 1

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- CIS. HS. 6. 1. a Define basic networking terminology.
- CIS. HS. 6. 1. b Identify the purpose of networks and their functionality.
- CIS. HS. 6. 1. c Develop strategies to make an effective transition from school to career.

CIS. HS. 6. 2

Demonstrate an understanding of programming and its usage in business and industry.

- CIS. HS. 6. 2. a Explain the purpose and function of software development.
- CIS. HS. 6. 2. b Demonstrate the use of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), programming languages, and common webpage formats.

CIS. HS. 6. 3

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CIS. HS. 7. 1

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- CIS. HS. 7. 1. a Define basic networking terminology.
- CIS. HS. 7. 1. b Identify the purpose of networks and their functionality.
- CIS. HS. 7. 1. c Develop strategies to make an effective transition from school to career.

CIS. HS. 7. 2

Demonstrate an understanding of programming and its usage in business and industry.

- CIS. HS. 7. 2. a Explain the purpose and function of software development.
- CIS. HS. 7. 2. b Demonstrate the use of Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), programming languages, and common webpage formats.

CIS. HS. 7. 3

Demonstrate an understanding about providing technology support to maintain service.

- CIS. HS. 7. 3. a Apply strategies for identifying and solving routine hardware and software problems.
- CIS. HS. 7. 3. b Understand security, privacy, and risk management policies and procedures for information technology.

CIS. HS. 7. 4

Describe current and emerging hardware.

- CIS. HS. 7. 4. a Identify hardware components.
- CIS. HS. 7. 4. b Develop criteria for purchasing or upgrading computer system hardware.

CIS. HS. 7. 5

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- CIS. HS. 7. 5. b Manage files and folders.
- CIS. HS. 7. 5. c Identify productivity software appropriate for specific task.

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