



COMPUTER INFORMATION TECHNOLOGY

DATABASE ADMINISTRATION

ASSOCIATE IN APPLIED SCIENCE

Your Butler experience will prepare you to design and manage the construction of databases and related software programs and applications, including the linking of individual data sets to create complex searchable databases (warehousing) and the use of analytical search tools

(mining). This program provides training for the following certifications: CompTIA A+, CCNA, and MCITP: Database Administrator.

General Education Requirements

Course	Hours
Communications	9
___English Comp I (EG 101)	3
___Technical Writing (EG 112)	3
___Public Speaking (SP 100)	3
Science, Math and Computer Science	3
___Math Requirement (MA 114 or above)	3
Social/Behavioral Science Requirement	3
___Sociology (BS 105) OR	3
___General Psychology (BS 160)	3
Required Courses	
First Semester	
___Intro to Programming (IN 105)	3
___Supporting Desktop Systems (IN 106)	3
___Supporting Networked Computers (IN 133)	3
Second Semester	
___Network Servers** (IN 131)	3
___Internetworking Fund* (IN 245)	3
___Router Technologies* (IN 246)	3
___SQL Server 2005 Implementation (IN 238)	3
Third Semester	
___HTML (IN 112)	3
___Routing and Switching (IN 247)	3
___Internetworking Protocols (IN 248)	3
___Designing DB Serv. Infrastructure (IN 268)	3
___Optimizing/Maintaining Data Sol. (IN 269)	3

Fourth Semester

___Network Clients (IN 130)	3
___Princ of Info Assurance (IN 2001)	3
___Small Bus Mgmt (BA 109) OR	
___Intro to Marketing (BA 140)	3

* Denotes CISCO Certification Classes

** Denotes MCDBA Certification Classes

A total of 63 credit hours is required for this degree. In addition to the 15 credit hours of general education requirements and 45 credit hours of required courses, choose 3 credit hours of Technical electives.

Technical Electives

One course **must** be selected from the following list:

PC Visual Basic Programming (IN 108)	
XML Programming (IN 116)	
Active Server Pages.NET (IN 118)	
Computer Prog & Databases (IN 181)	
Object Oriented Prog w/ C# (IN 201)	
Java Programming (IN 211)	

Remaining Technical Electives can be any IN course.

Students can achieve additional certifications by selecting the following technical electives:

MCSA

Network Management (IN 237)	
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MCSE

Network Clients (IN 130)	
Enterprise Networking (IN 140)	
Network Management (IN 237)	
Network Directory Services I (IN 150)	
Network Directory Services II (IN 250)	

CompTIA Linux +

Linux on the Desktop (IN 240)	
Linux as a Server (IN 249)	

Database Administration

Career Program

Degree Offered: Associate in Applied

Science in Database Administration

Credits Required: 63

Contact: Steve Strom, Lead Instructor, at 316.218.6143

Prior to Admission

Students enrolling in Computer Information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in Math.

Articulation Agreements

K-State at Salina

Related Programs

Database Administration
Digital Media
Digital Media Specialist
Digital Media Business Specialist
e-Business Application
Information Assurance & Digital Forensics
Internetworking Management
Internetworking Management Business Specialist
Software Development
Web Development
Web Development Specialist
Web Development Business Specialist
Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

Median Wage for Database Administrators in South Central Kansas is \$58,262 per year. (Source: Workforce Planning Guide & Wage Survey, Local Area IV 2003 Edition, KDHR.)

Additional Costs

Additional lab fees are assessed to each program course and subject to change.

Digital Media

Career Program
Degree Offered: Associate in Applied Science
Credits Required: 63
Contact: Skyler Lovelace, Lead Instructor, at 316.218.6229

Prior to Admission

Students enrolling in Computer Information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in Math.

Related Programs

Database Administration
Digital Media
Digital Media Specialist
Digital Media Business Specialist
e-Business Application
Information Assurance & Digital Forensics
Internetworking Management
Internetworking Management Business Specialist
Software Development
Web Development
Web Development Specialist
Web Development Business Specialist
Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

Median Wage for Digital Media Artists and Animators in South Central Kansas is \$40,040 per year. (Source: Workforce Planning Guide & Wage Survey, Local Area IV 2003 Edition, KDHR.)

Additional Costs

Additional lab fees are assessed to each program course and subject to change.

DIGITAL MEDIA ASSOCIATE IN APPLIED SCIENCE

Your Butler experience will prepare you to use computer applications and visual and sound imaging technologies to manipulate images and information originating as film, video, still photographs, digital copy, soundtracks, and physical objects. Students create projects designed to inform, educate and entertain.

General Education Requirements

Course	Hours
Communications	
___English Comp I (EG 101)	3
___Public Speaking (SP 100)	3
___One other course (EG 102 or EG 112)	3

Science, Math and Computer Science	3
___Math Requirement (MA 114 or above)	3

Social/Behavioral Science Requirement	3
One course from the following	
___Sociology (BS 105)	3
___General Psychology (BS 160)	3

Required Courses

First Semester	
___Cyber Marketing (BA 219)	3
___Intro to Programming (IN 105)	3
___Flash Fundamentals (IN 115)	3
___Digital Graphics w/Photoshop (IN 122)	3
___Intro to Multimedia Design (IN 124)	3

Second Semester

___HTML (IN 112)	3
___Digital Video Editing (IN 117)	3
___Digital Audio (IN 119)	3
___Logo Design w/Illustrator (IN 123)	3

Third Semester

___3D Computer Animation I (BA 128)	3
___Flash ActionScript (IN 216)	3
___2D Animation & Cartooning I (IN 217)	3
___Info Technology Ethics (IN 275)	3

Fourth Semester

___Multimedia Authoring Tools (IN 208)	3
___Computer Science Capstone (IN 299)	3

A total of 63 credit hours is required for this degree. In addition to the 15 credit hours of general education requirements and 45 credit hours of required courses, choose 3 credit hours from the list of Related Electives below:

Related Electives	3
___3D Computer Animation II (BA 228)	3
___Dreamweaver (IN 114)	3
___XML Programming (IN 116)	3
___Info Tech Business Solutions (IN 290)	3
___Internships (IN 193, 194)	1-3
___Cooperative Ed I, II, III, IV (IN 197, 198, 297, 298)	2-6
___Special Topics (IN 253)	3
___Special Topics (IN 254)	3

DIGITAL MEDIA SPECIALIST

CERTIFICATE

Your Butler experience will prepare you to use computer applications and visual and sound imaging techniques to manipulate images and information originating from film, video, still photographs, digital copy, soundtracks, and physical objects. Students create projects designed to inform, educate and entertain.

Required Courses

		Hours
___Flash Fundamentals	(IN 115)	3
___Digital Video Editing	(IN 117)	3
___Digital Audio	(IN 119)	3
___Logo Design w/ Illustrator	(IN 123)	3

___Intro to Multimedia Design	(IN 124)	3
___Multimedia Authoring Tools	(IN 208)	3
___2D Animation & Cartooning	(IN 217)	3
___Information Technology Ethics	(IN 275)	3
___Computer Science Capstone	(IN 299)	3
___3D Computer Animation I	(BA 128)	3
___Digital Graphics w/Photoshop	(IN 122)	3

Certificate requires 33 credit hours.

DIGITAL MEDIA BUSINESS SPECIALIST

CERTIFICATE

Your Butler experience will prepare you to use computer applications and visual and sound imaging techniques to manipulate images and information originating from film, video, still photographs, digital copy, soundtracks, and physical objects. Students create projects designed to inform, educate and entertain.

This certificate includes additional work in business and marketing, so you will be prepared to apply business strategies to the Information Technology workplace.

Required Business Courses

___Small Business Management	(BA 109)	3
___Accounting I	(BA 126)	3
___Accounting II	(BA 127)	3
___Cyber Marketing	(BA 219)	3
___Information Technology Business Solutions	(IN 290)	3

Required Information Technology Courses

___Flash Fundamentals	(IN 115)	3
___Digital Video Editing	(IN 117)	3
___Digital Audio	(IN 119)	3
___Logo Design w/ Illustrator	(IN 123)	3
___Intro to Multimedia Design	(IN 124)	3
___Multimedia Authoring Tools	(IN 208)	3
___2D Animation & Cartooning	(IN 217)	3
___Information Technology Ethics	(IN 275)	3
___Computer Science Capstone	(IN 299)	3
___3D Computer Animation I	(BA 128)	3
___Digital Graphics w/Photoshop	(IN 122)	3

Certificate requires 48 credit hours.

Digital Media Specialist Certificate

Certificate of Completion in
Digital Media Specialist
Credits Required: 36
Contact: Skyler Lovelace, Lead Instructor,
at 316.218.6229

Program Information

This certificate program can be converted to the Digital Media Associate in Applied Science degree by adding the appropriate general education courses which will add to your employability and future income. Cooperative Education opportunities will also add to your income potential.

Prior to Admission

Students enrolling in Computer information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, Students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in Math.

Related Programs

Database Administration, Digital Media, Digital Media Specialist, Digital Media Business Specialist, e-Business Application, Information Assurance & Digital Forensics, Internetworking Management, Internetworking Management Business Specialist, Software Development, Web Development, Web Development Specialist, Web Development Business Specialist, Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

Median Wage for Digital Media Artists and Animators in South Central Kansas is \$40,040 per year. (Source: Workforce Planning Guide & Wage Survey, Local Area IV 2003 Edition, KDHR.)

Additional Costs

Additional lab fees are assessed to each program course and subject to change.

e-Business Application Development (IBM ACE)

Career Program
 Degree offered: Associate in Applied Science
 Credits Required: 68
 Contact: Bob Ray, Lead Instructor, at 316.218.6129

Additional Costs

Additional lab fees are assessed to each program course and subject to change

Prior to Admission

Students enrolling in Computer Information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in math.

Articulations

K-State at Salina

Related Programs

Database Administration
 Digital Media
 Digital Media Specialist
 Digital Media Business Specialist
 e-Business Application
 Information Assurance & Digital Forensics
 Internetworking Management
 Internetworking Management Business Specialist
 Software Development
 Web Development
 Web Development Specialist
 Web Development Business Specialist
 Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

e-BUSINESS APPLICATION DEVELOPMENT (IBM ACE)

ASSOCIATE IN APPLIED SCIENCE

Your Butler experience will prepare you to gain technical and business skills needed to compete for e-business job roles utilizing IBM curriculum. Blended learning approach prepares students to pass the IBM ACE Certificates in e-Business Application Development and additional certifications such as the Sun JAVA certification, the IBM WebSphere Studio Application Development certification, the IBM DB2 UDB certification, and ProSoft 's Certified Internet Webmaster (CIW) certification.

General Education Requirements

Course	Hours
Communications	9
___English Comp I (EG 101)	3
___Technical Writing (EG 112)	3
___Public Speaking (SP 100) OR Interpersonal Communication (SP 102)	3

Science, Math and Computer Science

___Math Requirement (MA 131 or above)	3
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Social/Behavioral Science Requirement

___Sociology (BS 105) OR ___General Psychology (BS 160)	3
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Required Courses:

First Semester

___Intro to Programming (IN 105)	3
___Linux on the Desktop (IN 240)	3

Second Semester

___HTML (IN 112)	3
___Network Basics (IN 134)	3
___Intro to Programming w/ C++ (IN 200)	3
___Intro to SQL Language (IN 228)	3
___Small Business Management (BA 109) OR Intro to Marketing (BA 140)	3

Third Semester

___Computer Program and DB (IN 181)	3
___Java Programming (IN 211)	3
___Data Structures & Algorithms (IN 207)	2
___Software Engineering & UML (IN 202)	2
___Web Programming I (IN 203)	3
___IBM Project Based Learning I (IN 205)	2

Fourth Semester

___E-Commerce,e-Business,& Security (IN 207)	3
___Enterprise JAVA I (JSPs & Servlets) (IN 208)	3
___Enterprise JAVA II (EJBs) (IN 209)	3
___Web Programming II (IN 204)	3
___Data Enterprise App Dev Using XML(IN206)	3
___IBM Project Based Learning II (IN 2030)	2

A total of 68 credit hours is required for this degree.

Note: First time, full-time students must complete OR 102 – College Orientation.

e-BUSINESS APPLICATION DEVELOPMENT (IBM ACE)

CERTIFICATE

Your Butler experience in the IBM ACE Program for e-business Application Development takes students through advanced computer programming and e-business application development concepts. IBM ACE Program for e-business Application Development includes a blended learning framework approach that gradually introduces students to the basics - such as PCs, Internet fundamentals and operating system concepts - and moves on to more intermediate subjects, such as programming in C++, Java, and software engineering. The final and most advanced course modules focus on object-oriented and Web applications, in addition to e-business solution development using J2EE and enterprise computer framework. Successful completion of the proposed curriculum will earn students an IBM ACE Certificate for e-business Application Development.

IBM ACE Program for e-business Application Development will allow our students to leave as sought-after professionals, well-equipped with the skills needed to meet the challenges of next-generation e-business environments. We are offering a premier program that exclusively focuses on the development of real-life, in-demand job skills.

e-Business Application Developer Roadmap

Required Courses:

___Intro to Programming	(IN 105)	3
___HTML	(IN 112)	3
___Network Basics	(IN 134)	3
___Computer Program and DB	(IN 181)	3
___Intro to Programming w/ C++	(IN 200)	3
___Java Programming	(IN 211)	3
___Intro to SQL Language	(IN 228)	3
___Linux on the Desktop	(IN 240)	3
___Data Structures & Algorithms	(IN 2017)	2
___Software Engineering & UML	(IN 2022)	2
___Web Programming I	(IN 2023)	3
___Web Programming II	(IN 2024)	3
___IBM Project Based Learning I	(IN 2025)	2

Students completing the courses listed above are then eligible to take an exam to earn the e-Business Application Development Certificate from Butler.

___Data Enterprise App Dev Using XML (IN2026)	3
___E-Commerce,e-Business,& Security (IN 2027)	3
___Enterprise JAVA I (JSPs & Servlets) (IN 2028)	3
___Enterprise JAVA II (EJBs) (IN 2029)	3
___IBM Project Based Learning II (IN 2030)	2

Following successful completion of the courses listed above, students are then eligible for a final IBM assessment/test. Successful completion of this test then qualifies the student to receive the IBM Advanced Career Education e-Business Application Developer Certificate from IBM.

This certificate provides the successful student with international recognition and understanding of their IT skills and competencies, including Europe and China. In addition, this training positions students for additional industry certifications

Professional Certifications

This program is designed to help students get ready for international certifications such as:

- Sun Java
- IBM WebSphere
- IBM DB2 UDB
- Prosoft Certified Internet Webmaster
- CompTIA
- IBM Advanced Career Education
- e-Business Application Developer Certificate

e-Business Application Development (IBM ACE)

Certificate of Completion
Credits Required: 50
Contact: Bob Ray, Lead Instructor, at
316.218.6129

Additional Costs

Additional lab fees are assessed to each program course and subject to change

Prior to Admission

Students enrolling in Computer Information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in math.

Articulations

K-State at Salina

Related Programs

- Database Administration
- Digital Media
- Digital Media Specialist
- Digital Media Business Specialist
- e-Business Application
- Information Assurance & Digital Forensics
- Internetworking Management
- Internetworking Management Business Specialist
- Software Development
- Web Development
- Web Development Specialist
- Web Development Business Specialist
- Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

Information Assurance and Digital Forensics

Career Program
Degree offered: Associate in Applied Science
Credits Required: 69
Contact: Larry Evans, Lead Instructor, at 316.218.6142

Additional Costs

Additional lab fees are assessed to each program course and subject to change

Prior to Admission

Students enrolling in Computer Information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in math.

Articulations

K-State at Salina

Related Programs

Database Administration
Digital Media
Digital Media Specialist
Digital Media Business Specialist
e-Business Application
Information Assurance & Digital Forensics
Internetworking Management
Internetworking Management Business Specialist
Software Development
Web Development
Web Development Specialist
Web Development Business Specialist
Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

INFORMATION ASSURANCE & DIGITAL FORENSICS

ASSOCIATE IN APPLIED SCIENCE

Your Butler experience will prepare you to assess the security needs of computer and network systems, recommend safeguard solutions, and manage the implementation and maintenance of security devices, systems, and procedures. Students completing the curriculum mapped to National Security Administration (NSA) standards will receive the corresponding CNSS 4011 certification, that designates federal training standards.

General Education Requirements

Course	Hours
Communications	9
___English Comp I (EG 101)	3
___Technical Writing (EG 112)	3
___Public Speaking (SP 100)	3
Science, Math and Computer Science	3
___Math Requirement (MA 135 or above)	3
Social/Behavioral Science Requirement	3
___Sociology (BS 105) OR General Psychology (BS 160)	3

Required Courses:

First Semester	
___Intro to Programming (IN 105)	3
___Supporting Desktop Systems (IN 106)	3
___HTML (IN 112)	3
___Supporting Networked Comp (IN 133)	3
Second Semester	
___Network Clients (IN 130)	3
___Network Server (IN 131)	3
___Internetworking Fund (IN 245)	3
___Router Technologies (IN 246)	3

Third Semester

___Network Management (IN 237)	3
___SQL Server Implementation (IN 238)	3
___Routing & Switching (IN 247)	3
___Internetworking Protocols (IN 248)	3
___Principles of Info Assurance (IN 2001)	3

Fourth Semester

___Network Security (IN 2002)	3
___Secure Electronic Commerce (IN 2003)	3
___Small Business Management (BA 109) OR Intro to Marketing (BA 140)	3

Fifth Semester

___Enterprise Security Mgt. (IN 2004)	3
___Digital Forensics (IN 2005)	3

A total of 69 credit hours is required for this degree.

Note: First time, full-time students must complete OR 102 - College Orientation.

INFORMATION ASSURANCE & DIGITAL FORENSICS CERTIFICATE

Your Butler experience will prepare students with information technology experience for careers as Systems Assurance Auditor, Information Security Officer, IT Security Analyst, Network Security Architect, or Computer Forensics Analyst. Because the curriculum has been mapped to the National Security Administration (NSA) standards, students satisfactorily completing the following coursework will receive the corresponding CNSS 4011 certification.

Required Courses:

___ Supporting Desktop Systems	(IN 106)	3
___ Network Clients	(IN 130)	3
___ Network Server	(IN 131)	3
___ Internetworking Fund	(IN 245)	3
___ Router Technologies	(IN 246)	3
___ Routing & Switching	(IN 247)	3
___ Internetworking Protocols	(IN 248)	3
___ Principles of Info Assurance	(IN 2001)	3
___ Network Security	(IN 2002)	3
___ Secure Electronic Commerce	(IN 2003)	3
___ Enterprise Security Mgt.	(IN 2004)	3
___ Digital Forensics	(IN 2005)	3

A total of 36 credit hours is required for this degree.

Information Assurance and Digital Forensics

Certificate of Completion
Credits Required: 36
Contact: Larry Evans, Lead Instructor, at
316.218.6142

Additional Costs

Additional lab fees are assessed to each program course and subject to change

Prior to Admission

Students enrolling in Computer Information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in math.

Articulations

K-State at Salina

Related Programs

Database Administration
Digital Media
Digital Media Specialist
Digital Media Business Specialist
e-Business Application
Information Assurance & Digital Forensics
Internetworking Management
Internetworking Management Business Specialist
Software Development
Web Development
Web Development Specialist
Web Development Business Specialist
Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

Internetworking Management

Career Program
Degree Offered:
Associate in Applied Science
Credits Required: 63
Contact: Larry Evans, Lead Instructor, at
316.218.6142

Articulation Agreements

K-State at Salina

Accreditation

Butler is an approved CISCO Academy.

Additional Costs

Additional lab fees are assessed to each program course and subject to change.

Prior to Admission

Students enrolling in Computer Information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in Math.

Related Programs

Database Administration, Digital Media, Digital Media Specialist, Digital Media Business Specialist, e-Business Application, Information Assurance & Digital Forensics, Internetworking Management, Internetworking Management Business Specialist, Software Development, Web Development, Web Development Specialist, Web Development Business Specialist, Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

After Butler

Recent graduates hold entry-level positions as Network and Computer Systems Administrators

Median Wage for Network and Computer Systems Administrators in South Central Kansas is \$45,718 per year. (Source: Workforce Planning Guide & Wage Survey, Local Area IV 2003 Edition, KDHR.)

INTERNETWORKING MANAGEMENT

ASSOCIATE IN APPLIED SCIENCE

Your Butler experience will prepare you to oversee and regulate the computer system and performance requirements of an entire organization or network of satellite users. Instruction includes performing balancing; redundancy; CISCO router configuration; Local and Wide Area Networking. This program provides training for the following certifications: CISCO CCNA and CompTIA A+. Courses are taught by CISCO Certified Academy Instructors (CCAI).

General Education Requirements

Course	Hours
Communications	9
___English Comp I (EG 101)	3
___Technical Writing (EG 112)	3
___Public Speaking (SP 100)	3
Science, Math and Computer Science	3
___Math Requirement (MA 114 or above)	3

Social/Behavioral Science Requirement

___Sociology (BS 105) OR	3
___General Psychology (BS 160)	3

Required Courses

First Semester	Hours
___Intro to Programming (IN 105)	3
___Supporting Desktop Systems (IN 106)	3
___Supporting Networked Computers (IN 133)	3

Second Semester

___HTML (IN 112)	3
___Network Clients (IN 130)	3
___Network Servers (IN 131)	3

Third Semester

___Internetworking Fund (IN 245)	3
___Router Technologies (IN 246)	3

Fourth Semester

___Routing & Switching (IN 247)	3
___Internetworking Protocols (IN 248)	3
___Princ of Info Assurance (IN 2001)	3
___Small Bus Mgmt (BA 109) OR	
___Intro to Marketing (BA 140)	3

A total of 63 credit hours is required for this degree. In addition to the 15 credit hours of general education requirements and 36 credit hours of required courses, choose 12 credit hours of Technical electives.

Technical Electives

Technical Electives	Hours
___PC Visual Basic Programming (IN 108)	3
___Enterprise Networking (IN 140)	3
___Network Directory Services I (IN 150)	3
___JAVA Programming (IN 211)	3
___JAVA Prog & Web Design (IN 214)	3
___Networking Management (IN 237)	3
___SQL Server 2005 Implementation (IN 238)	3
___Linux on the Desktop (IN 240)	3
___Linux as a Server (IN 249)	3
___Network Directory Services II (IN 250)	3

Students can achieve additional certifications by selecting the following technical electives:

MCSA

Network Management (IN 237)	
SQL Server 2005 Implementation (IN 238)	

MCSE

Enterprise Networking (IN 140)	
Network Directory I (IN 150)	
Network Management (IN 237)	
SQL Server 2005 Implementation (IN 238)	
Network Directory Services II (IN 250)	

MCDBA

Enterprise Networking I (IN 140)	
Intro to Database Management (IN 223)	
Client Server Application Dev (IN 224)	

CompTIA Linux +

Linux on the Desktop (IN 240)	
Linux as a Server (IN 249)	

INTERNETWORKING MANAGEMENT BUSINESS SPECIALIST CERTIFICATE

Your Butler experience will prepare you to oversee and regulate the computer system and performance requirements of an entire organization or network of satellite users. Instruction in performance balancing; redundancy; CISCO router configuration; Local Area Network (LAN) and Wide Area Network (WAN).

This certificate includes additional work in business and marketing, so you will be prepared to apply business strategies to the Information Technology workplace.

Required Business Courses

___Small Business Management	(BA 109)	3
___Accounting I	(BA 126)	3
___Accounting II	(BA 127)	3
___Introduction to Marketing	(BA 140)	3
___Information Technology Business Solutions	(IN 290)	3

Required Information Technology Courses

___Supporting Desktop Systems	(IN 106)	3
___Network Clients	(IN 130)	3
___Network Servers	(IN 131)	3
___Supporting Networked Computers	(IN 133)	3
___Networking Management	(IN 237)	3
___SQL Server 2005 Implementation	(IN 238)	3
___Internetworking Fundamentals	(IN 245)	3
___Router Technologies	(IN 246)	3
___Routing and Switching	(IN 247)	3
___Internetworking Protocols	(IN 248)	3
___Information Technology Ethics	(IN 275)	3

Certificate requires 48 credit hours.

Internetworking Management Business Specialist

Certificate Program
Degree Offered: Certificate
Credits Required: 48
Contact: Larry Evans, Lead Instructor, at 316.218.6142

Articulation Agreements

K-State at Salina

Accreditation

Butler is an approved CISCO Academy.

Additional Costs

Additional lab fees are assessed to each program course and subject to change.

Prior to Admission

Students enrolling in Computer Information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in Math.

Related Programs

Database Administration, Digital Media, Digital Media Specialist, Digital Media Business Specialist, e-Business Application, Information Assurance & Digital Forensics, Internetworking Management, Internetworking Management Business Specialist, Software Development, Web Development, Web Development Specialist, Web Development Business Specialist, Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

After Butler

Recent graduates hold entry-level positions as Network and Computer Systems Administrators

Median Wage for Network and Computer Systems Administrators in South Central Kansas is \$45,718 per year. (Source: Workforce Planning Guide & Wage Survey, Local Area IV 2003 Edition, KDHR.)

Software Development

Career Program
Degree Offered: Associate in
Applied Science
Credits Required: 63
Contact: Bob Ray, Lead Instructor, at
316.218.6129

Prior to Admission

Students enrolling in Computer Information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in Math.

Related Programs

Database Administration, Digital Media, Digital Media Specialist, Digital Media Business Specialist, e-Business Application, Information Assurance & Digital Forensics, Internetworking Management, Internetworking Management Business Specialist, Software Development, Web Development, Web Development Specialist, Web Development Business Specialist, Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

Articulation

K-State at Salina

After Butler

Recent graduates hold positions as computer programmers and related positions.

Median Wage for Computer

Programmers in South Central Kansas is \$57,845 per year. (Source: Workforce Planning Guide & Wage Survey, Local Area IV 2003 Edition, KDHR.)

Additional Costs

Additional lab fees are assessed to each program course and are subject to change.

SOFTWARE DEVELOPMENT

ASSOCIATE IN APPLIED SCIENCE

Your Butler experience will prepare you to focus on the general writing and implementation of generic and customized programs to drive operating systems including applying the methods and procedures of software design and programming to software installation and maintenance.

General Education Requirements

Course	Hours
Communications	9
___English Comp I (EG 101)	3
___Public Speaking (SP 100)	3
___Technical Writing (EG 112)	3

Science, Math and Computer Science	3
___Math Requirement (MA 114 or above)	3

Social/Behavioral Science Requirement	3
___Sociology (BS 105)	3
or	
___General Psychology (BS 160)	3

Required Courses

First Semester	
___Intro to Programming (IN 105)	3
___HTML (IN 112)	3

Second Semester	
___PC Visual Basic (IN 108)	3
___XML Programming (IN 116)	3
___Network Basic (IN 134)	3
___Web Programming I (IN 2023)	3

Third Semester

___Computer Prog & Databases (IN 181)	3
___Web Programming II (IN 2024)	3

Fourth Semester

___C # (IN 201)	3
___Java Programming (IN 211)	3
___Info Technology Ethics (IN 275)	3
___Computer Science Capstone (IN 299)	3

A total of 63 credit hours is required for this degree. In addition to the 15 credit hours of general education requirements and 36 credit hours of required courses, choose 12 credit hours from the list of related electives below:

Related Electives	12
___Supporting Desktop Systems (IN 106)	3
___Flash Fundamentals (IN 115)	3
___Network Clients (IN 130)	3
___Network Servers (IN 131)	3
___Supporting Networked Computers (IN 133)	3
___Advanced Database Prog (IN 182)	3
___Intro to Programming w/C++ (IN 200)	3
___Advanced Java Programming (IN 214)	3
___Flash ActionScript (IN 216)	3
___Linux on the Desktop (IN 240)	3
___Linux as a Server (IN 249)	3
___Prog for Wireless & Handheld (IN 261)	3
___Visual Basic.NET (IN 264)	3
___Handheld Game Programming (IN 265)	3
___Desktop Game Programming (IN 266)	3
___Internet Game Programming (IN 267)	3

WEB DEVELOPMENT

ASSOCIATE IN APPLIED SCIENCE

Your Butler experience will prepare you to develop and maintain Web servers and their hosted Web pages and to function as designated Webmaster. These skills are foundational for jobs such as Web designer, Internet developer, interface designer, HTML scripter, and Web site coordinator. Web development skills are used in a variety of jobs, including corporate communications, education, architecture, advertising.

General Education Requirements

Course	Hours
Communications	9
___English Comp I (EG 101)	3
___Public Speaking (SP 100)	3
___Technical Writing (EG 112)	3
Science, Math and Computer Science	3
___Math Requirement (MA 114 or above)	3
Social/Behavioral Science Requirement	
Humanities/Fine Arts	3
One course from the following	
___Sociology (BS 105)	3
___General Psychology (BS 160)	3
___Art Appreciation (AR 100)	3
Required Courses	
First Semester	
___Intro to Programming (IN 105)	3
___HTML (IN 112)	3
___Flash Fundamentals (IN 115)	3
___Web Graphics (IN 135)	3

Second Semester

___Supporting Desktop Systems (IN 106)	3
___Dreamweaver (IN 114)	3
___XML Programming (IN 116)	3
___Web Programming I (IN 2023)	3

Third Semester

___Intro. to SQL Language (IN 228)	3
___Linux on the Desktop (IN 240)	3
___Web Programming II (IN 2024)	3

Fourth Semester

___Cyber Marketing (BA 219)	3
___Info Technology Ethics (IN 275)	3
___Info Tech Business Solutions (IN 290)	3

A total of 63 credit hours is required for this degree. In addition to the 15 credit hours of general education requirements and 42 credit hours of required courses, choose 6 credit hours from the list of Related Electives below.

Related Electives 6

Any IN class from multimedia, software development or networking. In addition, the following BA classes are acceptable:	
___3D Computer Animation I (BA 128)	3
___3D Computer Animation II (BA 228)	3

Web Development

Career Program
Degree Offered: Associate in Applied Science
Credits Required: 63
Contact: Shiva Kumar, Lead Instructor, at 316.218.6132

Additional Costs

Additional lab fees are assessed to each program course and subject to change.

Prior to Admission

Students enrolling in Computer Information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in Math.

Related Programs

Database Administration
Digital Media
Digital Media Specialist
Digital Media Business Specialist
e-Business Application
Information Assurance & Digital Forensics
Internetworking Management
Internetworking Management Business Specialist
Software Development
Web Development
Web Development Specialist
Web Development Business Specialist
Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

After Butler

Recent graduates hold entry-level positions as Web Designers, Web Developers, and Webmasters.

Wages: Salary/hourly rates are dependent on skill level, experience and location.

Web Development Business Specialist

Certificate Program

Degree Offered: Certificate

Credits Required: 33

Contact: Shiva Kumar, Lead Instructor, at 316.218.6132

Additional Costs

Additional lab fees are assessed to each program course and subject to change.

Prior to Admission

Students enrolling in Computer Information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in Math.

Related Programs

Database Administration

Digital Media

Digital Media Specialist

Digital Media Business Specialist

e-Business Application

Information Assurance & Digital

Forensics

Internetworking Management

Internetworking Management

Business Specialist

Software Development

Web Development

Web Development Specialist

Web Development Business Specialist

Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

After Butler

Recent graduates hold entry-level positions as Web Designers, Web Developers, and Webmasters.

Wages: Salary/hourly rates are dependent on skill level, experience and location.

WEB DEVELOPMENT SPECIALIST

CERTIFICATE

Your Butler experience will prepare you to develop and maintain Web servers and their hosted Web pages and to function as designated Webmaster. These skills are foundational for jobs such as Web designer, Internet developer, interface designer, HTML scripter, and Web site coordinator. Web development skills are used in a variety of jobs, including corporate communications, education, architecture, and advertising.

Required Courses

		Hours
___Introduction to Programming	(IN 105)	3
___Supporting Desktop Systems	(IN 106)	3
___HyperText Markup Language	(IN 112)	3
___Dreamweaver	(IN 114)	3
___Flash Fundamentals	(IN 115)	3

___XML Programming	(IN 116)	3
___Web Graphics	(IN 135)	3
___Intro. to SQL Language	(IN 228)	3
___Linux on the Desktop	(IN 240)	3
___Web Programming I	(IN 2023)	3
___Web Programming II	(IN 2024)	3

Certificate requires 33 credit hours.

WEB DEVELOPMENT BUSINESS SPECIALIST

CERTIFICATE

Your Butler experience will prepare you to develop and maintain Web servers and their hosted Web pages and to function as designated Webmaster. These skills are foundational for jobs such as Web designer, Internet developer, interface designer, HTML scripter, and Web site coordinator. Web development skills are used in a variety of jobs, including corporate communications, education, architecture, and advertising. This certificate includes additional work in business and marketing, so you will be prepared to apply business strategies to the Information Technology workplace.

Required Business Courses

___Small Business Management	(BA 109)	3
___Accounting I	(BA 126)	3
___Accounting II	(BA 127)	3
___Introduction to Marketing	(BA 140)	3
___Information Technology Business Solutions	(IN 290)	3

Required Information Technology Courses

___Introduction to Programming	(IN 105)	3
___Supporting Desktop Systems	(IN 106)	3
___HyperText Markup Language	(IN 112)	3
___Dreamweaver	(IN 114)	3
___Flash Fundamentals	(IN 115)	3
___XML Programming	(IN 116)	3
___Web Graphics	(IN 135)	3
___Intro to Multimedia Design	(IN 124)	3
___Java Programming	(IN 211)	3
___Intro. to SQL Language	(IN 228)	3
___Linux on the Desktop	(IN 240)	3
___Information Technology Ethics	(IN 275)	3
___Computer Science Capstone	(IN 299)	3
___Web Programming I	(IN 2023)	3
___Web Programming II	(IN 2024)	3

Certificate requires 48 credit hours.

WINDOWS ADMINISTRATION

ASSOCIATE IN APPLIED SCIENCE

Your Butler experience will prepare you to manage the computer operations and networks based on Windows software. Includes instruction in computer hardware and software applications; local and wide area networking; network security; disc space and traffic load monitoring; data backup; resource allocation; and setup and take down procedures. This program provides training for the following certifications: CompTIA A+, CCNA, and Microsoft Certified Systems Administrator (MCSA).

General Education Requirements

Course	Hours
Communications 9	
___English Comp I (EG 101)	3
___Technical Writing (EG 112)	3
___Public Speaking (SP 100) or Interpersonal Communication (SP 102)	3
Science, Math and Computer Science 3	
___Math Requirement (MA 114 or above)	3
Social/Behavioral Science Requirement 3	
___Sociology (BS 105) OR	3
___General Psychology (BS 160)	3
Required Courses	
First Semester	
___Intro to Programming (IN 105)	3
___Supporting Desktop Systems (IN 106)	3
___Supporting Networked Computers (IN 133)	3
Second Semester	
___Network Servers** (IN 131)	3
___Internetworking Fund* (IN 245)	3
___Router Technologies* (IN 246)	3
___SQL Server 2005 Implementation (IN 238)	3

Third Semester

___HTML (IN 112)	3
___Network Clients** (IN 130)	3
___Networking Management** (IN 237)	3
___Routing and Switching (IN 247)	3
___Internetworking Protocols (IN 248)	3

Fourth Semester

___Princ of Info Assurance (IN 2001)	3
___Small Bus Mgmt (BA 109) OR	
___Intro to Marketing (BA 140)	3

* Denotes CISCO Certification Classes

** Denotes MCSA Certification Classes

A total of 63 credit hours is required for this degree. In addition to the 15 credit hours of general education requirements and 42 credit hours of required courses, choose 6 credit hours of Technical electives.

Technical Electives

Any IN course. **6**

Students can achieve additional certifications by selecting the following technical electives:

MCSE

Enterprise Networking I (IN 140)	3
Network Directory Services I (IN 150)	3
Network Directory Services II (IN 250)	3

CompTIA Linux +

Linux on the Desktop (IN 240)	3
Linux as a Server (IN 249)	3

Windows Administration

Career Program
Degree Offered: Associate in Applied Science
Credits Required: 63
Contact: Steve Strom, Lead Instructor, at 316.218.6143

Articulation Agreements

K-State at Salina

Prior to Admission

Students enrolling in Computer Information Technology programs need to be computer literate and able to manipulate basic computer applications. Because of the high level of math and reading required in Information Technology, students should have ASSET math and reading scores of 39 or ACT scores of 18 in English and 21 in Math.

Related Programs

Database Administration
Digital Media
Digital Media Specialist
Digital Media Business Specialist
e-Business Application
Information Assurance & Digital Forensics
Internetworking Management
Internetworking Management Business Specialist
Software Development
Web Development
Web Development Specialist
Web Development Business Specialist
Windows Administration

Recommended Course Sequence

Some courses are offered only in the spring or fall semesters. Ask your advisor or instructor for details as you plan your class schedule.

Median Wage for Network Systems and Data Communications Analysts in South Central Kansas is \$56,555 per year. (Source: Workforce Planning Guide & Wage Survey, Local Area IV 2003 Edition, KDHR.)

Additional Costs

Additional lab fees are assessed to each program course and subject to change.