

ASSOCIATE OF APPLIED SCIENCE

Computer Science - Systems Administration

START here



Requirements to Earn this Associate Degree

Work with an advisor to develop your specialized education plan.

| Systems Administration Core: | Credits |
|--|---------|
| BUS 289: Project Management | 5 |
| • CS 103: Intro to Comp Hardware & Operating Syst 🔷. | 6 |
| CS 106: Intro to Virtualization | |
| CS 111: Intro to Programming | 5 |
| CS 115: Intro to Database Design & Mngmnt | 5 |
| CS 116: Networking & Network Security I | 3 |
| CS 117: Networking & Network Security II | 3 |
| CS 120: A+ Prep & Certification | 2 |
| CS 171: Cisco Networking: Intro to Networks | 6 |
| • CS 172: Cisco Networking: Routing & Switching Ess | 6 |
| CS 205: Windows Server Administration | 5 |
| CS 206: Linux Server Administration | 5 |
| CS 207: Intro to Security Administration | 5 |
| Electives or Specialty Requirements | 7-9 |
| General Education Requirements: | |
| CMST&210: Interpersonal Communication OR | |
| CMST&220: Public Speaking | 5 |
| ENGL&101: English Composition | 5 |
| FAD 150: Industrial First Aid | 2 |
| • MAP 117: Applied Math for Workforce Programs OR | |
| MATH&146: Statistics OR | |
| MATH&141: Pre Calculus | 5 |
| PSYC&100: General Psychology OR | |
| SOC&101: Intro to Sociology | 5 |

Total Credits Required: 90

TO DO:

Stay on track with this checklist!

TO DO'S:

QUARTER 1

- APPLY FOR <u>FAFSA</u> OR <u>WASFA</u> FOR NEXT YEAR
- · SET UP YOUR BANKMOBILE ACCOUNT
- GET FAMILIAR WITH YOUR CTCLINK STUDENT HOMEPAGE
- . MEET WITH YOUR ADVISOR

QUARTER 2

- MAKE AN EDUCATION PLAN WITH YOUR ADVISOR
- . APPLY FOR <u>BBCC FOUNDATION</u> <u>SCHOLARSHIPS</u>

QUARTER 3

· MEET WITH YOUR ADVISOR

QUARTER 4

 UPDATE YOUR EDUCATION PLAN WITH YOUR ADVISOR

QUARTER 5

 APPLY FOR GRADUATION (AFTER ENROLLING IN YOUR FINAL QUARTER OF CLASSES)

QUARTER 6

- · ORDER CAP AND GOWN
- · ATTEND GRADUATION!
- · BEGIN YOUR JOB SEARCH

Career Outlook

The Systems Administration program prepares students for careers in network systems and administration. Network administrators install and maintain computer workstations and server software, set up user accounts, maintain system resources and operations, trouble shoot systems and network problems, and manage system security. Students are trained in technical support of PC systems and in administration of Windows Server and Linux server based operating systems. All types of industries and businesses including data centers, hospitals, school districts. corporations governments that use networked computers, servers. and online tools reauire administration skills.

Future Education Opportunities

This degree may prepare you for transfer to several 4-year programs around the state. The most common opportunities are with BBCC's BAS-AM and CWU's ITAM BAS (Bachelor of Applied Science) program. Others are being offered at EWU (Eastern Washington University), CBC (Columbia Basin College), and many other colleges on the West side of the state. Talk to your advisor about options!

Find Out More

compsci@bigbend.edu https://www.bigbend.edu/academics/computer-science/

Length of Program

90 credits = 6 quarters* if you take 15 credits each quarter.

*Your specific route may take longer than 6 quarters depending on the number of credits you take each quarter and where you start in your math and English pathways.

Which Quarter Can I Begin?

CS starts new cohorts in the technical courses every Fall and Winter Quarter. Students may begin working on the related education courses in any quarter. A Winter Quarter start requires that you also attend Summer classes to stay on track.

Program Modality

Currently, this degree cannot be easily completed online. All CS classes are offered primarily in the hybrid modality; however, many of the lectures and some labs are completed synchronously online. Most classes with hands-on lab requirements require inperson attendance. Students who need 100% online should contact Tom Willingham about options as we can work with individuals to resolve most cases.

Helpful Hints

- Everyone in each cohort takes the same CS courses throughout the first year and many of the same courses in the second year. This makes finding someone to study with easier and often results in professional relationships that last past graduation.
- The Systems Administration degree offers flexibility in the second year of classes to allow students to specialize in Desktop support, Network Administration, Helpdesk, Cybersecurity, or other IT options using elective credits.

OPPORTUNITY FOR FREE \$\$\$

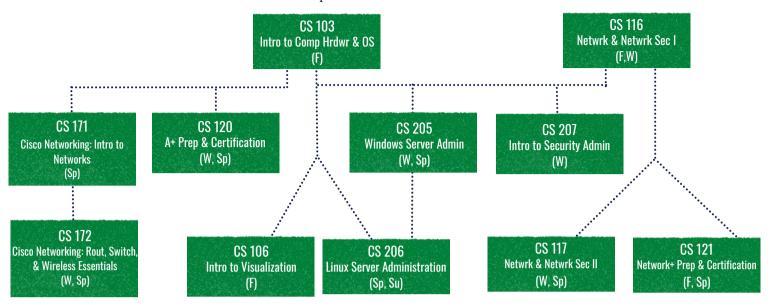
Workforce Education Services provides additional financial assistance for tuition and fees, books, tools, bus passes, and emergency support.

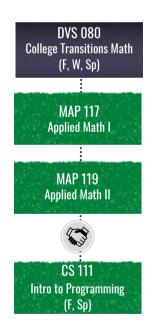
See if you qualify here!



Systems Administration Pre-Requisite Flow Chart

Start by talking with an advisor to determine which courses to take first based on your placement scores.









Advising Tips

- Talk to your advisor about 2nd year certificate options!
- Interested in the Datacenter IT Specialist Pathway? Take WKED 101, 102, and 103.
- CompTIA Certifications are available. Talk with your advisor to find out more!

Limited Availability Courses Without Prerequisites:

• CS 115 (F)

CERTIFICATE OPTIONS

Computer Science

Desktop Support Specialist Certificate of Accomplishment

Total Credits: 30

Systems Administration Certificate of Achievement

| | (| Credits |
|---|--|---------|
| • | Desktop Support Specialist Certificate + | 30 |
| • | CMST& 220 Public Speaking OR | |
| | CMST& 210 Interpersonal Communication | 5 |
| • | ENGL&101: English Composition | 5 |
| • | FAD 150 Industrial First Aid | 2 |
| • | MATH&146: Statistics OR | |
| | MATH& 141 Pre-Calculus OR | |
| | MAP 117 Applied Math for Workforce Prog | 5 |
| • | PSYC& 100 General Psychology | |
| | SOC& 101 Intro to Sociology | 5 |

Total Credits: 50-52

Associate in Applied Science Degree

| 0-52 5 |
|-----------|
| 5 |
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| 5 |
| 5 |
| 5 |
| Ess.6 |
| 5 |
| 7-9 |
| |

Total Credits: 90

Cisco Networking Certificate of Accomplishment

| | Credits |
|---|---|
| • | CS 171: Cisco Networking: Intro to Networks6 |
| • | CS 172: Cisco Networking: Routing & Switching Ess.6 |
| • | CS 173: Cisco Networking: Enterprise Networking6 |
| | |
| | Total Credits: 18 |

Cisco Networking Certificate of Achievement

| | Credits |
|--|----------|
| Cisco Networking Certificate + | 18 |
| CS 103: Intro to Comp Hardware & Operati | ng Syst6 |
| • CS 116: Networking & Network Security I | 3 |
| • CS 117: Networking & Network Security II | 3 |
| • CS 121: Network+ Prep & Certification | 1 |
| CMST& 220 Public Speaking OR | |
| CMST& 210 Interpersonal Communication | 5 |
| ENGL&101: English Composition | 5 |
| FAD 150 Industrial First Aid | 2 |
| MATH&146: Statistics OR | |
| MATH& 141 Pre-Calculus OR | |
| MAP 117 Applied Math for Workforce Prog | g5 |
| PSYC& 100 General Psychology | |
| SOC& 101 Intro to Sociology | 5 |
| | |

Total Credits: 51-53

Network Administration Specialist Certificate of Accomplishment

| | Credits |
|---|--|
| • | CS 115: Intro to Database Design & Mngmnt5 |
| • | CS 121: Network+ Prep & Certification1 |
| • | CS 173: Cisco Networking: Enterprise Networking6 |
| • | CS 207: Intro to Security Administration5 |
| • | CS 211: Scripting3 |
| | |

Total Credits: 20

CERTIFICATE OPTIONS

Computer Science

Computer Support Specialist Certificate of Accomplishment

Credits CS 116: Networking & Network Security I......3 CS 120: A+ Prep & Certification......2 CS 205: Windows Server Administration...... 5 • Select 5 credits from the following: • BUS 289: Project Management.....(5) • CS 106: Intro to Virtualization.....(5) • CS 111: Intro to Programming.....(5) • CS 115: Intro to Database Design & Mngmnt......(5) • CS 121: Network+ Prep & Certification.....(1) • CS 151: Digital Forensics.....(5) • CS 152: Ethical Hacking.....(5) • CS 172: Cisco Networking: Rout & Switch Ess....(6) • CS 173: Cisco Networking: Enterprise Network.(6) • CS 207: Intro to Security Administration.....(5) • CS 211: Scripting.....(3)

Total Credits: 18

Cybersecurity Specialist Certificate of Accomplishment

Total Credits: 23-24

Data Center IT Specialist Certificate of Accomplishment

| Cr | edits |
|---|---------|
| CS 106: Intro to Virtualization | 5 |
| CS 172: Cisco Networking: Routing & Switching | Ess.6 |
| CS 207: Intro to Security Administration | 5 |
| Select 5 credits from the following: | |
| BUS 289: Project Management | (5) |
| CS 106: Intro to Virtualization | (5) |
| CS 111: Intro to Programming | (5) |
| CS 115: Intro to Database Design & Mngmnt | (5) |
| • CS 121: Network+ Prep & Certification | (1) |
| • CS 122: Server+ Prep & Certification | (1) |
| CS 151: Digital Forensics | (5) |
| CS 152: Ethical Hacking | (5) |
| CS 173: Cisco Networking: Enterprise Networking: | ork.(6) |
| CS 211: Scripting | (3) |

Total Credits: 21

Suggested Schedule to Earn this Associate Degree

If the classes listed below don't fit your schedule or you're planning to start after fall quarter, work with an advisor to develop your specialized education plan.

| Year One | |
|---|---------|
| Fall | Credits |
| CMST&220: Public Speaking OR | |
| CMST&210: Interpersonal Communication | 5 |
| • CS 103: Intro to Computer Hardware & Operating Systems | 6 |
| CS 116: Networking & Network Security I | 3 |
| • WKED 101: Professional Preparation-Occupation Specific I. | 1 |
| Winter | |
| CS 117: Networking & Network Security II | 3 |
| CS 120: A+ Certification Prep | 1 |
| CS 205: Windows Server Administration | 5 |
| ENGL&101: English Composition I | 5 |
| • WKED 102: Professional Preparation-Occupation Specific I | I1 |
| Spring | |
| CS 120: A+ Certification Prep | 1 |
| CS 171: Cisco Networking: Intro to Networks | 6 |
| CS 206: Linux Server Administration | 5 |
| PSYC&100: General Psychology OR | |
| SOC&101: Intro to Sociology | 5 |
| WKED 103: Professional Preparation-Occupation Specific I | II1 |
| Year Two | |
| Fall | |
| CS 106: Intro to Virtualization | 5 |
| CS 111: Intro to Programming | |
| CS 115: Intro to Database Design & Management | |
| FAD 150: Industrial First Aid | |
| Winter | |
| CS 172: Cisco Networking: Routing & Switching | 6 |
| CS 207: Intro to Security Administration | |
| MAP 117 Applied Math for Workforce Programs OR | |
| MATH&146: Statistics OR | |
| MATH& 141 Pre-Calculus OR | 5 |
| Spring | |
| Approved Elective or Specialty Option | 5 |
| Approved Elective or Specialty Option | |

• BUS 289: Project Management......5

| Name: | ID #: |
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| Quarter/Year | Quarter/Year |
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| Quarter/Year | Quarter/Year |
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My Education Plan

| ame: | ID #: |
|------|-------|
|------|-------|

| Quarter/Year | Quarter/Year |
|--------------|--------------|
| Quarter/Year | Quarter/Year |
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