some point in their journey to a bachelor's or professional degree.

Core Requirements (33 credits)

 A minimum of 15-16 credits of combined science and math credits are required for the AS degree. This must include a minimum of three (3) credits of math and four (4) credits of science from BIOS, CHEM or PHYS options.

Class	Cı	edits
BIOS-2250	Human Anatomy & Physiology I (and lab)	4
BIOS-2260	Human Anatomy & Physiology II (and lab)	4
CHEM-1090	General Chemistry I (and lab)	4
CHEM-1100	General Chemistry II (and lab)	4
MATH-1150	College Algebra	4
MATH-1210	Trigonometry	3
PHYS-1300	Physics I (and lab & recitation)	5
PHYS-1350	Physics II (and lab & recitation)	5

Recommended electives or courses required for transfer (9 credits selected from below):

Class		Credits
BIOS-1010	General Biology (and lab)	4
BIOS-1380	General Zoology (and lab)	4
BIOS-2120	Genetics (and lab)	4
BIOS-2460	Microbiology (and lab)	4
CHEM-2510	Organic Chemistry I (and lab)	4
CHEM-2520	Organic Chemistry II (and lab)	4

Recommended Plan of Study

1st Semester		Credits
BIOS-2250	Human Physiology & Anatomy I (and lab)	4
CHEM-1090	General Chemistry I (and lab)	4
ENGL-1010	English Composition I	3
MATH-1150	College Algebra	4
PRDV-1010	Achieving College Success	3
	Total Credits	18
2nd Semester		Credits
BIOS-2260	Human Physiology & Anatomy I (and lab)	I 4
CHEM-1100	General Chemistry II (and lab)	4
ENGL-1020	English Composition II	3
MATH-1210	Trigonometry	3
	Total Credits	14

3rd Semester		Credits
CHEM-2510	Organic Chemistry I (and lab)	4
PHYS-1300	Physics I (and lab & recitation)	5
PSYC-1810	Introduction to Psychology	3
	Oral Communication GE elective	e 3
	Total Credits	15
4th Semester		Credits
CHEM-2520	Organic Chemistry II (and lab)	4
PHYS-1350	Physics II (and lab & recitation)	5
	Social science and humanities	6
	GE electives	
	Total Credits	15
	Total AS Credits	62

(Pre) Computer Science

AS.1199A (64 Credits)
Associate of Science
Alliance • Scottsbluff • Sidney

This program provides students with the background necessary for further study in computer science, typically leading to a baccalaureate degree in computer science, computer engineering, computer information systems, or a related field. This program acquaints students with the principles and practices of algorithmic design, programming, programming languages, and operating systems. These principles prepare students with practical and theoretical knowledge to apply to the remainder of a baccalaureate degree program.

Objectives

- Provide coursework for the first two years of a baccalaureate degree in computer science, computer engineering, programming, or computer information systems.
- Provide a basis for student understanding of the principles, concepts, and theories that effect computer science, programming, and information systems by offering specific application, programming, and computer information systems courses.
- Promote and help students develop lifelong learning skills needed for professional and personal growth.

Notes

- This program is also available online.
- Students who plan to transfer to a four-year college or university should consult their faculty advisor early in their WNCC career to determine a curriculum that best suits their transfer goals.

Program Requi	irements
General Education	

General Education	34 credits
Computer Science Core	30 credits
Total AS credits required	64

Computer Science Core

Class	C	Credit
INFO-1040	Database (Access)	3
INFO-1100	Microcomputer Applications or	3
INFO-2000	Advanced Microcomputer Applications	
INFO-1210	Introduction to Computer Science	3
INFO-1241	IT Technical Support	3
INFO-1355	Computer Science I	3
INFO-1360	Visual C#	3
INFO-1400	Networking Essentials	3
INFO-1510	Introduction to Robotics	3
INFO-2040	SQL Database Design and Management	3
INFO-2426	Linux	3
	Total Credits	30

Recommended Plan of Study

1st Samostar (fall)

Note: Students who choose not to follow the recommended plan of study listed below, may not be able to complete the program in the number of semesters shown.

aii)	Credits
Microcomputer Applications or	3
Advanced Microcomputer Applications	
IT Technical Support	3
Introduction to Robotics	3
College Algebra (or higher)	4
Achieving College Success	3
Total Credits	16
2nd Semester (spring)	
English Composition I	3
Visual C#	3
Networking Essentials	3
Trigonometry (or higher)	3
Oral Communication GE elective	e 3
Total Credits	15
	or Advanced Microcomputer Applications IT Technical Support Introduction to Robotics College Algebra (or higher) Achieving College Success Total Credits spring) English Composition I Visual C# Networking Essentials Trigonometry (or higher) Oral Communication GE elective

3rd Semester (fall) Cr		
ENGL-1020	English Composition II	3
INFO-1040	Database (Access)	3
INFO-1210	Introduction to Computer Science	ce 3
MATH-1600	Calculus I	5
	Humanities GE elective	3
	Total Credits	17
4th Semester (spring)		Credits
INFO-1355	Computer Science I	3
INFO-2040	SQL Database Design	
	and Management	3
INFO-2426	Linux	3
	Lab Science GE elective	4
	Social Science GE elective	3
	Total Credits	16
	Total AS Credits	64

Criminal Justice Studies

Associate of Applied Science Alliance • Scottsbluff • Sidney

The criminal justice emphasis area provides the student with a broad academic and multi-disciplinary background that prepares him/her for professional careers in law enforcement, corrections, private security, court, parole, and probation. The criminal justice emphasis area also provides the student with an interdisciplinary curriculum that prepares him/her for advance studies.

Objectives

Cradite

- Illustrate the inter-dependent operations of the three general criminal justice components – police, courts, and corrections
- Demonstrate how criminal justice organizations function in relation to the political, legal, and socioeconomic environments in which they operate.
- Demonstrate basic qualitative and quantitative criminal justice research techniques, methodology, skills, and analysis.
- Summarize criminal law, constitutional law, and the law of criminal justice.
- Analyze criminological theories and their implication to contemporary criminal justice policies.
- Communicate, both orally and through writing, in a manner appropriate for criminal justice.