SCIENCE - ASSOCIATE OF SCIENCE

A Suggested Plan of Study

The contents of this roadmap may vary depending on initial student placement in mathematics and English. This is only a suggested plan of study for students, and is not intended as a contract. Individual student academic plans may vary. Please contact your academic advisor to create a plan that works for you. Course availability may vary from fall to spring semester and may be subject to modification or change.

Students must complete at least 60 credits with a minimum cumulative grade-point average of 2.0. A minimum of 15 of the total degree credits for the associate's degree must be completed at DACC, or any other NMSU campus. The New Mexico General Education Requirements can be found in the section titled, "Transfer Among New Mexico Institutions of Higher Education".

NOTE: Not all General Education ('G') courses listed below are taught at DACC. Please check DACC's current schedule for actual course offerings.

A grade of C- or better is required in ENGL 1110G Composition I and designated Mathematics courses.

(60-62 credits)

Associate of Science Pathway

The contents of this roadmap may vary depending on initial student placement in mathematics and English. This is only a suggested plan of study for students, and is not intended as a contract. Individual student academic plans may vary. Please contact your academic advisor to create a plan that works for you. Course availability may vary from fall to spring semester and may be subject to modification or change.

Students must complete at least 60 credits with a minimum cumulative grade-point average of 2.0. A minimum of 15 of the total degree credits for the associate's degree must be completed at DACC, or any other NMSU campus. The New Mexico General Education Requirements can be found in the section titled, "Transfer Among New Mexico Institutions of Higher Education".

NOTE: Not all General Education ('G') courses listed below are taught at DACC. Please check DACC's current schedule for actual course offerings.

A grade of C- or better is required in ENGL 1110G Composition I and designated Mathematics courses.

Semester 1		Credits
Area I: Communications - English Composition Level 1		4
ENGL 1110G	Composition I	
or other Approved New Mexico General Education Area I course listed in Level 1 in the current DACC/NMSU Catalog		
Area II: Mathematics/Algebra - Choose one from the following:		3-4
MATH 1220G	College Algebra	
MATH 1250G	Trigonometry & Pre-Calculus	
MATH 1350G	Introduction to Statistics	
MATH 1430G	Applications of Calculus I	
MATH 1511G	Calculus and Analytic Geometry I	
MATH 1521G	Calculus and Analytic Geometry II	
MATH 2350G	Statistical Methods	
MATH 2530G	Calculus III	
or other Approved New Mexico General Education Area II course listed in the current DACC/NMSU Catalog		
Area IV: Social/Behavioral Sciences [1]		3
Area V: Humanities [1]		3
STEM-H Elective (Selected in consultation with an academic advisor, the DACC/NMSU Catalog, and the bachelor's degree requirements to ensure course transfer.		3
	Credits	**16-17**
Semester 2		
Area I: Communications - English Composition Level 2		3
ENGL 2210G or ENGL 2221G	Professional and Technical Communication or Writing in the Humanities and Social Science	
Area III: Laboratory Sciences [1]		4
Area VI: Creative and Fine Arts [1]		3
STEM-H Elective (Selected in consultation with an academic advisor, the DACC/NMSU Catalog, and the bachelor's degree requirements to ensure course transfer.)		3
STEM-H Elective (Selected in consultation with an academic advisor, the DACC/NMSU Catalog, and the bachelor's degree requirements to ensure course transfer.)		3
	Credits	**16**
Semester 3		
Area I: Communications - Oral Communications		3
COMM 1115G or COMM 1130G	Introduction to Communication or Public Speaking	
Area III: Laboratory Sciences [1]		4
STEM-H Elective (Selected in consultation with an academic advisor, the DACC/NMSU Catalog, and the bachelor's degree requirements to ensure course transfer.)		3
STEM-H Elective (Selected in consultation with an academic advisor, the DACC/NMSU Catalog, and the bachelor's degree requirements to ensure course transfer.)		3
	Credits	**13**
Semester 4		
General Education Elective (To complete this requirement, take a GE Elective course for 3-4 crits. See the NMGE Section of the DACC/NMSU Catalog for a full list of courses.		3-4
STEM-H Elective (Selected in consultation with an academic advisor, the DACC/NMSU Catalog, and the bachelor's degree requirements to ensure course transfer.)		3
STEM-H Elective (Selected in consultation with an academic advisor, the DACC/NMSU Catalog, and the bachelor's degree requirements to ensure course transfer.)		3
College Elective (Selected in consultation with an academic advisor and the intended bachelor's degree requirements.)		3
College Elective (Selected in consultation with an academic advisor and the intended bachelor's degree requirements.)		3
	Credits	**15-16**
	Total Credits	**60-62**

[1] See the General Education (https://catalogs.nmsu.edu/dona-ana/general-education-and-transfer-options/transfer-new-mexico-institutions/)Section of the catalog for a full list of courses

Associate of Science to Bachelor of Science in Agricultural Biology Pathway

First Year

Semester 1		**Credits**
ENGL 1110G	Composition I	4
MATH 1220G	College Algebra	3
COMM 1115G	Introduction to Communication	3
EPWS 1110	Applied Biology	3
EPWS 1110L	Applied Biology Lab	1
ACES 1120	Freshman Orientation	1
	Credits	**15**
Semester 2		
ENGL 2210G	Professional and Technical Communication	3
BIOL 2610G & BIOL 2610L	Principles of Biology: Biodiversity, Ecology, and Evolution and Principles of Biology: Biodiversity, Ecology, and Evolution Laboratory	4
Area VI Creative and Fine Arts		3
Area V Humanities		3
General Education		3
	Credits	**16**

Second Year

Semester 3		
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
MATH 1430G	Applications of Calculus I	3
SOIL 2110 & 2110L	Introduction to Soil Science and Introduction to Soil Science Laboratory	4
Area IV Social Behavioral		3
Elective		1
	Credits	**15**
Semester 4		
BIOL 2110G & BIOL 2110L	Principles of Biology: Cellular and Molecular Biology and Principles of Biology: Cellular and Molecular Biology Laboratory	4
PHYS 1230G & PHYS 1230L	Algebra-Based Physics I and Algebra-Based Physics I Lab	4
CHEM 2115	Survey of Organic Chemistry and Laboratory	4
General Education		3
	Credits	**15**

Third Year

Semester 5		
A ST 311	Statistical Applications	3
EPWS 302	General Entomology	4
BIOL 311	General Microbiology	3
Viewing a Wider World		3
BIOL 312	Plant Taxonomy	3
	Credits	**16**
Semester 6		
BIOL 313	Structure and Function of Plants	3
EPWS 301	Agricultural Biotechnology	3
TOX 361	Basic Toxicology	3
EPWS 462	Parasitology	3
Viewing a Wider World		3
	Credits	**15**

Fourth Year

Semester 7		
EPWS 310	Plant Pathology	4
EPWS 311	Introduction to Weed Science	4
EPWS 492	Diagnosing Plant Disorders	3
AGRO 305	Principles of Genetics	3
EPWS 447	Seminar	1
	Credits	**15**
Semester 8		
EPWS 314	Plant Physiology	3
AGRO 471	Plant Mineral Nutrition	3
EPWS 455	Advanced Integrated Pest Management	3
SOIL 312	Soil Management and Fertility	3
Elective		3
	Credits	**15**
	Total Credits	**122**

Associate of Science to Bachelor of Science with a Major in Biology Pathway

First Year

Semester 1		**Credits**
ENGL 1110G	Composition I	4
MATH 1220G	College Algebra	3
BIOL 2610G & BIOL 2610L	Principles of Biology: Biodiversity, Ecology, and Evolution and Principles of Biology: Biodiversity, Ecology, and Evolution Laboratory	4
Area IV: Social and Behavioral Sciences		3
Elective		3
	Credits	**17**
Semester 2		
MATH 1250G	Trigonometry & Pre-Calculus	4
BIOL 2110G & BIOL 2110L	Principles of Biology: Cellular and Molecular Biology and Principles of Biology: Cellular and Molecular Biology Laboratory	4
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
COMM 1115G	Introduction to Communication	3
	Credits	**15**

Second Year

Semester 3		
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	4
MATH 1511G	Calculus and Analytic Geometry I	4
ENGL 2210G	Professional and Technical Communication	3
BIOL 305	Principles of Genetics	3
	Credits	**14**
Semester 4		
BIOL 301	Principles of Ecology	3
Upper Division Biology Elective		4
Area V: Humanities		3
Area VI: Creative and Fine Arts		3
SPAN 1110	Spanish I	4
	Credits	**17**

Third Year		
Semester 5		
CHEM 313	Organic Chemistry I	3
PHYS 2230G & PHYS 2230L	General Physics for Life Science I and Laboratory to General Physics for Life Science I	4
SPAN 1120	Spanish II	4
Viewing a Wider World		3
	Credits	**14**
Semester 6		
PHYS 2240G & PHYS 2240L	General Physics for Life Science II and Laboratory to General Physics for Life Science II	4
CHEM 314 & CHEM 315	Organic Chemistry II and Organic Chemistry Laboratory	5
BIOL 455	Biometry	3
Upper Division Biology Elective		4
	Credits	**16**
Fourth Year		
Semester 7		
BIOL 314	Plant Physiology	3
BIOL 322	Zoology	3
BIOL 377	Cell Biology	3
Viewing a Wider World		3
BCHE 395	Biochemistry I	3
	Credits	**15**
Semester 8		
BIOL 381	Animal Physiology	3
BIOL 462	Conservation Biology	3
BIOL 469	Biology of Emerging Infectious Diseases	3
BIOL 467	Evolution	3
	Credits	**12**
	Total Credits	**120**

Associate of Science to Bachelor of Arts with a Major in Biology Pathway

First Year		
Semester 1		**Credits**
ENGL 1110G	Composition I	4
MATH 1220G	College Algebra	3
BIOL 2110G	Principles of Biology: Cellular and Molecular Biology	3
Area IV: Social and Behavioral Sciences		3
Elective Course		3
	Credits	**16**
Semester 2		
MATH 1430G	Applications of Calculus I	3
BIOL 2110G & BIOL 2110L	Principles of Biology: Cellular and Molecular Biology and Principles of Biology: Cellular and Molecular Biology Laboratory	4
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
COMM 1115G	Introduction to Communication	3
Elective		1
	Credits	**15**
Second Year		
Semester 3		
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	4
Elective Courses		5
ENGL 2210G	Professional and Technical Communication	3
BIOL 305	Principles of Genetics	3
	Credits	**15**
Semester 4		
BIOL 301	Principles of Ecology	3
Upper Division Biology Elective		3
Area V: Humanities		3
Area VI: Creative and Fine Arts		3
SPAN 1110	Spanish I	4
	Credits	**16**
Third Year		
Semester 5		
CHEM 313	Organic Chemistry I	3
Upper Division Biology Elective		3
SPAN 1120	Spanish II	4
Viewing a Wider World		3
Elective		1
	Credits	**14**
Semester 6		
Science Elective Prefix (ASTR, CSCI, GEOL or PHYS)		4
CHEM 314 & CHEM 315	Organic Chemistry II and Organic Chemistry Laboratory	5
Upper Division Biology Elective		3
Elective		3
	Credits	**15**
Fourth Year		
Semester 7		
BIOL 377	Cell Biology	3
Upper Division Biology Elective		3
Upper Division Elective		3
Upper Division Elective		3
Viewing a Wider World		3
	Credits	**15**
Semester 8		
BIOL 467	Evolution	3
Upper Division Elective		4
Elective		4
Elective		3
	Credits	**14**
	Total Credits	**120**

Associate of Science to Bachelor of Science with a Major in Biochemistry Pathway

First Year		
Semester 1		**Credits**
ENGL 1110G	Composition I	4
MATH 1511G	Calculus and Analytic Geometry I	4
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
Area IV: Social and Behavioral Science		3

BCHE 140	Explorations in Chemistry and Biochemistry	1
	Credits	**16**
Semester 2		
MATH 1521G	Calculus and Analytic Geometry II	4
BIOL 2110G & BIOL 2110L	Principles of Biology: Cellular and Molecular Biology and Principles of Biology: Cellular and Molecular Biology Laboratory	4
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	4
Area V: Humanities		3
	Credits	**15**
Second Year		
Semester 3		
BIOL 305	Principles of Genetics	3
CHEM 313	Organic Chemistry I	3
CHEM 371	Analytical Chemistry	4
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	4
Area VI: Creative and Fine Arts		3
	Credits	**17**
Semester 4		
COMM 1115G	Introduction to Communication	3
ENGL 2210G	Professional and Technical Communication	3
CHEM 314	Organic Chemistry II	3
CHEM 315	Organic Chemistry Laboratory	2
PHYS 1320G & PHYS 1320L	Calculus -Based Physics II and Calculus -Based Physics II Lab	4
	Credits	**15**
Third Year		
Semester 5		
A ST 311	Statistical Applications	3
BIOL 377	Cell Biology	3
BCHE 395	Biochemistry I	3
CHEM 430	Physical Chemistry: Thermodynamics, Kinetics, Quantum Chemistry, and Spectroscopy	3
Elective		3
	Credits	**15**
Semester 6		
BCHE 396	Biochemistry II, Lecture and Laboratory	4
BIOL 311 & 311 L	General Microbiology and General Microbiology Laboratory	5
Viewing a Wider World		3
Elective		3
	Credits	**15**
Fourth Year		
Semester 7		
BCHE 440	Biochemistry Seminar	1
CHEM 471	Advanced Integrated Inorganic and Physical Chemistry Laboratory	3
Electives		11
	Credits	**15**
Semester 8		
CHEM 472	Advanced Integrated Instrumental Analysis and Protein Biochemistry Laboratory	3
BCHE 432	Physical Biochemistry	3
CHEM 456	Inorganic Structure and Bonding	3
Viewing a Wider World		3
	Credits	**12**
	Total Credits	**120**

Associate of Science to Bachelor of Arts with a Major in Chemistry Pathway

First Year		
Semester 1		**Credits**
ENGL 1110G	Composition I	4
MATH 1511G	Calculus and Analytic Geometry I	4
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
Area IV: Social and Behavioral Science		3
	Credits	**15**
Semester 2		
ENGL 2210G	Professional and Technical Communication	3
MATH 1521G	Calculus and Analytic Geometry II	4
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	4
Area V: Humanities		3
Elective		1
	Credits	**15**
Second Year		
Semester 3		
COMM 1115G	Introduction to Communication	3
CHEM 313	Organic Chemistry I	3
CHEM 371	Analytical Chemistry	4
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	4
Elective		3
	Credits	**17**
Semester 4		
CHEM 314	Organic Chemistry II	3
CHEM 315	Organic Chemistry Laboratory	2
PHYS 1320G & PHYS 1320L	Calculus -Based Physics II and Calculus -Based Physics II Lab	4
CHEM Emphasis Area		3
Area VI: Creative and Fine Arts		3
	Credits	**15**
Third Year		
Semester 5		
CHEM 430	Physical Chemistry: Thermodynamics, Kinetics, Quantum Chemistry, and Spectroscopy	3
Viewing a Wider World		3
Elective		9
	Credits	**15**
Semester 6		
CHEM Emphasis Area		9
CHEM 456	Inorganic Structure and Bonding	3
Elective Course		3
	Credits	**15**
Fourth Year		
Semester 7		
Viewing a Wider World		3
CHEM Emphasis Area Upper-Division		3
CHEM Upper-Division Elective		3

Upper-Division Elective		3
Elective		3
	Credits	**15**
Semester 8		
CHEM 443	Senior Seminar	1
CHEM Emphasis Area		6
Upper-Division Elective		3
Elective		3
	Credits	**13**
	Total Credits	**120**

Associate of Science to Bachelor of Science in Computer Science Pathway

First Year		
Semester 1		**Credits**
ENGL 1110G	Composition I	4
MATH 1511G	Calculus and Analytic Geometry I	4
CSCI 1720	Computer Science I	4
SOCIAL/BEHV SCIENCES		3
	Credits	**15**
Semester 2		
MATH 1521G	Calculus and Analytic Geometry II	4
CSCI 2230	Assembly Language and Machine Organization	4
CSCI 2210	Object-Oriented Programming	4
HUMANITIES		3
	Credits	**15**
Second Year		
Semester 3		
CSCI 2310	Discrete Mathematics for Computer Science	4
CSCI 2220	Introduction to Data Structures and Algorithms	4
COMM 1115G	Introduction to Communication	3
STAT 3110	Statistics for Engineers and Scientists	3
Creative and Fine Arts		3
	Credits	**17**
Semester 4		
ENGL 2210G	Professional and Technical Communication	3
CSCI 3730	Compilers and Automata Theory	4
CSCI 3710	Software Development	4
Lab Science		4
	Credits	**15**
Third Year		
Semester 5		
CSCI 3720	Data Structures and Algorithms	4
MATH 2415	Introduction to Linear Algebra	3
Viewing a Wider World		3
Lab Science		4
Elective		1
	Credits	**15**
Semester 6		
CSCI 4105	Programming Language Structure I	3
CSCI 4140	Database Management Systems I	3
CSCI 4265	Modern Web Technologies	3
Viewing a Wider World		3
Elective		3
	Credits	**15**
Fourth Year		
Semester 7		
CSCI 4405	Artificial Intelligence I	3
CSCI 4230	Architectural Concepts I	3
MATH 3160	Introduction to Ordinary Differential Equations	3
CSCI 4120	Operating Systems I	3
Elective		4
	Credits	**16**
Semester 8		
CSCI 4980	Senior Project	4
CSCI 4110	Computing Ethics and Social Implications of Computing	1
CSCI 4410	Computer Graphics I	3
Elective		4
	Credits	**12**
	Total Credits	**120**

Associate of Science to Bachelor of Science in Environmental Science Pathway

First Year		
Semester 1		**Credits**
ENGL 1110G	Composition I	4
ENVS 1110G	Environmental Science I	4
MATH 1220G	College Algebra	3
MATH 1221	General Supplemental Instruction II	1
Area IV: Social and Behavioral Science		3
	Credits	**15**
Semester 2		
BIOL 2610G	Principles of Biology: Biodiversity, Ecology, and Evolution	3
Area VI: Creative and Fine Arts		3
MATH 1250G	Trigonometry & Pre-Calculus	4
GEOL 1110G	Physical Geology	4
COMM 1115G	Introduction to Communication	3
	Credits	**17**
Second Year		
Semester 3		
BIOL 2110G	Principles of Biology: Cellular and Molecular Biology	3
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
MATH 1511G	Calculus and Analytic Geometry I	4
ENVS 457	Water Measurement	3
	Credits	**14**
Semester 4		
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	4
MATH 1521G	Calculus and Analytic Geometry II	4
Area V: Humanities		3
CHEM 2120	Integrated Organic Chemistry and Biochemistry	3
	Credits	**14**
Third Year		
Semester 5		
A ST 311	Statistical Applications	3
Viewing a Wider World		3

SOIL 2110 & 2110L	Introduction to Soil Science and Introduction to Soil Science Laboratory	4
GEOG 481	Fundamentals of GIS	4
Elective		1
	Credits	**15**
Semester 6		
PHYS 1310G	Calculus -Based Physics I	3
ENVS 312	Emergency Response to Hazardous Material Incidents	2
ENGL 2210G	Professional and Technical Communication	3
ENVS 2111 & 2111L	Environmental Engineering and Science and Environmental Science Laboratory	4
ENVS 370	Environmental Soil Science	3
	Credits	**15**
Fourth Year		
Semester 7		
ENVS 462	Sampling and Analysis of Environmental Contaminants	3
ENVS 452	Geohydrology	4
ENVS 422	Environmental Chemistry	3
ENVS 460	Introduction to Air Pollution	3
ENVS 361	Basic Toxicology	3
	Credits	**16**
Semester 8		
ENVS 301	Principles of Ecology	3
ENVS 470	Environmental Impacts of Land Use and Contaminant Remediation	3
ENVS 391	Internship	3
BIOL 311	General Microbiology	3
ENVS 447	Seminar	1
Viewing a Wider World		3
	Credits	**16**
	Total Credits	**122**

Associate of Science to Bachelor of Science in Electrical Engineering Pathway

First Year		
Semester 1		**Credits**
ENGL 1110G	Composition I	4
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
ENGR 130	Digital Logic	4
ENGR 140	Introduction to Programming and Embedded Systems	4
	Credits	**16**
Semester 2		
HUMANITIES		3
MATH 1511G	Calculus and Analytic Geometry I	4
ENGR 190	Introduction to Engineering Mathematics	4
ELT 110	Electronics I	4
	Credits	**15**
Second Year		
Semester 3		
MATH 1521G	Calculus and Analytic Geometry II	4
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	4
E E 200	Linear Algebra, Probability and Statistics Applications	4
ENGR 230	AC Circuit Analysis	4
	Credits	**16**
Semester 4		
PHYS 1320G & PHYS 1320L	Calculus -Based Physics II and Calculus -Based Physics II Lab	4
COMM 1115G	Introduction to Communication	3
CSCI 1720	Computer Science I	4
MATH 3160	Introduction to Ordinary Differential Equations	3
E E 240	Multivariate and Vector Calculus Applications	3
	Credits	**17**
Third Year		
Semester 5		
E E 300	Cornerstone Design	2
E E 320	Signals and Systems I	3
E E 340	Fields and Waves	4
Viewing a Wider World		3
Area IV: Social/Behavioral Sciences		3
	Credits	**15**
Semester 6		
E E 317	Semiconductor Devices and Electronics I	4
E E 325	Signals and Systems II	4
E E 362	Introduction to Computer Organization	4
ENGL 2210G	Professional and Technical Communication	3
	Credits	**15**
Fourth Year		
Semester 7		
ENGR 401	Engineering Capstone I	3
E E 395	Introduction to Digital Signal Processing	3
E E 462	Computer Systems Architecture	3
E E 407	Introduction to Control Systems	3
Area VI: Creative and Fine Arts		3
	Credits	**15**
Semester 8		
ENGR 402	Engineering Capstone II	3
E E 473	Introduction to Optics	3
E E 475	Control Systems Synthesis	3
Upper Division STEM Elective		3
Viewing a Wider World		3
	Credits	**15**
	Total Credits	**124**

Associate of Science to Bachelor of Science in Animal Science

First Year		
Semester 1		**Credits**
ENGL 1110G	Composition I	4
MATH 1220G	College Algebra	3
ANSC 1120	Introduction to Animal Science	3
ANSC 1120L	Introduction to Animal Science Lab	1
ACES 1120	Freshman Orientation	1
RGSC 2110	Introduction to Rangeland Management	3
	Credits	**15**
Semester 2		
COMM 1115G	Introduction to Communication	3

CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
Area VI: Creative and Fine Arts		3
Area V: Humanities Course		3
ANSC 1110	Animal Science Careers	1
Elective		1
	Credits	**15**
Second Year		
Semester 3		
ENGL 2210G	Professional and Technical Communication	3
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	4
BIOL 2610G & BIOL 2610L	Principles of Biology: Biodiversity, Ecology, and Evolution and Principles of Biology: Biodiversity, Ecology, and Evolution Laboratory	4
ANSC 304	Feeds and Feeding	3
Elective		1
	Credits	**15**
Semester 4		
BIOL 2110G & BIOL 2110L	Principles of Biology: Cellular and Molecular Biology and Principles of Biology: Cellular and Molecular Biology Laboratory	4
ECON 1110G	Survey of Economics	3
A ST 311	Statistical Applications	3
ANSC 2310	Introduction to Meat Science	3
PHYS 1230G & PHYS 1230L	Algebra-Based Physics I and Algebra-Based Physics I Lab	4
	Credits	**17**
Third Year		
Semester 5		
ANSC 370	System Physiology of Farm Animals	4
ANSC 303	Livestock, Meat and Wool Evaluation	4
CHEM 313	Organic Chemistry I	3
ANSC 305	Principles of Genetics	3
	Credits	**14**
Semester 6		
ANSC 421	Physiology of Reproduction	4
CHEM 314	Organic Chemistry II	3
CHEM 315	Organic Chemistry Laboratory	2
Viewing a Wider World		3
Elective		2
	Credits	**14**
Fourth Year		
Semester 7		
ANSC 422	Animal Nutrition	3
ANSC 423	Animal Breeding	3
ANSC 402	Animal Science Seminar	1
ANSC 462	Parasitology	3
Elective		5
	Credits	**15**
Semester 8		
BCHE 395	Biochemistry I	3
ANSC 424	Swine Production	3
ANSC 425	Horse Science and Management	3
Viewing a Wider World		3
Elective		2
	Credits	**14**
	Total Credits	**119**

Associate of Science to Bachelor of Science in Agriculture (Range Science)

First Year		
Semester 1		**Credits**
ENGL 1110G	Composition I	4
MATH 1220G	College Algebra	3
RGSC 1110	The Range Science Profession	1
RGSC 2110	Introduction to Rangeland Management	3
ACES 1120	Freshman Orientation	1
Area VI: Creative and Fine Arts		3
	Credits	**15**
Semester 2		
COMM 1115G	Introduction to Communication	3
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
ENGL 2210G	Professional and Technical Communication	3
PHIL 2110G	Introduction to Ethics	3
Elective		2
	Credits	**15**
Second Year		
Semester 3		
BIOL 2610G & BIOL 2610L	Principles of Biology: Biodiversity, Ecology, and Evolution and Principles of Biology: Biodiversity, Ecology, and Evolution Laboratory	4
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	4
ECON 1110G	Survey of Economics	3
Elective		4
	Credits	**15**
Semester 4		
BIOL 2110G & BIOL 2110L	Principles of Biology: Cellular and Molecular Biology and Principles of Biology: Cellular and Molecular Biology Laboratory	4
CHEM 2115	Survey of Organic Chemistry and Laboratory	4
A ST 311	Statistical Applications	3
RGSC 317	Rangeland Communities	3
Elective		1
	Credits	**15**
Third Year		
Semester 5		
RGSC 452	Vegetation Measurements for Rangeland Assessment	4
RGSC 316	Rangeland Plants	3
RGSC 325	Rangeland Restoration Ecology	3
SOIL 2110 & 2110L	Introduction to Soil Science and Introduction to Soil Science Laboratory	4
Elective		2
	Credits	**16**
Semester 6		
RGSC 357	Grass Taxonomy and Identification	3

RGSC 318	Watershed Management	3
GEOG 381	Cartography and GIS	4
ANSC 304	Feeds and Feeding	3
Elective		3
	Credits	**16**
Fourth Year		
Semester 7		
RGSC 402	Seminar	1
RGSC 440 & 440 L	Rangeland Resource Ecology and Rangeland Resource Ecology Lab	4
SOIL 472	Soil Morphology and Classification	4
FWCE 1110G	Introduction to Natural Resources Management	4
Viewing a Wider World		3
	Credits	**16**
Semester 8		
RGSC 460	Rangeland and Natural Resource Planning and Management	4
EPWS 314	Plant Physiology	3
FWCE 2110	Principles of Fish and Wildlife Management	3
Viewing a Wider World		3
	Credits	**13**
	Total Credits	**121**

Associate of Science to Bachelor of Science in Artificial Intelligence

First Year		
Semester 1		**Credits**
ENGL 1110G	Composition I	4
MATH 1511G	Calculus and Analytic Geometry I	4
CSCI 1720	Computer Science I	4
SOCIAL/BEHV SCIENCES		3
	Credits	**15**
Semester 2		
MATH 1521G	Calculus and Analytic Geometry II	4
CSCI 2230	Assembly Language and Machine Organization	4
CSCI 2210	Object-Oriented Programming	4
HUMANITIES		3
	Credits	**15**
Second Year		
Semester 3		
CSCI 2310	Discrete Mathematics for Computer Science	4
CSCI 2220	Introduction to Data Structures and Algorithms	4
COMM 1115G	Introduction to Communication	3
A ST 311	Statistical Applications	3
STEM-H ELECTIVE		3
	Credits	**17**
Semester 4		
ENGL 2210G	Professional and Technical Communication	3
CSCI 3730	Compilers and Automata Theory	4
Creative and Fine Arts		3
Lab Science		4
MATH 2415	Introduction to Linear Algebra	3
	Credits	**17**
Third Year		
Semester 5		
CSCI 3720	Data Structures and Algorithms	4
CSCI 3710	Software Development	4
Viewing a Wider World		3
Lab Science		4
	Credits	**15**
Semester 6		
CSCI 4105	Programming Language Structure I	3
CSCI 4140	Database Management Systems I	3
CSCI 4265	Modern Web Technologies	3
Viewing a Wider World		3
CSCI 4420	Applied Machine Learning I	3
	Credits	**15**
Fourth Year		
Semester 7		
CSCI 4405	Artificial Intelligence I	3
CSCI 4230	Architectural Concepts I	3
MATH 3160	Introduction to Ordinary Differential Equations	3
CSCI 4120	Operating Systems I	3
CSCI 4415	Introduction to Data Mining	3
	Credits	**15**
Semester 8		
CSCI 4980	Senior Project	4
CSCI 4110	Computing Ethics and Social Implications of Computing	1
CSCI 4410	Computer Graphics I	3
Elective		3
	Credits	**11**
	Total Credits	**120**

Associate of Science to Bachelor of Science in Food Science and Technology

First Year		
Semester 1		**Credits**
ENGL 1110G	Composition I	4
Area V: Humanities		3
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
FSTE 2110G	Food Science I	4
	Credits	**15**
Semester 2		
COMM 1115G	Introduction to Communication	3
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	4
FSTE 1120	ACES in the Hole Foods I	4
Elective		1
Area VI: Creative and Fine Arts		3
	Credits	**15**
Second Year		
Semester 3		
ENGL 2210G	Professional and Technical Communication	3
BCIS 1110	Introduction to Information Systems	3
CHEM 2120	Integrated Organic Chemistry and Biochemistry	3

MATH 1430G	Applications of Calculus I	3
Elective		2
	Credits	**14**
Semester 4		
BIOL 2110G & BIOL 2110L	Principles of Biology: Cellular and Molecular Biology and Principles of Biology: Cellular and Molecular Biology Laboratory	4
NUTR 2110	Human Nutrition	3
PHYS 1230G & PHYS 1230L	Algebra-Based Physics I and Algebra-Based Physics I Lab	4
BIOL 311 & 311 L	General Microbiology and General Microbiology Laboratory	5
	Credits	**16**
Third Year		
Semester 5		
MATH 1350G	Introduction to Statistics	3
FSTE 2120	ACES in the Hole Foods II	4
FSTE 4110	Food Microbiology	4
BCHE 395	Biochemistry I	3
Choose one of the following:		3
FSTE 4996	Special Topics	
Elective		
	Credits	**17**
Semester 6		
FSTE 3110	Professional Development in Food Science	1
FSTE 4120	Food Chemistry	3
FSTE 4140	Food Analysis	3
Viewing a Wider World		3
Choose one of the following:		4
FSTE 4996	Special Topics	
Elective		
	Credits	**14**
Fourth Year		
Semester 7		
FSTE 4230	Food Processing Technologies	4
FSTE 2130G	Survey of Food and Agricultural Issues	3
FSTE 4150	Food Safety	3
FSTE 4250	Sensory Evaluation of Foods and Product Development	3
ANSC 2310	Introduction to Meat Science	3
	Credits	**16**
Semester 8		
FSTE 4130	Food Preservation	3
Viewing a Wider World		3
FSTE 4998	ACES Foods at NMSU-Experiential Learning	1
Choose 7 credits from the following:		7
FSTE 4996	Special Topics	
FSTE 4997	Special Problems	
	Credits	**14**
	Total Credits	**121**