

PSY 229	Adolescent Psychology	_____	_____
PSY 230	Psychology of Adjustment	_____	_____
PSY 232	Abnormal Behavior	_____	_____
PSY 370	Social Psychology	_____	_____
PSY 290	Developmental Psychology	_____	_____
SOC 213	Deviant Behavior	_____	_____
SOC 216	Ethnic and Intercultural Relations	_____	_____
SOC 220	Social Problems	_____	_____
SOC 225	Marriage and the Family	_____	_____

** Students in associate degree programs are advised that upper-division courses used to satisfy any of these requirements are not covered under financial aid.

Area V: Humanities and Fine Arts (6 – 9)*

HUM 100	FYE: History and Culture of Northern New Mexico (3)	_____	_____
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Electives (3-6) You must select courses from **one other discipline area** from Area V courses.

ART 105	Introduction to Art (3)	_____	_____
ART 107	History of Art I (3)	_____	_____
ART 208	History of NM Art & Arch. I (3)	_____	_____
ART 211	History of Art II (3)	_____	_____
DANC 240	Dance Appreciation (3)	_____	_____
ENG 270	Children’s Literature (3)	_____	_____
ENG 262	Literature of the Southwest (3)	_____	_____
ENG/PIS 265	Native American Literature I(3)	_____	_____
ENG/PIS 266	Native American Literature II(3)	_____	_____
ENG 280	Readings in Literature(3)	_____	_____
ENG 290	Study of Literature (3)	_____	_____
ENG 294	Mythology (3)	_____	_____
HIST 101	Western Civilization I (3)	_____	_____
HIST 102	Western Civilization II (3)	_____	_____
HIST 161	History of U.S. to 1877 (3)	_____	_____
HIST 162	History of U.S. from 1877 (3)	_____	_____
HIST 200	History of World Religions (3)	_____	_____
HIST 220	Southwestern Women’s History (3)	_____	_____
HIST 230	Chicano Experience in the U.S. (3)	_____	_____
HIST 250	American Indian History (3)	_____	_____
HIST 260	History of New Mexico (3)	_____	_____
HUM 101	Humanities I (3)	_____	_____
HUM 102	Humanities II (3)	_____	_____
HUM 105	Humanities and the Southwest (3)	_____	_____
HUM/HSS311	Readings in the Social Sciences ** (3)	_____	_____
HUM/HSS414	Humanity and Creativity ** (3)	_____	_____
HSS/HUM421	History, Literature, Art & Philosophy ** (3)	_____	_____
MUS 103	Music Hist & Lit I (3)	_____	_____
MUS 105	Music Appreciation (3)	_____	_____
MUS 218	Music Hist & Lit II (3)	_____	_____
PHIL 110	Intro to Philosophical Problems (3)	_____	_____
PHIL 111	History of Philosophy (3)	_____	_____
PHIL 150	Critical Thinking (3)	_____	_____
PHIL 220	Ethics (3)	_____	_____
PIS 200	Introduction to Pueblo Indian Studies (3)	_____	_____
THE 120	Introduction to Theatre I (3)	_____	_____
THE 130	History of Theater (3)	_____	_____

***You must complete at least 15 credits between the areas IV and V, Social/Behavioral Science and Humanities/Fine Arts, maintaining at least two disciplines in each area.**

Area VI Library Technology (1)

LT 101 Library Research Skills (1)

Area VII Foreign Language (3)

3 credits

PROGRAM REQUIREMENTS (36 crs)

Required Supporting Courses in Physics and Chemistry (8)

CHEM 121/L General Chemistry I with lab (4)
and

CHEM 122/L General Chemistry II with lab (4)
or

PHYS 121/L Applied Physics I with lab (4)
and

PHYS 122/L Applied Physics II with lab (4)
or

CHEM 121/L General Chemistry I with lab (4)
and

PHYS 121/L Applied Physics I with lab (4)

Required Supporting Course in Computer Science (3)

CS 142 Computer Science I (3)

Core Curriculum (25)

MATH 162 Calculus I (4)

MATH 163 Calculus II (4)

MATH 264 Calculus III (4)

MATH 375 Numerical Computing (3)

or

MATH 275 Intro to Numerical Computing (3)

MATH 314 Linear Algebra with Applications (3)

or

MATH 294 Intro to Linear Algebra with Applications (3)

MATH 316 Applied Ordinary Differential Equations (3)

or

MATH 296 Intro to Applied Ordinary Differential Equations (3)

MATH 401 Advanced Calculus (4)

MAJOR (27 crs)

Applied Mathematics (24)

MATH 311 Vector Analysis (3)

MATH 312 Partial Differential Equations for Engineering (3)

MATH 313 Complex Variables for Engineering (3)

MATH 316 Applied Ordinary Differential Equations (3)

MATH 327 Discrete Structures (3)

MATH 345 Elements of Applied Statistics and Probability Theory (3)

MATH 395 Practicum in Mathematics (6)

MATH 466 Mathematical Methods in Science and Engineering (3)

Choose one of the following (3):

MATH 402 Advanced Calculus II (3)

MATH 441	Probability (3)	_____	_____
MATH 464	Applied Matrix Theory (3)	_____	_____

CONCENTRATIONS

Along with your major, you may complete a concentration if you wish. For the BS in Mathematics, we suggest one of the following four concentrations.

General Engineering (21 crs)

ME 202	Engineering Statics (3)	_____	_____
ME 302	Mechanics of Materials (3)	_____	_____
EECE 203L	Circuit Analysis (3)	_____	_____
ME 160L	Mechanical Engineering Design (3)	_____	_____
ME 301	Thermodynamics (3)	_____	_____
ME 306	Dynamics (3)	_____	_____
ME 317	Fluid Mechanics (3)	_____	_____

Information Technology (22 crs)

EECE 132	Computer Networks I (3)	_____	_____
IT 210	Information Technology Systems (4)	_____	_____
EECE 231	Intermediate Programming (3)	_____	_____
IT 250	Introduction to Databases (3)	_____	_____
EECE 330	Computer Networks II (3)	_____	_____
EECE 342	Wireless and Mobil Computing (3)	_____	_____
EECE 440	Advanced Computer Networks (3)	_____	_____

Chemistry (19 crs)

CHEM 121/L	General Chemistry I with lab (4) *	_____	_____
CHEM 122/L	General Chemistry II with lab (4) *	_____	_____
CHEM 301/L	Organic Chemistry I with lab (4)	_____	_____
CHEM 302/L	Organic Chemistry II with lab (4)	_____	_____
CHEM 311	Physical Chemistry (3)	_____	_____

(No course can count more than once toward a degree at Northern. If you pursue this concentration, you will not have taken CHEM 121/L and 122/L as part of the "supporting courses" on the catalog.*

Physics (20 crs)

PHYS 215/L	Engineering Physics with lab (4)	_____	_____
PHYS 262/L	General Physics with lab (4)	_____	_____
PHYS 331	Thermodynamics and Statistical Methods (3)	_____	_____
PHYS 302	Optics (3)	_____	_____
PHYS 330	Introduction to Modern Physics (3)	_____	_____
PHYS 405	Electricity and Magnetism (3)	_____	_____

Should you choose not to pursue a concentration, you must complete enough approved upper-division (300 or above) math, chemistry, engineering or physics courses in order to fulfill our requirement of at least 40 cr of upper-division coursework.

In order to fulfill the graduation requirement of 128 credits for the program, you will have to enroll in additional 4-26 credits of approved electives depending on the concentration option you choose.

TOTAL CREDIT HOURS 128