



COLLEGE OF ARTS & SCIENCES PHYSICS

Plan of study

Assumes: high-school preparation for physics I and calculus I

YEAR ONE (Semester 1)		
Course Number	Course Title	Credit Hours
UNV 100	First Year Experience	3
ENG 112	Critical Writing & Reading	3
MTH 121	Calculus I	4
PHY 243	Principles of Physics I	5
Semester Total		15

YEAR ONE (Semester 2)		
Course Number	Course Title	Credit Hours
MTH 122	Calculus II	4
PHY 245	Principles of Physics II	5
CSC/CIS 175	Problem Solving and Programming I	4
Req. D Prereq		3
Semester Total		16

YEAR TWO (Semester 1)		
Course Number	Course Title	Credit Hours
MTH 222	Multivariate Calculus	4
MTH 305	Differential Equations	3
General Education		3
PHY / MTH 250	Introduction to Computer-based Mathematics	1
PHY 343	Modern Physics	3
Semester Total		14

YEAR TWO (Semester 2)		
Course Number	Course Title	Credit Hours
MTH 220	Elementary Linear Algebra	3
PHY 333	Advanced Lab I	3
CHM 260	Principles of Chemistry I	3
CHM 261	General Chemistry Laboratory	1
General Education		3
General Education		3
Semester Total		16

YEAR THREE (Semester 1 Odd Fall)		
Course Number	Course Title	Credit Hours
PHY 344	Classical Mechanics	3
PHY 351	Thermal Physics	3
CHM 262	Principles of Chemistry I	3
MTH 357	Advanced Calculus	3
General Education		3
Semester Total		15

YEAR THREE (Semester 2 Even Winter)		
Course Number	Course Title	Credit Hours
PHY 374	Quantum Mechanics	4
General Education		3
General Education		3
DDD 3xx (Req. D)	3xx or better in BIO, CHM, CSC, EGR, MTH, or ERS	3
Free Elective		3
Semester Total		16

YEAR FOUR (Semester 1 Even Fall)		
Course Number	Course Title	Credit Hours
PHY 367	Electricity & Magnetism	3
PHY 3xx (Req. B)	(e.g., Optics, Astrophysics, Supervised Study)	3
DDD 3xx (Req. D)		3
General Education		3
Free Elective		3
Free Elective		2
Semester Total		17

YEAR FOUR (Semester 2 Odd Winter)		
Course Number	Course Title	Credit Hours
PHY 433	Advanced Lab II (Capstone)	3
PHY 3xx (Req. B)	(e.g., Optics, Astrophysics, Supervised Study)	3
MTH 374	Introduction to Numerical Analysis	3
MTH 470	Theory of Functions of a Complex Variable	3
Free Elective		3
Semester Total		15
Program Total		124

YEAR THREE (Semester 1 Even Fall)		
Course Number	Course Title	Credit Hours
PHY 367	Electricity & Magnetism	3
PHY 3xx (Req. B)	(e.g., Optics, Astrophysics, Supervised Study)	3
DDD 3xx (Req. D)	3xx or better in BIO, CHM, CSC, EGR, MTH, or ERS	3
CHM 262	Principles of Chemistry II	3
General Education		3
Semester Total		15

YEAR THREE (Semester 2 Odd Winter)		
Course Number	Course Title	Credit Hours
PHY 3xx (Req. B)	(e.g., Solid State, Supervised Study)	3
MTH 374	Introduction to Numerical Analysis	3
MTH 470	Theory of Functions of a Complex Variable	3
General Education		3
Free Elective		3
Semester Total		15

YEAR FOUR (Semester 1 Odd Fall)		
Course Number	Course Title	Credit Hours
PHY 344	Classical Mechanics	3
PHY 351	Thermal Physics	3
MTH 357	Advanced Calculus	3
DDD 3xx (Req. D)		3
General Education		3
Free Elective		2
Semester Total		17

YEAR FOUR (Semester 2 Even Winter)		
Course Number	Course Title	Credit Hours
PHY 433	Advanced Lab II (Capstone)	3
PHY 374	Quantum Mechanics	4
General Education		3
Free Elective		3
Free Elective		3
Semester Total		16
Program Total		124

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