

Physics

College of Natural and Health Sciences

Credit Hours: 120 hours minimum Total - 65 credits for Major

Declaring the Major: Plan Declaration form may be submitted anytime after successful completion of Math 221, 222 and PHYS 201, 202 with a grade of C or better.

Concentrations: None



First Year

Semester 1

Course	Credits	Course Notes	Category	Major GPA	Fall	Winter	Spring	Summer	Min. Grade	Grade	Complete
Gen Ed (NS): MATH 221 - Calculus and Analytic Geometry I	5	Prereq: MATH 112 and 113 or equivalent or appropriate placement score	MJ/GE	●	●		●		C		
Gen Ed (NS): PHYS 201 - General Physics I	5	Prereq: MATH 221 with a C or better or concurrent registration	MJ/GE	●	●		●				
Gen Ed (HU): Humanities & Fine Arts	3		GE		●	●	●	●			
Gen Ed (SS): Social & Behavioral Science	3		GE		●	●	●	●			

Total Credits: 16

Semester 2

Gen Ed (NS): MATH 222 - Calculus and Analytic Geometry II	5	Prereq: MATH 221 or equivalent	MJ/GE	●	●		●				
PHYS 202 - General Physics II	5	Prereq: PHYS 201; MATH 222 or concurrent registration	MJ	●	●		●				
Gen Ed (HU): Humanities & Fine Arts	3	Pick a course that meets Diversity Requirement	GE/DV		●	●	●	●			
Gen Ed (SS): Social & Behavioral Science	3		GE		●	●	●	●			

Total Credits: 16

First Year Credit Total 32

WINTERIM YEAR 1 - OPTIONAL: Consult with your advisor whether winterim is appropriate for you in your first year.

SUMMER YEAR 1 - OPTIONAL: Enrollment in Summer courses is recommended for students who end their first year with less than 30 credit hours.

GE = General Education Requirement, MJ = Major Requirement, SS = Social and Behavioral Sciences Requirement, NS = Natural Science Requirement, HU = Humanities and Fine Arts Requirement, DV = Diversity Requirement

Second Year

Semester 1											
Course	Credits	Course Notes	Category	Major GPA	Fall	Winter	Spring	Summer	Min. Grade	Grade	Complete
MATH 223 - Calculus and Analytic Geometry III	3	Prereq: MATH 222	MJ	●	●		●				
PHYS 205 - Modern Physics	3	Prereq: PHYS 202	MJ	●	●						
MATH 317 - Differential Equations & Their Applications	4	Prereq: MATH 222	MJ	●	●						
Gen Ed (SS): Social & Behavioral Science	3		GE		●	●	●	●			
XXXX - General Elective	3		EL		●	●	●	●			

Total Credits: 15

Semester 2											
XXXX - General Elective	3		EL		●	●	●	●			
PHYS 241 - Scientific Programming	3	Prereq: PHYS 201 and MATH 221 or consent of instructor	MJ	●	●		●				
XXXX - General Elective	3		EL		●	●	●	●			
Gen Ed (HU): Humanities & Fine Arts	3		GE		●	●	●	●			
XXXX - General Elective	3		EL		●	●	●	●			

Total Credits: 15

Second Year Credit Total 30

WINTERIM YEAR 2 - OPTIONAL: Enrollment in Winterim courses is strongly recommended for students who have accumulated less than 45 credits.
 SUMMER YEAR 2 - OPTIONAL: Enrollment in Summer courses is recommended for students who end their second year with less than 60 credit hours.

GE = General Education Requirement, MJ = Major Requirement, SS = Social and Behavioral Sciences Requirement,
 HU = Humanities and Fine Arts Requirement, EL = General Elective Requirement

Third Year

Semester 1											
Course	Credits	Course Notes	Category	Major GPA	Fall	Winter	Spring	Summer	Min. Grade	Grade	Complete
MATH 301 - Linear Algebra	4	Prereq: MATH 223 or MATH 222 and consent of instructor	MJ	●	●						
PHYS 301 - Classical Mechanics	4	Prereq: PHYS 201; MATH 317 or concurrent registration or consent of instructor	MJ	●	●						
PHYS 307 - Mathematical Methods of Physics	3	Prereq: MATH 222, PHYS 202	MJ	●	●						
Gen Ed (SS): Social & Behavioral Science	3		GE		●	●	●	●			
XXXX - General Elective	3		EL		●	●	●	●			
Total Credits: 17											
Semester 2											
PHYS 303 - Computational Physics	3	Prereq: MATH 223, PHYS 205, 241	MJ	●			●				
PHYS 403 - Thermodynamics & Statistical Physics	4	Prereq: MATH 301 and 317 or PHYS 307 or consent of instructor	MJ	●			●				
PHYS 306 - Advanced Experiments in Physics	3	Prereq: PHYS 205	MJ	●			●				
PHYS 499 - Independent Study	1	Consent of instructor	MJ	●	●	●	●	●			
Gen Ed (HU): Humanities & Fine Arts	3		GE		●	●	●	●			
Total Credits: 14											
Third Year Credit Total 31											

WINTERIM YEAR 3 - OPTIONAL: Enrollment in Winterim courses is strongly recommended for students who have accumulated less than 75 credits.
 SUMMER YEAR 3 - OPTIONAL: Enrollment in Summer courses is recommended for students who end their third year with less than 90 credit hours.

GE = General Education Requirement, MJ = Major Requirement, SS = Social and Behavioral Sciences Requirement,
 HU = Humanities and Fine Arts Requirement, EL = General Elective Requirement

Fourth Year

Semester 1											
Course	Credits	Course Notes	Category	Major GPA	Fall	Winter	Spring	Summer	Min. Grade	Grade	Complete
PHYS 302 - Electricity and Magnetism	4	Prereq: PHYS 202; MATH 317 or concurrent registration or consent of instructor	MJ	●	●						
XXXX - General Elective	3		EL		●	●	●	●			
Gen Ed (NS): Natural Science	3		GE		●	●	●	●			
XXXX - General Elective	3		EL		●	●	●	●			
Total Credits: 13											
Semester 2											
PHYS 441 - Quantum Physics	4	Prereq: PHYS 205; MATH 301 and 317 or PHYS 307 or consent of instructor	MJ	●			●				
XXXX - General Elective	3		EL		●	●	●	●			
PHYS 495 - Senior Seminar	1	Prereq: Junior or Senior standing	MJ	●	●		●				
300 or 400+ Level Elective	3			●	●		●				
XXXX - General Elective	3		EL		●	●	●	●			
Total Credits: 14											
Fourth Year Credit Total 27											

WINTERIM YEAR 4 - OPTIONAL: Enrollment in Winterim courses is strongly recommended for students who have accumulated less than 105 credits.
 SUMMER YEAR 4 - OPTIONAL: Enrollment in Summer courses is recommended for students who end their fourth year with less than 120 credit hours.

GE = General Education Requirement, MJ = Major Requirement, EL = General Elective Requirement, NS = Natural Science Requirement

Milestone Checklist

Year 1:	
Complete MATH 221 and 222 with a grade of C or better and PHYS 201 and 202.	
Review DARS and consult with your advisor every semester.	
Declare major by submitting a plan declaration form.	
Create a CareerLocker account and create a resume using Resume Module.	
Year 2:	
Complete 27 of 36 required general education courses including Diversity Requirement.	
Complete PHYS 205, MATH 223 and MATH 317.	
Review DARS and consult with advisor each semester.	
Register for RangerTrak and create a career profile, shadow a physics professional.	
Year 3:	
Complete MATH 301 and PHYS 301.	
Review DARS and consult with advisor each semester.	
Join LinkedIn, Explore internships and graduate school options.	
Submit Graduation Application.	
Year 4:	
Complete General Education Requirments.	
Complete all Major Requirements including PHYS 495 - Senior Seminar.	
Update RangerTrak profile and resume, develop a job search strategy and attend Senior Send Off.	

Graduation Requirements Summary:

Minimum Total Hours: 120 credits

Minimum Upper-Division Hours: 36 credits

Minimum Major hours: 65 credits

Minimum Major GPA: 2.0

Minimum Overall GPA: 2.0