

PHYSICS-BS Program
Study Abroad Pathway—Option 1
 (last revised September 2016)

Table 1a: Undergraduate Program Schedule

These undergraduate program schedules are subject to change.

Please verify information with your academic advisor and/or School representative before planning your study abroad trip.

Term: Fall 1		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
COS-CHMG-141 General & Analytical Chemistry I (LAS-P5) Or COS-BIOL-101 General Biology I (LAS-P5)	3	3			High school chemistry or equivalent	
COS-CHMG-145 General & Analytical Chemistry I Lab (LAS-P5) Or COS-BIOL-103 General Biology I Lab (LAS-P5)	1	1			High school chemistry or equivalent	
COS-MATH-181 Project-based Calculus I (LAS-P7-A)	4	4			Three years of high school mathematics and a score of 75% on the RIT Mathematics Placements Exam	
COS-PHYS-150 Introduction to Special Relativity	3		3		High school algebra and physics	
LAS Elective (LAS-E5)	3	3				
Liberal Arts and Sciences perspective (LAS-P1)	3	3				
Term credit total:	17	14	3			
Term: Fall 2		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
COS-MATH-219 Multivariable Calculus (LAS-E2)	3	3			COS-MATH-182	
COS-PHYS-217 University Physics II: Physics majors (LAS-E3)	4	4			COS-MATH-182, COS-PHYS-216	
COS-PHYS-225 Introduction to Computational Physics and Programming	3		3		COS-PHYS-216, COS-MATH-182	
Liberal Arts and Sciences perspective (LAS-P2)	3	3				
Liberal Arts and Sciences perspective (LAS-P3)	3	3				
Term credit total:	16	13	3			
Term: Spring 1		(Check course classification (s))				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
COS-CHMG-142 General & Analytical Chemistry II (LAS-P6) Or COS-BIOL-102 General Biology II (LAS-P6)	3	3			COS-CHMG-141	
COS-CHMG-146 General & Analytical Chemistry II Lab (LAS-P6) Or COS-BIOL-104 General Biology II Lab (LAS-P6)	1	1			COS-CHMG-141, COS-CHMG-145	
COS-MATH-182 Project-based Calculus II (LAS-P7-B)	4	4			COS-MATH-181	
COS-PHYS-216 University Physics I: for Physics majors (LAS-E1)	4	4			COS-MATH-181	
First-year writing intensive course (LAS-F2)(WI)	3	3		N		
Term credit total:	15	15				
Term: Spring 2		(Check course classification (s))				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
COS-MATH-231 Differential Equations (LAS-E4)	3	3			COS-MATH-182	
COS-PHYS-213 Modern Physics I	3		3		COS-PHYS-217	
COS-PHYS-222 Electronic Measurements	3		3		COS-PHYS-217	
COS-PHYS-275 Sophomore Physics Seminar	1		1		COS-PHYS-217	
COS-PHYS-283 Vibrations and Waves	3		3		COS-PHYS-217, COS-MATH-182	
Liberal Arts and Sciences perspective (LAS-P4)	3	3				
Term credit total:	16	6	10			

Term: Fall 3		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
COS-PHYS-214 Modern Physics II	3		3		COS-PHYS-213, COS-PHYS-275	
COS-PHYS-315 Experiments in Modern Physics	3		3		COS-PHYS-213, COS-PHYS-275	
COS-PHYS-320 Mathematical Methods in Physics	3		3		COS-MATH-219, COS-MATH-231, COS-PHYS-217	
COS-PHYS-330 Classical Mechanics	4		4		COS-PHYS-217, COS-MATH-219, COS-MATH-231, COS-PHYS-275	
Liberal Arts and Sciences immersion (LAS-I1)	3	3				
Term credit total:		16	3	13		
Term: Summer 3—STUDY ABROAD		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
Open elective	3					
Liberal Arts and Sciences elective (LAS-E5)	3	3				
Term credit total:		6				
Term: Fall 4		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
COS-PHYS-414 Quantum Mechanics	3		3		COS-PHYS-213, COS-PHYS-320, COS-PHYS-330	
COS-PHYS-440 Thermal and Statistical Physics	3		3		COS-PHYS-213, COS-MATH-231, COS-PHYS-275	
COS-PHYS-451 Capstone Project I	3		3		COS-PHYS-450	
COS-PHYS-xxx Physics elective ^b	3		3			
Term credit total:		12		12		

Term: Spring 3		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
COS-PHYS-316 Advanced Laboratory in Physics	3		3		COS-PHYS-214, COS-PHYS-315	
COS-PHYS-411 Electricity and Magnetism	4		4		COS-PHYS-212, COS-PHYS-320, COS-PHYS-275, COS-PHYS-275	
COS-PHYS-450 Capstone Preparation	1		1		Departmental approval	
COS-PHYS-xxx Lab/computation physics electives ^a	3		3			
Liberal Arts and Sciences immersion (LAS-I2)	3	3				
Term credit total:		14	3	11		
Term:		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
Term credit total:						
Term: Spring 4		Check course classification (s)				
Course Number & Title	CR	LAS	Maj	New	Prerequisite(s)	
COS-PHYS-452 Capstone Project II (WI)	3		3		COS-PHYS-451	
COS-PHYS-xxx Physics elective ^c	3		3			
Open elective	3					
Liberal Arts and Sciences immersion (LAS-I3)	3	3				
Term credit total:		12	3	6		

Program Totals:	Credits: 124	Liberal Arts & Sciences: 60	Major: 58	Elective & Other: 6
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Cr: credits **LAS:** liberal arts & sciences **Maj:** major requirement **New:** new course **Prerequisite(s):** list prerequisite(s) for the noted courses
^a Such as: COS-PHYS-360 Introduction to Chaotic Dynamics, COS-PHYS-365-Physical Optics, COS-PHYS-373-Observational Astronomy, COS-PHYS-377-Advanced Computational Physics, COS-PHYS-667-Quantum Optics
^b Such as: COS-PHYS-321-Advanced Mathematical Methods in Physics, PHYS-370-Stellar Astrophysics, PHYS-371-Galactic Astrophysics, PHYS-372-Extragalactic Astrophysics and Cosmology, PHYS-408-Laser Physics, PHYS-412-Advanced Electricity and Magnetism, PHYS-415-Advanced Quantum Mechanics, PHYS-441-Advanced Thermal and Statistical Physics, PHYS-424-Nuclear Physics, PHYS-432-Solid State Physics
^c All courses in ^a and ^b