

TRANSFER GUIDE/BDP

BS, Physics, Automation & Instrumentation, 270F
 Appalachian State University
 2023-2024

[Department of Physics & Astronomy](#)
[College of Arts & Sciences](#)
[Program of Study](#)

HOW-TO Use the Transfer Guide/BDP

The Transfer Guides/BDPs have three sections:

1. The NC Community College courses are listed in the yellow section. Recommended and/or preferred courses are provided, with the equivalent Appalachian courses listed. If a specific course is not listed, students should use the blue hyperlink to access the [Comprehensive Articulation Agreement \(CAA\) transfer course list](#). Students are welcome to choose any CAA course; however, students should choose courses that are available at their institution and satisfy their transfer degree requirements.
2. Appalachian courses are listed in the gray section. Students will work with an Appalachian advisor to develop an individual graduation plan.
3. Important transfer and major information is listed in the white sections. Students should refer to these sections for information regarding program requirements and other important information the department would like students to be aware of.

Please note - Transfer Guides/BDPs are developed based on the approved curriculum for that catalog year. Depending on term of entry and the curriculum posted for that catalog year, programs of study may have changed.

Community College Coursework: 61 Transfer hours		Associate in Science			
Semester 1: 14 hours	NCCC Course	Course Name	Hours	Appalachian Equivalent	Notes
	ENG 111	Writing & Inquiry	3	RC 1000	
	MAT 171	Precalculus Algebra	4	MAT 1020	Prerequisite for MAT 172
	UGETC	Social Science	3		
	UGETC	Humanities/Fine Arts	3		
	ACA 122	College Transfer Success	1		
		Semester hours	14		
Semester 2: 13 hours	NCCC Course	Course Name	Hours	Appalachian Equivalent	Notes
	ENG 112	Writing/Research in the Disciplines	3	RC 2001	
	MAT 172	Trigonometry	4	MAT 1025	Prerequisite for MAT 271
	UGETC	Humanities/Fine Arts	3		
	UGETC	Social Science	3		
		Semester hours	13		
Semester 3: 17 hours	NCCC Course	Course Name	Hours	Appalachian Equivalent	Notes
	MAT 271	Calculus I	4	MAT 1110	Required for the major - prerequisite to MAT 272
	PHY 251	Physics I	4	PHY 1150	Required for the major
	Pre-Major/GEC/Elective		3		
	Pre-Major/GEC/Elective		3		
		Semester hours	17		
Semester 4: 17 hours	NCCC Course	Course Name	Hours	Appalachian Equivalent	Notes
	MAT 272	Calculus II	4	MAT 1120	Required for the major - prerequisite to MAT 2130, Calculus III
	PHY 252	Physics II	4	PHY 1151	Required for the major
	Pre-Major/GEC/Elective		3		
	Pre-Major/GEC/Elective		3		
		Semester hours	17		
		Total AS degree hours	61		

Appalachian Course Work: 59-61 hours				
Semester 5: 16 hours	Appalachian Course	Course Name	Hours	Notes
	PHY 2010	Intermediate Physics I	4	Offered fall semester only
	PHY 2110	Modern Physics I	3	Offered fall semester only
	MAT 2130	Calculus III	4	
	CS 2435	Intro to Scientific Programming	4	Offered fall semester only
	PHY 2005	Professional Development for PHY majors	1	Offered fall semester only
Semester hours			16	
Semester 6: 16 hours	Appalachian Course	Course Name	Hours	Notes
	PHY 2020	Intermediate Physics II	4	Offered spring semester only
	PHY 2700	Intro to Electronics and Interfacing	3	Offered spring semester only
	PHY 3310	Physics Lab Techniques and Data Analysis	3	Writing in the Discipline. Offered in spring semester only. You will need permission to take this as a coreq to PHY 2020
	Emphasis Area Elective 1		3	A total of 9 hours from list on POS
	PHY/AST Elective 1		3	
Semester hours			16	
Semester 7: 14-15 hours	Appalachian Course	Course Name	Hours	Notes
	PHY 4330	Digital Electronics	4	
	PHY 4730	Analog System	4	
	Emphasis Area Elective 2		3-4	
	PHY/AST Elective 2		3	
Semester hours			14-15	
Semester 8: 13-14 hours	Appalachian Course	Course Name	Hours	Notes
	PHY 4210	Senior Seminar	4	Capstone
	Emphasis Area Elective 3		3	
	PHY/AST Elective 3		3	A total of 9-11 hours (3-4 courses) is required at the 2000 level or above
	PHY/AST Elective 4		3-4	If PHY/AST are complete, take enough free elective to reach 120 hours
Semester hours			13-14	
Total Appalachian hours			59-61	

Applying to Appalachian:

- A minimum cumulative GPA of 2.25, from all post-secondary coursework, is required for admission to Appalachian.
- Students interested in applying to Appalachian should submit an application and official college transcripts to be considered for admission.
- Students hoping to attend a summer or fall term are encouraged to apply by February 15th and those hoping to attend in the spring are encouraged to apply by October 15th.

Advising & Community College Course Selection:

- For UGETC, Pre-Major, Elective, or GEC course options please refer to the [Comprehensive Articulation Agreement transfer course list](#).
- Students should work with their community college academic advisor to ensure appropriate course selection for AA degree completion.

Transfer Information:

- A minor is optional for this degree.
- Students will work with an Appalachian advisor, after transferring, to develop an individual graduation plan.

Transfer Resources:

- Online & Transfer Services** transfer.appstate.edu
Office of Admissions admissions.appstate.edu
Office of Financial Aid financialaid.appstate.edu
Scholarships scholarships.appstate.edu
Career Development careers.appstate.edu
University Housing housing.appstate.edu
Off-Campus Housing offcampushousing.appstate.edu
Campus Activities campusactivities.appstate.edu



Questions, please call Online & Transfer Services at 828-262-7877