

PROGRAM
TRANSFER GUIDE



This transfer guide is intended for students pursuing an Associate Degree in Physical Science: Physics at (Carroll Community College who are interested in pursuing a Bachelor's Degree in Interdisciplinary Physics-Physics Innovation & Entrepreneurship at Towson University. This transfer guide outlines the courses and program requirements a student should follow to satisfy degree requirements at Carroll in order to complete both the Carroll and TU degrees within a total of 4 years and 120 credits.

Associate Degree in Physical Science: Physics

Effective Term:
Spring 2027

Bachelor's Degree in Interdisciplinary Physics-Physics Innovation & Entrepreneurship

YEAR 1 - Carroll Community College

Fall	TU Equivalent	Credits	Spring	TU Equivalent	Credits	
CHEM 105 - Principles of General Chemistry 1*© (Core 7)	CHEM 131/131L	4	PHYS 111 - Physics 1 for Scientists and Engineers*© (Core 8)	PHYS 241	4	
MATH 135 - Calculus of a Single Variable 1* © (Core 3)	MATH 273	4	MATH 136 - Calculus of a Single Variable 2*	MATH 274	4	
ART 125 - Art Appreciation © (Core 5) ♦	ARTH 105	3	ENGL 102 - Writing About Literature © (Core 12)	ENGL TLL	3	
ENGL 101 - College Writing*© (Core 2)	ENGL 102	3	CHEM 106 - Principles of General Chemistry 2	CHEM 132/132L	4	
TOTAL CREDITS:			14	TOTAL CREDITS:		15

YEAR 1 - Carroll Community College

Fall	TU Equivalent	Credits	Spring	TU Equivalent	Credits
PHYS 212 - Physics 2 for Scientists and Engineers*	PHYS 242	4	PHYS 213 - Physics 3 for Scientists and Engineers*	PHYS 243	4
MATH 205 - Multivariable Calculus*	MATH 275	4	MATH 215 - Differential Equations*	MATH T74 (374)	4
PHIL 105 - Ethics © (Core 14) ♦	PHIL 103	3	SOC 101 - Introduction to Sociology (Core 10) ♦	SOCI 101	3
ECON 100-Principles of Microeconomics © (Core 6)*	ECON 201	3	COMM 105 - Introduction to Speech Comm (Core 13) ♦*	COMM 131	3
General Elective	USEL TLL	3			
TOTAL CREDITS: 17			TOTAL CREDITS: 14		

YEAR 3 - Towson University

Fall	Credits	Spring	Credits
PHYS 185 Introductory Seminar in Physics*	1	LEGL 225 Legal Environment of Business* (Core 11)	3
PHYS 305 Computers in Physics*	4	PHYS or EPHY 300-400 level Elective (see TU catalog for approved courses)*	3
PHYS 311 Modern Physics I*	3	ENGL 317 Writing for Business and Industry* OR	3
MKTG 341 Marketing and Creativity*	3	BUSX 301 Business Communications*	
EPHY 155 Engineering Design for Society (Core 4)*	3	Entrepreneurship or Marketing minor course*	3
		General Elective	4
TOTAL CREDITS: 14		TOTAL CREDITS: 16	

YEAR 4 - Towson University

Fall	Credits	Spring	Credits
PHYS 341 Intermediate Physics Laboratory*	3	PHYS 312 Modern Physics II*	3
Entrepreneurship or Marketing minor courses*	9	PHYS or EPHY 300-400 level Electives (see TU catalog for approved courses)*	6
EPHY 335 Analog Electronics OR EPHY 337 Digital Electronics OR	4	PHYS 385 Physics Seminar* OR	1
PHYS 361 Optics Fundamentals*		ASTR 385 Astrophysics Seminar* OR	
PHYS 486 Physics Seminar II*	1	EPHY 385 Engineering Physics Seminar*	
		Entrepreneurship or Marketing minor course*	3
		(Students may take EPHY 335 Analog Electronics this semester if	
		EPHY 335/EPHY 337/PHYS 361 not previously completed)	
TOTAL CREDITS: 17		TOTAL CREDITS: 13	

* Denotes course that must be completed with a grade of C or better ** Must consult with a TU Academic Advisor © Core Curriculum

Notes & Recommendations from Towson University:

- *Core 1 at TU is automatically waived for all transfer students.
- *Students must follow the course selections outlined in this agreement. Failing to complete the specified courses will require them to fulfill remaining requirements at TU and could jeopardize their ability to earn a bachelor's degree within two years.
- *Courses with the ♦ symbol are recommendations only; consult with advising for alternate options to complete all coursework within four years.
- *Course equivalents ending in TLL are general lower-level elective coursework at TU.
- *Students in this concentration must declare a minor in Entrepreneurship or Marketing which is included in the listed coursework

- Bachelor’s degree requirements for all students:**
- A cumulative grade point average (GPA) of 2.0 is required.
 - A C grade (2.0 GPA) or higher is required for all major courses and prerequisites.
 - 32 credits of the bachelor’s degree must be completed at the upper level (courses numbered 300 or above) at TU