







Program of Study: Physics Transfer Major - Associate of Science

Career Pathway: Physics

Secondary Partner: Program Name: CIP: Program ID:

Post-secondary Partner: Trinidad State College Program Name: Physics Transfer Major – AS CIP: 40.0801 Program ID: AS_AS DPHY

Secondary Program Description:

The Physics Program at Trinidad State is meticulously crafted to provide students with a comprehensive and robust foundation in physics, preparing them for the successful completion of the lower-division coursework required for a Bachelor of Science (BS) degree. This program culminates in an Associate of Science degree, which is designed with strategic precision to include Guaranteed Transfer Courses and core lower-division courses, as recommended by the Colorado Department of Higher Education.

Career and Technical Courses

Possibilities of careers, and demand relating to this Pathway

State Graduation Requirements: www.cde.state.co.us/postsecondary/graduationguidelines

- ENG 1021 English Composition I: GT-CO1 CE
- MAT 2410 Calculus I: GT-MA1 CE
- CHE 1111 General College Chemistry I with Lab: GT-SC1 CE
- PHY 2111 Physics: Calculus-Based I with Lab: GT-SC1 CE
- ENG 1022 English Composition II: GT-CO1 CE
- MAT 2420 Calculus II: GT-MA1 CE
- Computer Science I: (Language), or General College Chemistry II with Lab: GT-SC1 CE
- PHY 2112 Physics: Calculus-Based II with Lab: GT-SC1 CE
- Calculus III: GT-MA1, or Calculus III with Engineering Applications: GT-MA1 CE
- ART 1111 Art History Ancient to Medieval GT-AH1, or HUM 1022 Humanities: Medieval-Modern: GT-AH2, or HUM 1023 Humanities: Modern World: GT-AH2, or LIT 1015 Introduction to Literature I: GT-AH2, or LIT 2001 World Literature to 1600: GT-AH2, or MUS 1020 Music Appreciation: GT-AH1 CE
- MUS 1021 Music History Medieval thru Classical: GT-AH1, or MUS 1022 Music History Early Romantic Period to the Present: GT-AH1, or MUS 1025 History of Jazz: GT-AH1, or PHI 1011 Intro to Philosophy: GT-AH3, or PHI 1012 Ethics: GT-AH3, or PHI 1013 Logic: GT-AH3 CE
- ECO 2001 Principles of Macroeconomics: GT-SS1, or ECO 2002 Principles of Microeconomics: GT-SS1, or PSC 2020 Introduction to
 Political Science: GT-SS1, or PSC 1011 American Government: GT-SS1, or GEO 1005 World Regional Geography: GT-SS2, or PSY 1001
 General Psychology I: GT-SS3 CE
- MAT 2560* Differential Equations: GT-MA1 CE
- PHY 2113* Physics III: Calculus-Based Modern Physics CE
- HIS 1310 Western Civilization: Antiquity-1650: GT-HI1, or HIS 1320 Western Civilization: 1650-Present: GT-HI1, or HIS 1110 The World: Antiquity-1500: GT-HI1, or HIS 1120 The World: 1500-Present: GT-HI1, or HIS 1210 US History to Reconstruction: GT- HI1, or HIS 1220 US History since the Civil War:GT-HI1 CE
- ART 1110 Art Appreciation: GT-AH1, or HUM 1021 Humanities: Early Civilization: GT-AH2, or SPA 2011 Spanish Language III: GT-AH4, or SPA 2012 Spanish Language IV: GT-AH4, or THE 1005 Theatre Appreciation: GT-AH1, or THE 2012 Development of Theatre Restoration to Modern: GT-AH1 CE

Possibilities of Careers:

Materials Scientists, Physicists, Atmospheric and Space Scientists, Nuclear Engineers, Natural Sciences Managers, Physics Teachers, Nuclear Technicians, Biochemists and Biophysicists, Astronomers Natural Sciences Managers median income \$69 per hour, ten-year job growth 18%.

Employment Demand and Wage Data:
Materials Scientists median income \$60
per hour, ten-year job growth 10%.
Physicists' median income \$66 per hour,
ten-year job growth 8%. Atmospheric
and Space Scientists median income \$50
per hour, ten-year job growth 0%.
Nuclear Engineers median income \$87
per hour, ten-year job growth 14%.
Natural Sciences Managers median
income \$69 per hour, ten-year job
growth 18%. Physics Teachers median
income \$35 per hour, ten-year job
growth 22%.

Related Industry Certifications/Credential(s) offered through program:	Work-based Learning offered through	
	program:	
	Career Research Cooperative Education Job Shadowing	
Advanced Credit Options Key:	CTSO organization(s):	
Notate above which course has an articulation agreement or concurrent enrollment.		
AA – Course is approved for Articulation Agreement	□ DECA □ FBLA □ FCCLA □	
CE – Course is offered as Concurrent Enrollment	FFA □ CCSA □ HOSA □	
	SkillsUSA	
	□ TSA □ SC ²	

	POSTSECONDARY CREDENTIALS						
	Certificate(s) offered through program:	Associate Degree(s) offered through program:	Bachelor's Degree(s) program aligns to:	Advanced Degree(s) program aligns to:			
Postsecondary		Physics AS	Physics BS	Physics MS, PhD			
Posts	Postsecondary Program Description: The Physics Program at Trinidad State is meticulously crafted to provide students with a comprehensive and robust foundation in physics, preparing them for the successful completion of the lower-division coursework required for a Bachelor of Science (BS) degree. This program culminates in an Associate of Science degree, which is designed with strategic precision to include Guaranteed Transfer Courses and core lower-division courses, as recommended by the Colorado Department of Higher Education.						
	Program Requirements for Entry: http://www.trinidadstate.edu/admissions						
	CTE Courses						

Semester 1

- ENG 1021 English Composition I: GT-CO1
- MAT 2410 Calculus I: GT-MA1
- CHE 1111 General College Chemistry I with Lab: GT-SC1
- PHY 2111 Physics: Calculus-Based I with Lab: GT-SC1

Semester 2

- ENG 1022 English Composition II: GT-CO1
- MAT 2420 Calculus II: GT-MA1
- Computer Science I: (Language), or General College Chemistry II with Lab: GT-SC1
- PHY 2112 Physics: Calculus-Based II with Lab: GT-SC1

Semester 3

- Calculus III: GT-MA1, or Calculus III with Engineering Applications: GT-MA1
- ART 1111 Art History Ancient to Medieval GT-AH1, or HUM 1022 Humanities: Medieval-Modern: GT-AH2, or HUM 1023 Humanities: Modern World: GT-AH2, or LIT 1015 Introduction to Literature I: GT-AH2, or LIT 2001 World Literature to 1600: GT-AH2, or MUS 1020 Music Appreciation: GT-AH1
- MUS 1021 Music History Medieval thru Classical: GT-AH1, or MUS 1022 Music History Early Romantic Period to the Present: GT-AH1, or MUS 1025 History of Jazz: GT-AH1, or PHI 1011 Intro to Philosophy: GT-AH3, or PHI 1012 Ethics: GT-AH3, or PHI 1013 Logic: GT-AH3
- ECO 2001 Principles of Macroeconomics: GT-SS1, or ECO 2002 Principles of Microeconomics: GT-SS1, or PSC 2020 Introduction to Political Science: GT-SS1, or PSC 1011 American Government: GT-SS1, or GEO 1005 World Regional Geography: GT-SS2, or PSY 1001 General Psychology I: GT-SS3

Semester 4

- MAT 2560* Differential Equations: GT-MA1
- PHY 2113* Physics III: Calculus-Based Modern Physics
- HIS 1310 Western Civilization: Antiquity-1650: GT-HI1, or HIS 1320 Western
 Civilization: 1650-Present: GT-HI1, or HIS 1110 The World: Antiquity-1500: GT-HI1,
 or HIS 1120 The World: 1500-Present: GT-HI1, or HIS 1210 US History to
 Reconstruction: GT- HI1, or HIS 1220 US History since the Civil War:GT-HI1
- ART 1110 Art Appreciation: GT-AH1, or HUM 1021 Humanities: Early Civilization: GT-AH2, or SPA 2011 Spanish Language III: GT-AH4, or SPA 2012 Spanish Language IV: GT-AH4, or THE 1005 Theatre Appreciation: GT-AH1, or THE 2012 Development of Theatre Restoration to Modern: GT-AH1

District/College Review

Secondary Partner Print Name:	Title:	Signature:	Date:
Postsecondary Partner Print Name:	Title:	Signature:	Date: