

MATHEMATICS POST-BACCALAUREATE CERTIFICATE

For post-baccalaureate information please see the "Certification" section of the Graduate Course Catalog.

Advanced Professional Studies - Post-Bacc Cert

Code	Title	Hours
COURSE REQUIREMENTS FOR APS		
FOUNDATIONS COURSES - Choose 1 of the following options 1-2:		6
Option 1. Foundations Graduate Level		
EDFN 590	Social Foundation of Educ	
EDFN 545	Advanced Educational Psychology	
Option 2. Foundations Undergraduate Level		
EDFN 211	Foundations Modern Education	
EDFN 241	Psychological Foundations of Teaching	
ACT 126 - Educator Ethics Training		
You must submit your Educator Ethics Training (If applying to APS AFTER Jan 15, 2020)		
3.0 Minimum Cert GPA		
undefined - See separate block		
If you are given the 2.8 GPA Exception for graduation and you graduate with a GPA lower than 3.0, you must have higher certification test scores in order to meet PA state certification requirements.		
REQUIRED CLEARANCES		
ACT 114 - FBI Fingerprint Needed		
You must submit your FBI Fingerprint Clearance		
ACT 34 - Criminal Record Check Needed		
You must submit your Criminal Record Check		
ACT 151 - Child Abuse Clearance Needed		
You must submit your Child Abuse Clearance		
Negative TB Test or Chest X-ray Needed		
You must submit your Negative TB Test or Chest X-ray		
No dispositions-related holds		
If the requirement above is checked as complete, then there are currently no dispositions-related holds on your APS Status. Registration for APS courses is permitted when all APS requirements have been met. If it is incomplete, you have a hold and APS registration will not be allowed.		
APS registration status		
You ARE NOT eligible to register for courses requiring APS status.		
Application for APS status		
When all requirements are met, you must submit application for admission to APS status. Click here for the application.		
Total Hours		6

Major in Mathematics, Post-Baccalaureate Cert

Code	Title	Hours
REQUIRED MATHEMATICS COURSES		
A grade of C- or higher is required in all required math courses, except MATH 464.		
MATH 161	Calculus 1	4
MATH 211	Calculus 2	4
History of Mathematics - Choose 1 of the following:		3
MATH 301	History of Mathematics	
MATH 603	History of Mathematics	
Intro Math Proof - Choose 1 of the following:		3
MATH 310	Intro to Mathematical Proof	
MATH 520	Logic and Foundations of Math	
MATH 311	Calculus 3	4
Linear Algebra I - Choose 1 of the following:		4
MATH 322	Linear Algebra 1	
MATH 502	Linear Algebra	
Abstract Algebra I - Choose 1 of the following:		3
MATH 345	Abstract Algebra 1	
MATH 504	Modern Algebra for Teachers	
Survey of Geometry or Transfrmtnl Geometry - Choose 1 of the following:		3-4
MATH 353	Survey of Geometry	
MATH 355	Transformational Geometry	
MATH 505	Classical & Modern Geometry	
MATH 650	Topics in Geometry	
Real Analysis I - Choose 1 of the following:		3
MATH 464	Real Analysis 1	
MATH 506	Modern Analysis for Teachers	
REQUIRED OPTION COURSES		
STATISTICS REQUIREMENT - Choose 1 of the following options 1-2:		4-6
Option 1. Intro to Probability and Statistics - Choose 1 of the following:		
MATH 333	Probablity and Statistics	
MATH 503	Probability and Stats for Tchrr	
Option 2. Math Statistics I and Statistics II - Choose 2 of the following:		
MATH 335	Mathematical Statistics 1	
MATH 435	Mathematical Statistics 2	
MATH 535	Statistical Methods 1	
MATHEMATICS ELECTIVES - Choose 6 hours from:		6
MATH 333	Probablity and Statistics	
MATH 335	Mathematical Statistics 1	
MATH 353	Survey of Geometry	
MATH 355	Transformational Geometry	
MATH 365	Ordinary Differential Equation	
MATH 370	Operations Research	
MATH 375	Numerical Analysis	
MATH 393	Number Theory	
MATH 395	Introduction Combinatorics	
MATH 408	Topics in Mathematics	
MATH 418	Topics in Math Education	
MATH 422	Linear Algebra 2	

MATH 435	Mathematical Statistics 2
MATH 438	Topics in Statistics
MATH 445	Abstract Algebra 2
MATH 448	
MATH 457	Elementary Differentl Geometry
MATH 458	
MATH 465	Real Analysis 2
MATH 467	Partial Differential Equations
MATH 468	
MATH 471	Mathematical Modeling
MATH 472	Financial Mathematics II
MATH 478	Topics in Applied Mathematics
MATH 483	Point-Set Topology
MATH 488	
MATH 498	Independent Study
MATH 503	Probability and Stats for Tchr
MATH 535	Statistical Methods 1
MATH 536	Statistical Methods 2
MATH 566	Complex Variables
MATH 577	Problems in Applied Math
MATH 592	Graph Theory
	Any 6-level MATH course(s)
Total Hours	41-44

Req Related for Mathematics, Post-Bacc Cert

Code	Title	Hours
REQUIRED RELATED COURSES		
	Intro. to Computing I	4
CSCI 161	Introduction to Programming 1	
CSCI 140	Discrete Structures	4
Total Hours		8

Professional Education - Certification

Code	Title	Hours
FOUNDATIONS BLOC		
We recommend 590 and 545 for Post-Bacc students. These courses each require 35 hours field placement at an urban school. Offered in the evenings Fall and Spring. Also offered in Summer Session. If enrolling in EDFN 211/241, please register for both courses in the same block.		
Foundations of Modern Education - Choose 1 of the following:		3
EDFN 590	Social Foundation of Educ	
EDFN 211	Foundations Modern Education	
Psychological Foundations of Teaching - Choose 1 of the following:		3
EDFN 545	Advanced Educational Psychology	
EDFN 241	Psychological Foundations of Teaching	
APS - PROFESSIONAL BLOC		
Students must meet APS eligibility requirements prior to registering. Course Appropriate PRAXIS II Exam should be taken after Professional Bloc, but prior to Student Teaching.		
Issues in Secondary Education - Choose 1 of the following:		3
EDSE 521	Issues in Second Education	
EDSE 321	Issues in Secondary Education	

Content Area Literacy for Diverse Classrooms - Choose 1 of the following:		3
EDSE 340	Content Area Literacy for Diverse Classrooms	
EDSE 540	Cntnt Area Litrcy Divers Class	
Secondary Students w/Disabilities in Inclusive Settings - Choose 1 of the following:		3
SPED 346	Secondary Students w/Disabilities in Inclusive Settings	
SPED 546	Sec Stdnts w Disab Inclu Sttgs	
MATH 405	Teaching Math in Secondary Schools 2	3
STUDENT TEACHING SEMESTER		
Students must meet APS eligibility requirements prior to registering. Submit your Teacher Certification Packet 90 days prior to completion of your certification program. Click here to access the packet on the Certification Website.		
EDSE 471	Student Teaching Seminar	3
Student Teaching		9
File your Intent to Student Teach Card one year prior to the beginning of the semester in which you wish to Student Teach. Click here to access the Student Teaching Website		
Total Hours		30