# **PROGRAMS**

## **Graduate Major Degree Programs**

- Accounting (Behrend)
- Accounting (Capital)
- · Accounting (Great Valley)
- · Accounting (Smeal)
- · Accounting Analytics
- · Acoustics
- · Additive Manufacturing and Design
- · Aerospace Engineering
- · African American and Diaspora Studies
- · African Studies
- · Agricultural and Biological Engineering
- · Agricultural and Environmental Plant Science
- · American Studies
- Anatomy
- · Animal Science
- Anthropology
- · Applied Behavior Analysis
- · Applied Clinical Psychology
- · Applied Linguistics
- · Architectural Engineering
- Architecture
- Art
- Art Education
- · Art History
- · Artificial Intelligence
- · Asian Studies
- Astrobiology
- · Astronomy and Astrophysics
- · Athletic Training
- · Biobehavioral Health
- · Biochemistry, Microbiology, and Molecular Biology
- · Bioethics
- Biogeochemistry
- · Bioinformatics and Genomics
- Biology
- · Biomedical Engineering
- · Biomedical Sciences
- BioRenewable Systems
- · Biostatistics
- Biotechnology
- · Business Administration (Behrend)
- · Business Administration (Capital)
- · Business Administration (Executive)
- · Business Administration (Great Valley)
- · Business Administration (Intercollege)
- Business Administration (Smeal)
- Business Analytics
- · Chemical Engineering

- · Chemistry
- · Civil Engineering (Capital)
- Civil Engineering (Engineering)
- · Classics and Ancient Mediterranean Studies
- · Climate Science
- · Clinical and Translational Sciences
- · Clinical Research
- · Communication Arts and Sciences
- · Communication Sciences and Disorders
- Communications
- · Community and Economic Development
- · Comparative and International Education
- · Comparative Literature
- · Computer Science
- · Computer Science and Engineering
- · Corporate Innovation and Entrepreneurship
- · Counselor Education
- · Criminal Justice
- · Criminal Justice Policy and Administration
- Criminology
- · Curriculum and Instruction
- · Cybersecurity Analytics and Operations
- · Data Analytics
- · Demography
- Ecology
- Economics
- · Ecosystem Management and Administration
- · Education
- · Education, Development and Community Engagement
- · Educational Leadership
- · Educational Psychology
- Educational Theory and Policy
- Electrical Engineering (Capital)
- · Electrical Engineering (Engineering)
- · Energy and Mineral Engineering
- · Energy, Environmental, and Food Economics
- · Engineering
- · Engineering at the Nano-scale
- · Engineering Design
- Engineering Leadership and Innovation Management
- Engineering Management (Capital)
- · Engineering Management (Great Valley)
- · Engineering Science and Mechanics
- · Engineering Systems
- · Engineering, Law, and Policy
- · English
- · Enterprise Architecture and Business Transformation
- Entomology
- · Environmental Engineering
- Epidemiology
- · Finance (Great Valley)
- · Finance (Smeal)

- · Food Science
- · Forensic Science
- · Forest Resources
- · French and Francophone Studies
- Geodesign
- · Geographic Information Systems
- Geography
- · Geosciences
- German
- · Health Administration
- · Health Policy and Administration
- · Higher Education
- History
- · Homeland Security
- · Hospitality Management
- · Human Development and Family Studies
- · Human Resources and Employment Relations
- · Industrial Engineering
- Informatics
- · Information Science
- · Information Systems
- · Integrative and Biomedical Physiology
- · International Affairs
- · International Agriculture and Development
- Kinesiology
- · Labor and Global Workers' Rights
- · Laboratory Animal Medicine
- · Landscape Architecture
- Language Science
- · Leadership Development
- · Learning, Design, and Technology
- · Lifelong Learning and Adult Education
- · Management and Organizational Leadership
- Marketing Analytics and Insights
- Mass Communications
- · Materials Science and Engineering
- · Mathematics
- · Mechanical Engineering (Capital)
- · Mechanical Engineering (Engineering)
- · Media Studies
- · Meteorology and Atmospheric Science
- · Microbiome Sciences
- Molecular, Cellular and Integrative Biosciences
- Music
- Music Education
- Neuroscience (Hershey)
- · Neuroscience (Science)
- · Nuclear Engineering
- Nursing
- · Nutritional Sciences
- · Operations Research
- · Organization Development and Change

- Pathobiology
- Philosophy
- Physics
- · Piano Performance
- · Plant Biology
- · Plant Pathology
- · Political Science
- · Project Management
- Psychology
- · Psychology of Leadership
- · Public Administration
- · Public Health
- · Public Policy
- · Quality and Manufacturing Management
- · Real Estate Analysis and Development
- · Recreation, Park, and Tourism Management
- · Renewable Energy and Sustainability Systems
- · Rural Sociology
- · Russian and Comparative Literature
- · School Psychology
- · Social and Behavioral Neuroscience
- · Social Data Analytics
- Sociology
- · Software Engineering
- · Soil Science
- Spanish
- Spatial Data Science
- · Special Education
- Statistics
- · Strategic Communications
- · Strategic Management and Executive Leadership
- · Supply Chain Management
- · Systems Engineering
- Taxation
- · Teaching and Curriculum
- Teaching English as a Second Language
- Theatre
- · Transdisciplinary Research on Environment and Society
- · Turfgrass Management
- Visual Studies
- · Wildlife and Fisheries Science
- · Women's, Gender, and Sexuality Studies
- · Workforce Education and Development

#### **Graduate Minor Programs**

- · Computational Materials Graduate Minor
- · Computational Science Graduate Minor
- · Electrochemical Science and Engineering Graduate Minor
- Gerontology Graduate Minor
- · Holocaust and Genocide Studies Graduate Minor
- Information and Communication Technologies for Development Graduate Minor

- · Jewish Studies Graduate Minor
- · Latin American Studies Graduate Minor
- · Latina and Latino Studies Graduate Minor
- · Linguistics Graduate Minor
- · Literary Theory, Criticism, and Aesthetics Graduate Minor
- · Science, Technology, and Society Graduate Minor
- · Social Thought Graduate Minor

### **Graduate Certificate Programs**

- · Accounting Foundations Graduate Credit Certificate Program
- · Accounting Graduate Credit Certificate Program
- Additive Manufacturing and Design Graduate Credit Certificate Program
- · Adult Basic Education Post-baccalaureate Credit Certificate Program
- Adult Education in the Health and Medical Professions Graduate Credit Certificate Program
- Adult Gerontology Acute Care Nurse Practitioner Graduate Credit Certificate Program
- Adult Gerontology Primary Care Nurse Practitioner Graduate Credit Certificate Program
- · Advanced Principal Graduate Credit Certificate Program
- Agricultural Biosecurity and Food Defense Graduate Credit Certificate Program
- · Al Engineering Graduate Credit Certificate Program
- · Analytics for Managers Graduate Credit Certificate Program
- Ancient Languages Postbaccalaureate Credit Certificate Program
- · Applied Behavior Analysis Graduate Credit Certificate Program
- Applied Demography Graduate Credit Certificate Program
- · Applied Statistics Graduate Credit Certificate Program
- · Business Analytics Graduate Credit Certificate Program
- Business Architecture Graduate Credit Certificate Program
- Business Management Foundations Graduate Credit Certificate Program
- Business Sustainability Strategy Graduate Credit Certificate Program
- · Children's Literature Graduate Credit Certificate Program
- · Clinical Research Graduate Credit Certificate Program
- Community and Economic Development Graduate Credit Certificate Program
- · Computer Vision Graduate Credit Certificate Program
- Corporate Innovation and Entrepreneurship Graduate Credit Certificate Program
- Counterterrorism Graduate Credit Certificate Program
- Cyber Threat Analytics and Prevention Graduate Credit Certificate Program
- Data Analytics and Engineering Graduate Credit Certificate Program
- Data Analytics Graduate Credit Certificate Program
- Data Engineering for Analytics Graduate Credit Certificate Program
- Dietetic Internship Postbaccalaureate Credit Certificate Program
- · Distance Education Postbaccalaureate Credit Certificate Program
- Diversity and Inclusion as Strategy Graduate Credit Certificate Progarm
- Diversity, Ethics, and Leadership Postbaccalaureate Credit Certificate Program
- · e-Learning Design Graduate Credit Certificate Program

- Ecosystem Measurements and Data Analysis Graduate Credit Certificate
- Educating Individuals with Autism Postbaccalaureate Credit Certificate Program
- Educational Technology Integration Postbaccalaureate Credit Certificate Program
- Electrical Engineering Post-Baccalaureate Credit Certificate Program
- Engineering Leadership and Innovation Management Graduate Credit Certificate Program
- English as a Second Language Program Specialist Postbaccalaureate Credit Certificate Program
- · Enterprise Architecture Graduate Credit Certificate Program
- Enterprise Information and Security Technology Architecture Graduate Credit Certificate Program
- Entrepreneurship & New Ventures Graduate Credit Certificate Program
- · Family Literacy Postbaccalaureate Credit Certificate Program
- Family/Individual Across the Lifespan Nurse Practitioner Graduate Credit Certificate Program
- · Financial Accounting Graduate Credit Certificate Program
- · Financial Analysis Graduate Credit Certificate Program
- · Financial Engineering Graduate Credit Certificate Program
- Folklore and Ethnography Graduate Credit Certificate Program
- Foundations of Artificial Intelligence Graduate Credit Certificate Program
- Foundations of Data Science Graduate Credit Certificate Program
- Fundamentals of Finance Graduate Credit Certificate Program
- Fundamentals of Leadership Graduate Credit Certificate Program
- Geodesign Graduate Credit Certificate Program
- Geographic Information Systems Postbaccalaureate Credit Certificate Program
- Geospatial Intelligence Analytics Graduate Credit Certificate Program
- Geospatial Intelligence Applications Postbaccalaureate Credit Certificate Program
- Geospatial Programming and Web Map Development Graduate Credit Certificate Program
- · Gerontology Postbaccalaureate Credit Certificate Program
- · Global Health Graduate Credit Certificate Program
- Global Justice and Security Graduate Credit Certificate Program
- · Global Management Graduate Credit Certificate Program
- Healthcare Supply Chain and Operations Management Graduate Credit Certificate Program
- Heritage and Museum Practice Graduate Credit Certificate Program
- · Homeland Security Graduate Credit Certificate Program
- Hospital and Health System Preparedness Graduate Credit Certificate Program
- · Hospitality Management Graduate Credit Certificate Program
- · Human Resource Management Graduate Credit Certificate Program
- Human Resources and Employment Relations Foundations Graduate Credit Certificate Program
- Information Systems Cybersecurity Graduate Credit Certificate Program
- · Institutional Research Graduate Credit Certificate Program
- International Affairs Graduate Credit Certificate Program
- · International Development Policy Graduate Credit Certificate Program

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- International Human Resources and Employment Relations Graduate Credit Certificate Program
- · International Public Policy Graduate Credit Certificate Program
- · International Security Studies Graduate Credit Certificate Program
- Labor and Collective Bargaining Postbaccalaureate Credit Certificate Program
- · Labor and Employment Law Graduate Credit Certificate Program
- Leadership and Communication Skills for Ecosystem Managers Graduate Credit Certificate Program
- Leading in Diversity, Equity & Inclusion Graduate Credit Certificate Program
- Life-Cycle Systems Design Graduate Credit Certificate Programs
- · Literacy Leadership Postbaccalaureate Credit Certificate Program
- · Management Accounting Graduate Credit Certificate Program
- Management Consulting Graduate Credit Certificate Program
- · Management Essentials Graduate Credit Certificate Program
- · Marketing Analytics Graduate Credit Certificate Program
- · Natural Language Processing Graduate Credit Certificate Program
- Negotiation and Influence Graduate Credit Certificate Program
- · Nonprofit Administration Graduate Credit Certificate Program
- · Nurse Administrator Graduate Credit Certificate Program
- · Nurse Educator Graduate Credit Certificate Program
- Organization Development and Change: Analytics Graduate Credit Certificate Program
- Organization Development and Change: Consulting Skills Graduate Credit Certificate Program
- Organization Development and Change: Essentials Graduate Credit Certificate Program
- Organization Development and Change: Occupational Safety and Health Graduate Credit Certificate Program
- Organization Development and Change: Operational Excellence Graduate Credit Certificate Program
- Organizational Leadership Graduate Credit Certificate Program
- People Analytics and Artificial Intelligence Graduate Credit Certificate Program
- · Policy Analysis and Evaluation Graduate Credit Certificate Program
- · Primary Palliative Care Graduate Credit Certificate Program
- · Principalship Graduate Credit Certificate Program
- · Project Management Graduate Credit Certificate Program
- · Project Quality Management Graduate Credit Certificate Program
- · Psychology of Ethical Leadership Graduate Credit Certificate Program
- Psychology of Leadership Foundations Graduate Certificate
- Psychology of Team Leadership Graduate Credit Certificate Program
- Public Budgeting and Financial Management Graduate Credit Certificate Program
- · Public Health Graduate Credit Certificate Program
- · Public Health Preparedness Graduate Credit Certificate Program
- Public Sector Human Resources Management Graduate Credit Certificate Program
- Quality Management Across Product Lifecycle Graduate Credit Certificate Program
- Quantitative Business Essentials Graduate Credit Certificate Program
- Quantitative Decision Making for Engineering Managers Graduate Credit Certificate Program

- · Real Estate Law and Valuation Graduate Credit Certificate Program
- Remote Sensing and Earth Observation Graduate Credit Certificate Program
- Sensory and Consumer Science Graduate Credit Certificate Program
- Software Architecture and Design Graduate Credit Certificate Program
- · Solar Energy Graduate Credit Certificate Program
- Strategic Human Resources and Workplace Ethics Graduate Credit Certificate
- · Strategic Leadership Graduate Credit Certificate Program
- Superintendency Graduate Credit Certificate Program
- Supply Chain and Operations Management Graduate Credit Certificate Program
- · Supply Chain Management Graduate Credit Certificate Program
- Supply Chain Risk Management Graduate Credit Certificate Program
- · Survey Research Methods Graduate Credit Certificate Program
- Sustainability & Social Impact Graduate Credit Certificate Program
- Sustainability Management and Policy Graduate Credit Certificate Program
- Sustainable Development in Africa Graduate Credit Certificate Program
- System Modeling and Analysis Graduate Credit Certificate Program
- System Quality & Risk Evaluation Graduate Credit Certificate Program
- · Systems Data Analytics Graduate Credit Certificate Programs
- Talent Management Graduate Credit Certificate Program
- · Taxation Graduate Credit Certificate Program
- Teacher Leadership Graduate Credit Certificate Program
- Teaching Writing and Literacy Post-baccalaureate Credit Certificate Program
- Technical Management and Leadership Essentials Graduate Credit Certificate Programm
- · Technical Management Graduate Credit Certificate Program
- · Translational Science Graduate Credit Certificate Program
- $\bullet \ \, {\it Trauma-Informed Psychotherapy Graduate Credit Certificate Program}$
- Weather and Climate Analytics Graduate Credit Certificate Program