

Harrisburg University Of Science and Technology

Doctorate Catalog

2017-2018

The provisions of this Catalog, and its electronic version at www.HarrisburgU.edu , are not to be considered as an irrevocable contract between Harrisburg University of Science and Technology and the student. The University reserves the right to change any policy, provision or requirement at any time. This right to change a policy, provision or requirement includes, but is not limited to, the right to revise, reduce or eliminate course offerings in academic programs and to add requirements for graduation. All students are responsible for adhering to the requirements, rules, policies and procedures, whether published in this Catalog, the Student Handbook, or other official media.

CONTACT INFORMATION

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ABOUT THE CATALOG

This University Catalog is updated annually and made available in electronic form on the Harrisburg University website (www.HarrisburgU.edu/current-students/registration.php). The University website at also contains updated lists of courses, course descriptions, textbook adoptions, and other important information.

Harrisburg University has made every effort to make this catalog accurate; however, all policies, procedures or charges are subject to change at any time by appropriate action of the faculty, administration, or Board of Trustees. Each edition of the University's catalog is archived in the library.

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2017 – 2018 ACADEMIC CALENDAR

DOCTORATE DIVISION

2017 FALL SEMESTER (FA 2017-2018) <i>August 26, 2017 – December 13, 2017</i>			
2017		<p style="text-align: center;"><u>New Student Dates</u></p> <p>Orientation: August 25 Weekend 1: August 26–27 Weekend 2: October 14–15 Weekend 3: November 18–19</p> <p style="text-align: center;"><u>Returning Student Dates</u></p> <p>Weekend 1: September 8–10 Weekend 2: October 20–22 Weekend 3: December 1–3</p>	
August 25	New Graduate Student Orientation		
August 26 – 27	Classes Begin New Graduate Student Executive Format Weekend # 1 Add/Drop Period Begins		
September 4	Labor Day Holiday (No Classes, University Closed)		
September 5	Add/Drop Period Ends Census Date Last Day to Withdraw with 75% Tuition Refund		
September 8 – 10	Returning Graduate Student Executive Format Weekend # 1		
September 11	Last Day to Withdraw with 50% Tuition Refund		
September 18	Last Day to Withdraw with 25% Tuition Refund		
October 14 – 15	New Graduate Student Executive Format Weekend # 2		
October 20 – 22	Returning Graduate Student Executive Format Weekend # 2		
November 3	Last Day to Withdraw from a Course with a “W”		
November 15	Registration Opens for Spring 2018		
November 18 – 19	New Graduate Student Executive Format Weekend # 3		
November 22 – 26	Thanksgiving Holiday (No Classes; University Closed 11/23 – 11/26)		
December 1 – 3	Returning Graduate Student Executive Format Weekend # 3		
December 9	Classes End		
December 18	Final Grades Due to Registration Office by 8:00 a.m.		
2018 SPRING SEMESTER (SP 2017-2018) <i>January 6, 2018 – April 26, 2018</i>			
2018			<p style="text-align: center;"><u>New Student Dates</u></p> <p>Orientation: January 5</p> <p>Weekend 1: January 6–7 Weekend 2: February 10–11 Weekend 3: April 7–8</p> <p style="text-align: center;"><u>Returning Student Dates</u></p> <p>Weekend 1: January 12–14 Weekend 2: February 23–25 Weekend 3: April 13–15</p>
January 5	New Graduate Student Orientation		
January 6 – 7	Classes Begin New Graduate Student Executive Format Weekend # 1 Add/Drop Period Begins		
January 12 – 14	Returning Graduate Student Executive Format Weekend # 1		
January 15	Martin Luther King, Jr. Day (No Classes; University Closed)		
January 16	Add/Drop Period Ends Census Date Last Day to Withdraw with 75% Tuition Refund		
January 22	Last Day to Withdraw with 50% Tuition Refund		
January 29	Last Day to Withdraw with 25% Tuition Refund		
February 10 – 11	New Graduate Student Executive Format Weekend # 2		
February 23 – 25	Returning Graduate Student Executive Format Weekend # 2		
March 5 – 11	Spring Recess		
March 23	Last Day to Withdraw from a Course with a “W” Registration Opens for Summer 2018		
April 7 – 8	New Graduate Student Executive Format Weekend # 3		
April 13 – 15	Returning Graduate Student Executive Format Weekend # 3		
April 21	Classes End		
April 30	Final Grades Due to Registration Office by 8:00 a.m.		
May 10	Commencement		

2018 SUMMER SEMESTER (SU 2017-2018) <i>May 5, 2018 – August 18, 2018</i>		
2018		<u>New Student Dates</u>
May 4	New Graduate Student Orientation	Orientation: May 4 Weekend 1: May 5–6 Weekend 2: June 16–17 Weekend 3: July 21–22 <u>Returning Student Dates</u> Weekend 1: May 11–13 Weekend 2: June 22–24 Weekend 3: August 3–5
May 5 – 6	Classes Begin New Graduate Student Executive Format Weekend # 1 Add/Drop Period Begins	
May 10	No Classes due to Commencement Ceremony	
May 11 – 13	Returning Graduate Student Executive Format Weekend # 1	
May 14	Add/Drop Period Ends Census Date Last Day to Withdraw with 75% Tuition Refund	
May 21	Last Day to Withdraw with 50% Tuition Refund	
May 28	Memorial Day Holiday (No Classes; University Closed)	
May 29	Last Day to Withdraw with 25% Tuition Refund	
June 16 – 17	New Graduate Student Executive Format Weekend # 2	
June 22 – 24	Returning Graduate Student Executive Format Weekend # 2	
July 4	Independence Day Holiday (No Classes; University Closed on 7/4)	
July 13	Last Day to Withdraw from a Course with a “W”	
July 18	Registration Opens for Fall 2018	
July 21 – 22	New Graduate Student Executive Format Weekend # 3	
August 3 – 5	Returning Graduate Student Executive Format Weekend # 3	
August 11	Classes End	
August 20	Final Grades Due to Registration Office by 8:00 a.m.	

THE UNIVERSITY

HISTORY

The University was incorporated in the Commonwealth of Pennsylvania on December 12, 2001, making it the first science- and technology-focused, non-profit, comprehensive university to be established in Pennsylvania in more than 100 years. Founded to address the Capital Region's need for increased educational opportunities in science, technology, engineering and mathematics (STEM) careers, Harrisburg University represents a major step to attract, educate, and retain Pennsylvania's diverse 21st century knowledge-based workforce. A grand concept that was championed by business leaders, government officials, and the regional news media, Harrisburg University was built from concept to reality in less than a decade. The Pennsylvania Department of Education granted the University its charter in 2005.

An independent institution, the University offers academic and research programs designed to meet the needs of the region's youth, workforce and businesses. The University serves as a catalyst for creating, attracting an expanding economic development and opportunities in Central Pennsylvania by aligning traditional undergraduate, graduate, and doctorate degrees with science and technology-based experiential learning.

MISSION STATEMENT

The Harrisburg University of Science and Technology offers innovative academic and research programs in science and technology that respond to local and global needs. The institution fosters a diverse community of learners, provides access and support to students who want to pursue a career in science and technology, and supports business creation and economic development.

Approved by the Board of Trustees on September 17, 2015.

ACCREDITATION AND APPROVALS

Harrisburg University of Science and Technology was reaccredited on March 3, 2016 by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104, (267) 284-5000. The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation. The Doctor's Research Scholarship degree program (Ph.D. in Data Sciences) was granted by Middle States on January 4, 2017.

Program offerings are authorized by the Pennsylvania Department of Education, Division of Higher and Career Education, 333 Market Street, Harrisburg, PA 17126.

Approved to participate in the federal Title IV, HEA student assistance programs by the U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202.

Approved by the Pennsylvania Department of Education for veterans and eligible dependents to obtain education benefits through the Veteran's Administration (VA).

Approved by the Veterans Administration to participate in the “Yellow Ribbon” program.

Authorized under federal law by the Department of Homeland Security – U.S. Immigration and Customs Enforcement (DHS-USCIS-SEVIS) as an eligible institution for the Student and Exchange Visitor Information System (SEVIS) to enroll non-immigrant students.

STUDENT RESPONSIBILITY STATEMENT

A student has the responsibility to engage fully in assigned work, make connections, communicate with other members of the University community, and develop professional competencies. The University is new in both thought and ideas. The student should be a partner in this endeavor, now and in the future. It is the student’s responsibility to become engaged in the University’s community of learners and develop a strong professional and ethical foundation as an individual. Each student is bound by the Student Code of Conduct, which is contained in the Student Handbook.

STATEMENT OF COMMUNITY VALUES

Underlying the University’s mission are the following basic values:

- the importance of personal integrity, honesty, and ethical decision making;
- the right of every individual to be treated with respect and dignity as a member of a learning organization;
- freedom of intellectual inquiry in the pursuit of truth, even if it defies commonly understood theories;
- acceptance and appreciation of human diversity regarding race, gender, religion, sexual orientation, age, ability, ethnicity, and political views;
- freedom from violence or harassment that would interfere with or disrupt university activities; and
- recognition that civic engagement is a component of the intellectual development of a student and provides a path for knowledge and personal development in the service of the community.

DOCTORATE EDUCATION

ADMISSION

The University has a centralized Admissions Office to serve all prospective student applicants – undergraduate, graduate, doctorate, and non-degree. This centralized structure honors the University’s commitment to lifelong learning and to offer a more fluid and comprehensive service for those seeking access to a quality educational experience.

Doctorate Program Admission

Philosophy

Harrisburg University of Science and Technology seeks to admit doctorate program students from a variety of backgrounds. The University considers many factors in the review of applicant files and generally admits the qualified individual who has completed a baccalaureate degree with related undergraduate coursework, or those who have a baccalaureate degree but possess related professional experiences or potential.

The doctoral program at Harrisburg University focuses on enabling students to make original contributions to their respective fields of study. There are two phases of the doctoral program at Harrisburg University: An initial learning phase that can include coursework, seminars, research, and fieldwork that contributes to the student’s knowledge in the program of study; and a second research phase that focuses on student’s original research culminating in the final examination. Upon a student’s defense of the dissertation and completion of all other graduate requirements, the student is awarded the doctoral degree in the program of study.

Doctorate Program Admission Process

Doctorate program applicants are encouraged to apply at least six months prior to the start of any semester. This application process allows ample time for acceptance and development an academic schedule. The Admission Committee reviews all documents and will request an interview with the applicant prior to making an admission decision for a limited number of applicants to become resident or non-resident candidates for the degree.

Doctorate Admission Requirements

A faculty admission committee will evaluate each applicant’s candidacy once all admissions materials have been received. The doctorate admission process requires the candidate to:

- Complete the application online at www.HarrisburgU.edu/Apply.
- Write an essay (in English) on how this degree supports the candidate’s academic and career aspirations.
- Submit final official transcript(s) from the college or university at which the highest degree earned was conferred.
- Submission of an official record of Graduate Record Examination scores (GRE) is recommended.
- Provide two letters of recommendation from academic or industry professionals.
- Submit a resume or by email to Admissions@HarrisburgU.edu.
- Interview with Faculty Admission Committee.

International Students

An international student planning to attend the University on a student (F-1) visa must satisfy the appropriate admissions requirements and procedures, demonstrate proficiency in the English language, and provide an affidavit of financial support if admitted as a non-resident candidate. Academic records should include courses studied, grades earned, diplomas, certificates, and results of comprehensive national examinations.

A demonstration of English language proficiency is required of any student who is not a United States citizen. Acceptable demonstrations would include one of the following:

- completing a college degree program from a regionally accredited United States institution of higher education,
- scoring above average on the Analytical Writing section of the Graduate Record Examination (GRE),
- earning a TOEFL score of 80 or higher on the web-based version, 200 on the computer version, or 520 on the paper version; or
- earning an IELTS score of 6.0 or higher.

Harrisburg University of Science and Technology is approved by the Department of Homeland Security – U.S. Customs and Immigration Enforcement (DHS-USCIS-SEVP) as an eligible institution for the Student and Exchange Visitor Information System (SEVIS) to enroll non-immigrant students.

This approval allows an international student to apply for entry into the United States for study as non-resident candidate on an F-1 visa only after a complete application package is received an “Affidavit of Financial Support” is deemed sufficient by the University and a tuition deposit payment of at least \$1,000 toward the first semester’s tuition has been received. A USCIS Form I-20 is then certified and submitted to SEVIS. The SEVIS application fee of \$200 is then paid by the student directly to SEVIS.

Following entry into the United States and arrival at the University, the student will be required to provide a copy of the visa to confirm all identification information in SEVIS.

An international student does not qualify for Federal or State financial aid. Private education loans through participating lenders may be available, if eligible.

TUITION CHARGES, REFUND POLICIES AND BUSINESS OFFICE POLICIES

All graduate program tuition, charges and policies listed in this publication are effective as of July 1, 2017 and are subject to change, without notice, by the University's Board of Trustees.

Admission Application Charge

There is no charge for application for admission to the University.

Tuition Deposit

A non-refundable tuition deposit must be paid in advance of course registration for the initial semester of attendance.

Tuition – Semester Schedule

Tuition payment or satisfactory arrangement to pay tuition due is due generally one week prior to the beginning of the semester. A graduate student is charged the semester hour rate multiplied by the number of semester hours enrolled. A program fee is also charged for certain program deliveries.

Graduate Tuition Schedule per Semester

Description	Charge
Tuition – all programs	\$800 per credit hour
Executive Format Program Fee	\$500 per semester

Financial Aid Counseling and Financial Clearance Date

The student is encouraged to apply for federal and state grant program funding to determine the student's eligibility. A student who intends to seek federal financial aid program assistance is required to contact the Office of Financial Aid at least 30 days prior to the start of a semester to complete the application process, submit all required documents and materials requested, and finalize a financial assistance plan by the end of the Add/Drop Period. A student whose financial assistance plan is not finalized by the end of the Add/Drop Period will not be allowed to attend class.

Tuition Payments

Payments may be made in the Business Office by cash, check, or money order. Electronic payment options including credit card, debit card, and electronic check/ACH are available online only via the Finance page of MyHU. A preregistered student can view account information online. A convenience fee of 2.75% will be added for any credit/debit card transactions involving student tuition payments or other services. Online ACH/electronic check payments will not incur a convenience fee.

Graduate Assistantships

A graduate assistantship may be awarded to support the full-time doctoral student who works for faculty in research or as a teaching assistant. Duties may include serving on research teams; collecting, cleaning and analyzing datasets; preparing research publications or grant proposals; lecturing; grading, office hours, and other researching, teaching, or administrative tasks. An assistantship can include an annual stipend of up to \$40,000 and the option to purchase health coverage through the University healthcare plan. An assistantship is awarded based on demonstrated need, academic potential, and faculty recommendation.

Laptop Computer

A laptop computer with wireless capability is required for attendance in all programs of study and should be obtained prior to the first day of class. Minimum requirements are listed on the University's website at <http://www.HarrisburgU.edu/campuslife/technology/laptop.php>. The cost is approximately \$700 to \$1,200.

Textbooks

Textbooks and other supplies (if specified for a course) must be obtained by the student prior to the first day of class. Textbooks may include both hard- and soft-bound books, journals, CDs, and software. The estimated cost for textbooks and other supplies per course is \$100.

Other Charges

Tuition Payment Late Charge - A late payment charge of \$250 will be assessed if the student fails to make payment arrangements or pay tuition on or before the first day of the semester or term.

Returned Check Charge - A charge of \$20 will be assessed if a check or electronic check/ACH transaction processed for payment is returned by the issuing bank.

Campus ID Card Replacement Charge - Upon enrollment, a student receives, at no cost, a photo-imprinted Campus ID Card to be used as an identification badge, as a library card, and for building and elevator access. A student is required to wear the Campus ID Card badge when on campus. If a student desires a photo ID, submission of a 2" x 2" photo is required and a charge of \$25 is assessed to replace the card. If a Campus ID Card is lost or stolen, a charge of \$25 is assessed to replace the card.

Pay to Print Charge – On-campus printing is available to the student. A charge may be assessed depending upon the nature of the print job: paper size, ink color, and quantity.

Commencement Fee – A charge of \$60 will be assessed for the student participating in the Commencement Ceremony.

Transcript Requests – The official transcript request form is available on the Harrisburg University website or electronically submitted via MyHU. There will be a \$10.00 charge per transcript requested by standard domestic delivery and \$35.00 per transcript for standard international delivery.

Enrollment Status Determination

A student's enrollment status is determined at the end of the Add/Drop Period. The student is charged the applicable tuition rate for the number of semester hours in which the student is enrolled on the census date.

Refund Policy for Traditional Semesters

A student who withdraws from the University prior to the end of the third week of the semester may be due a credit for the unearned portion of the tuition charge.

The rate of tuition refund for withdrawal from the University is as follows:

- prior to the first day of the semester 100%
- during the first week 75%
- during the second week 50%
- during the third week 25%
- after the third week 0%

Tuition Refund Policy

Tuition for the semester is considered fully-earned at the end of the third week of classes. For refund purposes, the semester begins on the first day of class for that semester, regardless of the student's first class day of attendance during week one. The period of time used to calculate the tuition refund is the first day of class of the semester to the University's determination date of official or unofficial withdrawal.

There will be no refund or additional charges for a student who adds and drops an equal number of semester hours within the same semester prior to the end of the Add/Drop Period.

If a student reduces the number of courses and/or semester hours during the published Add/Drop Period, a tuition adjustment for that course or semester hour reduction will be made. There is no tuition refund when a student withdraws from one or more courses after the Add/Drop Period but remains enrolled in one or more other scheduled courses.

Official Withdrawal

A student is encouraged to contact the Financial Aid and Business Offices in advance of any decision to withdraw from the University to obtain an explanation of the tuition and financial aid adjustments that will occur, if any, as the result of withdrawal from the program of study.

A student who intends to officially withdraw from the University is encouraged to contact the Office of Records and Registration by telephone (717.901.5136), e-mail (Registrar@HarrisburgU.edu), or in person. It is recommended that a Withdrawal Form be completed or one will be completed for you.

The determination date for withdrawal purposes shall either be the actual date of formal notification by the student or some future date specified by the student as the intended last date of attendance. The determination date is used to calculate the tuition refund, if any, and the student financial assistance program refund, if applicable.

Unofficial Withdrawal

A student who discontinues attendance in all courses during a semester and who does not officially withdraw from the University is considered to have unofficially withdrawn. The determination date for unofficial withdrawals shall be the end of the semester, unless other evidence is provided to the Office of Records and Registration. There are serious Title IV, HEA federal student financial aid program implications for a student who unofficially withdraws.

STUDENT FINANCIAL AID PROGRAMS & POLICIES

The Office of Financial Aid assists qualified applicants who, without assistance, would otherwise be unable to pursue an advanced degree. The Free Application for Federal Student Aid (FAFSA) and resulting need analysis is used to apply for federal, state and institutional award consideration for payment of tuition, housing, or other charges.

A student must apply each year to renew financial aid eligibility. The amount of financial aid awarded will reflect changes in tuition, housing, or other costs and updates to the financial profile of the student and family.

Financial aid awards are based on the enrollment status of the student during a semester as of the conclusion of the Add/Drop Period, defined as:

Full-time Status: 6 or more semester hours

Part-time Status: 3 semester hours

A non-degree student is not eligible for financial aid.

Aid Sources

Federal Direct Loan - A Federal Direct Loan (FDL) is available to eligible borrowers. Interest accrues on the unsubsidized loan while the student is enrolled. The borrower may opt to pay the interest as it accrues, or allow it to accrue and capitalize. The unsubsidized loan is a non-need based loan program. The maximum Federal Direct Loan is \$10,250 per semester for an eligible degree-seeking graduate student. An international student attending on an F-1 visa or an international student outside the U.S. enrolled in a distance education program are not eligible to borrow a Federal Direct Loan.

Federal PLUS Loan for Graduate Students – A degree-seeking graduate student may be eligible to borrow under the PLUS Loan Program, up to the cost of attendance minus other estimated financial assistance in the Federal Direct loan (FDL) program. The terms and conditions applicable to Parent PLUS loans also apply to Graduate/Professional PLUS loans. The requirements include a determination that the applicant does not have an adverse credit history. Repayment begins 60 days after the date of graduation, withdrawal, or enrollment status below half-time. The student must have applied for the annual loan maximum eligibility under the Federal Unsubsidized Direct Loan Program before applying for a Graduate/Professional PLUS loan. An international student attending on an F-1 visa or an international student outside the U.S. enrolled in a distance education program is not eligible to borrow a Federal PLUS Loan for Graduate Students.

STUDENT SERVICES

Student Parking

Park UP Harrisburg (parkHarrisburg.com) operates the parking facilities in Harrisburg. Prices vary by facility. Check the website for specifics.

Health and Personal Counseling Services

Medical and counseling services are not provided on campus. A full-service hospital is located three city blocks from the University. Referral contact information for a student requiring health care assistance or personal counseling services can be obtained from the Office of Student Services.

Disability Support Services

Harrisburg University of Science and Technology welcomes diversity among its students and, in accordance to the Americans with Disabilities Act of 1990, seeks to provide reasonable and effective support services.

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 prohibit discrimination on the basis of disability and require the University to make reasonable accommodations for those otherwise qualified individuals with a disability who request accommodations. A reasonable academic accommodation is a modification or adjustment that allows an individual to gain equal access and have equal opportunity to participate in the University's courses, services, activities, and use of the facilities. The University is not obligated to provide an accommodation that requires a substantial change in the curriculum or alteration of any essential elements or functions of a program.

The applicant must provide recent documentation (within 3 years) of any disability that may affect learning to ensure that appropriate accommodations are considered. The documentation must be certified by a licensed professional in that field and include a specific diagnosis indicating the severity, a description of how the disability substantially impacts the student, and any suggested accommodation. A student may apply for an accommodation prior to admission with the requested documentation.

Textbook Services

Textbooks are made available for student purchase through the services of MBS Direct, which has an online store at <http://bookstore.mbsdirect.net/harrisburgu.htm> for new and used textbook purchase or rentals. Textbook information is listed on the student's course schedule at the time of registration and a complete textbook listing is available on MyHU. Textbooks and other supplies (if specified for a course) must be obtained by the student prior to the first day of class.

Additional online textbook purchase and rental options are available through companies such as Amazon.com and Chegg.com. Book retailers carry a small selection of texts but also have the ability to process online textbooks orders.

University Library

The mission of the library is to enhance learning in all academic programs and to support student development in all University competencies, especially information literacy skills to find, evaluate, and use information. Library services include:

- collaboration between the University Librarian and faculty to integrate information literacy skill development and use of library resources into the curriculum;

- access to a wide range of information sources selected to enhance course-based and independent learning, such as:
 - o online databases of full-text articles from newspapers, magazines, and scholarly journals;
 - o streaming multimedia such as documentaries and feature films;
 - o electronic books; and
 - o a self-service library located in the Learning Commons offering printed books, games, newspapers, and periodicals;
- research guidance for a student by phone, chat, e-mail, or in person;
- partnership with other regional libraries to provide access to their information sources, free of charge to our students and faculty; and
- group study rooms; these rooms may be reserved in advance through the University Librarian.

For more information including replacement charges, reporting of lost or damaged items, and replacement charges see the Student Handbook.

For more information, visit the library's website at <http://library.harrisburgu.edu>. Electronic content is available on the website 24 hours a day from on- or off-campus. Off-campus use requires authentication with a valid University network ID and password.

Technology Services

Information Technology Services is responsible for connecting the student, faculty, and staff to technology resources in support of the University's mission. Technology services include:

- a robust and reliable infrastructure to enable excellence in learning;
- a required laptop program and an entirely wireless campus to facilitate mobile computing and access to content;
- high-end classroom technologies to enhance interactivity and the capture and distribution of classroom content;
- access to enterprise software applications such as our course management system;
- MyHU; Office365 email and productivity suite; and many other course related software programs;
- the Harrisburg University Campus Card services which enables building access, pay-for-print, and book check-out from the library while serving primarily as the official university identification; and,
- training, orientation, and support for all university technology services.

For more information, contact Helpdesk at Helpdesk@HarrisburgU.edu or 717.901.5177 with questions.

Academic Advising

Academic advising can be a critical component of a student's education. Every graduate student is assigned to an academic advisor who is a faculty member. The advisor helps the student explore academic goals and assists in course selection for the academic program. The Office of Student Services supports the faculty role in advising. In addition, it assists the student to access resources and developing strategies when non-academic factors affect a student's ability to succeed.

Career Services

The student obtains career counseling from the academic advisor and the Office of Experiential Programs and Career Services. The following services can be obtained by enrolled students and alumni: one-on-one career counseling, assessment inventories, program and career exploration, professional development resources, mock interviews, and resume review. For more information, contact CareerServices@HarrisburgU.edu.

ACADEMIC POLICIES

Calendar and Credit System

The University operates on a semester calendar and uses the semester hour credit system. There are three semesters per twelve-month period: Fall, Spring, and Summer. Each semester consists of fourteen weeks of classes with final examinations or project submissions occurring during the two or three final examination days.

Catalog in Effect

A new student entering the University during the 2017-2018 academic year will be subject to the academic program requirements contained in this Catalog edition unless the student elects to complete a revised set of program requirements published in a future edition of the Catalog.

A student who elects to complete a revised set of program requirements must notify the Office of Records and Registration of this intent by completing a Declaration of Programs/Catalog Option Form.

A student who leaves the University and returns from an absence of one year or more will be subject to the Catalog edition in effect during the year of return.

Enrollment Status

Student enrollment status is defined for certification purposes as either full-time or part-time. Full-time graduate student enrollment is 6 or more semester hours in a semester. Part-time status is assigned to any doctorate candidate enrolled for fewer than 6 semester hours in a semester.

Registration Process

The student should complete registration on-line at MyHU/Academics. There are written and video registration instructions available on MyHU. The start and end dates appear on the Academic Calendar, which is in this catalog, posted on MyHU/Academics and www.HarrisburgU.edu.

Add/Drop Period and Course Withdrawals

The Add/Drop Period begins on the first day of the semester or subterm and ends after 6 days of classes have occurred (this includes Saturday). A student may make schedule adjustments during the Add/Drop period on MyHU, or in the Office of Records and Registration. No course may be added after the end of this period. If a student withdraws from any course after the conclusion of this period and up until the last day to withdraw from a course with a “W”, a final grade of “W” will appear on the permanent record. After that period, a “WF” will appear on the permanent record. The withdrawal deadlines appear on the Academic Calendar for both semesters and subterms.

Enrollment Status Determination

A student's enrollment status is determined at the end of the Add/Drop Period. The student is charged the applicable tuition rate for the number of semester hours in which the student is enrolled on the census date.

Class Attendance

Attendance is a critical part of a student's education. The student is expected to attend all classes when schedule and participate fully in the activities of each course. The instructor is responsible to set forth the attendance requirements in the syllabus.

If, in the judgment of the instructor, a student is absent from class or fails to complete the requested participatory assignments:

1. the instructor will notify the student of this determination;
2. the student will have one week to contact the instructor to address the situation;
3. if the student fails to do so, the instructor will notify the Office of Records and Registration to recommend withdrawal of the student from the course; and
4. if after persistent non-attendance or non-response to attempted contacts by the instructor, the Office of Records and Registration will notify the student of this action and may record a grade of WA or WF, respectively.

Curricular Practical Training

Curricular practical training (CPT) is defined to be alternative work/study, internship, cooperative education employment, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school. An F-1 student may be authorized by the Designated School Official (DSO) to participate in a curricular practical training program, which is an integral part of the established curriculum

Harrisburg University has defined full-time status for a student enrolled using the CPT option as six (6) semester hours of academic credit per semester. A student must be enrolled full-time during CPT. A student enrolled on an F-1 visa using CPT eligibility may not register for more than one (1) online course each semester. A student who holds an H-1B or H-4 visa is permitted to take more than one course online each semester.

The Doctor of Data Sciences program permits a student to begin Curricular Practical Training (CPT) in the first semester of study for those students who are deemed eligible to do so, as determined by the SEVIS Primary Designated School Official (PDSO) at the time of enrollment. A student's CPT internship experience or employment must relate to the student's program of study and may be part-time (20 or less hours per week) or full-time (21 to 40 hours per week).

CPT is an integral part of the program of study. Referred to as experiential learning, work experience permits the student to take lecture and textbook learning and apply that knowledge to the workplace.

A doctoral student that completes all coursework and enters the thesis/dissertation phase of the program may be considered for CPT if the work experience is clearly documented as necessary for completion of the thesis or dissertation, as determined by the Primary Designated School Official.

To apply for CPT, please submit the following documents to the Office of International Students:

1. A completed Curricular Practical Training Verification Form signed by an employer; and,
2. A copy of the training or employment offer letter.

Once approved, a student receives a revised SEVIS Form I-20 that is to be presented to the training site supervisor upon request.

Overview of Doctoral Programs

The doctoral program offers a course of study that emphasizes a strong foundation in science, technology, engineering, and mathematics disciplines. Doctoral candidates are required to complete six doctoral-level courses (18 semester hours); 6 semester hours in a formal research seminar; and 12 semester hours of dissertation work. In the second year (or equivalent), doctoral candidates participate in an informal, non-credit (but required) research symposium to provide exposure to current and interesting research in the student's field(s) of interest and industry needs, seeking trends for research and innovation.

After completing 18 semester hours of doctoral-level courses and participating in the research symposium, the student is eligible to sit for the qualifying examination. The qualifying examination is designed and administered by the candidate's dissertation committee. The examination is comprised of both oral and written requirements including the committee's approval of the candidate's dissertation proposal. Should a student not pass the second attempt at the qualifying examination, a terminal master's degree in Analytics is awarded.

A doctoral candidate may form a partnership with another institution in order to utilize that institution's facilities for research and project development, enlist doctoral faculty from another institution as dissertation or project committee members, or take appropriate post-master's courses from that institution.

Graduation Requirements

The student must satisfy all of the following requirements to receive a Ph.D. in Data Sciences. Verification the student has met the following requirements is made by Records and Registration.

1. Candidates have five years to complete and successfully defend the dissertation research or project development after passing the qualifying examination.
2. Candidates will schedule their dissertation defenses after receiving approval from the dissertation committee chair (or co-chairs).
3. Candidates must submit (but not yet have published) the results of their dissertation or project work for publication in a refereed journal and/or complete a patent application prior to the conferral of a degree.

Grades and Grading Grades are awarded to each student for academic credit completed at the University. A grade is assigned by the instructor responsible for the course in which the student is enrolled, using the following grading scale to indicate the quality of the student's academic work.

Grade	Description	Numerical Value
A	Superior achievement	4.00
B	Average achievement	3.00
F	Fail	0.00
CR	Credit	Not applicable
I	Incomplete	Not applicable

IP	In progress	Not applicable
NP	No Pass	Not applicable
NR	Not reported	Not applicable
P	Pass	Not applicable
TR	Transfer credit	Not applicable
W	Withdrawal	Not applicable
WA	Administrative withdrawal	Not applicable
WF	Withdrawal after the period to withdraw with a “W” grade	0.00

Grades of “CR”, “I”, “IP”, “NP”, “NR”, “P”, “TR”, “W”, and “WA” are not included in the calculation of a student’s grade point average (GPA). The “WF” is calculated into the student’s grade point average. These grades are used by the University in circumstances when grades of “A” through “F” are not appropriate.

Credit (CR) – A grade of “CR” is used to indicate on the student’s permanent record that credit has been awarded by the University for military training or successful completion of an examination. While courses with a “CR” grade are counted toward the student’s degree requirements, there are no quality points associated with this grade so there is no impact upon the calculation of the student’s grade point average.

Incomplete (I) – Inability to complete coursework due to documented circumstances beyond the student’s control (such as severe illness) may, at the discretion of the instructor, result in a grade of incomplete (I). However, all work must be completed by the end of the Add/Drop Period of the subsequent semester. If all work is not completed by that time, the “I” grade will convert automatically to a grade of “F.” It is the responsibility of the student to contact the instructor to make the necessary arrangements for makeup work.

In Progress (IP) – This is a deferred grade assigned by the instructor to be used for research projects, internships, directed study, etc., when it is understood that the course will extend over more than one semester. An “IP” grade should be accompanied by a written plan and a schedule for completing the course within a specified time period to be no longer than 12 months. If all work is not completed by that time, the “IP” grade will convert automatically to a grade of “F.”

Withdrawal (W) – This grade is recorded by the Office of Records and Registration when the student has withdrawn from the course according to the policy set forth by the University for withdrawing from a course.

Administrative Withdrawal (WA) – The “WA” grade can be assigned only by the Provost or other designated official. It is used when it is necessary for a student to leave the University under extenuating circumstances and when the normal withdrawal process is not available to the student. A request for administrative withdrawal with accompanying documentation will be submitted to the Office of Records and Registration. The “WA” grade can be submitted at any time during the semester.

Withdrawal Fail (WF) – This grade is recorded by the Records and Registration when the student has withdrawn from the course after the period a student can withdraw with a “W” grade.

Transfer (TR) – A grade of “TR” is used to indicate on the student’s transcript a block of credit that has been earned at another institution and that will count toward the degree at Harrisburg University.

Not Reported (NR) – The temporary grade of “NR” is recorded by Records and Registration when the instructor does not report a grade for the student for the course. Records and Registration will advise the Provost when an “NR” grade has been recorded for the student, and will work with the student and the instructor to determine why a grade was not reported.

Pass (P) - The “P” grade is assigned by instructors for a student who successfully completes a course that is designated as a course that will be graded on a Pass/No Pass basis.

No Pass (NP) – The “NP” grade is assigned by the instructors for a student who does not successfully complete a course that is designated as a course that will be graded on a Pass/No Pass basis.

Grade Point Averages

A grade point average (GPA) is a statistical calculation of a student’s performance in a semester. The semester grade point average summarizes the student’s performance during that academic term and the cumulative grade point average (CGPA) summarizes the student’s performance during semesters completed at the University.

Calculation of the Semester Grade Point Average

Course	Sem. Hrs. Attempted	Grade	Numerical Value	Quality Points
Course A	3	A	4.00	12.00
Course B	3	B	3.00	9.00
Total	6			21.00

$$\text{Total Quality Points} = 21.00/6 = \mathbf{3.5}$$

1. Compute the quality points earned for each course by multiplying the semester hour attempted for the course by the numerical value of the grade earned in the course.
Example: A student registered for a course worth 3 semester hours who earns a final grade of “A” in that course will earn 11.01 quality points for that course (3 semester hours \times 3.67).
2. Add the quality points earned for each course in which the student is registered in the semester.
3. Add the number of semester hours attempted for all courses in which a grade of “A” through “F” was earned.
4. Divide the total number of quality points earned by the total number of semester hours attempted. The result is the grade point average for the semester.

The cumulative grade point average (CGPA) is determined in a similar way using the cumulative attempted semester hours and cumulative quality points earned.

Repeated Courses

A graduate student may repeat a course in which a final grade of “W” or “WF” has been received. The original grade will remain on the student’s academic record. After the course has been repeated, the most recent grade will be used in the calculation of the student’s cumulative grade point average. A course may only be repeated once.

Academic Standing

A graduate student with a cumulative grade point average of 3.00 or higher is in satisfactory academic standing. A student whose cumulative grade point average falls below 3.00 is not in satisfactory academic standing and is placed on academic probation. If the cumulative grade point average is not raised to 3.00 or higher after attempting an additional 6 semester hours, the student is subject to academic dismissal.

Final Grade Appeal

A final grade is assigned by the instructor upon completion of coursework to earn credit during a semester or other term. A student who disagrees with the final grade assigned by the instructor may seek remedy using an evidence-based argument within five (5) days after grades are posted on one of the following grounds:

1. **Discrimination:** defined as unfair treatment or assignment of grade on the basis of race, religion, national origin, sex, age, ancestry, handicapped status, gender identity, sexual orientation, or political affiliation.
2. **Capricious evaluation:** defined as significant or unjustified departure from grading procedures outlined in the course syllabus or by the University or arbitrary assignment of grades. Capricious evaluation cannot be claimed if a student merely disagrees with the subjective evaluation of the instructor.
3. **Errors:** including clerical errors or errors in grade calculations that can be demonstrated in an objective manner.

A student who chooses to appeal a grade must obtain a Final Grade Appeal Form from the Office of Records and Registration. The form must be completed with an explanation forming the basis of the appeal. The student’s academic record will be placed in a “hold” status during the grade appeal process. A final grade appeal must be initiated on or before the fifth (5th) business day after grades are posted or other term as specified in the Academic Calendar.

The instructor must indicate and sign the form to either change the final grade, reaffirm the original grade assigned, or continue with the appeal process.

- If the original final grade is improved and satisfies the student’s appeal, the instructor shall submit a Grade Change Form to the Office of Records and Registration, the grade will be posted, and the academic record hold status will be released.
- If the original final grade is reaffirmed and both the instructor and student agree with the grade determination, the instructor shall submit a Grade Affirmation Form signed by the student and instructor confirming the original grade to the Office of Records and Registration, the grade will be posted, and the academic record hold status will be released.
- When a student is unable to meet with the instructor because of personal differences or if the instructor denies the initial appeal (above), the student may choose to pursue a final grade appeal by submitting the completed and endorsed form, with any and all tests, grades, essays or project summaries and a complete explanation as evidence in support of the student’s position, to the Office of Student Services requesting a review and determination, with a copy to the Office of the Provost. The student may seek the assistance of the Office of Student Services to

review a possible appeal and to prepare the appeal. Additional information may be requested from the student and/or the instructor during this time.

- A committee consisting of a representative of the Office of Student Services, Office of Compliance, one faculty member, and a student representative will review the appeal. The student and instructor will be offered the opportunity to participate in the appeal hearing. The committee will send a final determination to the Office of Records and Registration within five (5) days of receipt. The committee's decision is final and is not subject to further appeal. The Office of Records and Registration will then post the grade and release the academic record hold status.

Withholding of Records

Student records may be withheld by the Office of Records and Registration when directed by the appropriate University officials. The release of academic transcripts or a diploma may be held for a period of time. More specifically, an official academic transcript or diploma will not be released if tuition or other charges remain unpaid to the University. The Office of Student Services determines when a student's record should be placed on hold for disciplinary reasons and the Business Office determines when a student's record should be placed on hold for financial reasons.

Official Withdrawal Procedure

A student is encouraged to contact the Financial Aid and Business Offices in advance of any decision to withdraw from the University to obtain an explanation of the tuition and financial aid adjustments that will occur, if any, as the result of withdrawal from the program of study.

A student who intends to officially withdraw is encouraged to contact the Office of Records and Registration by telephone (717.901.5136), e-mail (Registrar@HarrisburgU.edu), or in person. It is recommended that a Withdrawal Form be completed or one will be completed for you.

The determination date for withdrawal purposes shall either be the actual date of formal notification by the student or some future date specified by the student as the intended last date of attendance. The determination date is used to calculate the tuition refund, if any, and the student financial assistance program refund, if applicable.

Standards of Academic Integrity

Harrisburg University expects a student to act honorably and in accordance with the standards of academic integrity. Academic integrity is grounded in mutual trust and respect. Therefore, it is expected that a student will respect the rights of others and will only submit work that is their own, refraining from all forms of lying, cheating and plagiarism. Lack of academic integrity includes:

- **Plagiarism:** Plagiarism is using the ideas of others and/or words without clearly acknowledging the source of that information. It is assumed that all work submitted for a grade will be the product of the student's own understanding, and thus expressed in the student's own words, calculations, computer language, etc. This means all writing assignments, in class or outside of class, are assumed to be composed entirely of words written (not simply found) by the student, except where words written by someone else are specifically marked as such with proper citation.
- **Cheating:** All examinations and other assignments are to be completed by the student alone, without inappropriate assistance of any kind. That means no help is to be given to or received from other persons during tests; no books, notes, cellphones, iPods, calculators, or other materials or devices of any kind are to be consulted, unless the professor instructs otherwise.

- **Fabrication, alteration of documents, lying, etc.:** It is wrong to lie to an instructor in order to get an excused absence, an extension on a due date, a makeup examination, an Incomplete, admission to a class or program, etc. It is wrong to forge an instructor's signature on any document, or anywhere else for academic advantage. It is wrong to falsify transcripts and diplomas. It is wrong to falsify data, for example, in an assigned lab project, or fabricate quotations or sources for a paper.
- **Assisting others in academic misconduct:** Helping someone else cheat is a violation of the academic integrity standards. In other words, providing another student with a paper or homework, or any other form of help, where the student knows, or reasonably should know, that the other student will use it to cheat is considered a violation.

A violation of the Standards of Academic Integrity could result in academic consequences. Please see the Student Handbook for details of procedures in the event of a violation of the Standards of Academic Integrity.

Disciplinary Dismissal

The University reserves the right to exclude at any time a student whose academic record is unsatisfactory or whose behavior or conduct is found to be detrimental to the orderly functioning of the University. When misconduct may constitute a threat to person or property within the University community or under other circumstances, it may result in disciplinary review action. The University assumes the responsibility to regulate the private conduct of the student when such conduct could constitute a hazard to or an infringement on the rights of others, a violation of the law, or a disruption of the legitimate academic and administrative processes of the University.

CURRICULUM OVERVIEW

Learning at Harrisburg University

The goal of learning at Harrisburg University is to obtain the relevant knowledge, competence, and experiences to best be prepared for an enriching career. Learning is, therefore, a multi-faceted activity that occurs throughout and across the college experience; it integrates both academic learning (acquiring and applying new knowledge) and student development (learning about one's self). Competency-based learning outcomes with programs that are intentionally designed to be engaging, integrative, and experiential are emphasized. There are four inter-dependent program characteristics that help define the Harrisburg University experience:

- **Highly Available:** The University provides learning experiences to meet the student's needs. This is demonstrated, for example, through the use of technology inside and outside of the classroom, and the applied learning opportunities available.
- **Highly Collaborative:** The student develops knowledge and skills through shared experience, as opposed to learning in isolation or in competition with each other. The faculty is responsible for creating learning environments based upon the premise that knowledge can be gained from everyone. The student has the advantage of learning from the minds and experiences of classmates, business mentors, or employers.
- **Highly Experiential:** The University deliberately ensures that learning is highly-linked to both practical and professional experience. This represents a shift from one-way (faculty to student), text-heavy content delivery to a more robust learning model that deliberately values experience, both inside and outside the classroom.
- **Highly Applied:** The learning conversation focuses on the practical application of knowledge. The intention is to shift the question from "How do I remember this information?" to "How can I act on this information in order to create knowledge that is both useful and actionable?" In this way, learning becomes an exercise in both in preparation for a career and personal advancement.

Learning Assessment at Harrisburg University

Harrisburg University's model for the assessment of student learning is structured to support learning goals. The goals of the programs and courses are clearly defined and are relevant to the mission of the University. Course syllabi establish specific learning objectives, articulate the instructor's expectation of the student, and outline the standards against which the student's learning is measured. Learning assessment of coursework and experiential learning is creative, in that it goes beyond instructor-driven evaluation through examinations and papers in most cases, and is done both inside and outside the classroom by faculty, business and academic professionals. Further, student learning around each of the University competencies is a focus of assessment activities. The University is committed to improve its program offerings by comparing student assessment outcomes to the program and course goals.

Competencies

Competency-Driven and Across-the-Curricula: A hallmark of the Harrisburg University experience is competency-driven education. The student is expected to demonstrate mastery of eight university-wide competencies:

Civic Engagement

Definition: Civic engagement is "working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values and motivation to make that difference. It means promoting the quality of life in a community through both political and non-political processes." (Excerpted from *Civic Responsibility and Higher Education*, edited by Thomas Ehrlich, published by Oryx Press, 2000, Preface, page vi.). In addition, civic engagement is participation in personal and public activities that are both life-enriching and socially beneficial to the community.

Written and Oral Communication

Definition of Written Communication: Written communication is the development and expression of ideas in writing. It involves writing in a variety of styles, genres, and technologies and mixing text, data, and images. Written communication abilities develop through repeated writing experiences across the disciplines.

Critical Thinking

Definition: Critical thinking is the use of deliberative thought, characterized by the comprehensive exploration of topics, ideas, artifacts, or events before accepting or formulating an opinion or conclusion. Using reason and experience to form informed judgments, the critical thinker combines or synthesizes existing ideas, images, or expertise in original ways; and reacts to experience in imaginative ways, characterized by innovation, divergent thinking, and risk-taking. The critical thinker solves problems by designing, evaluating, and implementing a strategy to answer an open-ended question or achieve a desired goal. Quantitative Literacy (QL) – also known as Numeracy or Quantitative Reasoning (QR) – is a "habit of mind," competency, and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).

Entrepreneurship

Definition: Entrepreneurship is the process of organizing tangible and intangible resources in order to pursue opportunities that generate value, meet an identified need, or satisfy an organizational or societal market (such as the creation of a business, organization, or laboratory). At Harrisburg University, entrepreneurship represents a "frame of mind" demonstrated by both thinking and action.

Ethical Awareness and Reasoning

Definition: Ethical decision making actualizes the realization and inclusion of the moral dimension for personal decision-making. "Reasoning about right and wrong human conduct requires students to be able to 1) assess their own ethical values and the social context of problems, 2) recognize ethical issues in a variety of settings, 3) think about how different ethical perspectives might be applied to ethical dilemmas, and, 4) consider the ramifications of alternative actions." Ethical self-identity evolves both on individual and organizational (e.g., corporate) levels. * Source: AAC&U / VALUE rubric

Global Awareness

Definition: Global awareness is knowledge of the world citizenry's common interests in community, social, political, information, and financial systems of different scales; appreciation and respect for diversity, culture, and environment; and the interactions and impacts of individuals, global systems, and cultures.

Information Literacy

Definition: Information literacy encompasses knowledge and familiarity with different media types, efficient data storage, retrieval methods, and research techniques. For the purposes of this rubric, "information" is not only text-based information, but also includes images, sounds, data sets, databases, artifacts, numerical and statistical data.

Teamwork and Collaboration

Definition: Teamwork and Collaboration encompass the ability to work effectively with others in a concerted effort toward a common goal. "Behaviors under the control of individual team members" include efforts put into team tasks, manner of interacting with others on the team, and the quantity and quality of contributions to team discussions. * Source: AAC&U / VALUE rubric

Regardless of the student's program of study, employers and community leaders desire these competencies; they also serve the broader purpose of preparation for life and citizenship.

ACADEMIC PROGRAMS

Doctor of Philosophy (Ph.D.) in Data Sciences Degree Program (ANDP)

Doctorate education focuses on enabling students to make original contributions to their respective fields of study. There are two phases of the doctoral program at HU: (1) a learning phase that includes coursework, seminars, research, and fieldwork that contributes to the student’s knowledge in the program of study; and, (2) a research phase that focuses on student’s original research culminating in his/her final examination. Upon a student’s defense of the dissertation and completion of all other requirements, the student is awarded the doctoral degree in the program of study.

Mission Statement

The mission of the Harrisburg University Analytics Program is to create scientifically minded and technically proficient professionals with a comprehensive background in the methodological diversity of the data sciences and the intellectual depth to offer influential perspectives to analytical teams across disciplines.

Program Goals

The Analytics Program program educational goals are as follows:

The student:

1. Will have applied diverse data science methodologies using a scientific process individually or in teams to provide impactful insights from large sets of data.
2. Will have used effective communications to explain insights from analytical processes on data to diverse audiences.
3. Will have grown professional through self-study, continuing education, and professional development.

Student Outcomes

HU Competencies	Analytics Program Student Outcomes
Critical Thinking	<ul style="list-style-type: none"> • Identify and assess the opportunities, needs and constraints for data usage • Conduct independent research at a level appropriate for expanding the body of knowledge in the data science domain
Information Literacy	<ul style="list-style-type: none"> • Make clear and insightful analyses changing direction quickly as required by these analyses • Measure, evaluate, and explain the level of quality of a dataset and determine/develop a plan to improve the quality
Teamwork and Collaboration	<ul style="list-style-type: none"> • Work effectively in a team to develop data analytic solutions
Ethical Decision Making	<ul style="list-style-type: none"> • Recognize and analyze ethical issues related to intellectual property, data security, integrity, and privacy
Communication	<ul style="list-style-type: none"> • Communicate clearly and persuasively to a variety of audiences

Specific Course Requirements for the Ph.D. in Data Sciences

Milestone 1: *Complete 6 courses from the following doctoral-level courses – 18 semester hours:*

ANLY 705	Modeling for Data Science	(3)
ANLY 710	Applied Experimental & Quasi-Experimental Design	(3)
ANLY 715	Applied Multivariate Data Analysis	(3)
ANLY 720	Data Science from an Ethical Perspective	(3)
ANLY 725	Current Topics in Unstructured Data Analysis	(3)
ANLY 730	Current Topics in Forecasting	(3)
ANLY 735	Current Topics in Machine Learning	(3)
ANLY 740	Graph Theory	(3)
ANLY 745	Functional Programming Methods for Data Science	(3)
ANLY 755	Advanced Topics in Big Data	(3)

Milestone 2: *Participate in non-credit research symposium*

Milestone 3: *Qualifying examination upon completion of doctor-level coursework and research symposium*

Milestone 4: *Participate in the Doctoral Research Seminar specific to their area of research for every semester enrolled in the doctoral program – 6 semester hours:*

ANLY 760	Doctoral Research Seminar	(6)
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Milestone 5: *Complete the dissertation process – 12 semester hours:*

ANLY 799	Doctoral Studies	(12)
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Doctor of Philosophy Courses Descriptions

ANLY 705 Modeling for Data Science (3 credit hours)

Prerequisite: Completion of the requirements within the first two years of the doctoral program

Description: This course provides a more in depth presentation of the theory behind linear statistical models, segmentation models, and production level modeling. Further emphasis is placed on practical application of these methods when applied to massive data sources and appropriate and accurate reporting of results.

ANLY 710 Applied Experimental and Quasi-Experimental Design (3 credit hours)

Prerequisite: Completion of the requirements within the first two years of the doctoral program

Description: Methods and approaches used for the construction and analysis of experiments and quasi-experiments are presented, including the concepts of the design and analysis of completely randomized, randomized complete block, incomplete block, Latin square, split-plot, repeated measures, factorial and fractional factorial designs will be covered along with methods for proper analysis and interpretation in quasi-experiments.

ANLY 715 Applied Multivariate Data Analysis (3 credit hours)

Prerequisite: Completion of the requirements within the first two years of the doctoral program

Description: This course provides hands-on experience in understanding when and how to utilize the primary multivariate methods Data Reduction techniques, including Principal Components Analysis and Exploratory and Confirmatory Factor Analyses, ANOVA/MANOVA/MANCOVA, Cluster Analysis, Survival Analysis and Decision Trees.

ANLY 720 Data Science from an Ethical Perspective (3 credit hours)

Prerequisite: Completion of the requirements within the first two years of the doctoral program

Description: This course introduces the power and pitfalls of handling user information in an ethical manner. The student is offered a historical and current perspective and will gain an understanding of their role in assuring the ethical use of data.

ANLY 725 Current Topics in Unstructured Data Analysis (3 credit hours)

Prerequisite: Completion of the requirements within the first two years of the doctoral program

Description: This course follows a research seminar format. Students and faculty develop research proposals, analyses, and reporting in the domain of Unstructured Data. Topics of special interest in Unstructured Data analysis are presented by faculty and students under faculty direction. Topics of special interest vary from semester to semester.

ANLY 730 Current Topics in Forecasting (3 credit hours)

Prerequisite: Completion of the requirements within the first two years of the doctoral program

Description: This course follows a research seminar format. Students and faculty develop research proposals, analyses, and reporting in the domain of Forecasting. Topics of special interest in Forecasting Data analysis are presented by faculty and students under faculty direction. Topics of special interest vary from semester to semester.

ANLY 735 Current Topics in Machine Learning (3 credit hours)

Prerequisite: Completion of the requirements within the first two years of the doctoral program

Description: This course follows a research seminar format. Students and faculty develop research proposals, analyses, and reporting in the domain of Machine Learning. In addition, topics of special interest in Machine Learning are presented by faculty and students under faculty direction. Topics of special interest vary from semester to semester.

ANLY 740 Graph Theory (3 credit hours)

Prerequisite: Completion of the requirements within the first two years of the doctoral program

Description: This course introduces standard graph theory, algorithms, and theoretical terminology. Including graphs, trees, paths, cycles, isomorphisms, routing problems, independence, domination, centrality, and data structures for representing large graphs and corresponding algorithms for searching and optimization.

ANLY 745 Functional Programming Methods for Data Science (3 credit hours)

Prerequisite: Completion of the requirements within the first two years of the doctoral program

Description: This course is designed to build on the Functional Programming Methods for Analytics course. The student works to extend programming skills to write the student's own versions of popular statistical functions using a current programming language.

ANLY 755 Advanced Topics in Big Data (3 credit hours)

Prerequisite: Completion of the requirements within the first two years of the doctoral program

Description: Topics include the design of advanced algorithms that are scalable to Big Data, high performance computing technologies, supercomputing, grid computing, cloud computing, and Parallel and Distributed Computing, and issues in data warehousing.

ANLY 760 Doctoral Research Seminar (6 credit hours)

Prerequisite: Completion of doctoral coursework requirements; pass qualification examination

Description: This seminar provides support to doctoral students within their specific domains of research. Led by the faculty advisor for that domain, the course is designed to provide a forum where faculty and students can come together to discuss, support, and share the experiences of working in research.

ANLY 799 Doctoral Studies (12 credit hours)

Prerequisite: Completion of doctoral coursework requirements; pass qualification examination

Description: Advancement to candidacy is a prerequisite of this course. This is an individual study course for doctoral students. Content to be determined by the student and the student's Doctoral Committee. May be repeated for credit.

UNIVERSITY ADMINISTRATION

Harrisburg University of Science and Technology is a private, not-for-profit organization providing instruction, research, and service to the community. The University is governed by a Board of Trustees. The immediate regulation and direction of the academic, research, and service activities of the University are delegated by the Board of Trustees to the President and the faculty of the University.

2017 -2018 Board of Trustees

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Douglas A. Neidich, <i>Trustee Emeritus</i>	Chairman, Green Works Development LLC.
David A. Schankweiler, <i>Trustee Emeritus</i>	Chief Executive Officer, Journal Publications

Faculty (Faculty list is updated in the first edition of the catalog each academic year)			
Nushwan	Al-Nakash	Assistant Professor	Computer & Information Sciences
Christine	Altieri	Assistant Professor	English
Farooq	Anjum	Associate Professor	Information Systems Engineering & Management
Samuel	Benigni	Assistant Professor	Physics
Chad	Chu	Lecturer	Computer & Information Sciences
Hilary	Coulson	Assistant Professor	History
Saeed	Esmaili-Sardari	Associate Professor	Information Systems Engineering & Management
Rachel	Fogle	Assistant Professor	Biological Sciences
Randolph	Ford	Professor	Analytics
Scott	Foulkrod	Associate Professor	Philosophy and Legal Studies
Robert	Furey	Professor	Integrative Sciences
Mina	Gabriel	Instructor	Computer & Information Sciences
Philip	Grim, II	Lecturer	Computer & Information Sciences
Andrew	Hacker	Cybersecurity Expert in Residence	
Marvine	Hamner	Professor	Analytics
Edgar	Harrell	Entrepreneur in Residence	
Kevin	Huggins	Professor	Computer & Information Sciences and Analytics
Richard	Jackson	Associate Professor	Integrative Sciences
Chintan	Kanadia	Instructor	Computer & Information Sciences
Richard	Kordel	LTMS Program Lead	Learning Technologies
Jay	Liebowitz	Distinguished Chair of Applied Business and Finance	Management & eBusiness and Information Systems Engineering & Management
John	McKnight	Assistant Professor	Sociology of Emerging Technologies
Thomas	McManus	Associate Professor	Director of Learning Technologies & Professional Development; Center for Innovative Teaching & Learning
Glenn	Mitchell	Professor	Healthcare Informatics
Mehdi	Noorbaksh	Professor	International Affairs and Business
Stanley	Nwoji	Assistant Professor	Business and Entrepreneurship
Stephen	Onu	Assistant Professor	Project Management
Charles	Palmer	Associate Professor	Multimedia Arts
Mrunalini	Pattarkine	Professor	Biotechnology
Stephen	Penn	Associate Professor	Analytics
Tamara	Peyton	Assistant Professor	Social Computing & HCI
Robert	Pittman	Assistant Professor	Systems Engineering
Wouter	Popelier	Instructor	Information Systems Engineering and Management
Christine	Proctor	Assistant Professor	Biology & Ecology
Roozbeh	Sadeghian	Assistant Professor	Data Analytics
Catharine	Santai	Associate Professor	Integrative Sciences
Albert	Sarvis	Assistant Professor	Geospatial Technology and Information Technology Project Management
Majid	Shalan	Associate Professor	Computer & Information Sciences

Thomas	Sheives	Associate Professor	Project Management
Michael	Stout	Game Designer in Residence	
Doaa	Taha	Visiting Professor	Analytics
Doug	Taylor	Professor	Biotechnology
Nayeem	Teli	Assistant Professor	Computer & Information Sciences
A. Michael	Theilacker	Lecturer	Applied Mathematics
Shane	Tomblin	Associate Professor	Enterprise Engineering and Healthcare Informatics
Amjad	Umar	Professor	Information Systems Engineering & Management
Ru	Wideman	Associate Professor	General Education
Daqing	Yun	Assistant Professor	Computer & Information Sciences

Corporate Faculty (Corporate Faculty list is updated in the first edition of the catalog each academic year based on the previous academic year)

Iheb	Abdellatif	Information Sciences Engineering & Management
Archie	Addo	Project Management
Adetoun	Adeniji-Adele	General Education Studies
Mani	Akella	Computer & Information Sciences
Naveen	Allu	Information Sciences Engineering & Management
Mani	Akella	Computer Science
John	Badovinac	General Education Studies
Feyzi	Bagirov	Analytics
Joshua	Barlup	Interactive Media
Kathryn	Barone	Project Management
Anshuman	Bassi	Project Management
Akeisha	Belgrave	Interactive Media
Michael	Bialousz	Geospatial Technology
Karl	Bopp	Project Management
Scott	Bostjancic	Learning Technologies & Media Studies
Barry	Boyer	Information Sciences Engineering & Management
Rick	Bradley	Project Management
Lisa	Brown	Interactive Media
Karl	Brummer	Management & eBusiness
Michael	Burnam-Fink	General Education Studies
Shawn	Canady	Learning Technologies & Media Studies
John	Clark	Project Management
Janine	Clarke	Information Sciences Engineering & Management
Scott	Copeland	Learning Technologies & Media Studies
Joseph	Deklinski	Project Management
Seema	Desai	Computer & Information Sciences
Katherine	Di Crocco	Project Management
Warren	Dutka	Project Management
Mike	Eck	General Education Studies
Ahmed	ElArabawy	Information Sciences Engineering & Management
William	French	Information Sciences Engineering & Management
Stephen	Fries	Management & eBusiness

Sarah	Fuhrmeister	Geospatial Technology
Barbara	Geisler	Project Management
Melissa	Gettys	General Education Studies
Marian	Gigliotti	Learning Technologies & Media Studies
Gordon	Goodrow	Integrative Sciences
Clifford	Graham	Project Management
Russell	Green	Geospatial Technology
Janita	Haastrup	Project Management
Moniquetta	Hall	Integrative Sciences
Hannah	Hartwell	Learning Technologies & Media Studies
Paul	Harvey	Project Management
Nathaniel	Hench	Project Management
Graham	Hetrick	Integrative Sciences
Pamela	Higgins	Integrative Sciences
Elizabeth	Hockley	General Education Studies
Johnathan	Jackson	Computer & Information Sciences
Susanna	Jackson	Project Management
Daniel	Jensen	Project Management
Mary	Johnston	Project Management
Ronald	Jones	Computer & Information Sciences
Louis	Jordan	Project Management
Rizwan	Khan	Project Management
Jay	Kirssin	Interactive Media
Patricia	Kowalczyk	Project Management
Michelle	Krill	Learning Technologies & Media Studies
Suresh	Kumar	Integrative Sciences
P.	Lees	Learning Technologies & Media Studies
Michael	Lepine	Learning Technologies & Media Studies
Andrew	Lippert	Project Management
Ryan	Lockard	Project Management
Rebecca	Lowe	General Education Studies
Mohammed	Lskaafi	Analytics
Karen	Lubrecht	Learning Technologies & Media Studies
Joy	Mackey	General Education Studies
Jacquelyn	Maddox	Integrative Sciences
Edmund	Maher	Analytics
Joe	Malak	Project Management
Sovanna	Mam	Interactive Media
Francis	Manning	Project Management
Melissa	McCoy	Project Management
Cherlyn	McIntee	Project Management
Jenn	McNamara	Learning Technologies & Media Studies
Ron	McNamara	Project Management
Arnie	Miles	Analytics
Bradley	Mitchell	Project Management
Michele	Mont	Project Management
R. Mark	Moore	Learning Technologies & Media Studies
Donald	Morgan	Project Management

Ali	Motamedi	Analytics
Brian	Myers	Project Management
Martin	Negron	Analytics
Derek	Newcomer	General Education Studies
Matthew	North	Information Sciences Engineering & Management
Matthew	Novak	Interactive Media
Donald	O'Hara	Information Sciences Engineering & Management
Obinna	Okoye	Management & eBusiness
Stephen	Oliver	Learning Technologies & Media Studies
Luis	Paris	Computer & Information Sciences
Jay	Parrish	Integrative Sciences
Madhukiran	Parvathaneni	Biotechnology
Luke	Peterschmidt	Interactive Media
Christopher	Plummer	Project Management
Kevin	Purcell	Analytics
Frances	Quinones	Project Management
Anis	Rahman	Integrative Sciences
Scott	Rainey	Project Management
Michael	Ramsey	Information Sciences Engineering & Management
Anna	Reeves	General Education Studies
Jennifer	Reiner	Project Management
Robert	Roadcap	Project Management
Gerald	Robinson	Information Sciences Engineering & Management
Eduardo	Rodriguez	Analytics
Alisa	Schreibman	General Education Studies
John	Sell	Analytics
Rajagopalan	Shanmugavelan	Analytics
Carolyn	Shaw	Project Management
Caleb	Smith	General Education Studies
Rick	Smith	Project Management
Paraminder	Talwar	Project Management
Cindy	Thatcher	Learning Technologies & Media Studies
Bongyong	Uh	Analytics
Albert	Unrath	Learning Technologies & Media Studies
Satish	Upadhyay	Project Management
Edward	Uravic	Project Management
Vicki	Villone	General Education Studies
Michele	Washko	Project Management
Brenda	Webber	Project Management
Pam	Wiedeman	General Education Studies
Jenna	Wilcox	Integrative Sciences
Glenn	Williams	Computer & Information Sciences
Kimberly	Witzig	General Education Studies
Michael	Wright	Computer & Information Sciences
Katie	Yohn	Project Management
Jeffrey	York	Project Management
Leah	Zimmerman	Project Management

Administration (Administration list is updated on the first edition of the catalog each academic year)		
Ben	Allatt	Associate Vice President of Human Resources
Debra	Althoff	Associate Registrar
Meera	Anilkumar	Student Account Representative
Melissa	Bailey	International Student Coordinator and DSO
Fay	Baxter	Academic Records Coordinator
Kimberly	Bowman	Assistant Director of Student Services
Jason	Brandt	Database Engineer
Ben	Buckley	Security Officer
Eric	Cerjanic	Security Desk Attendant
Sruthy	Chitturi	International Admissions Counselor
Eric	Darr	President and Chief Executive Officer
Justin	Detig	Manager of Online Learning Technologies
Lauren	Edgell	Director of Online Learning Technologies & Professional Development
Frank	Fernandez	Director of Institutional & Grant Research
Douglas	Firestone	Chief of Staff
Stephanie	Foster	International Student Coordinator and DSO
Vincent	Frank	Director of Financial Aid Services
Yuliya	Goss	University Administrative Assistant
Keith	Green	Director of Institutional Compliance and Reporting/SEVIS PDSO
Sabrina	Guzy	International Student Coordinator and DSO
Erin	Hill	Executive Recruiter
Jeff	Hoffman	Web Developer
Angela	Houseknecht	Admissions Counselor, Adult Degree Programs
Brian	Humphrey	Manager of University & Community Partnerships
Steven	Infanti	Associate Vice President for Enrollment Management & Communications
Nayeem	Islam	Residence Director
Jayme	Keller	Manager, Technology Services
Jon	Knorr	Vice President for Advancement
Sireesha	Kollipara	International Student Support Specialist
Ryan	Korn	Director of Secondary School Services, Programs & Partnerships
Lauren	Lewis	Program Coordinator
Kelly	Logan	Vice President for Strategic Workforce Development and University Centers
Becky	Low	Graduate Program Coordinator
Joy	Mackey	Student Success Programs & Partnership Liaison
Michelle	Mafnas	Program Coordinator
Beverly	Magda	Associate Provost for Strategic Partnerships
Bilita	Mattes	Provost and Chief Academic Officer
Ryan	Maun	Staff Accountant
Duane	Maun	Vice President for Finance and Chief Financial Officer

Thomas	McManus	Director of Learning Technologies & Professional Development
Shruthi	Mekala	International Student Services Coordinator
Teri	Mickle	Assistant Registrar
Melissa	Morgan	Director of Student Services
Brian	Morris	Admissions Counselor
Sandra	Nelson	Registrar
Anthony	Ortega	Production Coordinator
Christian	Perry	Admissions Counselor
Andy	Petroski	New Product Development Consultant
Alex	Pitzner	Associate VP & Chief Information Officer
Kristie	Postorino	Licensed Professional Counselor
Preetha	Ram	Chief Academic Expansion Officer & Associate Provost for International Affairs
David	Runyon	University Librarian
Nigel	Salmon	Intake Specialist
Manny	Sanchez	Graduate Program Director
Karen	Scharein	Admissions Data & Communications Specialist
Dawn	Spaar	Director of Adult and Professional Studies
Aaron	Spina	Admissions Counselor
Kim	Sprought	Associate Director of Experiential Learning & Professional Development
Keith	Thomas	AV Engineer
Jeremy	Walmer	Financial Accounts and Payroll Manager
Liza	Wertz	University Administrative Representative
Tara	Zydor	Admissions Counselor

UNIVERSITY POLICIES AND DISCLOSURES

These are some University policies that guide the conduct of the student, faculty, and staff. Additional details can be found in the [Student Handbook](#), [Faculty Handbook](#), and [Employee Handbook](#).

Family Educational Rights Privacy Act (FERPA) Policy

The University collects a considerable amount of information about each student during the period of enrollment. Almost all of this information is contained in records protected by the Family Educational Rights Privacy Act (FERPA), a federal statute signed into law in 1974. Under this law, a student has the right to review the records and to challenge anything in them that is perceived to be inaccurate or misleading. FERPA regulations also stipulate that the University cannot release information from the student's records to anyone but the student without the student's written consent, except to the extent that the FERPA policy authorizes disclosure without consent.

University officials may disclose education records and information to parents or others without consent of the student under certain circumstances:

- During a health or safety emergency to protect the student or other individuals;
- Any record to the parent when the student is a dependent for federal income tax purposes;
- Law enforcement unit records, including outside law enforcement authorities;
- Parental information when a student under 21 has violated any law or university policy; and, concerning the use or possession of alcohol or a controlled substance

Directory Information Policy - The University may disclose directory information about the student unless the student specifically informs the University in writing that this type of information should **not** be released. Directory information includes:

- student's name
- address
- e-mail address
- telephone number(s)
- class year, program of study
- enrollment status
- dates of attendance
- degree(s) and/or awards received
- photograph
- previous educational institution attended
- participation in officially recognized University activities

For additional information on the FERPA policy see <http://www.ed.gov/policy/gen/reg/ferpa/index.html>

Campus Crime and Security Disclosure

The Campus Security Policy and Campus Crime Statistics Act (the Jeanne Clery Act) requires the distribution of an annual security report on or before October 1 to all current faculty, staff, and students and notice of its availability to prospective students, faculty, and staff. The annual security report includes statistics for the previous three years concerning reported crimes that occurred on campus or property owned or controlled by the University, and on public property immediately

adjacent to and accessible from the campus. The report also includes institutional policies concerning campus security, such as: crime prevention, the reporting of crimes, sexual assault, timely warning, and other matters. This report is available on the University website or the U.S. Department of Education website at <http://ope.ed.gov/security>.

Electronic Mail Communication Policy

Policy Statement - Unless otherwise prohibited by law, the University may send official communications to faculty, staff and students by e-mail to an account assigned by the University with the full expectation that such e-mails will be read by the recipient on a frequent and consistent basis and in a timely fashion.

Reason for Policy - The University must be able to communicate quickly and efficiently with faculty, staff, and enrolled students in order to conduct official University business. E-mail is an available and appropriate medium for such communication. Official communications may include policy announcements, registration and billing information, regulatory compliance disclosures, emergency notifications, and other information of a critical or timely nature. Faculty, staff and students may not opt out from receiving official University e-mail communications.

Assignment of E-mail Accounts - Students and employees are assigned an account in the HarrisburgU.edu domain. The account is designated as the "[FiLastname@HarrisburgU.edu]" or "[Student FiMiLastname]@My.HarrisburgU.edu" e-mail account. [The addressee protocol may vary slightly in the event of Initials/Name duplication]. The e-mail account is generated by the Office of Technology Services and may not be changed without University approval. University communications that are sent by e-mail will be sent to the University-supported e-mail account.

Responsibilities - Faculty, staff, and students are expected to review messages received through the University-supported e-mail account on a frequent and consistent basis. Communications may be time-critical. Individuals shall use the e-mail account for all University-related e-mail communications. Faculty shall use the University-supported account for e-mail communication with a student and, conversely, the student shall respond to faculty communications or requests using the University-supported e-mail account.

Forwarding of E-mail – An individual who chooses to forward e-mail received on a Harrisburg University e-mail account to a different e-mail address risks loss of data integrity. The University is not responsible for e-mail, including attachments, forwarded to any e-mail address not supported by the University.

Third-Party, Web-Based [Cloud] Computer Records Policy

Policy Statement - It is the policy of Harrisburg University of Science and Technology that any and all user-generated content developed during the use of third-party, web-based (referred to as "cloud-based") technologies used in the classroom or coursework, which could include cloud-based instructional tools, cloud-based teaching and learning environments, and cloud-based server storage, is the property of the individual faculty, student, or staff who developed the content and that the University is not responsible, and shall be held harmless, for any theft, damage, manipulation or loss that may be incurred as a result of the failure by the third party to properly maintain or safeguard that content.

Reason for Policy - The University encourages and supports the use of new instructional tools and emerging technologies in open, digital teaching and learning environments. The use of web-based applications and cloud-based storage also bring new concerns about intellectual property and privacy. The Family Educational Rights and Privacy Act of 1974 (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is the federal law that protects the privacy of a student's education records. Generally, any work related to a course or program of study created by the individual is considered a part of the "student's education record." Accordingly, any work related to a course or program of study should not include personally identifiable information of the individual. Examples of "personally identifiable information" are: an individual's full name (if not common), Social Security number, date of birth, birthplace, face or fingerprints, credit card numbers, driver's license number, vehicle registration plate number, digital identity, or grades. Any of these data, when combined with other personal information, may identify an individual. Users of third-party, web-based technologies are strongly cautioned to avoid posting personally identifiable information in any computerized application.

A license agreement permits the University to provide access through its servers for the student to utilize the MicroSoft *SkyDrive* cloud-based computer server storage utility to store the student's ePortfolio during the period of enrollment in a program of study. The University requires that each degree-seeking undergraduate student develop an ePortfolio. An ePortfolio is defined as: *An organized, media-rich collection of documents, videos, and other exhibits that allows the student to demonstrate competence to a multitude of audiences.* Additionally, faculty, students, or staff are provided access to and use other web-based technologies and social media where user-generated content is stored.

The individual user of a third-party, web-based technology application, when establishing an account, is required to agree to the conditions of a Terms of Service or End-User Agreement, whereby the individual user accepts full responsibility for all content maintained in the application. Furthermore, the user agrees to a condition that, in no event will the software manufacturer be liable for any damages, whether direct, indirect, special, incidental, economic, compensatory, or consequential, arising out of the use of or inability to use the software or user documentation. Accordingly, the user is solely and exclusively responsible for any and all content.

Action Subsequent to Completion of a Program of Study or Termination of a Period of Employment - Any and all documents, videos, and other exhibits accumulated in an ePortfolio or other file, folder or collection by an individual who utilizes a third-party, cloud-based application or storage utility during a program of study or period of employment will no longer be accessible through the University's servers following the completion of the program of study or termination of a period of employment. Direct access to the materials held by the provider is conditional upon the Terms of Service or End-User Agreement accepted by the individual when the account was established.

Equal Opportunity

The University is committed to assuring equal opportunity to all persons and does not discriminate on the basis of race, creed, color, gender, age, religion, national origin, veteran or handicap status, or sexual orientation in its educational programs, activities, admissions, or employment practices as required by Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Title VI of the Civil Rights Act of 1964, and other applicable statutes. Inquiries concerning Title IX, Section 504, compliance and information regarding campus accessibility, may be referred to the Americans with Disabilities Act (ADA) Coordinator.

Non-Discrimination Grievance Procedure - Federal

Title IX of the Education Amendments of 1972 prohibits discrimination based on sex in educational programs and activities that receive federal financial assistance. To ensure compliance with Title IX and other federal and state civil rights laws, Harrisburg University of Science and Technology has

developed internal policies that prohibit discrimination and sexual misconduct on the basis of sex, such as sexual misconduct and sexual violence. A copy of the Title IX non-discrimination procedure is available upon request.

Non-Discrimination Policy - State

The Pennsylvania Fair Educational Opportunities Act provides student access to benefits and services of the University and prohibits discrimination without regard to race, color, gender, religious creed, ancestry, national origin, sexual orientation, age, ancestry, civil union, marital status, veteran status, handicap or disability, perceived handicap or disability, relationship or association with an individual with a handicap or disability, use of a guide or support animal, and/or handling or training of support or guide animals. This commitment includes, but is not limited to, admissions, course offerings, transfer of credit, financial aid, scholarships, student employment, internships, educational and social programs, and student advisement and counseling.

Any complaint of an alleged act of discrimination must be filed within 180 days of the incident by contacting the PA Human Relations Commission located at 1101-1125 Front Street, 5th Floor, Harrisburg, PA 17104-2515 (717) 787-9784.

Emergency Notification System Policy

The University's emergency notification service (ENS), the “e2Campus” system, is used to communicate with subscribers through voice, text, and email messages, as deemed appropriate in the event of an emergency. All University students, faculty, and staff are strongly encouraged to subscribe. Each subscriber can designate up to three contact numbers and specify text and/or voice messages. The Quick Test feature enables the user to send a test message to your wireless device. The Emergency Notification Service is designed for use with portable devices and is only one aspect of a layered approach to notifying the University community of emergencies.

Peer-to-Peer (“P2P”) File Sharing Information Technology Disclosure

Introduction

The Higher Education Act of 1965, as amended, under Title IV, Section 285(a)(1)(P) and Section 487(a)(29), effective August 14, 2008, requires the disclosure to users of information technology resources that Harrisburg University of Science and Technology has developed a plan to combat the unauthorized distribution of copyrighted material (including the use of technology-based deterrents) and will, to the extent practicable, offer alternatives to illegal downloading. The illegal distribution of copyrighted material is prohibited, and may subject an individual to criminal or civil penalties.

The “Digital Millennium Copyright Act of 1998” (DMCA) states that copyrighted information is protected and that it is illegal to download, upload, or distribute that information in any fashion. The provisions of this law specify a process to deal with any claimed infringement.

Plans to “Effectively Combat” Unauthorized Distribution of Copyrighted Material

P2P traffic is identified via the Intrusion Prevention System (IPS) that is integrated within the University’s Cisco ASA 5500 security appliance. In most cases, a client’s connection to the network will be dropped when typical P2P traffic is sensed.

This intrusion system covers the known protocols that popular P2P clients - such as Torrents, Limewire, Bearshare, Kazaa, etc. - utilize to establish connections to potentially transfer files containing copyrighted material. Additionally, the ability for the student to pass files over the Wireless LAN between laptops has been shut down.

Compliance

Harrisburg University reserves the right to capture, preserve, and/or inspect any information transmitted through, stored on, or used on any IT resource.

Identification of Copyrighted Material Violation and Action Taken

The designated agent to receive notification of a claimed infringement, in accordance with the provisions of the Digital Millennium Copyright Act, is:

Keith A. Green
Director of Institutional Research & Compliance
326 Market Street
Harrisburg, PA 17101
(717) 901-5123
KGreen@HarrisburgU.edu

If an infringement claim is submitted to the University by a complainant, appropriate action will be taken to identify the student, faculty, or staff member involved in the complaint.

Written notice to the involved individual via email requires the removal of the copyrighted files or documents from the computer containing the material within 72 hours of the formal notice. A reply confirmation is required when corrective action has been taken to remove the illegal files, documents, or other material.

Upon receipt of the material removal confirmation, the designated agent notifies the complainant of the institutional resolution.

If an individual involved in the complaint fails to take the requested corrective action within 72 hours, access to the Harrisburg University network will be deactivated. Reactivation to the network can only occur at such time that it is confirmed that corrective action was taken.

Penalties for Copyright Infringement

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement.

Penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or "statutory" damages affixed at not less than \$750 and not more than \$30,000 per work infringed. For "willful" infringement, a court may award up to \$150,000 per work infringed. A court can, in its discretion, also assess costs and attorneys' fees. For details, see Title 17, United States Code, Sections 504, 505.

Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to \$250,000 per offense.

For more information, please see the Web site of the U.S. Copyright Office at www.copyright.gov, especially the FAQ's at www.copyright.gov/help/faq.

Procedure to Update and/or Amend

Harrisburg University of Science and Technology reserves the right to update or amend this document to reflect university policy or procedural changes and/or state or federal law.

Campus ID Card Policy

The Campus ID Card serves as the University's student/faculty/staff ID card, provides access to campus buildings and events, and serves as the Library card.

While on campus, the Campus ID Card must be visible at all times and presented upon request to any faculty member, staff, security personnel, or contracted security personnel.

The Campus ID Card is the property of Harrisburg University of Science and Technology and all policies and procedures must be observed to retain the privilege of use. The card is not transferable and is only to be used by faculty, staff, a currently-registered student, and other authorized persons.

The Campus ID Card must be surrendered to the University upon deactivation. A fee may be assessed for any Campus ID Card that is not returned at the end of the expected period of use.

Campus Card Types

There are two versions of the Campus ID Card:

- Campus ID Card: card contains photo identification, student/employee ID number; and,
- Access-Only Campus ID Card: card without photo identification (typically for the short-term student or visitor).

Campus Card Usage

The primary purpose of the Campus ID Card is to provide easy identification of the cardholder and to permit access to permitted areas of the University campus. The Campus ID Card also serves as a library card. It is the responsibility of the cardholder to report suspected lost or stolen cards immediately.

Campus Card Activation

The Campus ID Card is activated for faculty and staff following formal contractual employment or position appointment.

The Campus ID Card is activated for a student following admission to the University, payment of the required tuition deposit, and completion of course registration for the semester or other term.

Campus Card Deactivation

The Campus ID Card is deactivated for faculty and staff following formal cancellation of contractual employment or resignation or termination from the position appointment.

The Campus ID Card is deactivated for a student following a determination of withdrawal, dismissal, graduation or other completion of a scheduled period of enrollment.

Student Grievance Policy

A situation, circumstance or incident may occur where a student concludes that they have incurred egregious harm as the direct result of an action caused by a member of the faculty or staff. A student in this circumstance may file a formal grievance against a faculty or staff member of the University to

seek administrative redress. Examples of adverse behaviors include, but are not limited to: violation of confidentiality; offensive remarks as a deliberate insult individually, in the company of others, or in the classroom; racist or sexist remarks and/or attitudes; inappropriate sexual contact, not limited to sexual intercourse; or, inappropriate relationships with the student which cause conflict of interest for either the student or faculty or staff.

A student who is compelled to submit a grievance must obtain a Student Grievance Form from the Office of Records and Registration. The form must be completed with an explanation of the facts of the allegation, and attach to it any and all documents, testimonies or petitions supporting the student's position as evidence. The completed grievance form should be submitted promptly to the Director of Institutional Compliance.

A grievance cannot be filed on behalf of another person. Grievances may not be used to challenge academic or other policies or procedures of general applicability.

Additional information may be requested from the student while the grievance is being considered. The alleged faculty or staff person is interviewed and asked to sign an affidavit stating facts relative to the alleged incident. Following consultation with the Office of the Provost, a decision shall be rendered by the Director of Institutional Compliance within five (5) business days of the grievance submission. The student then receives a determination letter.

If the student does not receive a satisfactory remedy relative to the grievance, the student may request further review by a Grievance Committee which consists of: the Director of Institutional Compliance, who shall act as the Committee Chair, an administrator designated by the Provost, the Chair of the Faculty of the Whole, a member of the Office of Student Services, and a student representative that has no previous knowledge of the matter to be considered. The request for review by the Grievance Committee must be submitted in writing to the Director of Institutional Compliance. Formal rules of evidence will not apply, and the panel may consider any evidence considered relevant and reliable. A student is permitted to have a representative to assist them during the proceeding; however, the representative may not be an attorney.

The student will be advised of the date and time of the Grievance Committee meeting so that he or she may participate. The Committee shall deliberate and reach a decision on the grievance in closed session and render its recommendation regarding the grievance within ten (10) days of its meeting. The student will be notified promptly of the Committee's recommendation.

If a student wishes to appeal the decision of the Grievance Committee, he or she must submit a written request to the Provost within five (5) business days after formal notification of the Committee's decision. The Provost's Office will review all of the relevant materials of the matter and notify the student of a final decision within five (5) business days of the appeal submission.

Grievances relating to the alleged denial of access to the benefits and services of the University as a result of discrimination on the basis of gender, race, color, creed, religion, national origin, sexual orientation, age, ancestry, disability, civil union, marital or veteran status should be presented in writing to the Affirmative Action Officer within 30 days of the alleged discrimination. The Affirmative Action Officer will review the written complaint and meet with the individual filing it. After reviewing all the facts and utilizing legal counsel, if appropriate, the Affirmative Action Officer will determine if corrective action is required. The student bringing the complaint will be promptly notified in writing of the determination. If corrective action is required, it will be initiated within 30 days of the determination of the grievance.

Acceptable Use of Information Technology Policy

Introduction

Harrisburg University offers comprehensive academic programs that emphasize science and

technology. Access to information technology is essential to the pursuit and achievement of the University's instructional, research, administrative and service missions. As such, the use of information technology is a privilege and all members of the University community are expected to be responsible and ethical users of information technology. This policy applies to all technology acquired by or on behalf of Harrisburg University (wherever used) and all technology (however acquired) used on any Harrisburg University resources¹.

Purpose

This policy:

- A.** Promotes the responsible and ethical use of computing, information resources, and/or communication systems, collectively known as "information technology" but hereafter known as "IT," administered by the Office of Information Services (OIS).
- B.** Defines the rights, responsibilities, and standards of conduct for its faculty, administrators, staff, students, and other authorized users with regard to the use of IT.
- C.** Explains the appropriate procedures for enforcing any and all misuse of the University's IT resources and outlines appropriate disciplinary procedures for violating these rules.

Responsibilities

- D.** It is the responsibility of the University faculty, administrators, staff, or student workers to communicate this policy and its contents to any and all users of IT at, or in affiliation with, Harrisburg University. Not being aware of any part of this policy does not excuse the individual from being responsible for its contents.
- E.** The Harrisburg University OIS is responsible for the following:
 - i.** Maintaining user accountability requirements including user identification and authentication, account administration, and password integrity.
 - ii.** Making every effort to protect the privacy of users and confidentiality of data².
 - iii.** Ensuring fair access to IT.
 - iv.** Developing and implementing security policies and standards.
- F.** All Harrisburg University IT users are responsible for the following:
 - i.** Acting in a responsible, ethical, and legal manner in the use of IT. As such, this use of IT implies consent with any and all applicable university policies and regulations.
 - ii.** Using IT for authorized university business only. Excessive use of any IT resource for personal use is prohibited.
 - iii.** Safeguarding data including personal information and passwords.
 - iv.** Recognizing the limitations to privacy afforded by electronic services.
 - v.** Respecting other users and their expectation of privacy, confidentiality, and freedom of expression.

¹Computers, computer systems, networks, electronic communications systems, institutional or third-party cloud data storage media, facilities, peripherals, servers, routers, switches, equipment, software, files, or accounts.

² While Harrisburg University recognizes the importance of (and makes every attempt to achieve) privacy, the University cannot promise privacy of information stored on, or sent through, university-owned systems or resources except for certain information pertaining to student records, research, or other proprietary or patentable materials.

- vi. Taking precautions to prevent the initial occurrence and/or spread of computer viruses. Therefore, network connected resources must utilize university-approved anti-virus software.
- vii. Avoiding any unauthorized or illegal use of IT. This includes but is not limited to the transmission of abusive or threatening material, spam, or communications prohibited by state or federal laws.
- viii. Using IT in compliance with applicable license and purchasing agreements. Each user is individually responsible for reading, understanding, and adhering to all licenses, notices, and agreements in connection with IT which he or she uses.

Compliance

- G. Harrisburg University reserves the right to capture, preserve, and/or inspect any information transmitted through, stored on, or used on any IT resource without notice but especially when:
 - i. There is reasonable cause a user has violated this policy.
 - ii. A user or an account appears to be engaged in unusual activity.
 - iii. It is necessary to protect the integrity, security, or functionality of IT resources.
 - iv. It is necessary to protect the University from liability.
 - v. It is permitted or required by law.

Enforcement and Disciplinary Procedures

- H. Any user who violates any part of this policy may be subject to the following:
 - i. Suspension or revocation of the user's computer account and/or suspension or revocation of access to the University's IT resources.
 - ii. Disciplinary action as described in Harrisburg University's Student Handbook which may include suspension, dismissal, or expulsion from the University.
 - iii. Disciplinary procedures outlined in Harrisburg University's Faculty Handbook or any other documents outlining conduct for faculty, staff, administration, or student employees which may include termination of employment or other disciplinary action.
 - iv. Civil or criminal prosecution under federal and/or state law. Noncompliance with certain provisions of this policy may incur penalties under such laws which may include fines, orders of restitution, and imprisonment.
 - v. Re-instatement of computer privileges shall be examined on a case-by-case basis.

Procedure to Update and/or Amend

Harrisburg University reserves the right to update and/or amend this document to reflect university policy changes and/or state or federal law.

Credit Card Policy

The University is in compliance with state requirements for policies related to the marketing of credit cards on campus (Senate bill 157 session 2003 article xx111-A, Section 2301-A).

The Board of Trustees of the University adopted the following statement related to credit card solicitation on October 13, 2004:

“Harrisburg University prohibits the marketing of all forms of credit cards on university property and prohibiting credit card marketers from offering gifts to a student in exchange for completing a credit card application.”

Intellectual Property Policy

Purpose

The policy reflects the following goals:

To create an environment that encourages the generation of new knowledge by faculty, staff, and the student;

To facilitate wide transfer of useful inventions, ideas, and writings to society;

To motivate the development and dissemination of intellectual property by providing appropriate financial rewards to creators and the University, and administrative assistance to creators; and,

To ensure that the financial return from the development of intellectual property does not distort ethical decisions and operations of the University in a manner contrary to the mission of the University.

Definitions

Terms used in this document are defined in this section. These definitions may not necessarily conform to customary usage.

Intellectual Property includes any patentable invention, any copyrightable subject matter, or trade secret. It also includes works of art, inventions, discoveries, or creations that might normally be developed on a proprietary basis.

University means Harrisburg University of Science and Technology.

Student means any full-time or part-time graduate or undergraduate student, regardless of whether the student receives financial aid from the University or from outside sources. It is the responsibility of a student who is also an employee of an outside entity to resolve any conflicts between this policy and provisions of agreements with the employer prior to beginning any undertaking at the University that will involve the development of intellectual property.

Faculty means a person employed for pay at the University who has received a teaching appointment, plus instructors who have faculty appointments of various types.

Staff means any employee of the University other than students and faculty as defined above. If a student is also a part-time university employee, that person is considered as staff with regard to intellectual property developed as a result of employment, and as a student with regard to other intellectual property. A full-time non-faculty employee who is also taking one or more courses is considered to be staff. Visitors to the University who make substantial use of university resources are considered as staff with respect to any intellectual property arising from such use.

Creator means any person (or persons) who create an item of intellectual property.

Net proceeds to the University means all proceeds received by the University on intellectual property that it assigns, sells or licenses, minus any application, litigation, interference, or marketing costs directly attributable to the intellectual property being licensed. Deducted costs shall be reasonable and fair, and shall be properly disclosed; the sources and amounts of compensation shall also be properly disclosed.

Net proceeds to the creator means all proceeds received by the creator from intellectual property owned that is sold, assigned, or licensed, less the costs of application, legal protection, or litigation,

interference, travel and other marketing costs directly attributable to the intellectual property being exploited. Such net proceeds do not include compensation legitimately received by the creator for consulting services or interest or other return on invested labor or capital. Deducted costs shall be reasonable and fair, and shall be properly disclosed; the sources and amounts of compensation shall also be properly disclosed.

Substantial use of university facilities means extensive unreimbursed use of major university laboratory, computational facilities, or human resources. The use of these facilities must be important to the creation of the intellectual property; merely incidental use of a facility does not constitute substantial use, nor does extensive use of a facility commonly available to all faculty or professional staff (such as libraries and offices), nor does extensive use of a specialized facility for routine tasks. Use will be considered "extensive" and facilities will be considered "major" if similar use of similar facilities would cost the creator more than \$5000 (five thousand dollars) if purchased or leased in the public market. Creators wishing to directly reimburse the University for the use of its facilities must make arrangements to do so before the level of facilities usage for a particular intellectual property becomes substantial.

Policy Provisions

This section states the policies concerning ownership of intellectual property created at the University. In order of precedence, ownership of intellectual property shall be as follows:

1. Externally Sponsored Work

Ownership Provisions: Intellectual property created as a result of work conducted under an agreement between an external sponsor and the University that specifies the ownership of such intellectual property shall be owned as specified in said agreement.

2. Internally Sponsored Work

Ownership Provisions: When the University provides funds or facilities for a particular project to the extent of substantial use, it may also choose to designate itself as sponsor of that work. The University may declare itself the owner of intellectual property resulting from said work. In such cases the University must specify in advance the disposition of any intellectual property rights arising from the project. If such ownership provisions are not in place, the University will not go into contract with researcher.

3. Individual Agreements

Ownership Provisions: Intellectual property, which is the subject of a specific agreement between the University and the creator(s) thereof, shall be owned as provided in said agreement. Such agreements by the University and the faculty are encouraged.

4. Intellectual Property Created Within Scope of Employment

Ownership Provisions: Intellectual property created by university employees who were employed specifically to produce particular intellectual property shall be owned by the University if said intellectual property was created within the normal scope of employment. Computer programs written on the job by staff computer programmers would fall under this provision.

5. Public Dedication

Ownership Provisions: Except when limited by the above, the creator of any intellectual property may choose to place his or her creation in the public domain. In such cases both the creator and the University waive all ownership rights to said property.

6. In General

Unless governed by the above, ownership of intellectual property created at the University shall be determined as follows:

A. Traditional Rights Retained

Ownership Provisions: In keeping with establishing academic traditions at the University, the creator retains all rights to the following types of intellectual property, without limitation: books (including textbooks), educational courseware, articles, pictorial and graphic works, audio-visual works, and sound recordings, regardless of the level of use of university facilities. This provision does not include computer software (other than educational courseware) or databases.

B. No Substantial Use of University Facilities

Ownership Provisions: The creator owns all intellectual property created without substantial use of university facilities, including intellectual property rights in computer software and databases.

C. Substantial Use of University Facilities - No External or Internal Sponsorship

Ownership of intellectual property created with substantial use of university facilities, but not directly arising from externally sponsored work, or from work for which the University has declared itself as sponsor, shall be determined as set forth hereinafter depending on whether the creator or the University develops said property.

i. Development by Creator

Ownership Provisions: The creator originally owns intellectual property created with substantial use of university facilities but no external or internal sponsorship, and retains said ownership by commercial development of said property subject to the following: (i) the University shall receive 15% (fifteen percent) of the net proceeds to the creator above \$25,000 (twenty-five thousand dollars) from all sources (in the case of patents and copyrights, this provision shall be limited to the life of the patent or copyright), and (ii) the University shall receive a perpetual, non-exclusive, non-transferable, royalty free license to use said intellectual property. In the case of software, this license includes access by specified university personnel to the source listings, and the University shall require each person to whom a disclosure is made to execute in advance a binding confidentiality agreement in favor of and enforceable by the creator. If the intellectual property is created solely by a student or students, the creator is exempt from the obligation to pay to the University a fraction of his net proceeds, but not from the provision of this paragraph for a non-exclusive license to the University.

ii. Development by the University

Ownership Provisions: When intellectual property is created with substantial use of university facilities, but not directly arising from sponsored research, the creator will originally retain the rights to the property, provided that he desires to commercially develop the property himself or to make it available to the public. If, however, the creator elects not to commercially develop same or fails to show diligence in pursuing such development, then the ownership rights to that property may be acquired by the University.

D. Substantial Use of University Facilities - External or Internal Sponsorship

Ownership of intellectual property created with substantial use of university facilities and directly arising from work sponsored under an agreement between an external sponsor and the University, or from work for which the University has declared itself a sponsor, but for which neither the external sponsor nor the University have specified the ownership of resulting intellectual property shall be determined as set forth hereinafter depending on whether the creator or the University develops said property.

i. Development by University

Ownership Provisions: The University originally owns intellectual property created with substantial use of university facilities provided by an external agreement or internal university sponsorship and retains said ownership by commercial development of said property, subject to the following: in all cases, the creator shall receive 50% (fifty percent) of the net proceeds to the University.

ii. Development by Creator

Ownership Provisions: When intellectual property is created with substantial use of university facilities provided by external or internal sponsorship, the University will originally retain the rights to the property, provided that it desires to commercially develop the property or to make it available to the public. If, however, the University elects not to commercially develop the same or fails to show diligence in such development, the ownership rights to that property may be acquired by the creator.

E. Consulting Agreements

Ownership Provisions: Work done by individuals as consultants to outside firms is presumed not to involve unreimbursed substantial use of university facilities, and the rights to intellectual property created under consulting agreements are retained by the outside firms or the individual as specified by the terms of the consulting agreement.

General Procedures

The creator of any intellectual property that is or might be owned by the University under this policy is required to make reasonably prompt written disclosure of the work to the University's Provost, and to execute any document deemed necessary to perfect legal rights in the University and enable the University to file patent applications and applications for copyright registration when appropriate. This disclosure to the Provost should be made at the time when legal protection for the creation is contemplated, and it must be made before the intellectual property is sold, used for profit, or disclosed to the public. Whenever legal protection for intellectual property is anticipated all persons engaged in such creative activity are encouraged to keep regular notebooks and records.

Whenever the University undertakes commercial development it shall do so, if possible, in a fashion that provides for the widest possible dissemination, avoiding suppression of inventions from which the public might otherwise benefit, providing for non-exclusive licensing at reasonable royalties, and giving consideration to more favorable or royalty-free licensing to non-profit charitable institutions, minority businesses or enterprises in developing countries.

The University's share of any proceeds under this policy will be used to reimburse the University for its expenses for commercial development of intellectual property. Any additional return to the University will be used to further the academic purposes of all disciplines of the University community.