## Harrisburg University Of Science and Technology

# Doctorate Catalog 2020-2021

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. The student is responsible for adhering to the requirements, rules, policies and procedures, whether published in this Catalog, the Student Handbook, or other official media.

Contact Information	4
About the Catalog	4
The University	
History	5
Mission Statement	5
Vision	5
Accreditation and Approvals	5
Student Responsibility Statement	6
Statement of Community Standards	6
Admission	7
Tuition Charges, Refund Policies and Business Office Policies	9
Tuition - Semester Schedule	9
Tuition Refund Policy	
Student Financial Aid Programs and Policies	
Aid Sources	
Satisfactory Academic Progress for Financial Aid Recipients	
Student Services	
Academic Policies	
Overview of Doctoral Programs	
Curriculum Overview	
Learning at Harrisburg University	
Learning Assessment at Harrisburg University	
Competencies	
Academic Programs	
Data Sciences, Ph.D.	
Information Systems Engineering and Management, Ph.D.	
Course Descriptions	
University Administration	
Board of Trustees	
Administration	
University Policies and Disclosures	
Family Educational Rights Privacy Act (FERPA)	
Campus Crime and Security Disclosure	
The Timothy J. Piazza Antihazing Disclosure	
Electronic Mail Communication Policy	
Third-Party, Web-Based [Cloud] Computer Records Policy	

17
8
8
8
8
9
50
51
52
54
54
54

## **Contact Information**

#### Harrisburg University of Science & Technology

326 Market Street Harrisburg, PA 17101 www.HarrisburgU.edu 717.901.5100 717.901.5150 (fax)

Undergraduate Admissions 717.901.5101 UndergraduateAdmissions@HarrisburgU.edu

Graduate Admissions 717.901.5101 Admissions@HarrisburgU.edu

Advancement Office 717.901.5103 Connect@HarrisburgU.edu

Financial Aid 717.901.5115 FinancialAid@HarrisburgU.edu

**Information Technology** 717.901.5106 OISHelp Student Portal

**Online Bachelor's Degree Program** 717.901.5109 http://AdultDegrees.HarrisburgU.edu

Finance & Administration 717.901.5105 BusinessOffice Student Portal

Veterans School Certifying Official 717.901.5136 RegHelp Student Portal Additional Location: 1500 Spring Garden Street, Suite 101 Philadelphia, PA 19130 717.901.5100, ext. 0127

**Office of the President** 717.901.5104 President@HarrisburgU.edu

Library 717.901.5188 Library@HarrisburgU.edu

Professional Development 717.901.5190 ProfessionalEd@HarrisburgU.edu

International Student Office 717.901.5154 ISOHelp Student Portal

**Records and Registration** 717.901.5136 RegHelp Student Portal

Student Services 717.901.5173 StudentServices@HarrisburgU.edu

Graduate Student Services GradStudentServices@HarrisburgU.edu

Harrisburg University Security 717.901.5180 HUSecurity@HarrisburgU.edu

## About the Catalog

This University Catalog is updated annually and made available in electronic form on the Harrisburg University website (https://harrisburgu.edu/records-registration/). The University website at https://harrisburgu.edu also contains updated lists of courses, course descriptions, textbook adoptions, and other important information. Should you require a paper copy of the catalog, please contact Records and Registration at the RegHelp Student Portal or 717-901-5136.

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.

## 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. Originally founded to address the Capital Region's need for increased educational opportunities in science, technology, engineering, and mathematics (STEM) careers, Harrisburg University represented 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 initially designed to meet the needs of the region's youth, workforce, and businesses. The University continues to serve as a catalyst for creating, attracting, and expanding economic development and opportunities in Central Pennsylvania, and now, well beyond 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.

## Vision

Originally founded to address the need of Pennsylvania's Capital Region for increased educational opportunities in applied science and technology-related fields, the vision of Harrisburg University of Science and Technology is to provide academic programs at undergraduate and graduate levels for a diversity of learners, using student-centered, technologically-advanced, and experiential learning designs that emphasize student success, with a sharp focus on specific interdisciplinary competencies and strong linkages to career development. The desired outcome is the emergence of well-qualified, technically expert graduates whose understanding of applied science and technology-related fields is honed by direct industry experience and rounded by a sound, cross-disciplinary liberal education.

#### **Accreditation and Approvals**

Harrisburg University of Science and Technology was re-accredited 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 in January 2017, and the Ph.D. in Information Systems Engineering and Management in July 2018.

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.

The Master of Science in Project Management program is accredited by the Global Accreditation Center from the Project Management Institute, 14 Campus Boulevard, Newtown Square, PA (855-746-4849). The M.S. program in Project Management is one of only 110 programs around the world to achieve this accreditation. The Global Accreditation Center (GAC) for Project Management Education Programs is an independent academic accreditation body with policies, procedures, and standards for project, program, portfolio management and related programs.

#### **Student Responsibility Statement**

A student has the responsibility to engage fully in assigned work, to be interactive in academic discussion, and to develop professional competencies both in the classroom and at internship sites. 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 be engaged in the University's community of learners and to develop a strong professional and ethical foundation as a community member. Failure to uphold HU's rules and policies, as well as federal, state, or local laws and/or regulations, may result in disciplinary action by HU pursuant to its Code of Student Conduct (Code).

### **Statement of Community Standards**

Underlying the University's mission are the following basic standards:

- 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;
- the freedom of intellectual inquiry in the pursuit of truth, even if it defies commonly understood theories;
- the acceptance and appreciation of human diversity regarding race, gender, religion, sexual orientation, age, ability, ethnicity, and political views;
- the freedom from violence or harassment that would interfere with or disrupt university activities; and
- the 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.

## 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 graduate degree with related graduate coursework, or those who have a graduate 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 dissertation defense. Upon a student's defense of the dissertation and completion of all other graduate requirements, the student will be 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 of 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.
- Individual programs may have additional admissions requirements beyond those listed here. Please see additional requirements listed with individual academic programs.

#### **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 Test of English as a Foreign Language (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 International English Language Testing System (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 nonresident 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.

#### Readmission

The Readmission Application Form is available through Records and Registration by emailing registrar@harrisburgu.edu. The form must be completed and submitted to that office. Despite the student's academic standing at the time of departure from the university, a student reapplying for admission to the doctorate program is not guaranteed readmission due to the selectivity of the program. The application will be reviewed by a committee appointed by the Provost, who will make the readmission decision. 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.

## 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, 2020 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 doctorate student is charged the semester hour rate multiplied by the number of semester hours enrolled. A program fee is also charged.

Graduate Tuition Schedule per Semester

Description	Charge
Tuition - all programs	\$800 per credit hour*
Program Fee	\$500 per semester

\* Tuition charge after 12 earned credits of the Doctoral Studies courses is \$400 per credit hour.

#### **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 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 https://harrisburgu.edu/it-resource-center/. 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%

See the Academic Calendar for withdrawal deadlines.

#### **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.

#### Federal Student Financial Aid Program Refund Calculation

Refunds are calculated upon official withdrawal from all classes and, if the student was deemed eligible for Title IV, Higher Education Act (HEA) student financial assistance program funds, any refund due will be paid within 45 days from the date the student is determined to have withdrawn.

A student who officially withdraws up to the 60 percent point in time of the semester will incur an adjustment to the amount of financial aid program funds awarded and/or disbursed for the term based on the percentage of time attended from the first day of class to the University's determination date of withdrawal. If a student officially withdraws after the 60 percent point in time of the 14-week semester, 100 percent of the student's financial assistance program awards are considered earned and will be applied to the total amount of institutional charges due for the term. The refund order of Title IV, HEA program funds (as applicable to the student) is: Unsubsidized Direct Loans; Subsidized Direct Loans; Direct PLUS Loans; Federal Pell Grants; and, Federal Supplemental Educational Opportunity Grant (FSEOG).

For a student who unofficially withdraws during a semester, the withdrawal date shall be the end of the semester. The student is then responsible for all tuition charges due resulting from this reduction in awards and/or payments previously credited to the student's account.

#### Official Withdrawal from the University

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 Records and Registration by telephone (717.901.5136), RegHelp Student Portal, or in person. It is recommended that a Withdrawal Form be completed, or the student will be unofficially withdrawn.

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 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 and 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 and state 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 or other costs and updates to the financial profile of the student.

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 Half-time Status: 3 semester hours

Required enrollment status for federal direct loans is half-time. A non-degree student is not eligible for financial aid.

### **Aid Sources**

<u>Federal Direct Loan -</u> 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 per academic year 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.

<u>Federal PLUS Loan for Graduate Students -</u> 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.

<u>Other Programs</u> - The following federal, state or private financial aid sources are available to a student based upon the individual's affiliations or experiences.

Veterans Administration Education Benefits Pennsylvania Office of Vocational Rehabilitation Job Training Agencies Employer Sponsorship

#### Satisfactory Academic Progress for Financial Aid Recipients

Satisfactory academic progress (SAP) for federal Title IV, Higher Education Act (HEA) student financial aid program assistance is defined as the minimum progress required toward the completion of a degree and must be maintained in order to receive federal financial aid.

Federal regulations require the University to establish standards of academic progress in both of the following areas:

- the student's cumulative grade point average, the qualitative measure; and,
- the maximum time limit for completing the program of study, the quantitative measure.

Satisfactory academic progress is evaluated at the end of each semester. Financial aid recipients must maintain the standards in both areas, regardless of whether aid was received in the past. A student who does not meet one or both of the standards is not making satisfactory progress until the standards are met.

A student who is academically eligible to continue enrollment at the University, but does not meet the standards of academic progress, may remain enrolled without financial aid until eligibility to receive financial aid is reestablished. A student should contact the Office of Financial Aid to discuss strategies for meeting the standards and to inquire about options for financial assistance that are not subject to the satisfactory academic progress requirements.

Transfer credit hours from another institution that are accepted toward a program of study are counted as both attempted semester hours and earned semester hours in the program pursuit calculation to determine satisfactory academic progress for Title IV, HEA student assistance program purposes. Grades for transfer credit hours are not included in the calculation of the cumulative grade point average.

Semester hours for a grade of Incomplete (I) are counted in the total attempted semester hours in the program pursuit calculation of satisfactory academic progress for Title IV, HEA student assistance program purposes.

Semester hours for a Withdrawal grade (W) are considered attempted semester hours in the calculations of satisfactory academic progress for Title IV, HEA student assistance program purposes.

When a course is repeated, the attempted credit hours are used to determine the student's enrollment status for the semester (i.e., full-time, half-time, less-than-half-time), but the repeated hours are not counted a second time as attempted credit hours in the cumulative grade point average calculation. Earned semester hours and quality points for a grade used in the cumulative grade point average calculation for a course repeat are taken from the most recent grade.

# Academic Standing and Financial Aid Eligibility (qualitative)

A student with a cumulative grade point average of 3.00 or higher is in satisfactory academic standing. If a student has a cumulative grade point average below 3.00 at the end of a semester, the student has failed to meet the minimum satisfactory academic progress standard and is subject to the warning, probation or dismissal sanction, as applicable, as stated below.

After the initial semester, if at any time the cumulative grade point average falls below 1.00 the University reserves the right to dismiss the student.

# **Program Pursuit - Maximum Timeframe for Completing the Program of Study (quantitative)**

A full-time student must successfully complete a program of study within one- and one-half times the normal time frame in semester hours attempted to continue to receive Title IV, HEA student financial aid program assistance. More simply stated, program pursuit requirements for a normal 2-year, 6 semester programs consisting of 36 semester hours must be completed successfully within 3 years (i.e., 9 semesters, 54 semester hours) to maintain eligibility for federal financial aid program assistance throughout the program of study.

The quantitative measure of satisfactory academic progress is measured using the following calculation:

Total Earned Semester Hours ÷ Total Attempted Semester Hours = a percentage (%)

Students must complete their degree within 150% of the number of credits necessary to complete the educational program. As a result, students are required to be earning a minimum of 67% of their total cumulative attempted credits at the end of each payment period to remain in good satisfactory academic progress standing.

# **Failure to Meet One of the Required Satisfactory Academic Progress Standards**

A student who fails to meet either the qualitative or quantitative measure of satisfactory academic progress at the end of a semester is subject to the following policy:

#### **First Occurrence - Warning**

Following the first semester in which the student does not meet the satisfactory academic progress standard, the student will automatically be placed in a financial aid warning status for the next semester. A letter will be issued advising the student of their financial aid warning status. No appeal is needed, but in coordination with the Office of Student Services, an academic plan may be required. The student remains eligible for financial aid program assistance during the warning semester.

#### **Second Consecutive Occurrence - Probation**

If, by the end of the warning semester, the student is not able to achieve satisfactory academic progress status, the student will not be able to receive financial aid for the next period of enrollment unless the student successfully appeals. A letter will be issued advising the student of their financial aid status, the effect of this status on the student's financial aid eligibility, and the steps the student must take to submit an appeal. If the appeal is approved, the student will be placed in a financial aid probation status for the next semester and will be eligible for financial aid during that semester. An academic plan will also be required during this semester.

#### Appeals

A student who becomes ineligible to participate in the financial aid programs as a result of failure to meet satisfactory academic progress after the warning semester, may file an appeal by submitting a letter outlining the nature of the appeal to the Financial Aid Office. An appeal will be considered only if the student's failure to meet the standards of academic progress is determined to be due to events beyond the student's control. Examples of circumstances for which an appeal may be considered include military obligation; death of a relative; injury or illness of the student; unusual personal hardship or other extenuating circumstance. Written documentation of the circumstances of why the student failed to make satisfactory progress and what has changed that will allow the student to make satisfactory progress by the next evaluation must be submitted with the appeal and should reference the student's name and student ID number. In addition, evidence must be received documenting that the required academic plan was completed, the cumulative grade point average has improved, and the required satisfactory progress grade point average can potentially be achieved to complete a program of study within the maximum timeframe limitation. Appeals submitted without documentation will not be considered. A timely determination will then be made and documented in the student's file.

If the financial aid appeal is denied, a second notice will be sent to the student advising them of the denial. If the appeal is approved, a semester of financial aid probation will be awarded. The student will be notified in writing their appeal was approved. The student must achieve satisfactory academic progress by the end of the financial aid probation semester.

If after the financial aid probation semester a student is still not making satisfactory academic progress, but is meeting the requirements of the academic plan, the student is eligible to continue to receive financial aid as long as the student continues to meet those requirements and is reviewed according to the requirements specified in the academic plan. A student becomes ineligible to receive federal funds when the student does not meet the requirements of the academic plan.

#### Academic Standing and Satisfactory Academic Progress Review and Notification

The University evaluates academic standing and satisfactory academic progress at the end of each semester. All students who receive federal financial aid must meet the standards for satisfactory academic progress in order to establish and retain student financial aid program eligibility. The University may establish academic policies that may be different than the policies governing academic warning, probation, and dismissal. Written notification of financial aid ineligibility is mailed to a student at the most recently reported permanent address.

#### **Re-establishing Eligibility for Federal Student Assistance Programs**

Following a dismissal action, a student may re-establish eligibility by earning course credit successfully at another institution that will directly transfer into the University's program of study and the required cumulative grade point average and maximum timeframe percentage for minimum satisfactory progress is achieved by the transfer credit and grades accepted.

## **Student Services**

#### Overview

The Office of Student Services provides educational, personal, and professional support to promote student development and success. The Office of Student Services, in collaboration with other staff and faculty, enhances the mission of the University by providing an inclusive campus community, promoting leadership opportunities and providing resources and programming to facility academic success.

#### **New Student Orientation**

Orientation sessions precede each semester in order for the student to become familiar with the University, technology services, campus policies and procedures. A new student entering the University will receive information from various functional areas during the enrollment process on the availability and delivery method of orientation content.

#### **Student Housing**

Harrisburg University does not own housing facilities. The Office of Student Services can assist the student to find housing with the University's local Harrisburg partners.

#### **Student Parking**

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

#### **Tutoring and Learning Services**

A student may request the assistance of a tutor for writing or ESL support. The Office of Student Services offers free one-on-one tutoring for all HU students. A student can choose to meet with a peer tutor in-person or on-line. In addition, HU also offers free access to tutoring services 24 hours a day, 7 days a week through Smarthinking. Access Smarthinking through any of your course pages on Canvas. Due to the rigors of an advanced degree, tutors are only able to provide writing support, not subject-specific assistance.

#### **Student Concerns and Complaints**

The Office of Student Services offers guidance to the student when uncertainty exists about the appropriate process to address a topic, concern, or problem. A request for assistance may be submitted to obtain clarification of a policy or procedure. The request is then reviewed and a recommended course of action is provided in a timely manner.

#### **Health Services**

Medical services are not provided on any campus location. Local medical facilities are listed on the Student Services SharePoint site at https://myharrisburgu.sharepoint.com/sites/StudentServices/SitePages/Resources.aspx

#### **Mental Health Services**

For students in the Harrisburg area that can commute to campus and reside in Pennsylvania, short-term mental health services are available. Students should contact counseling@harrisburgu.edu.

For students that do not reside in Pennsylvania or in a commutable distance to the physical campus, students may contact counseling@harrisburgu.edu for referral services in the student's location. More information can be found at the Student Services SharePoint site: https://myharrisburgu.sharepoint.com/sites/SSCounseling/Sitepages/counseling.aspx. website:

HU also provides 24/7 support for graduate students through a Student Assistance Program offered by BHS. BHS provides inthe-moment support for students in crisis or referrals for various services such as mental health care, medical care, legal advice, and food assistance. The BHS website also has a list of valuable resources. For more information, go to the Student Services SharePoint site: https://myharrisburgu.sharepoint.com/sites/SSCounseling/Sitepages/counseling.aspx.

#### **Accessibility 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. The applicant must provide recent documentation (within 3 years) of any disability that may affect learning to ensure that appropriate accommodations are considered. Please reach out to ADA@harrisburgu.edu for questions regarding proper documentation as well as support services provided.

#### **Textbook Services**

Textbooks are made available at the time of registration 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. A complete textbook listing is available on MBS Direct. 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. Book retailers carry a small selection of texts but also have the ability to process online textbooks orders.

#### **University Library**

The mission of the Harrisburg University Library is to support the mission of the University by enabling excellence in teaching and learning by providing robust access to information resources, integrating information literacy skills throughout the curriculum, and providing physical and virtual spaces for free intellectual curiosity, learning, collaboration, and knowledge sharing and creation. Library services include:

- collaboration between librarians and faculty to integrate information literacy skill development and use of information 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 articles from newspapers, magazines, and scholarly journals;
  - o streaming multimedia such as documentaries and video learning courses;
  - o electronic books; and
  - a self-service library located in the Learning Commons offering physical-format books, games, and periodicals;

- research guidance for students by phone, e-mail, chat, or in-person consultation;
- partnerships with other libraries to provide access to their information sources, free of charge to our students and faculty; and
- group study rooms which may be reserved in advance through a librarian.

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

For more information, visit the library's website at https://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 valid University credentials.

#### **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 the OISHelp Support Portal 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 develop strategies when non-academic factors affect a student's ability to succeed.

#### **Career Services**

The student obtains career counseling from the academic advisor, the Office of Experiential Programs, and the Office of Workforce Development. 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 twelvemonth period: Fall, Spring, and Summer. Each semester consists of fourteen weeks of classes.

#### **Credit Hour Policy Program Instructional Equivalencies**

A wide variety of course delivery is utilized. "Learning hours" are assigned to each course. Each "learning hour" represents one hour per week of student engagement, including both instructional and outside of class activities. The University reserves the right to change the delivery method of a course due to administrative needs, the health and safety of the University community, or government mandates.

Traditional 14-week semesters are offered, plus subterms and an accelerated format. Regardless of the format or delivery, all programs whether online, blended/hybrid, executive weekend, accelerated, subterms or traditional classrooms, must meet the 126-learning hours requirement for a 3-credit course (3 credits \* 3 hours/credit \* 14 weeks = 126 hours). Adherence to these regulations enhances the quality and rigor of the academic programs and is achieved by utilizing the "instructional equivalencies" detailed below.

Faculty establish the learning-based interactions (when, where, how and why) including frequency, duration, evaluation, and assessment techniques. These guidelines recognize the need for the faculty to actively manage the learning space, both inside and outside the classroom. This policy is extremely important in helping faculty in the design and teaching of courses and in the student learning. It is the responsibility of the faculty to deliver academic quality regardless of delivery format.

Provided below is an outline of acceptable "Instructional Equivalencies":

	Description	Rate of Equivalency
Blogs, Journals, Logs	Students' opportunity to apply learned concepts or for reflection on learning experiences; to be shared with instructor and/or classmates for thoughtful analysis, feedback and assessment.	1 private online posting= ½ learning hour 1 shared online posting (required to read all classmates' postings)= 1 learning hour
Case studies & problem- solving scenarios	In-depth analysis requiring utilization of higher order analytical skills which relate to course objectives and is shared with instructor and/or classmates for feedback and assessment.	1 case study analysis & posting= 1-3 learning hour
Required Online Chat rooms for group projects	Instructor-led opportunities for collaborative, synchronous learning with specific expectations for participation & feedback. (Chats are posted for review.)	1 hour online chat= 1 learning hour
Conference calls	Instructor-led opportunities for collaborative, synchronous learning with specific expectations for participation & feedback. (When possible, calls to be recorded for review.)	1/2 hour call = 1/2 learning hour

Discussion Board	Instructor-guided or mediated threaded discussion that directly relates to course objectives and which has specified time-frames, expectations for participation, and thoughtful analysis.	1 posting (requires reading all postings) = ½ learning hour 1 posting (requires reading all postings and reply to a minimum of 2) = 1 learning hour
Field trips, tours and experiential learning (to include virtual tours)	Students participate as individuals or in groups in analyzing an activity & preparing a paper or presentation, to be shared in whole or in part with instructor and/or classmates.	Instructor-Led-1-hour tour= 1 learning hour (Student(s) alone without instructor)- 1-hour tour plus reflection paper= 1 learning hour
Group projects	An instructor-mediated culminating activity with specific learning objectives; students collaborate via email, chat rooms, discussion boards, wikis, and/or face-to-face contact to research, analyze, synthesize, & prepare project with instructor receiving periodic updates & providing guidance to group.	
Guided Project/Thesis An instructor-mediated culminating individual project/thesis with specific learning objectives; student and facilitator collaborate via email, chat, discussion boards, and/or face-to face to research, analyze & prepare project/thesis with instructor receiving periodic updates and providing guidance and feedback.		1 hour = 1 learning hour
In-Class Instruction, Presentations, and Tests		
Instructional CDs, Powerpoints, Videos		
Lecture activity-written Opportunity for students to develop questions, comments, or observations, to be shared with classmates & instructor through discussion board postings or participation in chat rooms.		Reviews 1 lecture & posts response= 1 learning hour
Library Research instructor led opportunity for students to research scholarly articles or professional journals that relate to course objectives; to be shared with class in a designated manner.		Research for 1 five-page project = 1 learning hour Research for 1 3-5-page paper = 1-2 learning hours
Online Quizzes	Opportunity for instructor to assess students' subject knowledge and provide feedback on students' progress.	1-hour test = 1 learning hour
Reflection Paper or Article Review	Instructor-guided activity for students to apply learned concepts and relate practices to personal experiences or apply higher order analytic skills in assessing scholarly articles or professional journals.	1 private posting = ½ learning hour 1 shared posting (required to read all classmates' postings)- 1 learning hour

Service Learning Project; Jr and Sr projects, capstone	An instructor-led service project with specific learning objectives that integrates community service with academic study; faculty provides guidance, support, and feedback to students and students shares experience and reflection with fellow classmates via emails, chats, discussion boards, and/or face-to face.	1 hour = 1 learning hour
Web-conferencing	Instructor-led desktop to desktop or classroom video streaming instruction for collaborative, synchronous learning with specific expectations for participation and feedback. (i.e., Moodle, Adobe Connect, Skype, etc.)	1 hour = 1 learning hour
Web-Quest (Internet Research)	Instructor-guided opportunity for students to research information on the Internet that enhances student learning and addresses specific course outcomes; findings shared with the instructor and classmates.	1 in-depth posting = 1 learning hour

\*Researching, PowerPoint/video reviews, WebQuest activities, reading articles, etc. are considered "homework" assignments. The Rate of Equivalency denoted pertains to posting, reviewing, sharing, and providing student-to-student and/or instructor-tostudent feedback.

Adapted from Misericordia University, Dallas, PA and modified for Harrisburg University.

#### **Catalog in Effect**

A new student entering the University from the 2020-21 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**

The doctorate student is expected to maintain consecutive enrollment, which is defined for certification purposes as either fulltime or part-time. Full- time doctorate 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. The student may request one semester break. A student that does not return following a semester break will be unofficially withdrawn and will be required to reapply.

#### **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. Students who require an Americans with Disability Act accommodation to complete registration should contact the Office of Student Services at ADA@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.

#### **Class Attendance**

Attendance is a critical part of a student's education. The student is expected to attend all classes when scheduled 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.

#### **Advanced Standing**

Harrisburg University does not accept transfer credit into the doctoral program.

#### **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 <u>not</u> 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 Philosophy 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 the 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.

After completing 18 semester hours of doctoral-level courses, 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.

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 PhD degree. Verification the student has met the following requirements is made by Records and Registration.

- 1. At least 36 semester hours must be successfully completed.
- 2. A minimum cumulative grade point average of 3.00 is required for graduation.

3. In order for any completed course to satisfy the 36 semester hours required, the course must be completed with a grade of "B" (3.00) or higher.

4. Candidates have six years to complete and successfully defend the dissertation research or project development.

5. Candidates will schedule their dissertation defenses after receiving approval from the dissertation committee chair (or co-chairs).

6. 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	
В	Average achievement	3.00	
F	Fail	0.00	
CD	Doctoral Studies Complete	Not applicable	
CR	Credit	Not applicable	
CX	Doctoral Studies Incomplete	Not applicable	
I	Incomplete	Not applicable	
IP	In progress	Not applicable	
NP	No Pass	Not applicable	
NR	Not reported	Not applicable	
Р	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", "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.

Doctoral Studies Complete (CD) - A grade of "CD" is used to indicate doctoral studies are complete.

**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.

Doctoral Studies Incomplete (CX) - A grade of "CX" is used to indicate the doctoral studies are incomplete.

**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 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. Courses with WA grades can be repeated.

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. These credits are not calculated into the GPA.

**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	<b>Quality Points</b>
Course A	3	А	4.00	12.00
Course B	3	В	3.00	9.00
Total	6			21.00

#### Total Quality Points = 21.00/6 = 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 12.00 quality points for that course (3 semester hours x 4).*
- 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", "WA", or "WF" has been received. They can only attempt to repeat it one time. 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. The expectation is a student will be successful. If an unsuccessful grade is earned, a student receiving a failing grade will have their academic record and progress reviewed by the Academic Standing Committee and program lead.

#### **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. <u>Discrimination</u>: 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. <u>Capricious evaluation</u>: 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.
- If a student would like to appeal a grade during the semester, the student should approach the faculty member to resolve informally. All documentation should be saved. If at the time the final grade is insufficient, the student can file a formal appeal at that time.

#### Withholding of Records

Student records may be withheld by Records and Registration when directed by the appropriate University officials. The ability to register for courses or the release of academic transcripts or diploma may be held for a period of time. More specifically, an official academic transcript or diploma will not be released, and a student cannot register for courses if tuition or other charges remain unpaid to the University. Additionally, a student cannot register for courses while the hold is on their record. 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 complete the Withdrawal Form via MyHU. Should a student have any questions, please contact Records and Registration by telephone (717.901.5136), Reghelp Student Portal, or in person.

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.

#### **Military Personnel Called to Active Duty Policy**

If a student is called to active duty by the National Guard or the reserve forces of the United States during an active semester, they should provide documentation of their call to active duty to the Certifying Official. The below procedure will then apply:

1. Course Registration/Grades: The student will be given an option to have courses dropped or an "I" (Incomplete) grade assigned to each of their courses. The assigning of an "Incomplete" is by mutual consent of the faculty member and the student and an appropriate completion date is to be assigned. If the active duty call occurs late in the term, the faculty member also has the option of assigning a final grade rather than the "I" grade.

2. Tuition: Tuition charges will be canceled or refunded-in full- for all courses dropped. Courses in which the grade of "I" or a final grade is assigned will have applicable tuition assessed. The student must coordinate with the Certifying Official to address any overpayment or other financial considerations with Veterans Administration funding

3. Housing: If the student resides in campus housing, they should initiate a discussion with Residence Life Staff.

4. Student Record: The Student record will be kept active for one year from the later of the following dates, after which the student would be eligible for re-admission: - Effective date of dropped course(s) - End of the final completed semester - Latest deadline of assigned "I" grade

#### **Medical Withdrawal**

A student requesting to withdraw for medical reasons must complete a medical leave request through the Office of Student Services by contacting StudentServices@HarrisburgU.edu or 717.901.5102. Student services will obtain official documentation from a doctor supporting the student's request. To return from a medical leave, the student must provide student services with documentation from a doctor supporting the student's return. The student will have up to a year to return without having to apply for readmission.

#### **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.

A violation of the Standards of Academic Integrity could result in academic consequences. Please see the Student Handbook for details about academic conduct and the procedures in cases of a violation of Harrisburg University's Standards of Academic Integrity.

#### **Disciplinary/Academic 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. Please see the Student Handbook for details on the policies regarding the Student Code of Conduct/Honor Code, Academic Dishonesty- Plagiarism Policy and Disciplinary Process for Student Incidents of Misconduct.

## **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 risktaking. 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**

#### **Faculty and Administration**

Members or Administration, staff, and full time and part time faculty, their titles, and areas of instruction are available on the University's website at: https://harrisburgu.edu/faculty-and-staff-listing/.

#### Data Sciences, Ph.D.

Doctorate education focuses on enabling the student 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 successful completion of all required course work, defense of the dissertation, and completion of all milestones, the student is awarded the doctoral degree in the program of study.

#### **Mission Statement**

The mission of the Harrisburg University Data Science 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 Data Sciences Program will produce Ph.D. graduates who:

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

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

The following courses comprise the 36 semester hours required for the Ph.D. in Data Sciences. Each course listed represents a three-semester hour value. Details about each of the Milestones can be found in the PhD Guidebook on the Records and Registration SharePoint Site (https://myharrisburgu.sharepoint.com/sites/Academics).

#### Complete 18 semester hours from the following upper-level courses:

- ANLY 705 Modeling for Data Science (3 semester hours)
- ANLY 710 Applied Experimental and Quasi-Experimental Design (3 semester hours)
- ANLY 715 Applied Multivariate Data Analysis (3 semester hours)
- ANLY 720 Data Science from an Ethical Perspective (3 semester hours)
- ANLY 725 Research Seminar in Unstructured Data Analysis (3 semester hours)
- ANLY 730 Research Seminar in Forecasting (3 semester hours)

- ANLY 735 Research Seminar in Machine Learning (3 semester hours)
- ANLY 740 Graph Theory (3 semester hours)
- ANLY 745 Functional Programming Methods for Data Science (3 semester hours)
- ANLY 755 Advanced Topics in Big Data (3 semester hours)

## Complete 6 semester hours of Doctoral Research Seminars and defend dissertation proposal

- ANLY 760 Doctoral Research Seminar (6 semester hours)
- ANLY 761 Research Seminar in Unstructured Data Analysis (3 semester hours)
- ANLY 762 Research Seminar in Forecasting (3 semester hours)
- ANLY 763 Research Seminar in Machine Learning (3 semester hours)

Comprehensive examination to qualify for doctoral thesis research work

Complete the dissertation process (12 semester hours of ANLY 799: Doctoral Studies) and defend the dissertation

• ANLY 799 - Doctoral Studies (6 semester hours)

## **Information Systems Engineering and Management, Ph.D.**

Doctorate education focuses on enabling the student to make original contributions to their respective fields of study. There are two phases of the doctoral program at HU, 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 his/her final dissertation defense. Upon a student's defense of his/her dissertation as well as completion of all other milestones and graduate requirements, the student will be awarded the doctoral degree in his/her program of study.

#### Additional Requirements for Admission to the Ph.D. in Information Systems Engineering and Management

The following are requirements in addition to those that are part of the general doctoral admissions requirements:

- Minimum GPA: 3.30
- GRE score in the 65th percentile or above in the Quantitative portion

#### **Mission Statement**

The mission of the Harrisburg University Information Systems Engineering and Management Ph.D. Program is to create information systems thinkers and leaders with the ability to add to the body of knowledge and practice in today's and tomorrow's academic, public and private organizations.

#### **Program Goals**

The Information Systems Engineering and Management program will produce Ph.D. graduates who:

- Create original knowledge and understanding by contributing new theories, concepts, or new applications of existing theories to a discipline or area of professional practice;
- Advance research efforts and disseminate results to peers and the community including conferences, journal outlets, and/or internal organizational formats; and,
- Integrate theories and concepts through critical reflection, synthesis, and interpretation for solutions of private, public, national, or global problems.

#### Specific Course Requirements for the Ph.D. in ISEM

The following courses comprise the 36-48 semester hours required for the Ph.D. in Information Systems Engineering and Management. The semester hour value of each course appears in parentheses (). Details about Milestones can be found in the PhD Guidebook on the Records and Registration SharePoint Site.

## Complete 9 to 21 semester hours from the following graduate and doctoral Breadth courses:

(the number of semester hours required is based on the student's individual Plan of Study specified by the Admissions Committee):

- ISEM 503 Artificial Intelligence Principles and Applications (3 semester hours)
- ISEM 530 Analysis and Design of Modern Information Systems (3 semester hours)
- ISEM 540 Enterprise Architecture and Integration (3 semester hours)
- ISEM 580 Special Topics in Information Systems Engineering and Management (3 semester hours) (Special Topic: Introduction to Research Methods)
- ISEM 700 Smart Enterprises and Strategic Intelligence (3 semester hours)
- ISEM 706 Research Methods in Information Systems Engineering and Management (3 semester hours)
- ISEM 730 Advanced Systems Engineering (3 semester hours)

#### Complete 9 semester hours from the following doctoral Depth courses:

- ISEM 705 Advanced Design Project (3 semester hours)
- ISEM 710 Knowledge Engineering (3 semester hours)
- ISEM 712 Cyber-Physical Systems (3 semester hours)
- ISEM 715 Systems Science (3 semester hours)
- ISEM 720 Advanced Applications of Satellite Systems (3 semester hours)
- ISEM 725 Advanced Business Process Modelling and Intelligence (3 semester hours)
- ISEM 735 Advanced Applications of Machine Learning and Deep Learning (3 semester hours)
- ISEM 740 Enterprise Engineering (3 semester hours)
- ISEM 745 Research in Industry Analysis and Technology Patterns (3 semester hours)
- ISEM 750 Simulation Modeling and Analysis (3 semester hours)
- ISEM 755 Smart Cities, Societies, and Governments (3 semester hours)
- ISEM 760 Advanced Topics in Operations Management (3 semester hours)
- ISEM 770 Advanced Topics in ISEM (3 semester hours)
- MGMT 721 Management Sciences I (3 semester hours)
- MGMT 722 Management Sciences II (3 semester hours)
- MGMT 731 Innovation and Entrepreneurship (3 semester hours)

#### Complete the Doctoral Research Seminar:

6 semester hours of ISEM 780 and defend dissertation proposal

#### Complete the dissertation process:

12 semester hours of ISEM 799 and defend the dissertation

# **Course Descriptions**

## **ANLY 705 - Modeling for Data Science**

(3 semester hours)

Prerequisites: Admission to the Data Sciences 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 semester hours)

Prerequisites: Admission to the Data Sciences Doctoral Program

**Description:** Methods and approaches used for the construction and analysis of experiments and quasiexperiments 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 semester hours)

Prerequisites: Admission to the Data Sciences 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 semester hours)

Prerequisites: None

**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 - Research Seminar in Unstructured Data Analysis

(3 semester hours)

Prerequisites: Admission to the Data Sciences Doctoral Program

**Description:** This course follows a research seminar format. The student 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 the student under faculty direction. Topics of special interest vary from semester to semester. Repeatable for additional content reasons. Cross-listed with ANLY 761.

## ANLY 730 - Research Seminar in Forecasting

(3 semester hours)

Prerequisites: Admission to the Data Sciences Doctoral Program

**Description:** This course follows a research seminar format. The student 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 the

student under faculty direction. Topics of special interest vary from semester to semester. Repeatable for additional content reasons. Cross-listed with ANLY 762.

### ANLY 735 - Research Seminar in Machine Learning

(3 semester hours)

Prerequisites: Admission to the Data Sciences Doctoral Program

**Description:** This course follows a research seminar format. The student 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 the student under faculty direction. Topics of special interest vary from semester to semester. Repeatable for additional content reasons. Cross-listed with ANLY 763.

### ANLY 740 - Graph Theory

(3 semester hours)

Prerequisites: Admission to the Data Sciences 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 semester hours)

Prerequisites: Admission to the Data Sciences 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 semester hours)

Prerequisites: Admission to the Data Sciences 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 semester hours)

Prerequisites: Completion of doctoral coursework requirements; pass qualification examination

**Description:** This seminar provides support to the doctoral student 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 the student can come together to discuss, support, and share the experiences of working in research.

### ANLY 761 - Research Seminar in Unstructured Data Analysis

#### (3 semester hours)

Prerequisites: Completion of doctoral coursework requirements; pass qualification examination

**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. Cross-listed with ANLY 725.

### **ANLY 762 - Research Seminar in Forecasting**

(3 semester hours)

Prerequisites: Completion of doctoral coursework requirements; pass qualification examination

**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 are presented by faculty and students under faculty direction. Topics of special interest vary from semester to semester. Cross-listed with ANLY 730.

## ANLY 763 - Research Seminar in Machine Learning

#### (3 semester hours)

Prerequisites: Completion of doctoral coursework requirements; pass qualification examination

**Description:** This course follows a research seminar format. Students and faculty develop research proposals, analyses, and reporting in the domain of Machine Learning. 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. Cross-listed with ANLY 735.

### **ANLY 799 - Doctoral Studies**

#### (6 semester hours)

**Prerequisites:** 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 the doctoral student. Content to be determined by the student and the student's Doctoral Committee. May be repeated for credit.

### **ISEM 700 - Smart Enterprises and Strategic Intelligence**

(3 semester hours)

#### Prerequisites: Admission to ISEM Doctoral Program

**Description:** Smart Enterprises are the next generation of digital enterprises that heavily rely on artificial intelligence (AI) to deal with customers, suppliers/partners, government agencies and employees. This course highlights advances in research, technologies, systems, and applications as related to intelligent digital enterprises such as smart cities, smart towns, smart healthcare, smart islands, industry4.0, and automated planning environments. The emphasis is on "strategic intelligence" (SI) that refers to the intersection of Business Intelligence, Knowledge Management, and Competitive Intelligence for improving the strategic decision making in Smart Enterprises. Instead of intelligence on one sector, SI concentrates on intelligence that cuts across multiple sectors. The course uses case-based and project-based approaches for discussion and assignments, but the focus is on research directions in this broad area of work. The student is expected to produce a research paper as the final output of this course.

### **ISEM 705 - Advanced Design Project**

#### (3 semester hours)

**Prerequisites:** Completion of 12 credits in the Advanced Studies Program or Admission to ISEM Doctoral Program **Description:** This course goes beyond the master's level capstone courses and concentrates on the design of complex intelligent systems in modern settings. Instead of behavioral research approaches, the emphasis is on design science approach, where artifacts are designed based on iterative prototyping, modeling, and simulation techniques. In addition to a written document that catalogs the investigation, a demonstration of the proposed design is required through gamifications and/or actual operational prototypes. A student who has developed a system design in ISEM capstone may implement or further enhance and enrich his/her design in this course.

### **ISEM 706 - Research Methods in Information Systems Engineering and Management**

#### (3 semester hours)

Prerequisites: ISEM 580-Special Topics: Introduction to Research Methods and Admission to ISEM Doctoral Program, or permission of instructor

**Description:** This course will build on the introduction to research methods provided in GRAD 509 to examine and practice advanced methods of research and study design. Topics covered will include research theorizing and model development, instrument development and validation, structural equation modeling, multivariate techniques, grounded theory, action research, multi-methods, and significant study of design science research.

### **ISEM 710 - Knowledge Engineering**

#### (3 semester hours)

Prerequisites: Completion of all 500-level Breadth courses and ISEM 706, or permission of instructor

**Description:** This course concentrates on research and methods relevant to the analysis, critique, and creation of structures and formalisms for the acquisition, representation, distribution, and application of knowledge in intelligent and increasingly digitally and computationally driven organizations. Topics will include, but not limited to, ontologies and ontology engineering, genetic algorithms, fuzzy logic and reasoning, knowledge-based systems, explainable AI, taxonomies, Web X.0 formalisms, hybrid AI-KBS approaches (e.g., neuro-symbolic AI), knowledge graph construction and general knowledge-driven computing for the solution of complex problems.

### **ISEM 712 - Cyber-Physical Systems**

#### (3 semester hours)

Prerequisites: Completion of all 500-level Breadth courses and ISEM 706, or permission of instructor

**Description:** This course focuses on theories and issues surrounding the design and implementation of complex cyber-physical systems. Topics covered will encourage a command of models and theories, i.e. mathematical, organizational and/or cognitive, that underlie the design, construction, verification, control, and interaction of computational and physical components of systems in multiple areas of application, such as agriculture, healthcare, supply chain, and manufacturing.

### **ISEM 715 - Systems Science**

#### (3 semester hours)

Prerequisites: Completion of all 500-level Breadth courses and ISEM 706, or permission of instructor

**Description:** This is a research-focused course that demands extensive student research (readings), academic writing and presentation. This course introduces the student to the discipline of "Systems Science", which is characterized by multiple definitions but represents a field of scientific inquiry focused on the study of "systems". The concept of "System" is introduced and discussed in a mathematical form. The relationship between mathematics, computer technology and systems science is also explored. Conceptual frameworks within which to characterize Systems Science are discussed. A Systems Methodology is presented as a guide within which to address system problems, including the development of systems models. The topics of complexity reduction are also discussed. The history and the current future states of Systems Science research are also explored.

### **ISEM 720 - Advanced Applications of Satellite Systems**

#### (3 semester hours)

Prerequisites: Completion of at least 18 graduate semester hours and good knowledge of Web Technologies (equivalent to ISEM 501) or a degree in IT/software engineering/computer science or Admission to ISEM Doctoral Program
Description: This course covers major aspects concerning the field of advanced applications of satellite systems and remote sensing data. These satellites can be classified by their function since they are launched into space to do a specific job and hence the satellite must be designed specifically to fulfill its role. The focus of the course is on large and complex applications of satellites and remote sensing data in Health, Public Safety (e.g., disaster recovery), Public Welfare (e.g., economic development), Energy, Environment, Tourism, Agricultures, Smart Cities, and other satellite application areas such as weather forecasting and

satellite radios/TV. After an introduction to satellite technologies, this course concentration on innovative satellite applications to solve real life problems.

### **ISEM 725 - Advanced Business Process Modelling and Intelligence**

(3 semester hours)

Prerequisites: Admission to ISEM Doctoral Program

**Description:** In-depth coverage of current practical, conceptual, and theoretical techniques of process modeling, simulation, and intelligence. Primary emphasis is given to understanding and applying various modeling techniques and languages (such as BPEL), types of simulations (such as discrete event simulation), and to using various techniques and tools (such as PROM) to develop data-driven models/prescriptions of process models. All the foregoing will be considered within the context of the development of solutions to both practical and cutting-edge problems. The student conducts a focused literature review on some advanced aspect of the studied material and issues.

### **ISEM 730 - Advanced Systems Engineering**

#### (3 semester hours)

#### Prerequisites: Admission to ISEM Doctoral Program

**Description:** This course introduces the student to the discipline of "Large Scale Systems Engineering". Also referred to as "Requirements Driven Development" as well as "Systems Engineering", it represents a disciplined technical and management process by which abstract complex problem descriptions are successfully transformed into fully developed, tested and deployed systems. Discussed are the "art" and "science" of the Large-Scale Systems Engineering discipline. Evolution of Systems Engineering and Advances in Systems Science are discussed. Specialized concepts involved in developing human-engineered complex systems are reinforced primarily through student research and writings. This is a research-focused course that demands extensive student research and academic writing as well as advanced mathematical techniques such as optimization and stochastic processes.

### **ISEM 735 - Advanced Applications of Machine Learning and Deep Learning**

#### (3 semester hours)

Prerequisites: Completion of at least 18 graduate semester hours and knowledge of Machine Learning/Deep Learning approaches/applications (equivalent to ISEM 503 or ANLY 530 ) or Admission to ISEM Doctoral Program Description: This course concentrates on how the latest thinking/ideas/applications in Machine Learning/Deep Learning (ML/DL) can be used in large scale and complex enterprise problems. Instead of exploring new ML/DL algorithms and techniques, this course explicitly focuses on advanced applications of ML/DL techniques to solve digital enterprise problems that span Health, Education, Public Safety, Public Welfare, Utilities, Smart Cities and Communities, B2B Networks, and other Industrial Eco-systems. The students will select an applied research problem that could be possibly published as a conference paper and/or demonstrated as a solution prototype.

### **ISEM 740 - Enterprise Engineering**

#### (3 semester hours)

**Prerequisites:** Completion of all 500-level Breadth courses and ISEM 706, or permission of instructor **Description:** This course recognizes that the systems that we call enterprises must be (re)designed and (re)engineered. This course will provide an opportunity to gain fluency in theories and techniques of enterprise engineering through a study of enterprise ontology, modelling, and organizational design.

### ISEM 745 - Research in Industry Analysis and Technology Patterns

(3 semester hours)

Prerequisites: Completion of all 500-level Breadth courses and ISEM 706, or permission of instructor

**Description:** This course will provide the tools and knowledge necessary for students to conduct analyses of single- and crossindustry ecosystems. After a brief review of existing tools, such as Porter's Five-Forces model, PEST analysis, and SWOT analysis, the course will turn to the use of various databases, research, and other sources of data, information and tools that allow description and prediction of industry trends and technologies that course shape industrial, socio-technical, and societal forces and outcomes.

### **ISEM 750 - Simulation Modeling and Analysis**

#### (3 semester hours)

**Prerequisites:** Completion of all 500-level Breadth courses and ISEM 706, or permission of instructor **Description:** Simulations and simulation tools provide a valuable means for modeling and analyzing complex systems, especially when analyzing real-world systems and objects which are not amenable to manipulation or data collection. This course will provide in-depth exposure to simulation modeling, simulation software, simulation analysis, relevant probability distributions, agent-based modeling and simulation, system dynamics, discrete-event simulation, and multi-method modeling.

### **ISEM 755 - Smart Cities, Societies, and Governments**

(3 semester hours)

**Prerequisites:** Completion of all 500-level Breadth courses and ISEM 706, or permission of instructor **Description:** This course will concentrate on smart cities, societies and governments as human cyber-physical systems. Students will use theory, concepts and techniques to investigate large-scale human collectives as "sociotechnical ecosystems of people, technology, organizations, and information." (Cassandras, C. (2016). Engineering, vol. 2 (2)). Topics will include, but not be limited to, big city data, sensing and sensors, IoTs, smart grids and energy, smart services, information and data ethics, smart transportation, and dynamic resource allocation.

### **ISEM 760 - Advanced Topics in Operations Management**

(3 semester hours)

#### Prerequisites: Admission to ISEM Doctoral Program

**Description:** This course discusses how Operations are designed in modern digital organizations and how managers can use Information Technology (IT) to support these operations. Business operations in modern organizations are defined based on business strategies. The main focus of this course is to learn a) how business strategies are designed and implemented, b) how business operations are defined and managed, and c) how IT is used to enable the business operations. Recent research and industry trends in the field of operations management are discussed in some detail. The course systematically guides the student to conduct a focused literature review on some advanced aspect of the studied material and produce a research paper. The student uses hands-on tools for practical insights.

### **ISEM 770 - Advanced Topics in ISEM**

#### (3 semester hours)

Prerequisites: Completion of 12 semester hours of Breadth or Depth doctoral courses

**Description:** This course discusses overall research and industry trends in intelligent digital enterprises, industry4.0, intelligent planning and scheduling systems, next generation of digital infrastructure, business models, systems engineering, and other extant areas of work such as artificial intelligence, big data and analytics. The exact topics discussed will change with time. The main focus is on guiding the student to emerging relevant trends and to expose the student to a repository of potential "Ph.D. hard" questions (i.e., the questions that require Ph.D. level research).

### **ISEM 780 - Doctoral Research Seminar**

(3 to 6 semester hours)

Prerequisites: Completion of all Breadth and Depth course requirements; pass qualifying examination

**Description:** This course provides support to the doctoral student 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 the student can come together to discuss, support, and share the experiences of working in research. Research topics in the broad area of information systems engineering and management are discussed. Topic areas may concentrate on industry sectors (e.g., health, education, manufacturing, transportation, energy, environment, agriculture and others), emerging digital technologies and their impacts on the digital enterprises, and/or latest developments in systems engineering principles such as planning, architectures, integration, engineering, and engineering management. Each topic area will be studied in-depth to educate the student in conducting independent research. May be repeated for credit.

## **ISEM 799 - Doctoral Studies (Thesis)**

#### (6 semester hours)

Prerequisites: ISEM 780; pass comprehensive examination

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

### MGMT 721 - Management Sciences I

#### (3 semester hours)

**Prerequisites:** Completion of all 500-level Breadth courses and ISEM 706, or permission of instructor **Description:** This course is concerned with the use of quantitative approaches to solve business, management, and social problems. Advanced management science combines operations research and management systems to model complex management problems to discover and apply optimal solutions. The student is expected to investigate complex managerial and societal problems using scientific methodologies. Topics include, but are not limited to, Management Science Research, Linear Programming, Modeling with Spreadsheets, Linear Programming, Inventory Management, and Operations Research in the Public Sector.

### MGMT 722 - Management Sciences II

(3 semester hours)

Prerequisites: MGMT 721

**Description:** A continuation of Management Science I, combining operations research and management systems to model complex management problems to discover and apply optimal solutions. Topics include, but are not limited to, queuing models, non-linear optimization, heuristic techniques, and game theory.

### **MGMT 731 - Innovation and Entrepreneurship**

#### (3 semester hours)

#### Prerequisites: Admission to ISEM Doctoral Program

**Description:** In this course, the models for successfully organizing technologically driven innovations, in entrepreneurial and established firms, are studied, and critiqued. The student learns to develop innovative-based strategies, which will cause entrepreneurial organizations to earn sustained competitive advantage. The student also discovers how to identify, build, and commercialize technological innovations. This course emphasizes the need for continuity in the building and commercialization of valuable innovations. It draws heavily from recent literature and models on entrepreneurial innovation and expects the student, not only to critique these existing literature and models, but to design original technology-driven innovations that could aid organizations gain and sustain competitive advantage. The course is divided into 4 Modules, which takes the student from the formulation of innovative ideas to the building of innovative entrepreneurial firms. These modules will systematically guide the student to conduct a focused literature review on some advanced aspect of the studied material and produce a research paper.

# **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. A listing of the administration, staff, and full-time and part-time faculty, their titles, and areas of instruction are available at the University website at: https://harrisburgu.edu/faculty-and-staff-listing/

# **Board of Trustees**

J. Randall Grespin, Chair, and	Managing Director, Depository Trust and Clearing Corporation (Retired)
Bennett Chotiner, M.D., F.A.C.S.,	Medical Director, Memorial Eye Institute
Michael Fiaschetti,	President and Chief Executive Officer, MediPlanConnect LLC
Carmen Finestra,	American Producer and Television Writer and Partner, Wind Dancer Productions
Barbara Y. Groce,	Independent Non-Profit Organization Management Professional
Philip Guarneschelli,	President and Chief Executive Officer of UPMC Pinnacle
Bradley R. Jones,	President Harristown Enterprises, Inc.
Dolly Lalvani,	Director, PricewaterhouseCoopers, LLP
Sheri Phillips Lane,	Former Secretary of General Services (PA)
Lorina Marshall-Blake,	President, Independence Blue Cross Foundation
Robert A. Ortenzio,	Chief Executive Officer, Select Medical Corporation
Thomas G. Paese,	Retired Attorney and Businessman
Mayur Patel,	Principal, Laughner Patel Developers
Jeannine Peterson,	Chief Executive Officer, Hamilton Health Center
Mark S. Singel,	President, Winter Group and served as 27th Lieutenant Governor of Pennsylvania
Gary D. St. Hilaire,	President and Chief Executive Officer, Capital Blue Cross
Robert S. Taylor, Esq.,	Chairman and Chief Executive Officer, Cameron Companies
Cynthia Traeger,	Chief Executive Officer, Pacific Siren International LLC and President, VSI Pacific
R. Timothy Weston,	Partner, K&L Gates
Douglas A. Neidich, Trustee Emeritus	Chairman, Green Works Development LLC.

David A. Schankweiler, Trustee Emeritus Chief Executive Officer, Journal Multimedia (Retired)

# Administration

Eric D. Darr, Ph.D., President Duane F. Maun, CPA, Chief Operating Officer and Chief Financial Officer Bilita S. Mattes, D.Ed., Provost and Chief Academic Officer

# **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)

The University collects a considerable amount of information about each student during the period of enrollment. Almost all this information is contained in educational records protected by the Family Educational Rights and Privacy Act (FERPA). FERPA applies to all schools that receive funds under an applicable program of the U.S. Department of Education.

Under FERPA, students have the right to review their educational records and to challenge content that is inaccurate or misleading. FERPA regulations also stipulate that the University cannot release a student's educational records to anyone but the student without the student's written consent, except to the extent that FERPA authorizes disclosure without consent.

FERPA permits University officials to disclose educational records and certain 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

**University Privacy Notice** - The University is committed to safeguarding the privacy of individuals who share personal data with it and has adopted a Privacy Notice that outlines HU's collection, use, and disclosure of information provided by prospective students, applicants, or third parties. A copy of the University's Privacy Notice is available on its webpage at https://harrisburgu.edu/lib/pdf/HU-Privacy-Notice-5-2-19.pdf.

**Directory Information** - 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. The University defines directory information to include:

- student's name
- both permanent and temporary addresses
- email 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
- eSports Statistics

For additional information on FERPA: https://www2.ed.gov/policy/gen/reg/ferpa/index.html

# **Campus Crime and Security Disclosure**

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (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 as identified by the Clery Act 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 harassment and assault, domestic violence, timely warnings, and other safety and security matters including public, private, and University resources that are available to the University community.

The University's current Clery Report is available on its website at: http://harrisburgu.edu/lib/pdf/annual-security-report-clery-report.pdf

# The Timothy J. Piazza Antihazing Disclosure

Harrisburg University does not tolerate hazing, whether occurring on or off-campus. Students who engage in this behavior may face disciplinary action from HU, and may also face criminal charges under state law, including The Timothy J. Piazza Antihazing Law. This law requires Pennsylvania institutions to adopt a written policy against hazing and "adopt rules prohibiting students or other persons associated with an organization operating under the sanction of, or recognized as an organization by, a University from engaging in hazing or other identifiable offenses. It also requires the publishing of hazing offenses on a bi-annual basis. The University's current antihazing policy and antihazing report are available on its website at https://harrisburgu.edu/antihazing/.

# **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 HarrisbugU.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 and no other email address will be used for official HU business.

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 <u>not</u> 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 dictated by University policy and as required by federal statutes (Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Titles VI and VII of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990 (ADA)) and any other applicable anti-discrimination statutes, including those

of the Commonwealth of Pennsylvania (Pennsylvania Human Relations Act of 1955 (PHRA) and the Pennsylvania Fair Educational Opportunities Act of 1961 (PFEOA)).

Student inquiries concerning compliance and information regarding Title IX, Title VI, Title VII, PFEOA, Section 504, campus accessibility, or ADA accommodations should contact the Office of Student Services.

Faculty and staff inquiries concerning compliance and information regarding Title IX, Title VII, PHRA, Section 504, campus accessibility, or ADA accommodations should contact the Office of Human Resources.

# **Title IX Non-Discrimination Policy and Grievance Procedures**

Title IX of the Education Amendments of 1972 is a federal statute that 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 non-discrimination laws, the University has internal policies that prohibit discrimination and sexual misconduct based on sex including sexual harassment and violence, domestic and dating violence, and stalking.

The University's Title IX procedures are contained within its current Clery Report that is available on its website at: http://harrisburgu.edu/lib/pdf/annual-security-report-clery-report.pdf. All Title IX procedures are included as part of the University's overall Sexual Misconduct Policy.

# **Sexual Misconduct Policy**

The University's Sexual Misconduct Policy is located in the Student Handbook and contained within the University's current Clery Report that is available on its website at: http://harrisburgu.edu/lib/pdf/annual-security-report-clery-report.pdf. The policy applies to faculty, students, staff, and visitors.

# Non-Discrimination Statute - Commonwealth of Pennsylvania

The Pennsylvania Fair Educational Opportunities Act of 1961 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, 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 statutory obligation 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 can be filed by contacting the Pennsylvania Human Relations Commission (PHRC), 1101-1125 Front Street, 5th Floor, Harrisburg, PA 17104-2515, or by calling (717) 787-9784. Complaints must be filed within 180 days of the incident. Complaint forms can also be obtained at the PHRC's website: https://www.phrc.pa.gov/File-A-Complaint/ComplaintForms/Pages/default.aspx

# **Emergency Notification System**

When HU becomes aware of incidents that, in the judgment of HU's senior leadership, constitute an ongoing threat to the campus community, an Emergency Alert or a Timely Warning will be issued to notify the HU community. Depending on the circumstances, a timely warning or emergency alert will be issued without delay and the information may be further disseminated by using one or a combination of the following: e-mail distribution, HU website, campus publications, and postings and/or

activation of the externally hosted emergency notification Omnilert alert system to advise the community of the situation. HU withholds as confidential the names of victims. The same notification system will be used for other campus-wide emergencies/disasters such as fire, weather, or restricted access to buildings.

Members of HU's community may subscribe to receive emergency notifications text alerts regarding HU closures or emergency/disaster situations that may impact the HU community. You can subscribe to the system, "Omnilert," (formally e2Campus) through the MyHU portal of HU's webpage. For additional information on any matters, you will be directed to, or you should go to HU's website or social media accounts. Subscribers are subject to text message costs assessed by their cell phone provider.

# **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 of 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.

# **Copyright Infringement and Penalties**

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 § 106 of the Copyright Act of 1976. These rights include, but are not limited to, 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, impound the infringing work, and grant temporary and permanent injunctions.

Willful copyright infringement can also result in criminal penalties, including imprisonment and fines.

For more information, please see the Web site of the U.S. Copyright Office at: www.copyright.gov, especially the Frequently Asked Questions at www.copyright.gov/help/faq.

# **Infringement of Digitally Copyrighted Material**

The Digital Millennium Copyright Act of 1998 (DMCA) is a federal law that criminalizes production and dissemination of technology, devices, or services intended to circumvent measures that control access to copyrighted works (commonly known as digital rights management or DRM). In addition, the DMCA heightens the penalties for copyright infringement on the Internet.

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

Jacqueline Conforti Barnett General Counsel 326 Market Street Harrisburg, PA 17101 (717) 901-5100 ext. 1671 jbarnett@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 by 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 University's resolution.

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

Copyright violations may also fall under other University policies and subject to discipline.

# **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 consistent with HU policy and directions, 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 and only to whom it is issued.

The Campus ID Card must be surrendered to the University upon deactivation or upon demand. 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). <u>Campus Card Usage</u>

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 immediately report suspected lost or stolen cards to HU Security at HUSecurity@HarrisburgU.edu or by phone at 717-901-5180.

#### 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 a 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 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 a 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 Office of Students Services for students or Human Resources for HU employees within 30 days of the alleged discrimination. The respective office will review the written complaint and meet with the individual filing it. After reviewing all the facts and utilizing legal counsel, if appropriate, the respective office 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 resources<sup>1</sup>.

# 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.

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

# 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 the confidentiality of data<sup>2</sup>.
  - 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 expectations of privacy, confidentiality, and freedom of expression.
  - vi. Taking precautions to prevent the initial occurrence and/or spread of computer viruses. Therefore, networkconnected 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.

<sup>2</sup> 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.

# **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**

On July 15, 2004, the Commonwealth of Pennsylvania legislature enacted Act 82 of 2004 requiring universities to adopt a policy that regulates credit card marketing

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."

# Americans with Disabilities Act of 1990

The Americans with Disabilities Act of 1990 (ADA) is a federal anti-discrimination statute that provides civil rights protections to individuals with disabilities in the areas of employment, public accommodations, State and local government services, and telecommunications. The ADA was designed to remove barriers which prevent qualified individuals with disabilities from enjoying the same opportunities that are available to persons without disabilities. Similar protections are provided by Section 504 of the Rehabilitation Act of 1973 (Section 504).

An applicant or student that requires an accommodation under the Americans with Disabilities Act (ADA) should submit any required documentation in person or by mail to: Office of Disability Services, Harrisburg University of Science and Technology, 326 Market Street Harrisburg, PA 17101. All submitted documentation is confidential. See the Student Handbook for additional details regarding accommodations. If you have questions regarding the documentation policy and guidelines, email Student Services at ada@HarrisburgU.edu.

# **Clery Act Disclosure**

It is also HU's policy to continue to comply as a policy with the federal Violence Against Women Act (VAWA) amendments to the Jeanne Clery Disclosure of Campus Security Policy and Campus Crimes Statistics Act (Clery Act), and the accompanying regulations. The University's current Clery Report is available on its website at http://harrisburgu.edu/lib/pdf/annual-security-report-clery-report.pdf