INFORMATION SYSTEMS

Graduate Program Head  Stephen Schappe
Program Code            INFSY
Campus(es)              Harrisburg (M.S.)
Degrees Conferred       Master of Science (M.S.)
                        Integrated B.S. in Information Systems and M.S. in Information Systems
The Graduate Faculty    View (https://secure.gradsch.psu.edu/gpms/index.cfm?searchType=ac&de=INFSY)

Operating under the auspices of the School of Business Administration, Penn State Harrisburg’s Master of Science degree program in information systems is designed to meet the rapidly increasing need for technically grounded, upper-level information resources managers within business organizations. With the exception of a small percentage of students who are full-time, the students served by the M.S.I.S. program are employees of area businesses, state and local governments, and not-for-profit organizations who study on a part-time basis. In order to accommodate both full- and part-time students, courses are primarily offered in the evening.

The two-fold nature of the program requires a manager to have competence both in information technology and in management theory; therefore, the curriculum combines the highly technical content of information science with the managerial emphasis of information systems. Unlike computer science programs, which tend to focus on computer hardware and architecture, this program is organized around applied computer-based activities, the development of communication skills, and managerial principles.

Admission Requirements

Applicants apply for admission to the program via the Graduate School application for admission (http://gradschool.psu.edu/prospective-students/how-to-apply). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions (http://gradschool.psu.edu/graduate-education-policies).

Admission decisions are based primarily on undergraduate junior-senior grade-point average and the Graduate Management Admissions Test (GMAT) scores or Graduate Record Exam (GRE) scores. Post-baccalaureate course work, professional experience, and the statements provided in the application are also taken into account.

Applicants are also required to submit the following:

• a completed Graduate School application (http://www.gradschool.psu.edu/prospective-students/how-to-apply) with application fee
• official transcripts from all post-secondary institutions attended (http://www.gradschool.psu.edu/prospective-students/how-to-apply/new-applicants/requirements-for-graduate-admission);
• official scores from the GMAT test or GRE test (the test must have been taken within the past five years); and
• letters of recommendation (optional)

Application Dates

Candidates may enter the program at the beginning of the fall, spring, or summer session. To allow time for applications to be processed, all information, including GMAT or GRE score, must be received by Graduate Enrollment Services no later than:

• July 18 for admission to the fall semester
• November 18 for admission to the spring semester, and
• April 18 for admission to the summer session.

Applicants from outside the United States must follow the early admission dates in order to allow the necessary clearances and paperwork to be processed in time. International application deadline dates are:

• Fall Semester–May 31
• Spring Semester–September 30
• Summer Session–February 28

To be considered for a graduate assistantship, applicants must submit a complete application by March 1.

Entry Requirements

Credits obtained to fulfill entry and pre-program requirements cannot be applied towards the requirements for the degree.

Analytic Skills Requirement

Prior to enrolling in their M.S.I.S. course work, students are required to demonstrate competence in Analytic skills. This requirement may be demonstrated by:

1. satisfactory completion of college-level mathematics course or
2. successful completion of a mathematics proficiency examination approved by the M.S.I.S. program. This requirement must be taken either during the first semester or summer session before the student’s matriculation and completed with a grade of C or better.

Computer Skills Requirement

Students are required to demonstrate proficiency in the use of computer applications. This requirement can be satisfied through completion of a college-level computer applications or information systems course within the past five years with a grade of B or higher or by documented significant computer-related work experience. If this requirement has not been met prior to admission, a college-level computer-based information systems course such as MIS 204 is required. Course work must be taken either during the first semester or summer session before the student’s matriculation and completed with a grade of B or higher.

Communication Skills Requirement

Successful completion of the M.S.I.S. program requires the ability to think clearly and to write and speak persuasively. Part of this requirement can be met by obtaining a score of “4” or more on the Graduate Management Admission Test (GMAT) or Graduate Record Exam (GRE) Analytical Writing Assessment (AWA). If this score is not achieved, students must satisfy this requirement through additional course work in writing skills or other work developed in consultation with the M.S.I.S. Program. This requirement must be satisfied during the first semester or summer session before the student’s matriculation and completed with a grade of B or higher. The speech component of this requirement is satisfied through individual and group presentations in courses in the M.S.I.S. Program.
Pre-Program Requirement
The Pre-program requirement provides a basic foundation in theory, tools
and techniques required for the management of profit and non-profit
organizations. It also provides a basic understanding of applications of
financial accounting, the creation and distribution of goods and services,
and how business and how people relate to others in various organizations,
helping to merge two related disciplines: business and information
systems. Students who have completed the appropriate pre-program
courses previously must have completed the courses with a grade of B
or higher within seven years prior to admission, or through equivalent
coursework completed with a B or higher within seven years
prior to admission or college level coursework validated by recent work
experience. Students who have not met these tests of relevancy, grade,
currency prior to admission to the program must take these courses at
the graduate level and early in program.

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BUS 505</td>
<td>Data Analysis for Business Decisions</td>
<td>3</td>
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Select 6 credits from the following:

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<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ACCT 501</td>
<td>Financial Statement Analysis</td>
<td></td>
</tr>
<tr>
<td>BUSEC 502</td>
<td>Economics for Managers</td>
<td></td>
</tr>
<tr>
<td>MNGMT 511</td>
<td>Organizational Behavior</td>
<td></td>
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</tbody>
</table>

Total Credits 9

Degree Requirements
Master of Science (M.S.)
Requirements listed here are in addition to Graduate Council policies
listed under GCAC-600 Research Degree Requirements.

The M.S.I.S. degree program requires, excluding pre-program
requirements, 30 credits of course work at the 500 or 800 level, with a
minimum of 18 credits at the 500 level.

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<tr>
<th>Code</th>
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<tr>
<td>INFSY 535</td>
<td>Object Oriented Design and Programming in Business</td>
<td>3</td>
</tr>
<tr>
<td>INFSY 540</td>
<td>Information Technology and Knowledge Management</td>
<td>3</td>
</tr>
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</table>

15 credits of Information Systems courses from an approved list
available in the program office 15

Electives
6 credits of electives from the 500-level courses offered by Penn
State Harrisburg’s School of Business Administration 6

Culminating Experience
INFSY 554 Master’s Project 1 3

Total Credits 30

1 The INFSY 554 Master’s Project course involves development of
an original master’s project in the student’s field of interest and
preparation of a scholarly paper.

Data Analytics Track
The objective of this Track is to provide the student with data analytical
skills that enable them to gain data insights and transform data into
strategic decisions.

In consultation with their adviser, a student shall select 9 credits of the
following:

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<tbody>
<tr>
<td>BUS 510</td>
<td>Business Analytics and Decision Modeling</td>
<td>3</td>
</tr>
<tr>
<td>INFSY 555</td>
<td>Data Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>INFSY 556</td>
<td>Data Warehousing</td>
<td>3</td>
</tr>
<tr>
<td>INFSY 565</td>
<td>Intelligent Systems in Business</td>
<td>3</td>
</tr>
<tr>
<td>INFSY 566</td>
<td>Data Mining and Knowledge Discovery</td>
<td>3</td>
</tr>
<tr>
<td>INFSY 547</td>
<td>WEB Enabled Technologies</td>
<td>3</td>
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Transfer Credits
Credits earned at other institutions not used to earn a degree may
be applied toward the requirements for a graduate degree, subject
to restrictions outlined in GCAC-309 Transfer Credit.

Course Substitutions
Because some students enter the Program with advanced knowledge in
one or more subject areas, up to six credits in prescribed or additional
courses may be replaced with more advanced undergraduate or graduate
courses in the same subject area. Except for INFSY 554, which must
be taken at the College, INFSY prescribed and additional courses, in
cases where there is equivalent knowledge, must be replaced with
more advanced courses in the same field. Substitutions are based on
a minimum of six credits of advanced undergraduate course work in
an area of concentration or credits earned in an equivalent graduate-
level program at a regionally accredited, college-level institution.

Integrated Undergrad-Grad Programs
Integrated B.S. in Information Systems and M.S. in
Information Systems
Requirements listed here are in addition to requirements listed in
GCAC-210 Integrated Undergraduate-Graduate (IUG) Degree Programs.

The School of Business Administration offers a limited number of
academically superior Bachelor of Science in Information Systems
students the opportunity to enroll in an integrated, continuous program
of study leading to both the Bachelor of Science in Information Systems
and the Master of Science in Information Systems. The ability to coordinate
as well as concurrently pursue the two degree programs enables the
students to earn both degrees in five years. Specifically, as many as
twelve of the credits required for the master’s degree may be applied to
both undergraduate and graduate degree programs.

If for any reason students admitted to the IUG program are unable to
complete the requirements for the Master of Science in Information
Systems degree, the students will be permitted to receive the Bachelor of
Science in Information Systems degree assuming all the undergraduate degree requirements have been satisfactorily completed.

ADMISSION REQUIREMENTS

Students apply to the program via the Graduate School application for admission (http://www.gradschool.psu.edu/prospective-students/how-to-apply), and must meet the admission requirements of the Graduate School, as well as the admission requirements for the Master of Science degree in Information Systems. Students should mention in the notes section that the application is for the IUG program in Information Systems.

Students must submit:

- a resume,
- a personal statement including career goals and how the M.S.I.S. will enhance their career goals,
- official transcripts from all post-secondary institutions attended (http://www.gradschool.psu.edu/prospective-students/how-to-apply/new-applicants/requirements-for-graduate-admission) except for Penn State,
- two letters of recommendation, with at least one from the School of Business Administration faculty, and
- a plan of study that integrates both undergraduate and graduate requirements.

The plan should cover the entire time period of the integrated program, and it should be reviewed periodically with an adviser as the student advances through the program. A Graduate Faculty adviser in collaboration with the Director of M.S.I.S. Program will help undergraduate candidates determine a sequence of courses that will prepare them for acceptance into the Integrated Undergraduate-Graduate (IUG) degree program.

The Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE) is not required for admission into the program; however, if students are interested in a graduate assistantship, GMAT or GRE scores must be submitted by the end of the eighth semester.

The number of openings in the IUG program is limited. Applicants to the IUG program must have completed a minimum of 60 credits. Students must be admitted to an IUG program no earlier than the beginning of the third semester of undergraduate study at Penn State (regardless of transfer or AP credits accumulated prior to enrollment) and no later than the end of the second week of the semester preceding the semester of transfer or AP credits accumulated prior to enrollment) and no later than the third semester of undergraduate study at Penn State (regardless of transfer or AP credits accumulated prior to enrollment) and no later than the third semester of undergraduate study at Penn State.

In all cases, admission to the program will be at the discretion of the Graduate Admissions Committee in Information Systems.

DEGREE REQUIREMENTS

Students must fulfill all degree requirements for each degree in order to be awarded that degree, subject to the double-counting of credits as outlined below. Degree requirements for the Bachelor of Science in Information Systems are listed in the Undergraduate Bulletin (http://bulletins.psu.edu/undergraduate). Students must sequence their courses so all undergraduate degree requirements are fulfilled before taking courses to count towards the graduate degree.

Up to 12 credits may be double-counted towards the degree requirements for both undergraduate and graduate degrees. All courses counted for both degrees must be at the 500- or 800-level. Credits associated with the culminating experience for the graduate degree cannot be double-counted.

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<tr>
<td>STAT 200</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
<tr>
<td>or SCM 200</td>
<td>Introduction to Statistics for Business</td>
<td></td>
</tr>
</tbody>
</table>

Student applications will be evaluated based on their overall portfolio, in addition to the above requirements. In all cases, admission to the program will be at the discretion of the Graduate Admissions Committee in Information Systems.

Student Aid

Graduate assistantships available to students in this program and other forms of student aid are described in the Tuition & Funding (http://gradschool.psu.edu/graduate-funding) section of The Graduate School’s website. Students on graduate assistantships must adhere to the course load limits (http://gradschool.psu.edu/graduate-education-policies/gsad/gsad-500/gsad-501-credit-loads-graduate-assistants) set by The Graduate School.

There are a limited number of scholarships, fellowships, and research grants available, as well as several graduate assistantships. For more information on these, contact Penn State Harrisburg’s School of Business Administration.

Many students work full-time and take classes part-time. In many cases, employers have a tuition-reimbursement plan paying for partial or full tuition. To find other options available to you, contact one of the following offices:

1. Financial Aid Office, 717-948-6307
2. Admissions, 717-948-6250

Graduate School Assistantships

Full time graduate students who are interested in an assistantship should contact the graduate program coordinator. Students must be
nominated for an assistantship by their program coordinator. Students applying for an assistantship should submit scores from the Graduate Management Admissions Test (GMAT), Graduate Record Exam (GRE) or similar examinations by January 30.

Courses

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

Information Systems (INFSY) Course List (https://bulletins.psu.edu/university-course-descriptions/graduate/infsy)

Contact

<table>
<thead>
<tr>
<th>Campus</th>
<th>Harrisburg</th>
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<tbody>
<tr>
<td>Graduate Program Head</td>
<td>Stephen Patrick Schappe</td>
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<tr>
<td>Director of Graduate Studies (DGS) or Professor-in-Charge (PIC)</td>
<td>Girish Subramanian</td>
</tr>
</tbody>
</table>
| Program Contact | Amy Kathleen Jones-Atkins  
Graduate Admissions  
777 West Harrisburg Pike  
Middletown PA 17057  
akj11@psu.edu  
(717) 948-6140 |
| Program Website | View (https://harrisburg.psu.edu/business-administration/information-systems/master-science-information-systems) |