

# INFORMATION SCIENCE

<b>Graduate Program Head</b>	Raghu Sangwan
<b>Program Code</b>	INSC
<b>Campus(es)</b>	Great Valley (M.S.) World Campus (M.S.)
<b>Degrees Conferred</b>	Master of Science (M.S.)
<b>The Graduate Faculty</b>	View ( <a href="https://secure.gradsch.psu.edu/gpms/?searchType=fac&amp;prog=INSC">https://secure.gradsch.psu.edu/gpms/?searchType=fac&amp;prog=INSC</a> )

The Master of Science in Information Science at Penn State Great Valley is a well-rounded computing and IT degree, which addresses the multi-faceted challenges IT professionals face every day, from analyzing data to developing web applications and managing IT staff and projects. The program offers a balance of information systems and management theories. This program is STEM designated.

## Admission Requirements

Applicants apply for admission to the program via the J. Jeffrey and Ann Marie Fox Graduate School application for admission (<https://gradschool.psu.edu/admissions/how-to-apply/>). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions Policies (<https://gradschool.psu.edu/graduate-education-policies/>).

Students who have a baccalaureate degree in information systems, information science or other quantitative, scientific, or business discipline and those with experience in information technology will be considered for admission to the program. Students should have earned at least a 3.00 junior/senior average (on a 4.00 scale) in their baccalaureate program. Although not required, scores from the Graduate Record Examinations (GRE) or the Graduate Management Admissions Test (GMAT) will be considered by the admissions committee if submitted. If the admissions committee determines an area of weakness or insufficient baccalaureate preparation, the student may be required to take one or both pre-program requirement courses (IST 441 and SWENG 400). Pre-program requirements do not count toward the 33-credit program total.

The language of instruction at Penn State is English. English proficiency test scores (TOEFL/IELTS) may be required for international applicants. See GCAC-305 Admission Requirements for International Students (<https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/gcac-305-admission-requirements-international-students/>) for more information.

## Degree Requirements

### Master of Science (M.S.)

Requirements listed here are in addition to Graduate Council policies listed under GCAC-600 Research Degree Policies. (<https://gradschool.psu.edu/graduate-education-policies/>)

The requirement for the degree is 33 credits at the 400, 500, or 800 level (with least 18 credits at the 500 level), consisting of 18 credits of required core courses, 12 credits approved electives, selected from a list of approved courses maintained by the graduate program office with the assistance of a graduate adviser, followed by an integrative research topics course, which includes completion of a scholarly paper.

Code	Title	Credits
<b>Required Courses</b>		
INSC 831	Contemporary Information Systems Architecture	3
INSC 539	Information Science Emerging Topics	3
SWENG 545	Data Mining	3
INSC 526	Business Process Management and Integration	3
INSC 561	Web Security and Privacy	3
SWENG 568	Enterprise Integration	3
<b>Electives</b>		
12 credits of approved electives		12
<b>Culminating Experience</b>		
INSC 594	Research Topics (Scholarly Paper)	3
<b>Total Credits</b>		<b>33</b>

A grade-point average of at least 3.0 must be achieved, with at least 18 credits at the 500 level. Students lacking adequate preparation may be required to take one pre-program requirement course (IST 140 or equivalent). The pre-program requirement does not count toward the 33-credit program total.

## Minor

A graduate minor is available in any approved graduate major or dual-title program. The default requirements for a graduate minor are stated in Graduate Council policy GCAC-218 Minors (<https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-218-minors/>).

## Student Aid

Refer to the Tuition & Funding (<https://gradschool.psu.edu/funding/>) section of the J. Jeffrey and Ann Marie Fox Graduate School's website. Students in this program are not eligible for graduate assistantships.

Financial aid for students in on-campus programs is in the form of student loans and a limited number of small scholarships, as described on the Penn State Great Valley website (<https://greatvalley.psu.edu/tuition-and-financial-aid/>).

World Campus students in graduate degree programs may be eligible for financial aid. Refer to the Tuition and Financial Aid section (<https://www.worldcampus.psu.edu/tuition-and-financial-aid/>) of the World Campus website for more information.

## 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 Science (INSC) Course List (<https://bulletins.psu.edu/university-course-descriptions/graduate/insc/>)

## Learning Outcomes

1. KNOW: Graduates will be able to understand the information needs of organizations and identify optimal IT solutions.

2. APPLY: Graduates will be able to apply known and emerging information systems theories and principles to improve and enhance deployed IT solutions
3. APPLY: Graduates will design and maintain practically viable solutions to support information retrieval, data analysis, and decision-making
4. COMMUNICATE: Graduates will be able to effectively communicate their technical perspective solutions to diverse audience.
5. THINK: Graduates will be able to identify the security concerns of and determine effective protection solutions to organizational information assets
6. PROFESSIONAL PRACTICE: Graduates will demonstrate knowledge of and ability to practice the professional standards of IT professional behavior.

## Contact

<b>Campus</b>	Great Valley
<b>Graduate Program Head</b>	Raghu Sangwan
<b>Director of Graduate Studies (DGS) or Professor-in-Charge (PIC)</b>	Guanghua Qiu
<b>Program Contact</b>	Sharon V. Patterson Penn State Great Valley 30 East Swedesford Road Malvern PA 19355 svp40@psu.edu (610) 648-3318
<b>Program Website</b>	View ( <a href="http://greatvalley.psu.edu/academics/masters-degrees/information-science/">http://greatvalley.psu.edu/academics/masters-degrees/information-science/</a> )
<b>Campus</b>	World Campus
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