

# MANAGEMENT INFORMATION SYSTEMS, B.S. (BUSINESS)

**Begin Campus:** Any Penn State Campus

**End Campus:** University Park

## Program Description

The Management Information Systems major focuses on IT-supported techniques for exploring, analyzing, integrating, and reporting business data to facilitate fact-based decisions and enterprise-wide management. The framework encompasses the concepts, principles, and methods for (1) collecting, transforming, and managing data, (2) doing business analytics, (3) communicating and sharing the results, (4) aligning IT-enabled business analytics with business strategy.

Students in this major have the opportunity to take nine credits of supporting work in functional business areas such as accounting, finance, marketing, risk management, and supply chain management. Graduates develop cross-functional literacy in how techniques and technologies help achieve business objectives, along with competency in applying business analytics methods on behalf of the business and in a supporting business area. Thus, graduates are well-prepared for careers in industry, consulting, and government sectors as business analytics professionals.

More information about the broad range of career opportunities is available at <http://www.smeal.psu.edu/scis/recruit> (<http://www.smeal.psu.edu/scis/recruit/>).

## What is Management Information Systems?

Data is everywhere: location-based from smart phones, social media, text, corporate data, and more. Companies need to analyze this data to get meaningful information to the people who need it. Hence, Management Information Systems (MIS) lives in the space that intersects technology and business.

Some of the skills learned in the major include how to mine and analyze data, build interactive digital dashboards, create visual analytics, and how to use a variety of business software tools to support companies and facilitate data driven decision making within an organization.

Our MIS graduates use these business software tools to design informative and graphical applications, allowing executives to make strategic decisions analytically. Smeal MIS graduates are well prepared for careers in industry, consulting, and government sectors as business analytics specialists and systems analysis professionals.

## Entrance to Major

To be eligible for entrance into the Management Information Systems (MIS) major, a degree candidate must be enrolled in the Smeal College of Business or the Division of Undergraduate Studies and satisfy requirements for entrance to the major.

## Administrative Enrollment Controls

This program currently has administrative enrollment controls. Administrative Enrollment Controls are initiated when limitations of space, faculty, or other resources in a major prevent accommodating all

students who request them. Students must follow the administrative enrollment controls that are in effect for the semester that they enter the university.

## First-Year Students Entering Summer 2023, Fall 2023, Spring 2024

In order to be eligible for entrance to this major, students must satisfy the following requirements:

- 36-59 graded Penn State credits (excludes transfer and AP credits)
- completed with a grade of C or better:
  - English - ENGL 15 or ENGL 30H or ESL 15 or ENGL 137H or CAS 137H
  - Mathematics - MATH 110 or MATH 140 or MATH 140B
  - Statistics - SCM 200 or SCM 200H or STAT 200
- completed ECON 102 or ECON 102H
- completed at Penn State (no substitutions or transfers), in addition with a quality grade of "C" or better and no alternative or Pass/Fail (PS) grading:
  - Accounting - ACCTG 211 or ACCTG 211H
  - Management - MGMT 301 or MGMT 301H or MGMT 301M or MGMT 301W
  - Marketing - MKTG 301 or MKTG 301H or MKTG 301W
  - Finance - FIN 301 or FIN 301H
- earned a minimum cumulative grade-point average (GPA) of 3.00

## Students Who Entered Prior to Summer 2023

Students who entered the University from Summer 2018 through Spring 2023 should view the administrative enrollment controls in the appropriate Undergraduate Bulletin archive (<https://bulletins.psu.edu/undergraduate/archive/>). Students who entered the University prior to the summer 2018 semester should consult with their academic adviser about the administrative enrollment controls in effect for the semester they entered the university.

## Degree Completion

Students accepted into the Management Information Systems major are expected to enroll at University Park the fall semester after gaining entrance to the major. In addition, Senate Policy 83-80.5 stipulates that the college dean and program faculty may require up to 24 credits of course work in the major to be taken in the college where the degree is earned. Based on this policy, the Smeal College of Business has set the following credit earning limitations for MIS majors:

1. Eighteen credits of 300/400 level prescribed and additional courses in the major field must be completed with Management Information Systems faculty at University Park.
2. Six additional credits of 300/400 level related and supporting courses must also be completed at University Park. See the Management Information Systems Suggested Academic Plan for details.

## Degree Requirements

**For the Bachelor of Science degree in Management Information Systems, a minimum of 120 credits is required with at least 15 credits at the 400 level:**

Requirement	Credits
General Education	45
Electives	14
Requirements for the Major	73

**12 of the 45 credits for General Education are included in the Requirements for the Major. This includes: 3 credits of GWS courses (ENGL 202D); 6 credits of GQ courses (MATH 110 or MATH 140 and SCM 200 or STAT 200); 3 credits of GS courses (ECON 102).**

## Requirements for the Major

To graduate, a student enrolled in the major must earn a grade of C or better in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44>).

Code	Title	Credits
<b>Prescribed Courses</b>		
BA 342	Socially Responsible, Sustainable and Ethical Business Practice	3
BA 411	Analyzing Business and Industry	3
BLAW 341	Business Law I: Introduction to Contracts, Liability Issues, and Intellectual Property	3
ECON 102	Introductory Microeconomic Analysis and Policy	3
ECON 104	Introductory Macroeconomic Analysis and Policy	3
SCM 301	Supply Chain Management	3
<i>Prescribed Courses: Require a grade of C or better</i>		
ACCTG 211	Financial and Managerial Accounting for Decision Making	4
ENGL 202D	Effective Writing: Business Writing	3
FIN 301	Corporation Finance	3
MGMT 301	Basic Management Concepts	3
MIS 250	Introduction to Problem Solving with Spreadsheet Analysis and Information Systems Management	3
MIS 301	Business Analytics	3
MIS 431	Business Data Management	3
MIS 432	Business Information System Analysis	3
MIS 441	Business Intelligence for Decision Making	3
MIS 446	Information Technology and Business Strategy	3
MIS 479W	Enterprise Information Systems	3
MKTG 301	Principles of Marketing	3
<b>Additional Courses</b>		
<i>Additional Courses: Require a grade of C or better</i>		
MATH 110 or MATH 140	Techniques of Calculus I Calculus With Analytic Geometry I	4
SCM 200 or STAT 200	Introduction to Statistics for Business Elementary Statistics	4
<b>Supporting Courses and Related Areas</b>		
Attainment of 12th-credit-level proficiency in a single foreign language. Proficiency must be demonstrated by either examination or coursework.		4
Select 6 credits of supporting coursework. See Department List.		6

## General Education

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (<https://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program/>) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

### Foundations (grade of C or better is required and Inter-Domain courses do not meet this requirement.)

- **Quantification (GQ):** 6 credits
- **Writing and Speaking (GWS):** 9 credits

### Breadth in the Knowledge Domains (Inter-Domain courses do not meet this requirement.)

- **Arts (GA):** 3 credits
- **Health and Wellness (GHW):** 3 credits
- **Humanities (GH):** 3 credits
- **Social and Behavioral Sciences (GS):** 3 credits
- **Natural Sciences (GN):** 3 credits

### Integrative Studies

- **Inter-Domain Courses (Inter-Domain):** 6 credits

### Exploration

- **GN**, may be completed with Inter-Domain courses: 3 credits
- **GA, GH, GN, GS, Inter-Domain courses.** This may include 3 credits of World Language course work beyond the 12th credit level or the requirements for the student's degree program, whichever is higher: 6 credits

## University Degree Requirements

### First Year Engagement

All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.

### Cultures Requirement

6 credits are required and may satisfy other requirements

- **United States Cultures:** 3 credits
- **International Cultures:** 3 credits

### Writing Across the Curriculum

3 credits required from the college of graduation and likely prescribed as part of major requirements.

### Total Minimum Credits

A minimum of 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 credits. Students should consult with their college or department adviser for information on specific credit requirements.

### Quality of Work

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

### Limitations on Source and Time for Credit Acquisition

The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#83-80>)). For more information, check the Suggested Academic Plan for your intended program.

## Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/>)

### University Park

#### Advising Center

Smeal College Undergraduate Education  
202 Business Building  
University Park, PA 16802  
814-863-1947  
SmealAdvising@smeal.psu.edu

## Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2023-24 academic year. To access previous years' suggested academic plans, please visit the archive (<https://bulletins.psu.edu/undergraduate/archive/>) to view the appropriate Undergraduate Bulletin edition (*Note: the archive only contains suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin*).

## Management Information Systems, B.S. at University Park Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

### First Year

Fall	Credits Spring	Credits
PSU 6	1 MGMT 301 <sup>1,2</sup>	3
(MATH 110 or MATH 140) or (SCM 200 or STAT 200) (GQ) <sup>1,2</sup>	4 (SCM 200 or STAT 200) or (MATH 110 or MATH 140) (GQ) <sup>1,2</sup>	4
ENGL 15, 30H, ESL 15, ENGL 137H, or CAS 137H <sup>1,2</sup>	3 World Language - Level Two <sup>3</sup>	4
ECON 102 (GS) <sup>2</sup>	3 General Education Course (US) <sup>4</sup>	3
World Language - Level One <sup>3</sup>	4	
	<b>15</b>	<b>14</b>

### Second Year

Fall	Credits Spring	Credits
MKTG 301 <sup>1,2</sup>	3 FIN 301 <sup>1,2</sup>	3
ACCTG 211 <sup>1,2</sup>	4 SCM 301	3
ECON 104	3 CAS 100, ENGL 138T, or CAS 138T <sup>1</sup>	3
World Language - Level Three <sup>3</sup>	4 MIS 250 <sup>1</sup>	3
General Education Course (IL) <sup>4</sup>	3 General Education Course <sup>4</sup>	3
	<b>17</b>	<b>15</b>

### Third Year

Fall	Credits Spring	Credits
MIS 301 <sup>1</sup>	3 MIS 431 <sup>1</sup>	3
ENGL 202D <sup>1</sup>	3 Two-Piece Sequence <sup>5</sup>	3
General Education Course (N) <sup>4</sup>	3 General Education Course <sup>4</sup>	3
BLAW 341 or BA 342	3 BA 342 or BLAW 341	3
General Education Course <sup>4</sup>	3 General Education Course <sup>4</sup>	3
	<b>15</b>	<b>15</b>

### Fourth Year

Fall	Credits Spring	Credits
MIS 432 <sup>1</sup>	3 MIS 479W <sup>1</sup>	3
MIS 441 or 446 <sup>1</sup>	3 MIS 446 or 441 <sup>1</sup>	3
BA 411 (or Two-Piece Sequence) <sup>5</sup>	3 BA 411 (or Two-Piece Sequence) <sup>5</sup>	3
General Education Course (Z) <sup>4</sup>	3 General Education Course <sup>4</sup>	3
Elective <sup>4</sup>	2 Elective <sup>4</sup>	3
	<b>14</b>	<b>15</b>

### Total Credits 120

<sup>1</sup> Course requires a grade of C or better

<sup>2</sup> Entrance-to-Major Course – complete prior to attaining 59 cumulative credits at Penn State

<sup>3</sup> Attain 12<sup>th</sup> credit level proficiency in a world language (0-12 credits). Credits required vary based on predetermined skill level. Balance of remaining credits are taken as electives.

<sup>4</sup> When planning general education and elective courses, students should factor in the following requirements:

- 3 credits of United States Culture (US)
- 3 credits of International Culture (IL)
- 6 credits of Inter-Domain (N) and/or Linked (Z) coursework

<sup>5</sup> See the Two-Piece Sequence list on the Supply Chain Department website.

#### **University Requirements and General Education Notes:**

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and satisfy a portion of that General Education requirement. If the student's program prescribes GWS these courses will replace both ENGL 15/ENGL 30H and CAS 100A/CAS 100B/CAS 100C. Each course is 3 credits.

#### **College and Department Notes:**

- I. The Smeal College of Business requires that the following entrance-to-major courses be taken at Penn State: ACCTG 211, MGMT 301, MKTG 301, and FIN 301.
- II. Pursuant to the Association to Advance Collegiate Schools of Business (AACSB) accreditation standards, the Smeal College of Business requires that all upper division courses within the departments sponsoring the major be completed in residence at University Park under the instruction of Smeal College faculty.

## Management Information Systems, B.S. at Commonwealth Campuses

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

### First Year

Fall	Credits Spring	Credits
First-Year Seminar (if required by Campus)	1-0 MGMT 301 <sup>1,2</sup>	3
(MATH 110 or MATH 140) or (SCM 200 or STAT 200) (GQ) <sup>1,2</sup>	4 (SCM 200 or STAT 200) or (MATH 110 or MATH 140) (GQ) <sup>1,2</sup>	4
ENGL 15, 30H, ESL 15, ENGL 137H, or CAS 137H <sup>1,2</sup>	3 World Language - Level Two <sup>3</sup>	4
ECON 102 (GS) <sup>2</sup>	3 General Education Course (US) <sup>4</sup>	3
World Language - Level One <sup>3</sup>	4	
<b>15-14</b>		<b>14</b>

### Second Year

Fall	Credits Spring	Credits
MKTG 301 <sup>1,2</sup>	3 FIN 301 <sup>1,2</sup>	3
ACCTG 211 <sup>1,2</sup>	4 ENGL 202D <sup>1</sup>	3
ECON 104	3 CAS 100, ENGL 138T, or CAS 138T <sup>1</sup>	3
World Language - Level Three <sup>3</sup>	4 General Education Course <sup>4</sup>	3
General Education Course (IL) <sup>4</sup>	3 General Education Course <sup>4</sup>	3
<b>17</b>		<b>15</b>

### Third Year

Fall	Credits Spring	Credits
MIS 250 <sup>1</sup>	3 MIS 431 <sup>1</sup>	3
MIS 301 <sup>1</sup>	3 Two-Piece Sequence <sup>5</sup>	3
SCM 301	3 General Education Course <sup>4</sup>	3
BLAW 341 or BA 342	3 BA 342 or BLAW 341	3
General Education Course (N) <sup>4</sup>	3 General Education Course <sup>4</sup>	3
<b>15</b>		<b>15</b>

### Fourth Year

Fall	Credits Spring	Credits
MIS 432 <sup>1</sup>	3 MIS 479W <sup>1</sup>	3
MIS 441 or 446 <sup>1</sup>	3 MIS 446 or 441 <sup>1</sup>	3
BA 411 (or Two-Piece Sequence) <sup>5</sup>	3 BA 411 (or Two-Piece Sequence) <sup>5</sup>	3
General Education Course (Z) <sup>4</sup>	3 General Education Course <sup>4</sup>	3
Elective <sup>4</sup>	2-3 Elective <sup>4</sup>	3
<b>14-15</b>		<b>15</b>

**Total Credits 120**

- <sup>1</sup> Course requires a grade of C or better
- <sup>2</sup> Entrance-to-Major Course – complete prior to attaining 59 cumulative credits at Penn State
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### College and Department Notes:

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- II. Pursuant to the Association to Advance Collegiate Schools of Business (AACSB) accreditation standards, the Smeal College of Business requires that all upper division courses within the departments sponsoring the major be completed in residence at University Park under the instruction of Smeal College faculty.

## Career Paths

Starting salaries for MIS graduates are typically above average for business graduates along with a placement rate well above 95%. Students in MIS have countless options when thinking about internships and full-time employment. Career paths for MIS students include consulting, analytics, systems analysts, and data analysts. National and global companies visit the Smeal College annually seeking MIS graduates providing them opportunities to gain core competencies that are crucial for career success.

In addition to job-placement services available at the college and University level, the MIS program partners with Smeal's Center for Supply Chain Research (CSCR) in hosting annual fall and spring career fairs attended by more than 100 companies.

## Accreditation

The Smeal College of Business B.S. degree in Management Information Systems (MIS\_BS) is recognized by the AACSB (Association to

Advance Collegiate Schools of Business) as an accredited program after completing a meticulous internal review and meeting all AACSB standards and requirements.

MORE INFORMATION ABOUT THE ASSOCIATION TO ADVANCE COLLEGIATE SCHOOLS OF BUSINESS (<https://www.aacsb.edu>)

## Contact

### University Park

DEPARTMENT OF SUPPLY CHAIN AND INFORMATION SYSTEMS  
University Park, PA 16802  
454 Business Building  
814-865-1866  
[scis@smeal.psu.edu](mailto:scis@smeal.psu.edu)

<https://www.smeal.psu.edu/scis> (<https://www.smeal.psu.edu/scis/>)

**Ask A Question:** <https://directory.smeal.psu.edu/contact/scis> (<https://directory.smeal.psu.edu/contact/scis/>)