ACCOUNTING, B.S. (BUSINESS)

Begin Campus: Any Penn State Campus
End Campus: University Park

Program Description
This major prepares students for careers in public, corporate, not-for-profit, and governmental accounting and also provides an appropriate background for those planning to enter law school or graduate school. Accountants develop and interpret historical and prospective financial data required for decision-making by managers, investors, regulators, and other stakeholders. To perform their functions, accountants must synthesize both numerical and qualitative information, communicate it clearly, and function effectively as individuals and in teams. The field of Accounting is diverse and offers students the opportunity to be generalists or concentrate in one of the following:

Corporate Control & Financial Management - Courses in this concentration prepare students for positions in industry, government, and business advisory services doing financial planning, analysis, control, and decision support. Students can obtain such designations as Certified Management Accountant (CMA). Management accountants provide forecasts, compute costs and benefits, perform variance analysis, and review and monitor performance. Managerial accountants also design systems that provide information to decision makers.

Internal Auditing & Assessment - Courses in this concentration prepare students for positions as internal auditors. Students can obtain such designations as Certified Internal Auditor (CIA). Internal auditors are employed by the organization they audit. Internal auditing is a systematic approach to evaluating and improving the effectiveness of risk management, control, and governance processes. Internal auditors also review compliance with standards and assess the organization's risks.

Public Accounting - Public accounting is carried on by independent practitioners, most of whom are Certified Public Accountants (CPAs). In addition to statutory audits, CPAs render other assurance, tax, and management advisory services. To be licensed as a CPA in nearly every state, including Pennsylvania, individuals must complete 150 credit-hours of education, pass a demanding professional examination, and meet certain experience requirements. One way to accomplish this is to enroll in the Integrated B.S. in Accounting and Master of Accounting Program.

What is Accounting?
Accountants develop and interpret financial data required for decision-making by managers, investors, regulators, and other stakeholders. To perform their functions, accountants must work with both numerical information and concepts, and they must be able to function effectively as individuals and in teams. Accountants work with people in their own specialized departments, and with users of financial information throughout their organization. Because of this close association with other parts of the organization, the accountant is in a unique position to develop a broad business perspective.

MORE INFORMATION (https://undergrad.smeal.psu.edu/majors/accounting)

Entrance to Major
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 2018, Fall 2018, Spring 2019
In order to be eligible for entrance to this major, students must satisfy the following requirements:

- completed 44-59 credits at Penn State (actual credits taken at the University)
- completed with a grade of C or better: ESL 15 or ENGL 15 or ENGL 30, ACCTG 211, FIN 301, MATH 110 or MATH 140, MGMT 301, MKTG 301, and SCM 200 or STAT 200
- completed ECON 102
- earned a minimum grade-point average (GPA) of 3.20 in the eight entrance-to-major courses listed above.
- earned a minimum of 3.20 cumulative GPA

Students Who Entered Prior to Summer 2018
Students who entered the University prior to the summer 2018 semester should view the administrative enrollment controls for the semester that they entered the university (http://advising.psu.edu/entrance-major-requirements) on the Academic Advising Portal.

Degree Requirements
For the Bachelor of Science degree in Accounting, a minimum of 120 credits is required with at least 15 credits at the 400 level:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>45</td>
</tr>
<tr>
<td>Electives</td>
<td>11</td>
</tr>
<tr>
<td>Requirements for the Major</td>
<td>76</td>
</tr>
</tbody>
</table>

General Education
12 of these 45 credits are included in the Requirements for the Major.

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 (http://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program) section of the Bulletin and consult your academic adviser.

The cornerstone 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.)
- Quantification (GQ): 6 credits
- Writing and Speaking (GWS): 9 credits
Knowledge Domains
• Arts (GA): 6 credits
• Health and Wellness (GHW): 3 credits
• Humanities (GH): 6 credits
• Social and Behavioral Sciences (GS): 6 credits
• Natural Sciences (GN): 9 credits

Integrative Studies (may also complete a Knowledge Domain requirement)
• Inter-Domain or Approved Linked Courses: 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 (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44)). For more information, check the Suggested Academic Plan for your intended program.

Requirements for the Major
This includes 12 credits of General Education courses: 3 credits of GWS courses; 6 credits of GQ courses; 3 credits of GS courses.

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 (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 102</td>
<td>Introductory Microeconomic Analysis and Policy</td>
<td>3</td>
</tr>
<tr>
<td>BA 342</td>
<td>Socially Responsible, Sustainable and Ethical Business Practice</td>
<td>3</td>
</tr>
<tr>
<td>ECON 104</td>
<td>Introductory Macroeconomic Analysis and Policy</td>
<td>3</td>
</tr>
<tr>
<td>MIS 204</td>
<td>Introduction to Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>SCM 301</td>
<td>Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 403W</td>
<td>Auditing</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 404</td>
<td>Managerial Accounting: Economic Perspective</td>
<td>3</td>
</tr>
<tr>
<td>BA 411</td>
<td>Analyzing Business and Industry</td>
<td>3</td>
</tr>
</tbody>
</table>

Prescribed Courses: Require a grade of C or better

ACCTG 211 | Financial and Managerial Accounting for Decision Making | 4 |
FIN 301 | Corporation Finance | 3 |
MGMT 301 | Basic Management Concepts | 3 |
MKTG 301 | Principles of Marketing | 3 |
ENGL 202D | Effective Writing: Business Writing | 3 |
ACCTG 405 | Principles of Taxation I | 3 |
ACCTG 471 | Intermediate Financial Accounting I | 3 |
ACCTG 472 | Intermediate Financial Accounting II | 3 |

Additional Courses
Select 6 credits of the following:

ACCTG 406 | Principles of Taxation II | 4 |
ACCTG 432 | Accounting Information Systems | 4 |
ACCTG 440 | Advanced Management Accounting | 4 |
ACCTG 473 | Advanced Financial Accounting | 4 |
ACCTG 481 | Financial Statement Analysis: Accounting Based Evaluation and Decision Making | 4 |
ACCTG 483 | Forensic Accounting | 4 |

Additional Courses: Require a grade of C or better

MATH 110 | Techniques of Calculus I | 4 |
or MATH 140 | Calculus With Analytic Geometry I | 4 |
SCM 200 | Introduction to Statistics for Business | 4 |
or STAT 200 | Elementary Statistics | 4 |

Supporting Courses and Related Areas
Select 4 credits: Attainment of 12th credit level proficiency in a single foreign language. Proficiency must be demonstrated by either examination or course work.

Select 6 credits of supporting coursework. See Department List.

Integrated B.S. in Accounting and Masters in Accounting Program
The Department of Accounting offers an integrated program allowing students to receive a B.S. in Accounting and Master of Accounting (ACCTG_MACC) degrees within a five-year period. Students typically are admitted into the integrated program in the spring of the second year of the undergraduate program and the program is completed in the subsequent three years. The program is designed to meet the educational
requirements for becoming a certified public accountant in Pennsylvania as well as most other states. Certified public accountants conduct independent audits and provide accounting, tax, and management advisory services. The program prepares students to enter into careers in public accounting, corporate accounting, management accounting, governmental accounting, financial analysis, and law enforcement. In addition, the program is appropriate for students having an interest in entering law school and graduate programs in business, such as M.B.A. programs or doctoral programs.

Admissions Requirements
Students will generally apply for the program in the spring of their second year of undergraduate study. To apply for the program students must:

1. be enrolled in the Smeal College of Business or Division of Undergraduate Studies and intend to complete the entrance-to-major requirements by the end of the spring semester in which they apply

2. complete a Graduate School application for graduate study.

Although the program has no fixed minimum grade-point requirement, an applicant is generally expected to have grade-point average of at least 3.20 on Penn State's grading scale of A (4.00) to D (1.00).

In addition, the Department may request an interview with an applicant, or require a GMAT exam or other exam. Admissions decisions will be based upon the student's application, undergraduate record, SAT scores and, if applicable, interviews and examination results.

Admitted students must have completed ACCTG 211 with superior performance by the end of the spring semester in which they apply for admission to the program. A student who has not satisfied this requirement by the admissions deadline may be provisionally admitted pending completion of ACCTG 211 with a superior performance.

Degree Requirements
Students must complete the requirements for a B.S. in accounting with the following alterations:

Some of prescribed courses for the B.S. must be taken in sections that are available only to students enrolled in the program. These prescribed courses, which all count toward the undergraduate degree in accounting, are: ACCTG 403W, ACCTG 404, ACCTG 405, ACCTG 471, and ACCTG 472.

The student need not satisfy the requirement that 6 credit hours be completed from the following list of courses: ACCTG 406, ACCTG 432, ACCTG 473, and ACCTG 481.

The following courses cannot be used to satisfy the degree requirements of the integrated program: ACCTG 406, ACCTG 410, ACCTG 411, ACCTG 422, ACCTG 450, ACCTG 473, and ACCTG 481.

Students must complete the Master of Accounting Requirements, which total 30 credit hours of graduate instruction, in addition to completing 120 credit hours of undergraduate instruction.

The following courses, totaling 9 credit hours, will double-count towards both the B.S. and Master of Accounting degrees: BLAW 444, FIN 531, and ACCTG 881.

Students must complete a minimum of 30 credits hours of graduate instruction over and above the 120 credit hours required of the B.S. degree in accounting. All 30 of these credit hours must be earned in 400-level, 500-level, or 800-level courses. At least 18 of the 30 credit hours must be earned in 500-level and 800-level courses, and at least 6 of the 30 credit hours must be earned in 500-level courses.

Students must complete the following required courses as part of the 30 credit hours of graduate instruction:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 432</td>
<td>Accounting Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 440</td>
<td>Advanced Management Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 803</td>
<td>Forensic Accounting and Litigation Support</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 806</td>
<td>Taxes and Business Planning</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 873</td>
<td>Advanced Topics in Financial Reporting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 881</td>
<td>Financial Statement Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BA 817</td>
<td>Communication Skills for Management</td>
<td>1-4</td>
</tr>
<tr>
<td>BLAW 444</td>
<td>Advanced UCC and Commercial Transactions</td>
<td>3</td>
</tr>
<tr>
<td>FIN 531</td>
<td>Financial Management</td>
<td>3</td>
</tr>
</tbody>
</table>

These courses must be taken in sections that are available only to students enrolled in the integrated program. Note that these required courses satisfy 27 of the 30 credit hour minimum. In addition, after completing these courses, the student will have satisfied the requirement that 18 credit hours must be earned in 500-level or 800-level courses and the requirement that 6 credit hours must be earned in 500-level courses.

Student must have satisfactory academic performance to maintain enrollment in the program. A grade point average of 3.0 in the 30 credit hours of graduate instruction is required to receive the master's degree.

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 need to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (http://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
uge@smeal.psu.edu

Suggested Academic Plan
University Park Campus and 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.

### Academic Requirements

**First Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSU 6</td>
<td>1</td>
<td>MGMT 301 #3</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 15 or 30 †</td>
<td>3</td>
<td>SCM 200 or STAT 200 ††</td>
<td>4</td>
</tr>
<tr>
<td>MATH 110 or 140 ††</td>
<td>4</td>
<td>World Language 002</td>
<td>4</td>
</tr>
<tr>
<td>ECON 102 ††</td>
<td>3</td>
<td>General Education</td>
<td>3</td>
</tr>
<tr>
<td>World Language 001</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 301 †‡</td>
<td>3</td>
<td>FIN 301 †‡</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 211 † †*</td>
<td>4</td>
<td>SCM 301 or ENGL 202D ¹</td>
<td>3</td>
</tr>
<tr>
<td>ECON 104 (or General Education)</td>
<td>3</td>
<td>CAS 100 ‡</td>
<td>3</td>
</tr>
<tr>
<td>General Education</td>
<td>3</td>
<td>General Education</td>
<td>3</td>
</tr>
<tr>
<td>World Language 003</td>
<td>4</td>
<td>General Education</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>17</strong></td>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

**Third Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 471 *</td>
<td>3</td>
<td>ACCTG 472 *</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 404 or 405 ²</td>
<td>3</td>
<td>ACCTG 404 or 405 ²</td>
<td>3</td>
</tr>
<tr>
<td>SCM 301 or ENGL 202D ¹</td>
<td>3</td>
<td>ECON 104 (or General Education)</td>
<td>3</td>
</tr>
<tr>
<td>MIS 204</td>
<td>3</td>
<td>General Education</td>
<td>3</td>
</tr>
<tr>
<td>BLAW 341</td>
<td>3</td>
<td>BA 342</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General Education (GHW)</td>
<td>1.5</td>
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<tr>
<td><strong>Total Credits</strong></td>
<td><strong>15</strong></td>
<td><strong>Total Credits</strong></td>
<td><strong>16.5</strong></td>
</tr>
</tbody>
</table>

**Fourth Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 411</td>
<td>3</td>
<td>ACCTG 4xx</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 403 (or ACCTG 4xx)</td>
<td>3</td>
<td>ACCTG 403 (or ACCTG 4xx)</td>
<td>3</td>
</tr>
<tr>
<td>Two Piece Sequence</td>
<td>3</td>
<td>Two Piece Sequence</td>
<td>3</td>
</tr>
<tr>
<td>General Education</td>
<td>3</td>
<td>General Education</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
<td>General Education (GHW)</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>13.5</strong></td>
</tr>
</tbody>
</table>

Total Credits 120

*Course requires a grade of C or better for the major

† Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

‡ Course satisfies General Education and degree requirement

¹ Course requires a C or better for major and General Education (2nd course ONLY; the first course of the two options does not require a C)

² Course requires a C or better for major (2nd course ONLY; the first course of the two options does not require a C)

³ Course requires a C or better for Entrance to Major

Course requires a C or better for General Education (2nd course ONLY; the first course of the two options does not require a C)

### University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy University 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.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of ‘C’ or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL/CAS 137 in the fall semester and ENGL/CAS 138 in the spring semester. These courses carry the GWS designation and replace both ENGL 30 and CAS 100. Each course is 3 credits.

### Additional Notes:

In order to promote student academic success, the Smeal faculty has designated the successful completion of specific ‘entrance to major’ courses prior to the beginning of major field course work. In order to ensure all students are equally prepared for success, the Smeal College of Business requires that the following ‘entrance to major’ courses must be completed at a Penn State campus: ACCTG 211, MGMT 301, MKTG 301 and FIN 301.

Therefore, transfer courses or those designated as direct equivalent courses for the four courses listed above will not be credited toward Smeal entrance to major progress.

Please note that pursuant to AACSB accreditation standards, the Smeal College 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.

For example, students in the Accounting major must complete in residence with Smeal College faculty all 300 level and above Accounting courses.

Petitions for hardship exceptions from this policy may be made to the Smeal College of Business Associate Dean for Undergraduate Education.

### Advising Notes:

- It is highly recommended that students at University Park take SCM 301 in their 4th semester.
- It is highly recommended that students at campuses that do not offer SCM 301 take ENGL 202D in their 4th semester.
- Students must complete 12th credit level in a foreign language. Credits vary based on skill level.

### Accounting Degree Requirements ACCTG:

Program Year 2019
Course Descriptions

1. Take all of the following Accounting courses (15 credits) - A grade of ‘C or better’ is required in ACCTG 211, ACCTG 405, ACCTG 471, ACCTG 472 and ENGL 202D.
   a. ACCTG 471
   b. ACCTG 404
   c. ACCTG 472
   d. ACCTG 405
   e. ACCTG 403

2. Select two additional Accounting courses (6 credits)
   a. ACCTG 406
   b. ACCTG 432
   c. ACCTG 440
   d. ACCTG 473
   e. ACCTG 481
   f. ACCTG 483

3. Select one Two Piece Sequence from the following list (6 credits)
   a. Business Law - B LAW 424, B LAW 425, B LAW 441, B LAW 444, B LAW 445, B LAW 446, B LAW 497, B LAW 499
   b. Business Sustainability - BA 441 and BA 442
   c. Economics - Select 3 credits of 300/400 level Economics and select 3 credits of 400 level Economics
   d. Entrepreneurship - MGMT 425 and either MGMT 426 or MGMT 427
   e. Finance - Select two courses from the following: FIN 305, FIN 406, FIN 408
   f. Information Systems Management - MIS 301 and MIS 446
   g. International Business - Select two courses from the following: IB 303, IB 403, IB 404, IB 450, IB 460, IB 470, IB 497 Sustainability & International Business
   h. Management - MGMT 326 and either MGMT 461 or MGMT 471
   i. Marketing -- Select either MKTG 330 or MKTG 327 and select either MKTG 445 or 422
   j. Real Estate - RM 303 and RM 450
   k. Risk Management - RM 302 and RM 440
   l. Supply Chain and Information Systems - Select two courses from the following: SCM 404, SCM 405, SCM 406

Please Note: In lieu of completing a Two-Piece Sequence, students may complete one of the designated University minors listed below provided the minor has a minimum of six credits of 400-level course work that can be used in the two-piece category according to the course layout in the degree audit system.

Smeal College Minors
- Information Systems Management (ISM)
- International Business (IB)
- Legal Environment of Business (LEBUS)
- Supply Chain and Information Sciences & Technology (SCIST)

Liberal Arts Minor or Concurrent Major
- Economics (ECON)

College of IST Minor or Concurrent Major
- Information Sciences and Technology (IST)