

Department of Business Information Systems

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Degrees offered: Bachelor of Science (BS), Bachelor of Arts (BA), and Master of Science (MS) in Business Information Systems; BS and BA in Business Information Technology and Education; BS and BA in Marketing Education; Master of Education (MEd) in Secondary Education with specialization in Business Education; participates in the Interdepartmental Doctor of Philosophy (PhD) in Education and Doctor of Education (EdD) with a specialization in Business Information Systems

Undergraduate emphases: *Business Information Systems BS, BA*—Management Information Systems, Electronic Commerce; *Business Information Technology and Education BS, BA*—Business Teacher License, Training and Development; *Marketing Education BS, BA*—Marketing Teacher License, Training and Development

Graduate specializations: *Business Information Systems MS*—Business Education, Business Information Systems, Electronic Commerce, Management Information Systems, Marketing Education, and Training and Development. The MS in Business Information Systems is also offered through Distance Learning. For more information, contact the nearest USU Extension Center.

Undergraduate Programs

Objectives

The Department of Business Information Systems offers two major educational thrusts in undergraduate as well as graduate programs. The Business Information Systems major is designed to prepare individuals for positions as managers in business information systems, including information managers, information supervisors, network managers, worldwide web designers, electronic commerce developers, systems analysts, applications programmers, systems trainers, and office systems managers by pursuing a bachelor's degree program in Business Information Systems.

The second major thrust is designed to prepare individuals as teachers and supervisors of business and marketing subjects at the secondary and postsecondary grade levels in the educational system or as teacher-trainers in private industry. Students may earn a bachelor's degree in Business Information Technology and Education or Marketing Education.

Departmental Honors

See *Honors in Business* description in the College of Business section of this catalog (page 105).

Learning Objectives and Assessment

Assessment information for the Business Information Systems Department can be found online at:
<http://www.usu.edu/cob/bis/about/assessment.htm>

Requirements

College of Business Requirements

All bachelor's degree students majoring in Business Information Systems programs must satisfy the College of Business entrance requirements provided on pages 105-106. Academic advising about these requirements is provided by the College of Business Career and Education Opportunities Center, Business 309. Business Information Systems majors must also follow College of Business prebusiness course requirements for admission to a major, detailed on page 106.

Matriculation Requirement and Transfer Limitation

No more than 15 USU College of Business credits (ACCT, BA, BIS, BUS, MHR), numbered 2000 and above, earned as a nonbusiness major (before acceptance into the College of Business) can be applied to a College of Business degree. More than 15 business credits can be transferred from other accredited institutions. However, additional USU College of Business credits added to previously earned transfer business credits may not exceed a combined total of 15. Furthermore, to earn a bachelor's degree in a College of Business major, at least 50 percent of the required College of Business credits must be earned from coursework taken from the Utah State University College of Business.

USU Credits and Business Credits

At least 30 of the last 60 semester credits must be taken from Utah State University, 10 of which must be included within the last 40 credits presented for the degree. At least 50 percent of the College of Business credits required for a College of Business degree must be taken from the Utah State University College of Business or its departments, which include: School of Accountancy, Business Administration, Business Information Systems, Economics, and Management and Human Resources.

Teacher Licensure

Persons planning to teach must also be admitted to the teacher licensure program in the College of Education and Human Services. A cumulative college grade point average of 2.75 is required to be admitted to the College of Education and Human Services, to student teach, and to graduate in Business Information Technology and Education or Marketing Education with a teaching license. Detailed information may be obtained from the Department of Secondary Education and/or the College of Education and Human Services.

Competency-based Placement Program

Students who have acquired knowledge and skills that are not represented on their collegiate transcripts of credit are allowed to demonstrate competency by challenging related courses. Placement in a skills-oriented sequence can be accomplished by discussion with an advisor. Challenge of courses is done by successfully completing an examination similar to a final course test.

Students with potential for demonstrating competence have two options, one of which must be chosen prior to examination. One option is to challenge for credit (*P/D+*, *D*, *F* option) according to University established procedures; results of the test are recorded on the student's transcript. A second option is to waive without credit required classes, if competence at the *B* level is demonstrated. Students will be assessed a fee for choosing one of these options.

Department of Business Information Systems

Program Requirements

Bachelor's Degree in Business Information Systems

The Information Systems program at Utah State University offers a common core of courses through two departmental majors: **Business Information Systems** and **Computer Science**. The curricula of the individual departments differ *substantially* in emphasis.

The **Business Information Systems major, Management Information Systems (MIS) emphasis**, is offered in the Business Information Systems Department, College of Business. The Bachelor of Science or Bachelor of Arts program is designed for students interested in business careers as information specialists, systems analysts, network managers, applications programmers, and information systems managers in business and industry. BIS majors take required courses in analysis and design, Internet management, telecommunications, decision support systems, spreadsheet and database applications, and information systems projects. All graduates are required to complete a common core of business subjects. The College of Business is accredited by AACSB International—The Association to Advance Collegiate Schools of Business. The department also offers a Master of Science in Business Information Systems with an area of emphasis in Management Information Systems.

The **Computer Science major with an Information Systems emphasis** is located in the College of Science and is designed for students interested in a career as a Computer Scientist with a background in Information Sciences and Systems. Majors in this emphasis are trained in all phases of the analysis, design, and implementation of Information Systems. As part of this emphasis, students also receive training in the theory and application of information. Students select an application area such as Business, Accounting, or Economics. Other application areas can be developed by working closely with an advisor. This program of study leads to a Bachelor of Science, Bachelor of Arts, or Master of Science degree in Computer Science. See pages 209 and 211 for additional details.

Pre-Business Course Requirements (13 credits)

| | |
|--|---|
| ECON 1500 (BAI) Introduction to Economic Institutions, History, and Principles (F,Sp) | 3 |
| MATH 1100 (QL) Calculus Techniques (F, Sp, Su) | 3 |
| STAT 2300 (QL) Business Statistics (F, Sp, Su) | 4 |
| PSY 1010 (BSS) General Psychology (F, Sp, Su) (3 cr) or | |
| SOC 1010 (BSS) Introductory Sociology (F, Sp) (3 cr) | 3 |

College of Business Core (37 credits)

| | |
|--|---|
| ACCT 2010 Survey of Accounting I (F, Sp, Su)..... | 3 |
| ACCT 2020 Survey of Accounting II (F, Sp, Su)..... | 3 |
| BA 3400 (QI) Corporate Finance (F, Sp, Su) | 3 |
| BA 3500 Fundamentals of Marketing (F, Sp, Su)..... | 3 |
| BA 3700 Operations Management (F, Sp, Su)..... | 3 |
| BIS 2450 Spreadsheets and Databases for Business (F, Sp, Su) | 3 |
| BIS 2550 (CI) Business Communication (F, Sp, Su)..... | 3 |
| BUS 3250 Discussions With Business Leaders (F, Sp) | 1 |
| ECON 2010 (BSS) Introduction to Microeconomics (F, Sp)..... | 3 |
| ECON 3400 International Economics for Business (F, Sp, Su)..... | 3 |
| MHR 2990 Legal and Ethical Environment of Business (F, Sp, Su)..... | 3 |
| MHR 3110 Managing Organizations and People (F, Sp, Su) | 3 |
| MHR 4880 (CI) Business Strategy in an Entrepreneurial Context (F, Sp) (3 cr) or | |
| MHR 4890 (CI) Business Strategy in a Global Context (F, Sp, Su) (3 cr) | 3 |

Students must choose an **Electronic Commerce emphasis**, or a **Management Information Systems (MIS) emphasis**.

The **electronic commerce emphasis** provides knowledge and skills for students who wish to work in the electronic economy using high-speed Internet networks and applications, while providing competitive tools for all Internet-driven electronic commerce. This expertise includes business-to-business electronic commerce, as well as business-to-consumer electronic commerce. Students gain expertise in establishing and designing websites from the technical point of view, as well as expertise in electronic commerce from a strategic business point of view.

Electronic Commerce Emphasis (41-44 credits, plus electives)

Required Courses (29 credits)

| | |
|---|---|
| BIS 3330 Database Management (F, Sp, Su) | 3 |
| BIS 4330 Database Implementation (F,Sp)..... | 3 |
| BIS 5050 Advanced Web-Based Management Information Systems Development (F, Sp, Su) | 3 |
| BIS 5100 Systems Design and Implementation (F,Sp) | 3 |
| BIS 5110 Systems Design Laboratory (F,Sp)..... | 1 |
| BIS 5300 Advanced Data Communications (F,Sp)..... | 3 |
| BIS 5450 Designing Graphical User Interfaces for Electronic Commerce (F,Sp) | 3 |
| BIS 5650 Advanced Website Development (F, Sp, Su)..... | 3 |
| CS 1700 Introduction to Computer Science—CS 1 (F, Sp, Su) | 3 |
| CS 1710 Introduction to Computer Science—CS 1 Lab (F, Sp, Su) | 1 |
| CS 1720 (QI) Introduction to Computer Science—CS 2 (F, Sp, Su) (3 cr) or | |
| CS 3410 (CI/DSC) Algorithm Development: JAVA/Internet (F,Su) (3 cr) | 3 |

Major Requirements (12-15 credits)

| | |
|--|-----|
| BIS 1400¹ Microcomputer Applications in Business (F, Sp, Su) (3 cr) or Passing grade on Computer and Information Literacy competency exam (0 cr) | 0-3 |
| BIS 3500 Management Information Systems Development (F, Sp, Su) | 3 |
| BIS 5700 Internet Management and Electronic Commerce (F,Sp) | 3 |
| BIS 5800 Security of Business Information Systems (F, Sp, Su)..... | 3 |
| BUS 4250 Advanced Internship (pre-approval required) (F, Sp, Su) | 3 |

The **management information systems emphasis** provides knowledge and skills for business systems analysts, applications programmers, information managers, webmasters, and other business information systems positions.

Management Information Systems Emphasis (38-41 credits, plus electives)

Required Courses (23 credits)

| | |
|---|---|
| CS 1700 Introduction to Computer Science—CS 1 (F, Sp, Su) | 3 |
| CS 1710 Introduction to Computer Science—CS 1 Lab (F, Sp, Su) | 1 |
| CS 1720 (QI) Introduction to Computer Science—CS 2 (F, Sp, Su) (3 cr) or | |
| CS 3410 (CI/DSC) Algorithm Development: JAVA/Internet (F,Su) (3 cr) or | |
| CS 3510 (QI/DSC) Algorithm Development: COBOL/Business (F) (3 cr) | 3 |
| BIS 3330 Database Management (F, Sp, Su) | 3 |
| BIS 4330 Database Implementation (F,Sp)..... | 3 |
| BIS 5100 Systems Design and Implementation (F,Sp) | 3 |
| BIS 5110 Systems Design Laboratory (F,Sp)..... | 1 |
| BIS 5300 Advanced Data Communications (F,Sp)..... | 3 |
| BIS 5400 Local Area Network Management for Business (F, Sp)..... | 3 |

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Major Requirements (15-18 credits)

| | |
|--|-----|
| BIS 1400¹ Microcomputer Applications in Business (F, Sp, Su) (3 cr) or Passing grade on Computer and Information Literacy competency exam (0 cr) | 0-3 |
| BIS 2300 Business Data Communications and Networking (F, Sp, Su) (3 cr) or | |
| BIS 3100 Business Information Systems (F, Sp, Su) (3 cr) | 3 |
| BIS 3500 Management Information Systems Development (F, Sp, Su) | 3 |
| BIS 5050 Advanced Web-Based Management Information Systems Development (F, Sp, Su) (3 cr) or | |
| BIS 5650 Advanced Website Development (F, Sp, Su) (3 cr) or | |
| BIS 5700 Internet Management and Electronic Commerce (F,Sp) (3 cr) | 3 |
| BIS 5800 Security of Business Information Systems (F, Sp, Su) | 3 |
| BUS 4250 Advanced Internship (pre-approval required) (F, Sp, Su) | 3 |

Bachelor's Degree in Business Information Technology and Education

A composite major in Business Information Technology and Education is designed for students desiring to qualify for a license to teach business subjects in grades 7-12 or to teach in business and industry. Required courses include:

Pre-Business Course Requirements (13 credits)

| | |
|--|---|
| ECON 1500 (BAI) Introduction to Economic Institutions, History, and Principles (F,Sp) | 3 |
| MATH 1100 (QL) Calculus Techniques (F, Sp, Su) | 3 |
| STAT 2300 (QL) Business Statistics (F, Sp, Su) | 4 |
| PSY 1010 (BSS) General Psychology (F, Sp, Su) (3 cr) or | |
| SOC 1010 (BSS) Introductory Sociology (F, Sp) (3 cr) | 3 |

College of Business Requirements (15 credits)

| | |
|---|---|
| ACCT 2010 Survey of Accounting I (F, Sp, Su) | 3 |
| ACCT 2020 Survey of Accounting II (F, Sp, Su) | 3 |
| BIS 2450 Spreadsheets and Databases for Business (F, Sp, Su) | 3 |
| BIS 2550 (CI) Business Communication (F, Sp, Su) | 3 |
| MHR 2990 Legal and Ethical Environment of Business (F, Sp, Su) | 3 |

Business Information Technology and Education Major Requirements¹ (30-33 credits)

| | |
|--|-----|
| BIS 1400 Microcomputer Applications in Business (F, Sp, Su) (3 cr) or Passing grade on Computer and Information Literacy competency exam (0 cr) | 0-3 |
| BIS 2300 Business Data Communications and Networking (F, Sp, Su) (3 cr) or | |
| BIS 3100 Business Information Systems (F, Sp, Su) (3 cr) | 3 |
| BIS 2400 Web Design for Business Applications (F, Sp, Su) | 3 |
| BIS 2520² Integrating Office Technology | 3 |
| FCHD 3350 (QI)³ Family Finance (F, Sp) | 3 |
| BIS 4550 (CI) Principles of International Business Communications (Sp) | 3 |
| BIS 5300 Advanced Data Communications (F,Sp) (3 cr) or | |
| BIS 5450 Designing Graphical User Interfaces for Electronic Commerce (F,Sp) (3 cr) or | |
| BIS 5700 Internet Management and Electronic Commerce (F,Sp) (3 cr) | 3 |
| BIS 5400 Local Area Network Management for Business (F, Sp) | 3 |
| BA 3500 Fundamentals of Marketing (F, Sp, Su) | 3 |
| BUS 2250 Introductory Internship (pre-approval required) (F, Sp, Su) . | 3 |
| MHR 3110 Managing Organizations and People (F, Sp) | 3 |

¹Business Information Technology and Education majors may meet requirements for a Marketing Education minor by completing two of the following three courses, in addition to the requirements for the Business Information Technology and Education major: BIS 3550, Principles of Selling (online) (2 cr); BA 4510, Buyer Behavior (F,Sp) (3 cr); and BA 4550, Promotion Management (F,Sp) (3 cr).

²Prerequisites: BIS 1420 and 2550; or equivalent.

³FCHD 3350 meets the Quantitative Intensive University Studies Requirement.

Licensure Requirements (36 credits)

| | |
|---|---|
| BIS 3000 Principles of Business and Marketing Education (F,Sp) | 1 |
|---|---|

Level 1 (15-week courses) (1st semester, Junior year)

| | |
|---|---|
| SCED 3100 Motivation and Classroom Management (F, Sp) | 3 |
| SCED 3210 (CI) Educational and Multicultural Foundations (F, Sp) | 3 |
| BIS 3300 Clinical Experience I (40 hrs. minimum) (F,Sp) | 1 |
| BIS 3400 Methods of Teaching Keyboarding and Microcomputing (F and online) | 3 |

Level 2 (15-week courses) (2nd semester, Junior year)

| | |
|--|---|
| SPED 4000 Education of Exceptional Individuals (may be taken anytime) (F, Sp, Su) | 2 |
| SCED 4200 (CI) Reading, Writing, and Technology (F, Sp) | 3 |
| SCED 4210 Cognition and Evaluation of Student Learning (F, Sp) | 3 |
| BIS 4300 Clinical Experience II (40 hrs. minimum) (F,Sp) | 1 |
| BIS 4400 Business Education and Marketing Education Methods (Sp) | 3 |

Level 3 (includes 13 weeks of student teaching and 2 weeks of Student Teaching Seminar) (1st semester, Senior year)

| | |
|--|----|
| BIS 5500 Business/Marketing Teaching Seminar (2 wks.) (F,Sp) | 2 |
| BIS 5630 Business/Marketing Student Teaching (13 wks./full-time) (F,Sp) | 10 |

Training and Development Emphasis (27 credits)

| | |
|---|----|
| BIS 3450 Business Applications Using Visual Basic (F, Sp, Su) | 3 |
| BIS 4350 Introduction to Training and Development (Sp) | 3 |
| BIS 5450⁴ Designing Graphical User Interfaces for Electronic Commerce (F, Sp) | 3 |
| BUS 4250 Advanced Internship (pre-approval required) (F, Sp, Su) | 3 |
| Additional Training and Development Courses selected from the following list | 15 |

Electives for Training and Development Emphasis

| | |
|--|---|
| BIS 3330 Database Management (F, Sp) | 3 |
| MHR 3710 Developing Team and Interpersonal Skills (F, Sp) | 3 |
| INST 5210 Digital Audio-Video Production (F, odd Su) | 3 |
| INST 5230 Instructional Graphic Production (F, Su) | 3 |
| INST 5240 Producing Distance Education Resources (Sp, even Su) ... | 3 |
| INST 5250 Computer-Based Instruction Authoring Using Authorware (Sp, even Su) | 3 |
| INST 5260 Learning and Applying HTML (online) | 3 |
| INST 5300 Multimedia Production for Instruction and Training (Sp) ... | 3 |
| INST 5400 Computer Applications for Instruction and Training (online) | 3 |
| INST 5900 Independent Study: Current Software Application Seminar (F, Sp, Su) | 3 |
| MHR 4630 Human Resource Management (F, Sp) | 3 |

⁴Students who have already taken BIS 5450 as part of the Business Information Technology and Education Major Requirements must take BIS 5300 or 5700 instead.

Those who do not wish to receive a license to teach in the public schools may select an emphasis in Training and Development for business and industry.

Bachelor's Degree in Marketing Education

A composite major in marketing education is designed for students desiring to qualify for a license to teach marketing and distributive education subjects in the public secondary schools or in business and industry. Required courses for students wishing to receive a license to teach include:

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College of Business Requirements (15 credits)

| | |
|---|---|
| ACCT 2010 Survey of Accounting I (F, Sp, Su)..... | 3 |
| ACCT 2020 Survey of Accounting II (F, Sp, Su)..... | 3 |
| BIS 2450 Spreadsheets and Databases for Business (F, Sp, Su)..... | 3 |
| BIS 2550 (CI) Business Communication (F, Sp, Su)..... | 3 |
| MHR 2990 Legal and Ethical Environment of Business (F, Sp, Su)..... | 3 |

Marketing Education Requirements⁵ (30-33 credits)

| | |
|--|-----|
| BIS 1400 Microcomputer Applications in Business (F, Sp, Su) (3 cr) or Passing grade on Computer and Information Literacy competency exam (0 cr)..... | 0-3 |
| BIS 1420 Word Processing Applications (F,Sp)..... | 3 |
| BIS 2300 Business Data Communications and Networking (F, Sp, Su)..... | 3 |
| BIS 2400 Web Design for Business Applications (F, Sp, Su)..... | 3 |
| BIS 4550 (CI) Principles of International Business Communications (Sp)..... | 3 |
| BA 3500 Fundamentals of Marketing (F, Sp, Su)..... | 3 |
| BA 4510 Buyer Behavior (F,Sp)..... | 3 |
| BA 4540 ⁷ Marketing Institutions (F,Sp) (3 cr) or BA 4550 Promotion Management (F,Sp) (3 cr)..... | 3 |
| BUS 2250 Introductory Internship (pre-approval required) (F, Sp, Su)..... | 1-9 |
| FCHD 3350 (QI) ⁶ Family Finance (F, Sp)..... | 3 |
| MHR 3710 ⁷ Developing Team and Interpersonal Skills (F, Sp)..... | 3 |

⁵Marketing Education majors may meet requirements for a Business Information Technology and Education minor by completing the following courses, in addition to the requirements for the Marketing Education major: BIS 5300, Advanced Data Communications (3 cr) or BIS 5450, Designing Graphical User Interfaces for Electronic Commerce (3 cr) or BIS 5700, Internet Management and Electronic Commerce (3 cr); and BIS 5400, Local Area Network Management for Business (3 cr).

⁶FCHD 3350 meets the Quantitative Intensive University Studies Requirement.

⁷BUS 1120, Introduction to Apparel and Textiles (3 cr), and BA 4070, Retail Management (3 cr), may be substituted for BA 4540 and MHR 3710.

Licensure Requirements (36 credits)

| | |
|---|---|
| BIS 3000 Principles of Business and Marketing Education (F,Sp)..... | 1 |
|---|---|

Level 1 (15-week courses) (1st semester, Junior year)

| | |
|--|---|
| SCED 3100 Motivation and Classroom Management (F, Sp)..... | 3 |
| SCED 3210 (CI) Educational and Multicultural Foundations (F, Sp)..... | 3 |
| BIS 3300 Clinical Experience I (40 hrs. minimum) (F,Sp)..... | 1 |
| BIS 3400 Methods of Teaching Keyboarding and Microcomputing (F and online)..... | 3 |

Level 2 (15-week courses) (2nd semester, Junior year)

| | |
|---|---|
| SPED 4000 Education of Exceptional Individuals (may be taken anytime) (F, Sp, Su)..... | 2 |
| SCED 4200 (CI) Reading, Writing, and Technology (F, Sp)..... | 3 |
| SCED 4210 Cognition and Evaluation of Student Learning (F, Sp)..... | 3 |
| BIS 4300 Clinical Experience II (40 hrs. minimum) (F,Sp)..... | 1 |
| BIS 4400 Business Education and Marketing Education Methods (Sp)..... | 3 |

Level 3 (includes 13 weeks of student teaching and 2 weeks of Student Teaching Seminar) (1st semester, Senior year)

| | |
|---|----|
| BIS 5500 Business/Marketing Teaching Seminar (2 wks.) (F,Sp)..... | 2 |
| BIS 5630 Business/Marketing Student Teaching (13 wks./full-time) (F,Sp)..... | 10 |

Training and Development Emphasis (27 credits)

| | |
|--|----|
| BIS 3450 Business Applications Using Visual Basic (F, Sp, Su)..... | 3 |
| BIS 4350 Introduction to Training and Development (Sp)..... | 3 |
| BIS 5450 Designing Graphical User Interfaces for Electronic Commerce (F, Sp)..... | 3 |
| BUS 4250 Advanced Internship (pre-approval required) (F, Sp, Su)..... | 3 |
| Additional Training and Development Courses selected from the following list..... | 15 |

Electives for Training and Development Emphasis

| | |
|---|---|
| INST 5210 Digital Audio-Video Production (F, odd Su)..... | 3 |
| INST 5230 Instructional Graphic Production (F, Su)..... | 3 |
| INST 5240 Producing Distance Education Resources (Sp, even Su)..... | 3 |
| INST 5250 Computer-Based Instruction Authoring Using Authorware (Sp, even Su)..... | 3 |
| INST 5260 Learning and Applying HTML (online)..... | 3 |
| INST 5300 Multimedia Production for Instruction and Training (Sp)..... | 3 |
| INST 5400 Computer Applications for Instruction and Training (online)..... | 3 |
| INST 5900 Independent Study: Current Software Application Seminar (F, Sp, Su)..... | 3 |
| MHR 3710 Developing Team and Interpersonal Skills (F, Sp)..... | 3 |
| MHR 4630 Human Resource Management (F, Sp)..... | 3 |

Graduation Requirements

To be recommended by the department for graduation with a bachelor's degree, BIS majors must have a minimum GPA of 2.67 in courses required for their major. Business Information Systems majors must have an overall GPA of 2.5. Business Information Technology and Education and Marketing Education majors must have an overall GPA of 2.75. This includes transfer credit. At least 50 percent of the business credits required for a business degree must be earned from coursework taken from the Utah State University College of Business.

Communications Literacy requirements are ENGL 1010 and 2010 plus two Communications Intensive courses.

Minors

The Department of Business Information Systems is authorized to award teaching minors in Business Information Technology and Education, Marketing Education, and Business Computer and Information Systems. A minor in Business Information Systems and a minor in Electronic Commerce are also authorized.

Business Information Technology and Education Teaching Minor (29-32 credits)

This is a **teaching minor**. Students must be working on a teaching license and must also teach in at least one business information technology and education class as part of their student teaching experience.

| | |
|--|-----|
| BIS 1400 Microcomputer Applications in Business (F, Sp, Su) (3 cr) or Passing grade on Computer and Information Literacy competency exam (0 cr)..... | 0-3 |
| BIS 1420 Word Processing Applications (F, Sp)..... | 3 |
| ECON 1500 (BAI) Introduction to Economic Institutions, History, and Principles (F, Sp)..... | 3 |
| ACCT 2010 Survey of Accounting I (F, Sp, Su)..... | 3 |
| BIS 2300 Business Data Communications and Networking (F, Sp, Su)..... | 3 |
| BIS 2450 Spreadsheets and Databases for Business (F, Sp, Su)..... | 3 |
| BIS 3000 Principles of Business and Marketing Education (F, Sp)..... | 1 |
| BIS 3300 Clinical Experience I (F, Sp) (1 cr) or BIS 4300 Clinical Experience II (F, Sp) (1 cr)..... | 1 |
| BIS 3400 Methods of Teaching Keyboarding and Microcomputing (F or online)..... | 3 |
| BIS 4400 ⁸ Business Education and Marketing Education Methods (Sp)..... | 3 |
| BIS 5300 Advanced Data Communications (F,Sp) (3 cr) or BIS 5450 Designing Graphical User Interfaces for Electronic Commerce (F, Sp) (3 cr) or BIS 5700 Internet Management and Electronic Commerce (F, Sp) (3 cr)..... | 3 |
| BIS 5400 Local Area Network Management for Business (F, Sp, Su)..... | 3 |

⁸Prerequisites: ECON 1500, MHR 2990, FCHD 3350, ACCT 2010.

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Marketing Education Minor (28-32 credits)

This is a **teaching minor**. Students must be working on a teaching license and must also teach in at least one marketing education class as part of their student teaching experience.

| | |
|--|--------|
| BIS 1400 Microcomputer Applications in Business (F, Sp, Su) (3 cr) or Passing grade on Computer and Information Literacy competency exam (0 cr) | 0-3 |
| BIS 1420 Word Processing Applications (F,Sp) | 3 |
| ECON 1500 (BAI) Introduction to Economic Institutions, History, and Principles (F, Sp) | 3 |
| ACCT 2010 Survey of Accounting I (F, Sp, Su)..... | 3 |
| BIS 2300 Business Data Communications and Networking (F, Sp, Su) | 3 |
| BIS 2400 Web Design for Business Applications (F, Sp, Su) (3 cr) or | |
| BIS 3550 Principles of Selling (online) (2 cr)..... | 2 or 3 |
| BIS 3000 Principles of Business and Marketing Education (F, Sp)..... | 1 |
| BIS 3300 Clinical Experience I (F,Sp) (1 cr) or | |
| BIS 4300 Clinical Experience II (F,Sp) (1 cr)..... | 1 |
| BIS 3400 Methods of Teaching Keyboarding and Microcomputing (F or online)..... | 3 |
| BA 3500 Fundamentals of Marketing (F, Sp, Su)..... | 3 |
| BIS 4400 Business Education and Marketing Education Methods (Sp)..... | 3 |
| BA 4510 Buyer Behavior (F,Sp) (3 cr) or | |
| BA 4550 Promotion Management (F,Sp) (3 cr)..... | 3 |

Business Computer and Information Systems Teaching Minor (29-32 credits)

This is a teaching minor. To obtain this minor, students must be working on a teaching license and must also teach in at least one business computer applications class as part of their student teaching experience. A minimum 2.50 GPA is required in minor classes.

| | |
|--|-----|
| BIS 1400 Microcomputer Applications in Business (F, Sp, Su) (3 cr) or Passing grade on Computer and Information Literacy competency exam (0 cr) | 0-3 |
| BIS 1420 Word Processing Applications (F,Sp) | 3 |
| BIS 2300 Business Data Communications and Networking (F, Sp, Su) | 3 |
| BIS 2400 Web Design for Business Applications (F, Sp, Su)..... | 3 |
| BIS 2450 Spreadsheets and Databases for Business (F, Sp, Su) | 3 |
| BIS 3000 Principles of Business and Marketing Education (F, Sp)..... | 1 |
| BIS 3100 Business Information Systems (F, Sp, Su)..... | 3 |
| BIS 3300 Clinical Experience I (F,Sp) (1 cr) or | |
| BIS 4300 Clinical Experience II (F,Sp) (1 cr)..... | 1 |
| BIS 3400 Methods of Teaching Keyboarding and Microcomputing (F or online)..... | 3 |
| BIS 3450 Business Applications Using Visual Basic (F, Sp, Su) (3 cr) or | |
| BIS 3500 Management Information Systems Development (F, Sp, Su) (3 cr) | 3 |
| BIS 5300 Advanced Data Communications (F,Sp)..... | 3 |
| BIS 5400 Local Area Network Management for Business (F, Sp)..... | 3 |

The minors listed above are teaching minors and are available only to those working toward a teaching license.

Business Information Systems Minor

A minimum 2.50 GPA is required in all courses counted toward the minor.

Business Majors (21-22 credits)

Students majoring in the College of Business must take 21-22 credits, as follows:

| | |
|---|---|
| BIS 2300 Business Data Communications and Networking (F, Sp, Su) | 3 |
|---|---|

| | |
|---|---|
| BIS 2450 Spreadsheets and Databases for Business (F, Sp, Su) | 3 |
| BIS 3100 Business Information Systems (F, Sp, Su) | 3 |
| BIS 3330 Database Management (F, Sp, Su) | 3 |
| BIS 3450 Business Applications Using Visual Basic (F, Sp, Su) (3 cr) or | |
| BIS 3500 Management Information Systems Development (F, Sp, Su) (3 cr) | 3 |
| CS 1700 Introduction to Computer Science—CS 1 (F, Sp, Su) (3 cr) or | |
| CS 3410 (CI/DSC) Algorithm Development: JAVA/Internet (F, Su) (3 cr) | 3 |

Choose one of the following courses (3-4 credits):

| | |
|--|---|
| ACCT 4500 Accounting Information Systems (F, Sp) | 3 |
| BIS 4330 Database Implementation (F,Sp)..... | 3 |
| BIS 5100 Systems Design and Implementation (F,Sp) (3 cr) and | |
| BIS 5110 Systems Design Laboratory (F,Sp) (1 cr) | 4 |
| BIS 5150 Management Support Systems | 3 |
| BIS 5300 Advanced Data Communications (F,Sp)..... | 3 |
| BIS 5400 Local Area Network Management for Business (F, Sp)..... | 3 |
| BIS 5700 Internet Management and Electronic Commerce (F,Sp) | 3 |
| CS 1700⁹ Introduction to Computer Science—CS 1 (F, Sp, Su) (3 cr) or | |
| CS 3410 (CI/DSC)⁹ Algorithm Development: JAVA/Internet (F, Su) (3 cr) or | |
| CS 3510 (QI/DSC) Algorithm Development: COBOL/Business (F) (3 cr) | 3 |

Nonbusiness Majors (27-31 credits)

Students whose majors are **not** in the College of Business must take the following courses **in addition** to those previously listed on this page:

| | |
|---|-----|
| ACCT 2010 Survey of Accounting I (F, Sp, Su)..... | 3 |
| ACCT 2020 Survey of Accounting II (F, Sp, Su)..... | 3 |
| BIS 1400¹⁰ Microcomputer Applications in Business (F, Sp, Su) (3 cr) or | |
| Passing grade on Computer and Information Literacy competency exam (0 cr)..... | 0-3 |

⁹CS 1700 or 3410 may be chosen as an elective, if not taken as a required course for the section above.

¹⁰Prerequisite: Ability to keyboard at a minimum of 25 wpm. Students may meet this prerequisite by passing a waiver exam or by completing a keyboarding or word processing class.

Electronic Commerce Minor

A minimum 2.50 GPA is required in all courses counted toward the minor.

Business Majors (19 credits)

Students majoring in the College of Business must take 19 credits, as follows:

| | |
|---|---|
| BIS 2400 Web Design for Business Applications (F, Sp, Su)..... | 3 |
| BIS 3330 Database Management (F, Sp, Su) | 3 |
| BIS 3450 Business Applications Using Visual Basic (F, Sp, Su) (3 cr) or | |
| BIS 3500 Management Information Systems Development (F, Sp, Su) (3 cr) | 3 |
| BIS 5100 Systems Design and Implementation (F,Sp) | 3 |
| BIS 5110 Systems Design Laboratory (F,Sp)..... | 1 |
| BIS 5300 Advanced Data Communications (F,Sp)..... | 3 |
| BIS 5700 Internet Management and Electronic Commerce (F,Sp) | 3 |

Nonbusiness Majors (28 credits)

Students whose majors are **not** in the College of Business must take the following courses **in addition** to those listed above:

| | |
|---|---|
| ACCT 2010 Survey of Accounting I (F, Sp, Su)..... | 3 |
| BIS 2450 Spreadsheets and Databases for Business (F, Sp, Su) | 3 |
| BA 3500 Fundamentals of Marketing (F, Sp, Su)..... | 3 |

Department of Business Information Systems

College of Business majors who are minoring in Electronic Commerce should take MHR 4880, Business Strategy in an Entrepreneurial Context, as their capstone class in MHR.

Student Organizations

The Department of Business Information Systems sponsors or co-sponsors three student organizations. Each group provides unique experiences that can complement and enrich formal coursework. Leadership development and human relations skills are among the personal attributes enhanced by involvement in the various organization activities.

Association for Computing Machinery (ACM)

ACM, a professional society for the information systems industry, sponsors a student chapter at USU. The goals of ACM are to: (1) provide leadership experiences for undergraduate and graduate business information systems majors; (2) help student members plan their careers and find employment by introducing them to practicing systems professionals; and (3) foster a professional attitude among business information systems majors so that they will contribute to their field.

Delta Epsilon Chi (DEX)

Delta Epsilon Chi (DEX) is a cocurricular organization designed for marketing education and marketing majors. The major goal of DEX is to help students prepare for careers in marketing or marketing education. DEX provides students with opportunities to compete in marketing events at the state and national levels. Membership is open to all students interested in business and marketing.

Delta Pi Epsilon (DPE)

Delta Pi Epsilon (DPE) is a national honorary fraternity for graduate students. Purposes of the organization include enhancement of research, scholarship, service, and cooperation in the profession. Election to membership requires review by members and faculty of the Department of Business Information Systems.

Additional Information

For more information about requirements for the majors and minors within the Business Information Systems Department, see the major requirement sheets, available from the department, or online at: <http://www.usu.edu/ats/majorsheets/>

Graduate Programs

Master of Science

Students applying for admission to the Master of Science program in Business Information Systems must take the GMAT test. A score at the 40th percentile or better on the GMAT is required for admission. Undergraduate GPA should be 3.0 or above. Meeting minimum requirements does not guarantee admission.

The MS requires a minimum of 33 credits. A minimum of 24 credits of academic work must be in classes numbered 6000 and above. Twelve or more credits should be in the area of specialization. Students with bachelor's degrees outside of business may be required to complete additional coursework.

Students in the master's program pursue the *Plan C* option, where a research paper is completed in a special research class. Those who

wish to pursue the *Plan A* thesis option must have permission from their committee to do so.

All MS degrees in the BIS Department require the following core: BIS 6150, 6440, 6810.

The specialization in **Management Information Systems (MIS)** is for students who wish to work as systems analysts, application programmers, network managers, information managers, information center managers, and trainers in business information systems.

Students are expected to have a background in business information systems. Required courses are BIS 6120, 6200, 6330, 6400 (or 6700), in addition to the departmental core. Students who choose the Plan A option must complete 6 credits of BIS 6970. Students may take credits in Business Information Systems, Computer Science, Instructional Technology, Business Administration, Accounting, Economics, or other approved electives to complete the 9 credits of electives required.

The specializations in **Business Education, Marketing Education, and Training and Development** are designed for those who are teaching in an area of business or who wish to work in training and development in business and industry. Required courses for the Business Education or Marketing Education specialization are BIS 6350, 6450, 6700, 6720, 6730, and 6770. Students must complete 15 credits of electives chosen from the following list (or select others with committee approval): BIS 6350, 6400, 6600, 6720, 6730, 6770; BUS 6250.

Required courses for the Training and Development specialization are BIS 6350, 6450; and BUS 6250. Students must complete 15 credits of electives chosen from the following list (or select others with committee approval): BIS 6120, 6330, 6410.

For a current checklist of requirements, students should contact their departmental graduate advisor.

The USU MS in Business Information Systems is the only master's program in Business Information Systems in the state of Utah. Graduates are placed in the West and throughout the nation.

Master of Education

Students desiring admission to the MEd program must also meet the requirements of the Secondary Education Department.

The MEd degree in secondary education with specialization in business education has a master's project requirement as part of the program. The program is devised specifically for the practicing secondary school teacher of business or marketing education. Students complete a core area in secondary education, as well as requirements in business education and subject-matter-oriented courses. The program is also designed to prepare people to teach in public secondary schools.

Doctor of Philosophy and Doctor of Education

Applicants for admission to the College of Education and Human Services PhD or EdD programs with a specialization in Business Information Systems must take the GRE. Scores on the verbal and quantitative test must be at or above the 40th percentile. No minimum score is required on the analytical section (required by the Educational Testing Service).

Department of Business Information Systems

The Department of Business Information Systems cooperates with other departments in offering the interdepartmental Doctor of Philosophy (PhD) and Doctor of Education (EdD). Within the Business Information Systems specialization, emphases can be pursued in business education, marketing education, business information systems, and business communications. Other subject-matter emphases are also available. The PhD is a research-based degree. The EdD degree is a practitioner's degree. Both degrees require dissertations. Graduates secure positions teaching business subjects or business-teacher education in colleges and universities or in business and industry. Former graduates are currently in various positions in higher education, including higher education administration; in teacher education instruction; and in business and industry.

Additional Information

Specific details about each of the foregoing degree programs are outlined in policy and procedure documents available through the department. All requirements are subject to change; check with the department for current requirements.

The business and marketing teacher education programs, at the undergraduate and graduate levels, are ranked highly and respected throughout the nation, with faculty who are nationally and internationally recognized.

All students must meet admission requirements as specified by the School of Graduate Studies (see pages 93-94).

Research

Faculty in the Department of Business Information Systems are active in research and scholarly endeavors. Current and published research topics include business communications; international communications; improvement of instruction in teaching; business information systems as related to business and industry; curriculum for business schools; business reengineering; electronic commerce; group decision support systems; microcomputer applications; use of microcomputers in various subjects, including accounting and business communications; cooperative education; issues in higher education; and other areas related to business information systems, marketing education, and business education.

Financial Assistance and Assistantships

Funds for scholarships are provided through the School of Graduate Studies and administered in the department. Those interested in scholarships should contact the graduate director or the department head.

Each year several high-quality graduate teaching assistants are needed. These assistants generally teach classes in keyboarding, word processing, business communications, and microcomputer applications. Those who are interested in teaching assistantships must apply through the department head. They must have had teaching experience or be willing to take teaching methods classes, as well as the School of Graduate Studies-sponsored teaching assistant workshop, prior to receiving an assistantship.

Career Opportunities

Business Information Systems is one of the fastest growing fields in business and industry. Follow-up studies show that information systems positions pay excellent salaries, and the placement rate of students is almost 100 percent. Currently, there is also a great demand for business teachers in public education.

Business Information Systems Faculty

Professors

Karen A. Forcht, business information systems, business communication, data management, computer security
Dennis J. LaBonty, business information systems, business education
David H. Olsen, business information systems
James Calvert Scott, business education, business communications
John F. Vinsonhaler, business information systems

Professors Emeritus

H. Robert Stocker
William A. Stull

Associate Professors

Jeffrey J. Johnson, business information systems
Robert J. Mills, business information systems
David J. Paper, business information systems

Assistant Professors

Karina Hauser, lean manufacturing, artificial intelligence
Yong Seog Kim, data mining
Jean A. Pratt, business information systems
Zsolt Ugray, business information systems, electrical commerce and optimization

Principal Lecturers

Susan M. Jones, business information systems, business communications
Marianna Larsen, business information systems, business communications
Craig J. Peterson, business information systems
Dana H. Swensen, business information systems, business communications

Senior Lecturer

Ralph B. "Bernie" Lantz, computer technology, networks security, business information systems, computer literacy

Course Descriptions

Business Information Systems (BIS), pages 473-476