

# BUSINESS & COMPUTER SCIENCE DIVISION

---

## Contact Information

**Interim Chair:** Ayodeji Arogundade, PhD

**E-mail:** [abarogundade@lcsc.edu](mailto:abarogundade@lcsc.edu)

**Office:** TJH 126

**Phone:** 208-792-2293

**FAX:** 208-792-2878

**Web:** (<http://www.lcsc.edu/business/>)<http://www.lcsc.edu/business>

## Introduction to the Business & Computer Science Division

The Division's priority is undergraduate instruction, but we also recognize a responsibility to the broader community, which is met through service and scholarship. Faculty work with alumni and an advisory committee of professionals to gather feedback to ensure curriculum and degree programs are relevant and graduates are meeting the needs of the business community

### MISSION STATEMENT

The Business & Computer Science Division at Lewis-Clark State College provides quality education to prepare students with the knowledge, competencies, and experience necessary to successfully compete in today's economy through collaborative involvement with the business community.

### ACCREDITATION

Lewis-Clark State College is accredited by the Northwest Commission on Colleges and Universities. Lewis-Clark State College has received specialized accreditation for its business programs through the International Accreditation Council for Business Education (IACBE) located at 11374 Strang Line Road in Lenexa, Kansas, USA.

Click on the following document to see the business programs that are accredited by the IACBE:

<http://iacbe.org/memberpdf/LewisClarkStateCollege.pdf> (<https://iacbe.org/memberpdf/LewisClarkStateCollege.pdf>)

Click here for Public Disclosure of Student Achievement for Academic Year 20-21

<http://www.lcsc.edu/business/>

## Majors Offered

- Accounting
- Bioinformatics
- Business Administration
- Business Administration: Health Care Emphasis
- Business Informatics
- Business Management
- Business and Communication
- Computer Science
- Cybersecurity Management
- Sport Management
- General Studies: Business
- Bachelor of Applied Science - Business
- Bachelor of Applied Science - Interdisciplinary

### ASSOCIATE OF SCIENCE DEGREES

- Applied Accounting
- Business Administration
- Marketing
- Web Design & Development

## Program Outcomes

From the International Accreditation Council for Business Education's (IACBE) Outcomes Assessment Results for the LC State Business & Computer Science Division:

1. Students will be able to distinguish and explain the concepts, theories, and practices in the functional areas of business.
2. Students will develop and prepare professional oral and written forms of communication.
3. Students will be able to evaluate and apply information technology in support of management decision making.
4. Students will develop and demonstrate the appropriate information literacy skills.
5. Students will be able to work effectively and professionally with diverse colleagues in team situations.

## Assessment

To obtain regular feedback on program excellence, all graduating seniors are required to take a national assessment in Business. The national assessment exam compares LC State student scores in the functional areas of business with student scores at other institutions of higher learning. The General Studies: Business major does not require the student completing the exit exam.

## Admission Requirements

Refer to Lewis-Clark State College standard Admission guidelines.

Business & Computer Science Division students must earn at least a grade of "C-" in Math, ECON, PSYC-101, and all major requirements.

Business & Computer Science Division students must also earn at least a 2.50 grade point average in all business courses combined, including Accounting and Economics.

## Advising

Students are strongly advised to develop Program Plans with a Business & Computer Science Division faculty advisor early in their academic careers. Program Plans help the student to understand the course requirements that must be fulfilled to graduate with a degree. Planning also enables students to learn more about the proper sequencing of courses, which is a key to academic success.

## Minors, Certificates, Transfer Programs

### MINORS:

- Business Administration
- Economics
- Marketing
- Nonprofit Management

### ADVANCED CERTIFICATES

- Applied Accounting

### ACADEMIC CERTIFICATES:

- Entrepreneurship
- Marketing Management
- Sport Marketing

## Special Policies

All candidates for a baccalaureate degree in all business majors with the exception of the General Studies: Business degree must satisfy the following requirements prior to graduation:

1. Complete a minimum of 120 semester college level credits.
2. Complete college's General Education core requirements (see specific major).
3. Complete PSYC-101 and at least one economics class (ECON-201 and/or ECON-202). Some Business majors require both economics classes—check specific program plans. PSYC-101, [ECON-201](#) and ECON-202 satisfy the General Education, Social Sciences Component.
4. Earn at least a "C-" in PSYC-101 and the required math for the degree.
5. Earn at least a "C-" in all major courses.
6. Earn at least a 2.50 grade point average in all Business courses combined.
7. Complete all tests used as part of the College's value added evaluation strategy, including the COMP or other assessment test and a national assessment test in Business if required.

8. Complete no fewer than 64 credits (which can include economics and statistics) in departments other than business.
9. Complete at least 50% of Business credits in the major at LC State.
10. The General Studies: Business major has individual degree requirements. See your advisor and review the General Studies: Business program plan for information.

Expectations of students:

The student will:

1. Acquire and demonstrate the relevant knowledge and competencies in the functional areas of business relevant to their programs of study.
2. Exhibit effective business related skills and abilities.
3. Develop and demonstrate the appropriate information literacy skills.
4. Develop essentials skills in decision making in a business environment.
5. Exhibit the ability to use and apply technology in business situations.

## Additional Division Programs

### NORTH CENTRAL IDAHO SMALL BUSINESS DEVELOPMENT CENTER

North Central Idaho Small Business Development Center (SBDC) is affiliated with the LC State Business & Computer Science Division. The SBDC at LC State provide no-cost business coaching, financial and marketing analysis, practical information, and useful connections.

## Clubs, Honor Societies, other Activities

The Business & Computer Science Division has three student organizations, the Business Student Organization (BSO), the Accounting Club and Sigma Beta Delta Honor Society. Involvement in these organizations allows students to actively participate in networking with fellow students and with the business community.

BSO activities include a variety of fundraising ventures that allow students to raise scholarships and funding for student programs and events. Students may also earn credit for their participation.

The Accounting Club offers students an opportunity to meet and network with accounting professionals and LC State alumni in the community. As a part of this process, students can explore career options in the accounting field and develop an awareness concerning educational requirements. Students may also earn credit for their participation.

Chapter 472 of Sigma beta Delta, the international honor society for business, management and administration. The purposes of Sigma Beta Delta are to encourage and recognize scholarships and achievement among students of business, management and administration, and to encourage and promote personal, professional improvement and a life distinguished by honorable service to humankind.

## Preparation for Future Graduate Studies

The Master of Business Administration (MBA) and Master of Accountancy (MAcc) programs at most universities are open to graduates of business and non-business undergraduate programs. Students who wish to pursue these degrees at a particular university are urged to both contact the university and meet with their advisor to ensure their undergraduate coursework meets the entry requirements of that university.

### AC-231 PRINCIPLES OF ACCOUNTING I 3.00 Credits

Surveys accounting principles, practices, and decision making in organizations. Addresses topics of managerial, financial, not-for-profit, taxation, and international accounting. Develops and applies analytic accounting skills and techniques to management decision making. Continued in AC-232 Principles of Accounting II.

### AC-232 PRINCIPLES OF ACCOUNTING II 3.00 Credits

A continuation of AC-231. Pre-requisite: A grade of 'C-' or better in AC-231.

**AC-290 DIRECTED STUDY IN ACCOUNTING 1.00-12.00 Credits****AC-291 WORKSHOP IN ACCOUNTING 1.00-12.00 Credits****AC-292 SPECIAL TOPICS IN ACCOUNTING 1.00-12.00 Credits****AC-294 INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

(Introductory level internship in Accounting.) The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have Sophomore standing or higher - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-294A INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Introductory level of internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have Sophomore standing or higher - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-294B INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Introductory level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have Sophomore standing or higher - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-294C INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Introductory level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have Sophomore standing or higher - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-294D INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Introductory level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have Sophomore standing or higher - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-295 PRACTICUM IN ACCOUNTING 1.00-12.00 Credits****AC-299 RESEARCH ASSISTANTSHIP 1.00-12.00 Credits****AC-309 VOLUNTEER INCOME TAX ASSISTANCE 3.00 Credits**

The VITA program offers free tax help to low-to moderate-income people in the community who cannot prepare their own tax returns. The purpose of the class is to offer students the opportunity to apply the knowledge they acquire in their accounting classes and related tax classes. The class consists of taking the IRS-sponsored exam that qualifies students to prepare the returns and do a supervisor review of other student-'s' returns. Pre-requisite: AC-232 with a grade of 'C' or better and Junior standing or higher. Graded P/F only. May be repeated once for credit (up to total of 6 credits).

**AC-312 COMPUTERIZED ACCOUNTING 3.00 Credits**

Prepares the student to work with and through computers in meeting organizational financial control needs. Pre-requisite: Must have Junior standing or higher or permission of the instructor.

**AC-319 NOT-FOR-PROFIT ACCOUNTING 3.00 Credits**

This course addresses issues relative to the accounting, reporting and major auditing of a public sector entity. Topics covered include GASB, FASB, and FASAB jurisdiction over not-for-profit and governmental organizations, state and local governmental accounting principles, public entity reporting, and auditing issues. Pre-requisites: AC-232 or permission of the instructor.

**AC-331 INTERMEDIATE ACCOUNTING I 3.00 Credits**

A study of theory, concepts, and financial accounting standards and their application to decision making. Topics include financial statements, the accounting model, assets, liabilities, stockholder's equity, and other financial disclosures. Emphasizes the effects of accounting principles on decision-making, external disclosure consequences of corporate decisions, and the private sector influence on the regulatory and standard-setting environment. Incorporates computer applications into coursework. Continued in AC-332 Intermediate Accounting II. Pre-requisites: A grade of 'C-' or better in AC-232 or permission of the instructor.

**AC-332 INTERMEDIATE ACCOUNTING II 3.00 Credits**

A continuation of AC-331. Pre-requisites: A grade of 'C-' or better in AC-331 or permission of the instructor.

**AC-340 ACCOUNTING INFORMATION SYSTEMS 3.00 Credits**

This course provides a survey of accounting information systems, web technology, online auditing issues in addition to current issues affecting the field of accounting. Specific topics include e-business, computer crime, and expert systems. Pre-requisites: AC-232.

**AC-345 FRAUD EXAMINATION 3.00 Credits**

This course will cover the major methods employees use to commit occupational fraud. Students will learn how and why occupational fraud is committed, how to assess where an organization is at the greatest risk for fraud, how fraudulent conduct can be deterred, and how allegations of fraud should be investigated and resolved. Pre-requisites: AC-232.

**AC-385 MANAGERIAL AND COST ACCOUNTING I 3.00 Credits**

A study of managerial and cost accounting concepts and their application to planning and control of the firm. Topics include accounting for performance and productivity measurement, revenue and cost analysis for decision-making and investigating modern managerial accounting decisions. Emphasizes analytical reasoning to enhance decision-making. Incorporates computer applications into coursework. Pre-requisites: AC-232 and MATH-123 or higher with a grade of C- or better or permission of the instructor.

**AC-390 DIRECTED STUDY IN ACCOUNTING 1.00-12.00 Credits**

Pre-requisite: Must have Junior standing or higher or permission of the instructor.

**AC-391 PERSONAL FINANCE 3.00 Credits**

The course provides students with instruction on practices for budgeting, evaluating investments, and planning for retirement, while taking into account a variety of financial risks and future life changes. The socioeconomic and financial influences that impact personal finance will be considered, while emphasizing the individual responsibilities that are important and applicable to all professional finance settings. The course will cover personal financial planning concepts and applications including cash flow, net worth, asset selection and purchases, income taxes, insurance, and consumer debt. Pre-requisites: AC-231.

**AC-392 SPECIAL TOPICS IN ACCOUNTING 1.00-3.00 Credits**

Pre-requisite: Must have Junior standing or higher or permission of the instructor.

**AC-394 INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Intermediate level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit.- Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have junior standing or higher - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-394A INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Intermediate level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have junior standing or higher - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-394B INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Intermediate level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have junior standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-394C INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Intermediate level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have junior standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-394D INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Intermediate level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have junior standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-395 MANAGERIAL AND COST ACCOUNTING II 3.00 Credits**

A continuation of Managerial/Cost Accounting I. Pre-requisites: A grade of 'C-' or better in AC-385 or permission of the instructor.

**AC-483 TAX LAW I 3.00 Credits**

A survey of domestic taxation philosophy, concepts, legislation, and practice with emphasis on tax filings and topics relevant to individual taxation. Pre-requisites: A grade of 'C-' or better in AC-232 or permission of the instructor.

**AC-484 TAX LAW II 3.00 Credits**

Continuation of topics relevant to individual taxation and a survey of corporate, partnership, and estate taxation philosophy, concepts, legislation, and practice. This course will emphasize corporate taxation and tax planning for the corporate entity and introduction to tax research. Pre-requisites: A grade of 'C-' or better in AC-483 or permission of the instructor.

**AC-485 AUDITING CONCEPTS 3.00 Credits**

Examines financial and operational auditing philosophy and techniques. Topics include auditing standards, internal control design and evaluation, statistical applications in auditing, evidence, and report writing. Examines legal and ethical issues, governmental influence on auditing, and auditing's role in organizational change. Pre-requisites: AC-232 with a grade of C- or better or permission of the instructor.

**AC-490 DIRECTED STUDY IN ACCOUNTING 1.00-12.00 Credits**

Pre-requisite: Must have Junior standing or higher or permission of the instructor.

**AC-491 WORKSHOP IN ACCOUNTING 1.00-12.00 Credits**

Pre-requisite: Must have Junior standing or higher or permission of the instructor.

**AC-492 SPECIAL TOPICS IN ACCOUNTING 1.00-12.00 Credits**

Pre-requisite: Must have Junior standing or higher or permission of the instructor.

**AC-494 INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Advanced level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have junior standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-494A INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Advanced level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have junior standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-494B INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Advanced level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have junior standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-494C INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Advanced level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit. - Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have junior standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-494D INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits**

Advanced level internship in Accounting. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business and accounting courses to an approved accounting-related work setting. The duties and responsibilities at the work site should provide continued exposure to the business as well as an opportunity for improvement in skills for the student. Students will work at the employer's site for the contracted number of hours. 45 hours of supervised and documented work equals one credit.- Students may register for a minimum of one credit and a maximum of six credits in a single semester. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have junior standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**AC-495 PRACTICUM IN ACCOUNTING 1.00-12.00 Credits**

Pre-requisite: Must have Junior standing or higher or permission of the instructor.

**ACCPT-101 BASIC ACCOUNTING 3.00 Credits**

This course is an introduction to accounting procedures for individual proprietorship businesses. Emphasis is on the accounting cycle, double-entry accounting, payroll, and procedures for handling transactions associated with both service and merchandising businesses. Students will practice proper accounting procedures manually and/or on spreadsheet software. It is also helpful to those who want to upgrade business skills for improved employability.

**ACCPT-105 PAYROLL ACCOUNTING 3.00 Credits**

Payroll accounting systems, procedures, and time-keeping methods to comply with current laws and regulations. A comprehensive 'real-life' project will play a significant role in this course. Pre-requisite: ACCPT-101 or AC-231.

**ACCPT-190 DIRECTED STUDY IN ACCOUNTING 1.00-6.00 Credits****ACCPT-191 WORKSHOP IN ACCOUNTING 1.00-6.00 Credits****ACCPT-192 SPECIAL TOPICS IN ACCOUNTING 1.00-6.00 Credits****ACCPT-194 INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits****ACCPT-194A INTERNSHIP IN ACCOUNTING I 1.00-6.00 Credits**

Internship in Accounting.

**ACCPT-194B INTERNSHIP IN ACCOUNTING II 1.00-6.00 Credits**

Continuation of ACCPT-194A as a 100-level Internship in Accounting.

**ACCPT-194C INTERNSHIP IN ACCOUNTING III 1.00-6.00 Credits**

Continuation of ACCPT-194B as an intermediate 100-level Internship in Accounting.

**ACCPT-194D INTERNSHIP IN ACCOUNTING IV 1.00-6.00 Credits**

Continuation of ACCPT-194C as an intermediate to advanced 100-level Internship in Accounting.

**ACCPT-214 COMPUTERIZED ACCOUNTING 3.00 Credits**

Introduction to computerized accounting using current accounting software. The course integrates the normal accounting cycle for a service and merchandise business into a computerized information system. Topics include accounts receivable, accounts payable, bank reconciliations, and end-of-period procedures. Pre-requisite: ACCPT-101 or equivalent.

**ACCPT-219 GOVERNMENT AND NOT-FOR-PROFIT ACCOUNTING 3.00 Credits**

The primary purpose of this course is to introduce the student to accounting principles and procedures unique to federal, state, and local governments, and not-for-profit organizations. The course will cover financial statements and reports prepared for each type of entity, fund, and account group and explore the role of the Governmental Accounting Standards Board (GASB), Federal Accounting Standards Advisory Board (FASAB), and the Financial Accounting Standards Board (FASB) in establishing accounting standards and disclosure requirements for governments and not-for-profit organizations. For the 300 level course, students must complete two computerized practice sets, one dealing with governments and the other with not-for-profit organizations. Pre-requisite: ACCPT-232 or AC-232 with a grade of C or better.

**ACCPT-231 PRINCIPLES OF ACCOUNTING I 3.00 Credits**

Surveys accounting principles, practices, and decision making in organizations. Addresses topics of managerial, financial, not-for-profit, taxation, and international accounting. Develops and applies analytic accounting skills and techniques to management decision making. Continued in AC-232 Principles of Accounting II. Cross-listed with AC-231.

**ACCPT-232 PRINCIPLES OF ACCOUNTING II 3.00 Credits**

A continuation of AC-231. Pre-requisite: A grade of 'C-' or better in AC-231 or ACCPT-231. Crosslisted with AC-232.

**ACCPT-233 INTERMEDIATE ACCOUNTING 3.00 Credits**

This course will develop the judgement and decision-making skills professionals require to critically evaluate financial statements. Students will use conceptual framework fundamentals to solve accounting problems by applying standards, understanding how business activities are reflected in the financial statements and critically evaluating the trade-offs and assumptions of accounting methods. Pre-requisite: ACCPT-232 or AC-232.



**ACCPT-234 MANAGERIAL ACCOUNTING FOR THE HOSPITALITY INDUSTRY 3.00 Credits**

This course is an introduction to basic financial accounting concepts and practice applicable to resort and hospitality organizations using the industry's uniform system of accounting. Key accounting concepts and the selective application of its most effective strategies and tactics are mission critical factors for most hospitality operations. Students participate in real-world, hands-on managerial accounting in a hospitality setting.

**ACCPT-235 COST ACCOUNTING 3.00 Credits**

This course provides a study of budgeting and cost control systems including a detailed study of manufacturing cost accounts and reports, job order costing, and process costing. It includes an introduction to alternative costing methods such as activity based and just-in-time costing as well as historical cost systems, work in process inventories, material and labor control, multiple products, budgeting, applying overhead, standard costs, direct costs, evaluating profit performance, and distribution costs. These courses are offered at the 200 level with an option to take at the 300 level with a research project in addition to the 200 level course load. Prerequisite: ACCPT-231.

**ACCPT-236 MANAGEMENT ACCOUNTING IN HEALTHCARE ORGANIZATIONS 3.00 Credits**

This course focuses on the financial management of healthcare organizations and covers concepts in managerial accounting and finance that are critical to decision-making. These topics include evaluation of capital investment decisions, sources of financing, managerial accounting concepts (including cost behavior, profit analysis, and incremental analysis), reimbursement under various third-party payer environments, cost allocation and government program reporting. Pre-requisite: AC-231.

**ACCPT-245 FRAUD EXAMINATION 3.00 Credits**

This course will cover the major methods employees use to commit occupational fraud. Students will learn how and why occupational fraud is committed, how to assess where an organization is at the greatest risk for fraud, how fraudulent conduct can be deterred, and how allegations of fraud should be investigated and resolved. These courses are offered at the 200 level with an option to take at the 300 level with a research project in addition to the 200 level course load.

**ACCPT-260 ACCOUNTING INFORMATION SYSTEMS 3.00 Credits**

The objective of this course is to become familiar with how accounting information systems should function, regardless of the particular software used. This course emphasizes the practical application of accounting information systems concepts and will lead to understanding accounting information systems risks and controls so that you are capable of helping to solve issues related to the system or assist in implementing a new system. Quickbooks and Excel are an integral part of this course. During the course of the semester, students will engage in hands on problem solving through the use of technology as an analytical tool. These courses are offered at the 200 level with an option to take at the 300 level with a research project in addition to the 200 level course load. Prerequisite: ACCPT-231.

**ACCPT-280 AUDITING 3.00 Credits**

This course is designed to provide an introduction to auditing. The objectives include becoming familiar with principles and practices used by public accountants and internal auditors in examining financial statements and supporting data. Students will be studying the techniques available for gathering, summarizing, analyzing and interpreting the data presented in financial statements and procedures used in verifying the fairness of the information. Ethical and legal aspects and considerations are also emphasized. Pre-requisite: ACCPT-232 or AC-232.

**ACCPT-290 DIRECTED STUDY IN ACCOUNTING 1.00-6.00 Credits****ACCPT-291 WORKSHOP IN ACCOUNTING 1.00-6.00 Credits****ACCPT-292 SPECIAL TOPICS IN ACCOUNTING 1.00-6.00 Credits****ACCPT-294 INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits****ACCPT-294A INTERNSHIP IN ACCOUNTING I 1.00-6.00 Credits**

Internship in Accounting.

**ACCPT-294B INTERNSHIP IN ACCOUNTING II 1.00-6.00 Credits**

Continuation of ACCPT-294A as a 200-level Internship in Accounting.

**ACCPT-294C INTERNSHIP IN ACCOUNTING III 1.00-6.00 Credits**

Continuation of ACCPT-294B as an intermediate 200-level Internship in Accounting.

**ACCPT-294D INTERNSHIP IN ACCOUNTING IV 1.00-6.00 Credits**

Continuation of ACCPT-294C as an intermediate to advanced 200-level Internship in Accounting.

**ACCPT-299 APPLIED ACCOUNTING CAPSTONE 1.00 Credit**

This course is a required course for the Applied Accounting program. Students will review and practice the financial accounting skills learned throughout the program. Emphasis will be placed on accurately preparing financial statements using accounting software. Financial statements and payroll reports will be prepared from actual source documents. This course should be taken during the student's last semester and will precede taking the required Technical Skills Assessment through the National Occupational Competency Testing Institute (NOCTI). Pre-Requisite(s): ACCPT 105, ACCPT 214, ACCPT 231, and ACCPT 232.

**ACCPT-319 GOVERNMENT AND NOT-FOR-PROFIT ACCOUNTING 3.00 Credits**

The primary purpose of this course is to introduce the student to accounting principles and procedures unique to federal, state, and local governments, and not-for-profit organizations. The course will cover financial statements and reports prepared for each type of entity, fund, and account group and explore the role of the Governmental Accounting Standards Board (GASB), Federal Accounting Standards Advisory Board (FASAB), and the Financial Accounting Standards Board (FASB) in establishing accounting standards and disclosure requirements for governments and not-for-profit organizations. For the 300 level course, students must complete two computerized practice sets, one dealing with governments and the other with not-for-profit organizations. Pre-requisite: ACCPT-232 or AC-232 with a grade of 'C' or better.

**ACCPT-335 COST ACCOUNTING 3.00 Credits**

This course provides a study of budgeting and cost control systems including a detailed study of manufacturing cost accounts and reports, job order costing, and process costing. It includes an introduction to alternative costing methods such as activity based and just-in-time costing as well as historical cost systems, work in process inventories, material and labor control, multiple products, budgeting, applying overhead, standard costs, direct costs, evaluating profit performance, and distribution costs. Students taking this course at the 300 level are required to do a final research project. These courses are offered at the 200 level with an option to take at the 300 level with a research project in addition to the 200 level course load. Prerequisite: ACCPT-231.

**ACCPT-345 FRAUD EXAMINATION 3.00 Credits**

This course will cover the major methods employees use to commit occupational fraud. Students will learn how and why occupational fraud is committed, how to assess where an organization is at the greatest risk for fraud, how fraudulent conduct can be deterred, and how allegations of fraud should be investigated and resolved. Students taking this course at the 300 level will be required to do a final research project. These courses are offered at the 200 level with an option to take at the 300 level with a research project in addition to the 200 level course load.

**ACCPT-350 ACCOUNTING ETHICS 3.00 Credits**

This course will introduce students to the concepts of ethical reasoning, integrity, objectivity, independence, core values, and professional issues in accounting. Students will apply the concepts and theories to accounting cases. Students taking this course at the 300 level will be required to complete a final research project. These courses are offered at the 200 level with an option to take at the 300 level with a research project in addition to the 200 level course load.

**ACCPT-360 ACCOUNTING INFORMATION SYSTEMS 3.00 Credits**

The objective of this course is to become familiar with how accounting information systems should function, regardless of the particular software used. This course emphasizes the practical application of accounting information systems concepts and will lead to understanding accounting information systems risks and controls so that you are capable of helping to solve issues related to the system or assist in implementing a new system. Quickbooks and Excel are an integral part of this course. During the course of the semester, students will engage in hands on problem solving through the use of technology as an analytical tool. Students taking this course at the 300 level are required to complete a final research project. These courses are offered at the 200 level with an option to take at the 300 level with a research project in addition to the 200 level course load. Prerequisite: ACCPT-231.

**ACCPT-390 DIRECTED STUDY IN ACCOUNTING 1.00-6.00 Credits****ACCPT-391 WORKSHOP IN ACCOUNTING 1.00-6.00 Credits****ACCPT-392 SPECIAL TOPICS IN ACCOUNTING 1.00-6.00 Credits****ACCPT-394 INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits****ACCPT-394A INTERNSHIP IN ACCOUNTING I 1.00-6.00 Credits**

Internship in Accounting.

**ACCPT-394B INTERNSHIP IN ACCOUNTING II 1.00-6.00 Credits**

Continuation of ACCPT-394A as a 300-level Internship in Accounting.

**ACCPT-394C INTERNSHIP IN ACCOUNTING III 1.00-6.00 Credits**

Continuation of ACCPT-394B as an intermediate 300-level Internship in Accounting.

**ACCPT-394D INTERNSHIP IN ACCOUNTING IV 1.00-6.00 Credits**

Continuation of ACCPT-394C as an intermediate to advanced 300-level Internship in Accounting.

**ACCPT-422 INTEGRATED ACCOUNTING 3.00 Credits**

Generic journal-based computerized accounting for service and merchandising businesses formed as sole proprietorships, partnerships, and corporations. Concepts covered include the accounting cycle, bank reconciliation, voucher systems, budgeting, purchase orders, sales orders, inventories, fixed assets, payroll, financial statement analysis, and departmentalized accounting. Additional projects focus on integrating the accounting information with word processing and spreadsheet software. Students taking this course will be required to complete one additional project. Pre-requisites: ACCPT-101, ACCPT-102, and GNBPT-110 or permission of instructor.

**ACCPT-490 DIRECTED STUDY IN ACCOUNTING 1.00-6.00 Credits****ACCPT-491 WORKSHOP IN ACCOUNTING 1.00-6.00 Credits****ACCPT-492 SPECIAL TOPICS IN ACCOUNTING 1.00-6.00 Credits****ACCPT-494 INTERNSHIP IN ACCOUNTING 1.00-12.00 Credits****ACCPT-494A INTERNSHIP IN ACCOUNTING I 1.00-6.00 Credits**

Internship in Accounting.

**ACCPT-494B INTERNSHIP IN ACCOUNTING II 1.00-6.00 Credits**

Continuation of ACCPT-494A as a 400-level Internship in Accounting.

**ACCPT-494C INTERNSHIP IN ACCOUNTING III 1.00-6.00 Credits**

Continuation of ACCPT-494B as an intermediate 400-level Internship in Accounting.

**ACCPT-494D INTERNSHIP IN ACCOUNTING IV 1.00-6.00 Credits**

Continuation of ACCPT-494C as an intermediate to advanced 400-level Internship in Accounting.

**BIOF-100 INTRODUCTION TO BIOINFORMATICS 3.00 Credits**

An introduction to bioinformatics as a scientific discipline. No prior knowledge needed. Emphasis is on the application of computational tools and techniques to solving Molecular Biology problems. Topics include: essential concepts in Molecular Biology, DNA sequencing methods, sequence alignment methods, sequence databases and web servers, regulatory sequence motif finding, sequence variation and phylogenetics. Pre-requisite: Placement into core MATH or above.

**BIOF-301 COMPUTATIONAL GENOMICS 3.00 Credits**

Introduction to the current computational methods for whole genome sequence analysis. Emphasis is on large-scale sequence data analysis in a high-performance UNIX/Linux computing environment. Topics include, genome structure and organization, whole genome assembly and annotation, comparative genomics, transcriptome assembly and gene expression analysis, genome arithmetic, DNA polymorphism detection, and small RNA Biology and analysis. Pre-requisite: MATH-170 and CS-250, with a grade of C or better.

**BIOF-350 IMAGE ANALYSIS 4.00 Credits**

Covers image processing techniques with application to biological images. This includes scanning technology, image segmentation, application of machine learning to image analysis, and development of automatic image analysis software. Programming experience is expected. Students will both use and develop image analysis software. Pre-requisite: MATH-170 and CS-250, with a grade of C or better.

**BIOF-399 Research Assistantship 12.00 Credits**

Research Assistantship in Bioinformatics.

**BIOF-495 PRACTICUM IN BIOINFORMATICS 1.00-12.00 Credits****BUS-101 INTRODUCTION TO BUSINESS 3.00 Credits**

Increases student awareness of business functions and the business environment. Crosslisted with MGTPT-101.

**BUS-190 DIRECTED STUDY IN BUSINESS 1.00-12.00 Credits****BUS-192 SPECIAL TOPICS IN BUSINESS 1.00-12.00 Credits****BUS-220 BUSINESS COMMUNICATIONS 3.00 Credits**

Provides students with written and verbal skills to communicate effectively in the business environment. Written skills range from basic grammar and punctuation techniques to writing business memos and reports. Verbal skill situations include preparing presentations and interviews and directing meetings.

**BUS-221 INTRODUCTION TO COMPUTERS/INFO SYSTEMS 3.00 Credits**

Introduction to the characteristics of computer based information systems in organizations. Topics included are: the use of microcomputers in business; the most popular productivity software applications; Management Information Systems (MIS) theory; the importance of MIS in modern international management decision-making; systems analysis and design; and several uses of the Internet.

**BUS-261 SMALL BUSINESS/ENTREPRENEURIAL MGMT 3.00 Credits**

A study of the development and implementation of developing a for-profit enterprise. Emphasis is put on best practices for success in today's global economy. Case studies are used to explore topics ranging from the entrepreneurial lifestyle and mindset to the decision to start a business from scratch, purchase a franchise or existing business, to the components of a business plan, which include management and organization, marketing, financial sections, and managing growth.

**BUS-271 BUSINESS STATISTICS 3.00 Credits**

Survey of descriptive and inferential statistical concepts commonly used in the treatment of data in social science research. The understanding and application of the concepts will be emphasized. Topics include: measures of central tendency, measures of variability, correlation methods, hypothesis testing, and simple analysis of variance. Pre-requisite: MATH-123 with a grade of C or better.

**BUS-290 DIRECTED STUDY IN BUSINESS 1.00-12.00 Credits****BUS-292 SPECIAL TOPICS IN BUSINESS 1.00-12.00 Credits****BUS-294 INTERNSHIP IN BUSINESS 1.00-12.00 Credits**

Introductory level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. Students will work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits - Students must have sophomore standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-294A INTERNSHIP IN BUSINESS I 1.00-12.00 Credits**

Introductory level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. Students will work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. - Students must have sophomore standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-294B INTERNSHIP IN BUSINESS II 1.00-12.00 Credits**

Introductory level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. - Students must have sophomore standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-294C INTERNSHIP IN BUSINESS 1.00-12.00 Credits**

Introductory level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. Pre-requisite: Sophomore standing or permission of the instructor. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. - Students must have sophomore standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-294D INTERNSHIP IN BUSINESS 1.00-12.00 Credits**

Introductory level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. Pre-requisite: Sophomore standing or permission of the instructor. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. - Students must have sophomore standing or higher or permission of the instructor - Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-301 FINANCIAL MANAGEMENT 3.00 Credits**

A study of decision making within a firm, emphasizing the financial environment and maximizing the value of the firm. Subjects include financial planning, the CAP model and long-term valuation decisions. Pre-requisites: AC-232 and MATH-123 or higher with a grade of C- or better or permission of the instructor.

**BUS-306 BUSINESS AND CULTURE 3.00 Credits**

This course increases student awareness of business cultures, introduces business industry norms, and aspects of the general business environment on a micro, macro, and global basis.

**BUS-311 FOUNDATIONS OF MANAGEMENT THEORY 3.00 Credits**

Explores the historical foundations of management thought, analyzes the functions of management, and provides a detailed examination of leadership, communication, motivation, and organizational behavior.

**BUS-321 PRINCIPLES OF MARKETING 3.00 Credits**

Examines the basic elements of marketing theory, terminology and concepts with emphasis placed on analyzing consumer motivation.

**BUS-323 PROMOTION METHODS 3.00 Credits**

Focuses on major elements of the promotional mix including personal selling, advertising, sales, promotion, and publicity. Pre-requisite: BUS-321.

**BUS-325 FOOD SERVICE SYSTEMS AND CONTROLS 3.00 Credits**

Provides an introduction to control functions in food and beverage management, including determining standards, operating budgets, and menu production to students preparing for careers in the food and beverage management sector, as well as hotels and other enterprises where this knowledge is necessary.

**BUS-333 CONSUMER BEHAVIOR 3.00 Credits**

Focuses on those activities directly involved in obtaining, consuming, and disposing of products and services, including the decision processes that precede and follow these actions. Topics include individual and small group decision making as well as the major factors shaping these processes: individual differences, psychological processes, and environmental influences. Consumer Behavior is of particular interest to those who, for various reasons, desire to influence or change that behavior, including those whose primary concern is marketing, consumer education and protection, and public policy. Non-business majors are welcome. Pre-requisite: BUS-321 with a grade of C or better and Junior standing or higher; or permission of the instructor.

**BUS-340 RETAIL MARKETING 3.00 Credits**

Includes site selection, organization, merchandising, pricing, promotion, and controls. Pre-requisites: BUS-321.

**BUS-346 NONPROFIT MANAGEMENT 3.00 Credits**

This course introduces students to the nature of nonprofit organizations and provides a framework for managing and leading within the nonprofit sector. Key content areas include: understanding of legal structure, governance and leadership, accountability and performance, strategic planning, partnerships and alliances, employees and volunteers; marketing and communications; and financial management. Theory and practical application are blended in this course, providing an experiential learning experience through a service learning project for a local nonprofit organization. Crosslisted with COMM-346.

**BUS-347 NONPROFIT FUNDRAISING 3.00 Credits**

This course focuses on fundraising from the perspective of a nonprofit organization. Students will explore the skills needed to become a successful fundraiser, including donor research, event planning and evaluation, and community relations. From seeking donors and developing a needs statement through creating a fundraising plan and implementing a successful fundraising event, students will gain practical knowledge, which can be applied in a variety of situations. This course has a large community engagement component, and students will work with real nonprofit organizations to apply course concepts. Crosslisted with COMM-347.

**BUS-348 NONPROFIT GRANT WRITING 3.00 Credits**

This course focuses on grant writing from the perspective of a nonprofit organization. Students will become familiar with grant seeking and grant writing processes. From searching for funders and developing a needs statement through creating a budget and implementing a successful grant, students will gain practical knowledge which can be applied in a variety of situations. Students will gain experience in both writing and reviewing grant proposals. This course has a large community engagement component, and students will work with real nonprofit agencies to apply course concepts. Pre-requisites: Must have Junior standing or higher or permission from the instructor. Crosslisted with COMM-348.

**BUS-352 PUBLIC FINANCE 3.00 Credits**

An examination of the public sector and its contribution to economic welfare, resource allocation, income distribution, stabilization, and economic growth. Pre-requisites: ECON-201 and ECON-202.

**BUS-355 INFORMATION SYSTEMS FOR MANAGERS 3.00 Credits**

Advanced study of the characteristics of computer based information systems in organizations. Topics include: issues and problems in the use of computerized information systems in organizing and operating the business enterprise, global issues in information access, use comparative international applications, and implementation of decision support systems. Pre-requisites: BUS-311 or BUS-312.

**BUS-360 LEADERSHIP 3.00 Credits**

Explores the concept of leadership from an interdisciplinary perspective: psychological determinants of leaders and followers, political factors of governance, sociological issues connecting individuals and small groups, anthropological factors in tracking societal transformations, and management skills in the practice of leadership. Pre-requisite: BUS-311.

**BUS-364 EMOTIONAL INTELLIGENCE 3.00 Credits**

This course will cover evidence-based research on the application and effectiveness of Emotional Intelligence in the work place. This includes building a greater sense of awareness of emotions and learning strategies in yourself and others. Emotional Intelligence will help students develop leadership skills that are constructive, productive and authentic.

**BUS-365 BUSINESS LAW I 3.00 Credits**

Explores the legal environment of business, including the legal system, the nature and source of law as applied to business activity, and labor law and legislation. Emphasis on legislation and cases impacting business practice. Requires the preparation of written briefs for assigned cases. Pre-requisites: ENGL-102 or ENGL-109.

**BUS-366 BUSINESS AND SOCIETY 3.00 Credits**

Surveys the political, legal, and social factors that influence business, the role of business in alleviating social problems, and business' responsibility in light of contemporary ethical and moral values. Writing integrated. Pre-requisites: ENGL-102 or ENGL-109.

**BUS-370 PRODUCTION AND OPERATIONS MANAGEMENT 3.00 Credits**

Examines planning, scheduling, and management of business operations and procedures for achieving continuous improvements in quality in manufacturing and service firms. Topics include forecasting demand and costs, facilities design, production planning, and control procedures. Pre-requisites: MATH-123 or higher, BUS-311, and BUS-271 or ECON-300 with a grade of C- or better.

**BUS-375 BUSINESS LAW II 3.00 Credits**

Business Law II is a continuation of Business Law I and will cover a variety of legal issues including Negotiable Instruments, Agency Law, Business Associations, Creditor Relations, and Regulation of Business. The student will review current events involving the legal environment of business and will prepare case briefs and analyze legal problems. Pre-requisite: BUS-365.

**BUS-380 INTERNATIONAL BUSINESS 3.00 Credits**

An overview of the international business environment, conditions affecting firms conducting business overseas and the effects of a transcultural, multi-currency setting on each of the functional areas of business. Pre-requisites: BUS-311.

**BUS-390 DIRECTED STUDY IN BUSINESS 1.00-12.00 Credits**

Pre-requisite: Must have Junior standing or higher or permission of the instructor.

**BUS-392 SPECIAL TOPICS IN BUSINESS 1.00-3.00 Credits**

Pre-requisite: Must have Junior standing or higher or permission of the instructor.

**BUS-394 INTERNSHIP IN BUSINESS 1.00-12.00 Credits**

Intermediate level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. -Students must have junior standing or higher or permission of the instructor -Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-394A INTERNSHIP IN BUSINESS I 1.00-12.00 Credits**

Intermediate level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. -Students must have junior standing or higher or permission of the instructor -Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-394B INTERNSHIP IN BUSINESS II 1.00-12.00 Credits**

Intermediate level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. -Students must have junior standing or higher or permission of the instructor -Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-394C INTERNSHIP IN BUSINESS III 1.00-12.00 Credits**

Intermediate level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. -Students must have junior standing or higher or permission of the instructor -Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-394D INTERNSHIP IN BUSINESS IV 1.00-12.00 Credits**

Intermediate level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. -Students must have junior standing or higher or permission of the instructor -Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-400 ADVERTISING 3.00 Credits**

An in-depth study of the advertisement industry. Will explore theories of advertising as they relate to questions of ethics, consumerism, social media, and successful and unsuccessful marketing campaigns. Students will both create and critique advertisements. Suggested prerequisites: COMM-320, COMM-384, BUS-311, and/or BUS-321. Crosslisted with COMM-400.

**BUS-405 ENTREPRENEURSHIP 3.00 Credits**

Explores techniques and challenges in developing and operating a small business. Emphasizes application of classroom learning in cases involving local businesses. Pre-requisites: BUS-321 and Junior standing or higher or permission of the instructor.

**BUS-412 HUMAN RESOURCE MANAGEMENT 3.00 Credits**

A survey of personnel functions including manpower planning, appraisal systems, training and development, labor-management relations, compensation, and safety. Pre-requisite: BUS-311 and must have Junior standing or higher or permission of the instructor.

**BUS-413 ORGANIZATIONAL BEHAVIOR 3.00 Credits**

Provides an introduction to the study of organizational structure and design in a global environment. Organization behavior, intergroup relations, and conflict and decision making from a multicultural perspective will be introduced. The interaction between organizational structure and organizational behavior will be discussed in depth. Pre-requisite: BUS-311 and must have Junior standing or higher or permission of the instructor.

**BUS-416 STAFFING 3.00 Credits**

Provides an in-depth analysis of human resource planning, employee recruitment, selection, placement, evaluation, retention, and terminations/layoffs. Pre-requisites: BUS-412 and Junior standing or higher or permission of the instructor.

**BUS-421 MARKETING RESEARCH 3.00 Credits**

Introduces students to basic research designs, sampling, field work, data collection methods, secondary sources of data, data analysis, and research presentation and evaluation. Pre-requisites: BUS-321 and Junior standing or higher or permission of the instructor.

**BUS-428 MARKETING MANAGEMENT 3.00 Credits**

Investigates the role of the marketing manager in terms of product development, promotion, pricing, physical distribution, and marketing strategy. Pre-requisites: BUS-321 and Junior standing or higher or permission of the instructor.

**BUS-431 PUBLIC RELATIONS 3.00 Credits**

A study of the principles and techniques involved in creating and maintaining a favorable public image. Pre-requisite: BUS-321 and must have Junior standing or higher or permission of the instructor.

**BUS-435 MONEY AND BANKING 3.00 Credits**

Focuses on the relationship between depository institutions, their lending, and money demand/supply conditions. The effects of monetary policy on banks, financial markets, and the macro economy are also considered, as are the effects of banks' concerns over profits, liquidity, and solvency. Pre-requisites: ECON-201 and ECON-202 and Junior standing or higher or permission of the instructor.

**BUS-440 HUMAN RESOURCE LAW 3.00 Credits**

Provides information and basic considerations in most human resource legislative areas to aid in arriving at informed, reasonable, and defensible answers to many employment-related questions and situations that may arise at the workplace. Laws include, but are not limited to, the Fair Labor Standards Act (FLSA), Title VII of the Civil Rights Act (CRA) of 1964, the Age Discrimination in Employment Act (ADEA), the Americans With Disabilities Act (ADA), the Family and Medical Leave Act (FMLA), and the Equal Pay Act (EPA). Pre-requisites: BUS-412 and Junior standing or higher or permission of instructor.

**BUS-450 TRAINING AND DEVELOPMENT 3.00 Credits**

Introduces students to information about and examples of the most up-to-date developments in training, research, and practice, including the strategic role of training and the use of new technologies in training. Pre-requisites: BUS-412 and Junior standing or higher or permission of the instructor.

**BUS-461 COMPENSATION AND BENEFITS 3.00 Credits**

Provides instruction related to employee compensation policy and benefits administration. Topics include merit pay, seniority pay, pay equity within the organization and the market, international pay issues, legal and discretionary benefits, and executive compensation. Pre-requisites: BUS-412 and Junior standing or higher or permission of the instructor.

**BUS-480 COMPARATIVE INTERNATIONAL MANAGEMENT 3.00 Credits**

Examines the similarities and differences in managerial philosophy and practice in different parts of the world, familiarizing students with organizational, cultural, and ideological perspectives on management in a variety of cultural environments. Pre-requisites: BUS-311 and Junior standing or higher or permission of the instructor.

**BUS-482 INTERNATIONAL MARKETING 3.00 Credits**

Emphasizes the growing importance of an international perspective to successful business operations. Examines problems associated with marketing across national, international, transcultural, and subcultural boundaries. Develops international marketing skills. Pre-requisites: BUS-321 and Junior standing or higher or permission of the instructor.

**BUS-490 DIRECTED STUDY IN BUSINESS 1.00-3.00 Credits**

Pre-requisite: Must have Junior standing or higher or permission of the instructor.

**BUS-492 SPECIAL TOPICS IN BUSINESS 1.00-3.00 Credits**

Pre-requisite: Must have Junior standing or higher or permission of the instructor.

**BUS-494 INTERNSHIP IN BUSINESS 1.00-12.00 Credits**

Advanced level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. -Students must have junior standing or higher or permission of the instructor -Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-494A INTERNSHIP IN BUSINESS I 1.00-12.00 Credits**

Advanced level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. -Students must have junior standing or higher or permission of the instructor -Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-494B INTERNSHIP IN BUSINESS II 1.00-12.00 Credits**

Advanced level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. Students will work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. -Students must have junior standing or higher or permission of the instructor -Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.



**BUS-494C INTERNSHIP IN BUSINESS III 1.00-12.00 Credits**

Advanced level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. -Students must have junior standing or higher or permission of the instructor -Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-494D INTERNSHIP IN BUSINESS IV 1.00-12.00 Credits**

Advanced level internship in Business. The internship is a contracted and supervised learning experience enabling the student to apply skills, techniques, and professional values from business courses to an approved business-related work setting. The duties and responsibilities at the work site should constitute new learning for the student. Students will participate in two workshops with other interns in the Business Division, and work at the employer's site for the contracted number of hours. - 45 hours of supervised and documented work focused on onsite learning equals one hour of academic credit - Up to six credit hours may count towards Business Electives; additional credit hours can be counted as General Electives - Students may register for a minimum of 1 credit and a maximum of 6 credits in a single semester. -The maximum number of internship credits allowed is twelve, with the exception of Accounting graduates who are preparing to sit for the CPA exam. They may earn an additional twelve credits. -Students must have junior standing or higher or permission of the instructor -Students must be a Business Division major in good standing, and must have a 2.0 cumulative GPA and a 2.5 core/major GPA.

**BUS-498 SENIOR STRATEGIC SEMINAR 3.00 Credits**

A capstone course. Students will integrate knowledge of quantitative decision techniques with material drawn from all functional areas of business to formulate, select, implement and evaluate organizational strategies. Pre-requisite: AC-232, BUS-311, BUS-321, and ECON-201 or ECON-202, and Senior standing or permission of the instructor.

**BUS-499 DIRECTED STUDY IN BUSINESS 1.00-3.00 Credits**

Pre-requisite: Must have Junior standing or higher or permission of the instructor.

**BUS-512 HUMAN RESOURCE MANAGEMENT IN HEALTHCARE 3.00 Credits**

This course introduces a strategic approach to human resources management in health care organizations. The overarching goal of the course is to develop an understanding of the concept of strategic human resources management, and the need for alignment between HR practices and an organization's strategies and mission. The course addresses the key human resource functions, including: job analysis, recruiting and selection, performance management, compensation and benefits, and employee retention. The course includes a review of the legal and regulatory environment of human resources management, as well as discussion of healthcare labor markets.

**BUS-513 ORGANIZATIONAL BEHAVIOR 3.00 Credits**

Provides an in-depth study of organizational structure and design. Organization behavior, intergroup relations, and conflict and decision making from a multicultural perspective will be introduced. The interaction between organizational structure and organizational behavior will be discussed.

**BUS-560 LEADERSHIP 3.00 Credits**

Explores the concept of Leadership from an interdisciplinary perspective: psychological determinants of leaders and followers, political factors of governance, sociological issues facing individuals and small groups, anthropological factors in tracking societal transformations, and management skills in the practice of leadership.

**CITPT-101 INTRODUCTION TO WEB DESIGN & DEVELOPMENT 3.00 Credits**

A contemporary and comprehensive introduction to web design/development technologies and subjects.

**CITPT-108 INTRODUCTION TO COMPUTER SCIENCE 4.00 Credits**

This course is an introduction to the basic concepts of Computer Science. You will learn how to program a computer using the Java language, the basic capabilities of a computer system, how to form and validate a hypothesis in computer science, and how computer science relates to other scientific endeavors and society at large. Programming concepts include objects, functions, conditionals, and recursion. This course is suitable both for the non-major and as an entry point into the Computer Science major. Cross-listed with CS-108.

**CITPT-111 WEB DEVELOPMENT BASICS 3.00 Credits**

Provides a foundation in web development and design through a comprehensive study and hands-on application of contemporary Hyper Text Markup Language (HTML) and Cascading Style Sheets (CSS).

**CITPT-112 FUNDAMENTALS OF COMPUTER PROGRAMMING 3.00 Credits**

This course is an introduction to computer programming using contemporary programming logic methods and design practices. The focus of the course is to provide students with a strong foundation in programming principles. Fundamental topics include logic, expressions, operators, I/O, control and conditional structures, data types, containers, functions, programming errors, and events. Students will engage in hands-on programming development using JavaScript and command line interfaces in preparation for dependent courses in this degree program. Prerequisite: CITPT-111 or CITPT-311.

**CITPT-117 WEB DESIGN FUNDAMENTALS 3.00 Credits**

An introduction to design theory in websites and the use of industry development tools. Students will learn and apply standards related to site specifications, layout, navigation, organization, color, typography, and content development. Students will focus on the importance of a user-centered design that meets the expectations of a client or customer.

**CITPT-144 MULTIMEDIA WEB APPLICATIONS 3.00 Credits**

Explores contemporary instances of web application software designed to enhance websites with more dynamic content. This class has a hands-on approach and students will be expected to work through activities step-by-step and then take the basic competencies to create more advanced, original web application content. Cross-listed with CITPT-344.

**CITPT-150 APPLICATIONS IN ELECTRONIC COMMERCE 3.00 Credits**

This course is a thorough study and application of best practices of Electronic Commerce in a real-world setting, including the development and planning of an online store and an advertising campaign that utilizes social media platforms for promotion. Students demonstrate the installation and setup of an online store by developing a website proposal document, creating a business plan, controlling inventory systems, setting up payment information, and presenting their work. Students also create a social media plan for advertising the store by creating a strategy document, a calendar of media and web events, and a business presentation.

**CITPT-175 INTERACTIVE WEB SCRIPTING 3.00 Credits**

Course provides a comprehensive overview of client-side scripting technologies and methods. Pre-requisites: CITPT-111 and CITPT-112.

**CITPT-180 PORTFOLIO DESIGN 3.00 Credits**

This course provides students with an opportunity to prepare themselves for the workplace. Students will prepare a portfolio comprised of completed web design and development projects. Lesson topics include portfolio research, logo creation, site specifications, project timelines, peer review and feedback, and call-to-action interactions. Successful students will finish a portfolio and will be capable of scaling it for future development and projects. Prerequisite: CITPT-111 or CITPT-311.

**CITPT-189 DIRECTED WEB AUTHORING PROJECT 1.00-3.00 Credits**

Requires field experience on a team-based, organizational website project.

**CITPT-190 DIRECTED STUDY IN COMPUTER INFORMATION TECHNOLOGY 1.00-6.00 Credits****CITPT-191 WORKSHOPS IN COMPUTER INFORMATION TECHNOLOGY 1.00-6.00 Credits****CITPT-192 SPECIAL TOPICS IN COMPUTER INFORMATION TECHNOLOGY 1.00-6.00 Credits****CITPT-194 INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY 1.00-12.00 Credits****CITPT-194A INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY I 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-194B INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY II 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-194C INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY III 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-194D INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY IV 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-206 INTERACTIVE MEDIA PROGRAMMING 3.00 Credits**

This course offers an in-depth approach to creating and debugging applications and techniques of implementation for web and game applications. Topics include classes and objects, inheritance, polymorphism, namespaces, assemblies, exception handling, debugging, data collections, and event-driven programming. Emphasis is on software design and development of real-world applications. Students in the Web Design & Development program are encouraged to take CITPT-112 prior to enrolling in this course.

**CITPT-213 WEB DATABASE TECHNOLOGIES 3.00 Credits**

Expands basic database skills into the web environment and enterprise level applications. This course covers database design theory and advanced database application topics in contemporary, multi-user environments. Pre-requisite: CITPT-112.

**CITPT-217 ADVANCED WEB DESIGN 3.00 Credits**

A comprehensive study of various web design concepts and skills. Students will learn and apply concepts in a project-based manner. Special emphasis will be placed on learning and applying advanced web design techniques on real-world projects. Pre-requisite: CITPT-117 or CITPT-317.

**CITPT-225 WEB FRAMEWORKS 3.00 Credits**

A skill-based study of popular server-side web application frameworks. Students will learn how to build interactive and dynamic web site components. Pre-requisite: CITPT-112.

**CITPT-227 WEB APPLICATION DEVELOPMENT 3.00 Credits**

A hands-on study of web development for dynamic, data-driven web applications using contemporary technologies and development software. Pre-requisite: CITPT-112.

**CITPT-265 IMAGE EDITING AND ILLUSTRATION 3.00 Credits**

Comprehensive experience in image editing, drawing, painting, and typography.

**CITPT-275 WEB AUTHORING SYSTEMS 3.00 Credits**

A comprehensive study in web content management systems and when/how to use them properly. Topics include CMS installation and maintenance, website management, theme design, and extension development. Pre-requisites: CITPT-111 or CITPT-311.

**CITPT-280 WEB DEVELOPMENT CAPSTONE 3.00 Credits**

The web development capstone course provides web design and development students with the opportunity to integrate knowledge gained across the curriculum. Students will develop personal portfolios, data-driven web or mobile applications, and work in teams to apply knowledge to real-world situations. Students will work to identify client needs, develop a project proposal and specification, and implement the proposed specification. Lecture topics include web hosting setup, website optimization, accessibility, and user experience. Pre-requisite: CITPT-117 or CITPT-317 and CITPT-175 or CITPT-375.

**CITPT-290 DIRECTED STUDY IN COMPUTER INFORMATION TECHNOLOGY 1.00-6.00 Credits****CITPT-291 WORKSHOP IN COMPUTER INFORMATION TECHNOLOGY 1.00-6.00 Credits****CITPT-292 SPECIAL TOPICS IN COMPUTER INFORMATION TECHNOLOGY 1.00-6.00 Credits****CITPT-294 INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY 1.00-12.00 Credits****CITPT-294A INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY I 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-294B INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY II 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-294C INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY III 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-294D INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY IV 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-311 WEB DEVELOPMENT BASICS 3.00 Credits**

Provides a foundation in web development and design through a comprehensive study and hands-on application of contemporary Hyper Text Markup Language (HTML) and Cascading Style Sheets (CSS).

**CITPT-312 FUNDAMENTALS OF COMPUTER PROGRAMMING 3.00 Credits**

This course is an introduction to computer programming using contemporary programming logic methods and design practices. The focus of the course is to provide students with a strong foundation in programming principles. Fundamental topics include logic, expressions, operators, I/O, control and conditional structures, data types, containers, functions, programming errors, and events. Students will engage in hands-on programming development using JavaScript and command line interfaces in preparation for dependent courses in this degree program. Students in CITPT-312 will have an additional research project required of them. Prerequisite: CITP-111 or CITPT-311.

**CITPT-317 WEB DESIGN FUNDAMENTALS 3.00 Credits**

An introduction to design theory in websites and the use of industry development tools. Students will learn and apply standards related to site specifications, layout, navigation, organization, color, typography, and content development. Students will focus on the importance of a user-centered design that meets the expectations of a client or customer.

**CITPT-344 MULTIMEDIA WEB APPLICATIONS 3.00 Credits**

Explores contemporary instances of web application software designed to enhance websites with more dynamic content. This class has a hands-on approach and students will be expected to work through activities step-by-step and then take the basic competencies to create more advanced original web application content. Cross-listed with CITPT-144.

**CITPT-350 APPLICATIONS IN ELECTRONIC COMMERCE 3.00 Credits**

This course is a thorough study and application of best practices of Electronic Commerce in a real-world setting, including the development and planning of an online store and an advertising campaign that utilizes social media platforms for promotion. Students demonstrate the installation and setup of an online store by developing a website proposal document, creating a business plan, controlling inventory systems, setting up payment information, and presenting their work. Students also create a social media plan for advertising the store by creating a strategy document, a calendar of media and web events, and a business presentation. Students in CITPT-350 must submit an additional research project.

**CITPT-375 INTERACTIVE WEB SCRIPTING 3.00 Credits**

Provides a comprehensive overview of client-side scripting technologies and methods. Pre-requisites: CITPT-111 and CITPT-112.

**CITPT-380 PORTFOLIO DESIGN 3.00 Credits**

This course provides students with an opportunity to prepare themselves for the workplace. Students will prepare a portfolio comprised of completed web design and development projects. Lesson topics include portfolio research, logo creation, site specifications, project timelines, peer review and feedback, and call-to-action interactions. Successful students will finish a portfolio and will be capable of scaling it for future development and projects. Students in CITPT-380 will have an additional research project required of them. Prerequisite: CITPT-111 or CITPT-311.

**CITPT-390 DIRECTED STUDY IN COMPUTER INFORMATION TECHNOLOGY 1.00-6.00 Credits**

**CITPT-391 WORKSHOP IN COMPUTER INFORMATION TECHNOLOGY 1.00-6.00 Credits**

**CITPT-392 SPECIAL TOPICS IN COMPUTER INFORMATION TECHNOLOGY 1.00-6.00 Credits**

**CITPT-394 INTERNSHIP IN WEB DEVELOPMENT 1.00-12.00 Credits**

**CITPT-394A INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY I 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-394B INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY II 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-394C INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY III 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-394D INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY IV 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-413 WEB DATABASE TECHNOLOGIES 3.00 Credits**

Expands basic database skills into the web environment and enterprise level applications. This course covers database design theory and advanced database application topics in contemporary, multi-user environments. Pre-requisite: CITPT-112.

**CITPT-417 ADVANCED WEB DESIGN 3.00 Credits**

A comprehensive study of various web design concepts and skills. Students will learn and apply concepts in a project-based manner. Special emphasis will be placed on learning and applying advanced web design techniques on real-world projects. Students enrolled in CITPT-417 will have an additional research project to complete for this course. Prerequisite: CITPT-117 or CITPT-317.

**CITPT-465 IMAGE EDITING AND ILLUSTRATION 3.00 Credits**

Comprehensive experience in image editing, drawing, painting, and typography.

**CITPT-475 WEB AUTHORING SYSTEMS 3.00 Credits**

A comprehensive study in web content management systems and when/how to use them properly. Topics include CMS installation and maintenance, website management, theme design, and extension development. Pre-requisites: CITPT-111 or CITPT-311.

**CITPT-480 WEB DEVELOPMENT CAPSTONE 3.00 Credits**

The web development capstone course provides web design and development students with the opportunity to integrate knowledge gained across the curriculum. Students will develop personal portfolios, data-driven web or mobile applications, and work in teams to apply knowledge to real-world situations. Students will work to identify client needs, develop a project proposal and specification, and implement the proposed specification. Lecture topics include web hosting setup, website optimization, accessibility, and user experience. Pre-requisite: CITPT-117 or CITPT-317 and CITPT-175 or CITPT-375.

**CITPT-490 DIRECTED STUDY IN COMPUTER INFORMATION TECHNOLOGY 1.00-6.00 Credits**

**CITPT-491 WORKSHOP IN COMPUTER INFORMATION TECHNOLOGY 1.00-6.00 Credits**

**CITPT-492 SPECIAL TOPICS IN COMPUTER INFORMATION TECHNOLOGY 1.00-6.00 Credits**

**CITPT-494 INTERNSHIP IN COMPUTER INFORMATION SYSTEMS 1.00-12.00 Credits**

**CITPT-494A INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY I 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-494B INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY II 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-494C INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY III 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CITPT-494D INTERNSHIP IN COMPUTER INFORMATION TECHNOLOGY IV 1.00-6.00 Credits**

Internship in Computer Information Technology.

**CS-101 COMPUTER SCIENCE SEMINAR 1.00 Credit**

Introduces the computing and information technology profession and the LCSC's curriculum emphasis options. Topics include: fields of study, curriculum and professional options, legal and ethical issues for computing professionals, academic responsibilities and ethical conduct. Emphasis on the computing science fields of study and their uses in today's digital society.

**CS-108 INTRODUCTION TO COMPUTER SCIENCE 4.00 Credits**

This course is an introduction to the basic concepts of Computer Science. You will learn how to program a computer using the Java language, the basic capabilities of a computer system, how to form and validate a hypothesis in computer science, and how computer science relates to other scientific endeavors and society at large. Programming concepts include objects, functions, conditionals, and recursion. This course is suitable both for the non-major and as an entry point into the Computer Science major. Cross-listed with CITPT-108.

**CS-111 FOUNDATIONS OF PROGRAMMING 4.00 Credits**

Introduction to problem solving and the basic building blocks of algorithm design using a modern programming language. Topics include: procedural programming constructs and basic program modularization. Pre-requisite: CS-108 or MATH-170, all with a grade of C or better.

**CS-190 DIRECTED STUDY IN COMPUTER SCIENCE 1.00-12.00 Credits****CS-192 SPECIAL TOPICS IN COMPUTER SCIENCE 1.00-4.00 Credits****CS-211 COMPUTER SCIENCE II 4.00 Credits**

Covers object-oriented (OO) design and implementation techniques. Topics include: the Unified Modeling Language (UML), data types and classes, collaboration, association, aggregation, inheritance, polymorphism, parametric programming, and software libraries. Emphasis on design and implementation of object-oriented software systems through the adequate design and implementation of domain specific data types that collaborate to implement the requested functionality. Pre-requisites: CS-111 with a grade of C or better.

**CS-226 SQL: STRUCTURED QUERY LANGUAGE 3.00 Credits**

Introduces the basic concepts of relational database systems and the role of the Structured Query Language (SQL) in database development. It also covers SQL and its applications to the creation and maintenance of data in a Database Management System (DBMS). Emphasis is placed on using SQL for database querying. Pre-requisite: Completion of MATH-023 or MATH-025 or higher, excluding MTHPT-103P, MATH-153P and MATH-157P, or have satisfactory math placement scores.

**CS-250 COMPUTER ORGANIZATION AND ARCHITECTURE 4.00 Credits**

Introduces the architecture and organization of modern computer systems. Topics include: digital logic, number systems, Von Neumann architecture, processing and instruction sets, memory and memory addressing, parallel systems, and parallel architectures. Emphasis on the connections between the computer's hardware and its software. Pre-requisite: CS 211 with a grade of C- or better.

**CS-253 INTRO TO SYSTEMS PROGRAMMING 4.00 Credits**

Detailed overview of software development on unix-like operating systems with an emphasis on systems programming using C, C++, or an equivalent systems programming language. This includes an introduction to command-line usage and scripting using a common shell. Students will learn about mechanisms available on POSIX-compliant platforms such as signals, pipes, and file descriptors. Pre-requisite: CS-211 with a grade of C or better.

**CS-290 DIRECTED STUDY IN COMPUTER SCIENCE 1.00-6.00 Credits****CS-291 WORKSHOP IN COMPUTER SCIENCE 1.00-6.00 Credits****CS-292 SPECIAL TOPICS IN COMPUTER SCIENCE 1.00-3.00 Credits****CS-294 INTERNSHIP IN COMPUTER SCIENCE 1.00-12.00 Credits****CS-295 PRACTICUM IN COMPUTER SCIENCE 1.00-6.00 Credits****CS-311 ALGORITHMS AND DATA STRUCTURES 4.00 Credits**

Covers the fundamentals of data structures, abstract data types and associated algorithms. Topics include: abstract data types, recursion, trees, graphs, hashing, and searching and sorting. Pre-requisite: CS-211 with a grade of C or better.

**CS-360 SOFTWARE ENGINEERING 3.00 Credits**

Introduces the engineering principles for the design and development of high quality computing systems. Topics include: the software life cycle model, requirements definition, design, verification and validation, software and system modeling and documentation, and project management techniques. Pre-requisite: A grade of 'C' or better in CS-311.

**CS-390 DIRECTED STUDY IN COMPUTER SCIENCE 1.00-6.00 Credits****CS-391 WORKSHOP IN COMPUTER SCIENCE 1.00-6.00 Credits****CS-392 SPECIAL TOPICS IN COMPUTER SCIENCE 1.00-4.00 Credits****CS-394 INTERNSHIP IN COMPUTER SCIENCE 1.00-12.00 Credits****CS-395 PRACTICUM IN COMPUTER SCIENCE 1.00-6.00 Credits****CS-399 RESEARCH ASSISTANTSHIP 1.00-12.00 Credits****CS-401 FUTURE PROFESSIONALS SEMINAR 1.00 Credit**

Students develop either a job application packet or a graduate school application packet. This includes the development and presentation of a portfolio and resume or curriculum vita. Pre-requisite: A grade of 'C' or better in MATH-147 (or equivalent placement score) and CS-312 which can be taken as a co-requisite.

**CS-405 OBJECT-ORIENTED DESIGN FOR SECONDARY EDUCATION 4.00 Credits**

Covers object-oriented (OO) design and implementation techniques. Topics include: the Unified Modeling Language (UML), data types and classes, collaboration, association, aggregation, inheritance, polymorphism, parametric programming, and software libraries. Emphasis on design and implementation of object-oriented software systems through the adequate design and implementation of domain specific data types that collaborate to implement the requested functionality. Additional information focuses on adapting content to high school courses. Registration will be restricted to students admitted to the Secondary Education Program and/or students who are Secondary Education Certified. Pre-requisite: CS-411 with a grade of C or better.

**CS-408 INTRODUCTION TO COMPUTER SCIENCE FOR SECONDARY EDUCATION 4.00 Credits**

This course is an introduction to the basic concepts of Computer Science. You will learn how to program a computer using an object-oriented language, the basic capabilities of a computer system, how to form and validate a hypothesis in computer science, and how computer science relates to other scientific endeavors and society at large. Programming concepts include objects, functions, conditionals, and recursion. Additional information focuses on adapting content to high school courses. Registration will be restricted to students admitted to the Secondary Education Program and/or students who are Secondary Education Certified.

**CS-410 AUTOMATA:THEORY OF COMPUTATION 4.00 Credits**

Provides an introduction to the theoretical foundations of computing. Topics include: automata and languages (finite automata, regular languages, and context-free languages), computability theory (the Church-Turing thesis and decidability), and complexity theory (time and space complexity). Emphasis on the use of rigorous mathematical approaches to problem definition and description of solutions. Pre-requisite: A grade of 'C' or better in MATH-147 (or equivalent placement score) AND CS-312 which can be taken as a co-requisite.

**CS-411 FOUNDATIONS OF PROGRAMMING FOR SECONDARY EDUCATION 4.00 Credits**

An introduction to computer programming using a modern programming language. The course focuses on problem solving techniques and the basic concepts of procedural programming, by using the Python programming language. Additional information focuses on adapting content to high school courses. Registration will be restricted to students admitted to the Secondary Education Program and/or students who are Secondary Education Certified. Pre-requisite: CS-408 with a grade of C or better.

**CS-413 ALGORITHMS & DATA STRUCTURES FOR SECONDARY EDUCATION 4.00 Credits**

Covers the fundamentals of data structures, abstract data types and associated algorithms. Topics include: abstract data types, recursion, trees, graphs, hashing, and searching and sorting. Additional information focuses on adapting content to high school courses. Registration will be restricted to students admitted to the Secondary Education Program and/or students who are Secondary Education Certified. Pre-requisite: CS-405 with a grade of C or better.

**CS-420 ANALYSIS OF ALGORITHMS 4.00 Credits**

Covers fundamental formal techniques and algorithmic strategies that support advanced algorithm design. Topics include: asymptotic complexity bounds, time analysis of iterative and recursive algorithms, advanced data structures such as balanced and red-black trees and hashing, and advanced algorithmic strategies such as dynamic programming. Emphasis on the underlying mathematical theory, practical considerations of efficiency, and algorithm design trade-offs. Pre-requisites: A grade of 'C' or better in MATH-147 or equivalent placement score AND CS-312 which can be taken as a co-requisite.

**CS-430 OPERATING SYSTEMS 3.00 Credits**

Covers operating system's fundamental concepts and structure. Topics include: operating systems architecture, processes and threads, mutual exclusion and synchronization, deadlock and starvation, memory management and virtual memory, and processor scheduling. Emphasis on operating system design issues, techniques, and trade-offs; includes a hands-on introduction to multithreaded and multicore programming issues and approaches. Pre-requisites: A grade of 'C' or better in CS-253.

**CS-435 COMPUTER NETWORKS 3.00 Credits**

Covers current computer network architectures, protocols, and applications. Topics include: digital networks and the Internet, network architecture, network layers, services and communication protocols, the application layer, the transport layer, the network layer, the data link layer, wireless and mobile networks, and ethical issues with digital networks. Emphasis on Internet and current communication protocols, and the engineering trade-offs of network design and implementation. Includes hands-on sockets programming coursework. Pre-requisites: A grade of 'C' or better in CS-311.

**CS-440 INTELLIGENT SYSTEMS:AI AND INFORMATION 4.00 Credits**

Introduces students to the fundamental concepts and techniques of artificial intelligence (AI) and information management. Pre-requisite: A grade of 'C' or better in MATH-147 (or equivalent placement score) and CS-312 which can be taken as a co-requisite.

**CS-445 DATABASES AND KNOWLEDGE MANAGEMENT 3.00 Credits**

Covers the fundamental concepts required for the design and implementation of database applications and their underlying Database management Systems (DBMS). Topics include: principles and architectures, the relational data model, normalization, conceptual data modeling, design and implementation of database-based applications, and DBMS design issues and approaches. Pre-requisites: A grade of 'C' or better in CS-226 and CS-311.

**CS-450 USABILITY:HUMAN-CENTERED DES/EVALUATION 4.00 Credits**

An introduction to key methods in user-interface design and emphasis on usability design and evaluation. Topics include the user interface analysis, usability enhancement methods, and usability testing. Pre-requisite: A grade of 'C' or better in MATH-147 (or equivalent placement score) AND CS-312 which can be taken as a co-requisite.

**CS-475 COMPUTER SYSTEMS SECURITY 3.00 Credits**

Covers the fundamental concepts and practical applications of computing systems security with a holistic view and applied approach. Topics include: security concepts and services, physical, operational, and organizational security, the role of people in systems security, introduction to cryptography and public key infrastructure, computing systems hardening, secure code, and secure applications development. Emphasis on developing, deploying, and maintaining a secure computing infrastructure with a hands-on approach. Pre-requisite: CS-311.

**CS-480 CAPSTONE DESIGN PROJECT 4.00 Credits**

The application of engineering principles needed for the development and maintenance of high quality medium to large software systems, delivered on time and within budget. Emphasis on the development of a semester long project and final presentation. Pre-requisite: CS-445.

**CS-490 DIRECTED STUDY IN COMPUTER SCIENCE 1.00-6.00 Credits****CS-491 WORKSHOP IN COMPUTER SCIENCE 1.00-6.00 Credits****CS-492 SPECIAL TOPICS IN COMPUTER SCIENCE 1.00-4.00 Credits****CS-494 INTERNSHIP IN COMPUTER SCIENCE 1.00-12.00 Credits****CS-495 PRACTICUM IN COMPUTER SCIENCE 1.00-6.00 Credits****CS-499 RESEARCH PROJECT AND SEMINAR IN COMPUTER SCIENCE 1.00-12.00 Credits**

Students will perform a research project in Computer Science. Includes a satisfactory final oral presentation of findings and results as well as an advisor approved final written report. Proposal and interim oral and written reports may also be required.

**ECON-101 CONTEMPORARY ECONOMICS 3.00 Credits**

Builds breadth of understanding with respect to current economic events, problems and issues in the nation and world. May not be used by Business Administration and Management majors to satisfy the General Education Distributive Component.

**ECON-102 CONSUMER ECONOMICS 3.00 Credits**

Builds breadth of knowledge regarding consumers as an economic force and the impact of global and national economic trends on personal finance. May not be used by Business Administration and Management majors to satisfy the General Education Distributive Component.

**ECON-201 PRINCIPLES OF MACROECONOMICS 3.00 Credits**

Examines the problems of unemployment and inflation, the measurement of aggregate activity and other performance activity, and principles of Gross Domestic Product determination. The influence of monetary and fiscal policy are considered.

**ECON-202 PRINCIPLES OF MICROECONOMICS 3.00 Credits**

Builds breadth of knowledge regarding the economic principles which govern the production, exchange, and pricing of goods, services and resources, and the distribution of incomes in competitive and non-competitive markets. Recommended for students who have completed high school algebra.

**ECON-290 DIRECTED STUDY IN ECONOMICS 1.00-12.00 Credits****ECON-291 WORKSHOP IN ECONOMICS 1.00-12.00 Credits****ECON-292 SPECIAL TOPICS IN ECONOMICS 1.00-3.00 Credits****ECON-295 PRACTICUM IN ECONOMICS 1.00-12.00 Credits****ECON-299 RESEARCH ASSISTANTSHIP 1.00-12.00 Credits****ECON-300 STATISTICAL METHODS 3.00 Credits**

Survey of descriptive and inferential statistical concepts commonly used in the treatment of data in social science research. The understanding and application of the concepts will be emphasized. Topics include: measures of central tendency, measures of variability, correlation methods, hypothesis testing and simple analysis of variance. Pre-requisite: Core Math. Cross-listed with PSYC-300, SS-300.

**ECON-301 INTERMEDIATE MACROECONOMICS 3.00 Credits**

Compares alternative theories of GNP determination and examines the determination of the aggregate price level. The potential and limitations of demand management policy as an influence on performance are examined. Pre-requisites: ECON-201 and ECON-202.

**ECON-302 INTERMEDIATE PRICE THEORY 3.00 Credits**

Analyzes the market process and its role in allocating resources, outputs and income. Alternative market structures and their impact on consumer welfare are stressed, as are the roles of costs and consumer preferences in guiding the decisions of profit-oriented enterprise. Pre-requisites: ECON-201 and ECON-202.

**ECON-392 SPECIAL TOPICS IN ECONOMICS 1.00-3.00 Credits****ECON-399 RESEARCH ASSISTANTSHIP 1.00-12.00 Credits****ECON-465 INTERNATIONAL ECONOMICS 3.00 Credits**

Investigates various dimensions of international economics from comparative and classical perspectives followed by an analysis of costs, benefits, and regulation of international commerce. Pre-requisites: ECON-201 and ECON-202.

**ECON-490 DIRECTED STUDY IN ECONOMICS 1.00-12.00 Credits****ECON-491 WORKSHOP IN ECONOMICS 1.00-12.00 Credits****ECON-492 SPECIAL TOPICS IN ECONOMICS 1.00-3.00 Credits****ECON-495 PRACTICUM IN ECONOMICS 1.00-12.00 Credits****GAME-100 INTRODUCTION TO GAME DEVELOPMENT 3.00 Credits**

Course provides a hands-on comprehensive overview of roles within the video game development studio. Students will learn about the Scrum software development framework and how different roles interact with each other within an indie and AAA gaming studio. No prior programming experience is required.

**GAME-110 GAME HISTORY AND ANALYSIS 3.00 Credits**

This course explores the history of games and its effect on culture through a hands-on approach. Students will be exposed to a broad range of game styles played throughout history while creating their own version of a game from the same period.

**GAME-130 2D GAME DEVELOPMENT 3.00 Credits**

This course provides a primer for students to get started in creating 2D games. Topics include assets, coordinates, 2D Physics, prefabs, scripting, user interfaces, and simple AI. Prerequisites: CITPT-206.

**GAME-230 3D GAME DEVELOPMENT 3.00 Credits**

This course is for experienced programmers who wish to learn about 3D game development. Students will explore various advanced programming concepts through multiple projects. Topics will include prototyping, programming camera-relative movements, 3D physics, animator controllers, animation states, skyboxes, audio controllers, coroutines, and connecting your game to the internet. Prerequisites: GAME-130.

**GAME-250 INTRODUCTION TO GAME AI 3.00 Credits**

In this course students will explore strategies commonly used in the gaming industry to solve game AI problems. Topics will include state machines, behavior trees, sensory systems, pathfinding, trigger systems, rule-based systems, agent awareness, and adaptation. Prerequisites: GAME-130.

**GAME-280 GAME DEVELOPMENT PROJECT I 4.00 Credits**

This project is divided into two courses (GAME-280 and GAME-281) where students will work in groups to create a simple game or simulation. Topics will include iterative development techniques, source control, testing, debugging, team communication, and game documentation. Prerequisites: GAME-230.

**GAME-281 GAME DEVELOPMENT PROJECT II 4.00 Credits**

This project is divided into two courses (GAME-280 and GAME-281) where students will work in groups to create a simple game or simulation. Students will work towards completing their game by focusing on adding final elements to their game. Additional topics introduced may include team dynamics, task prioritization, and other development practices. Prerequisites: GAME-280.

**GAME-282 GAME DEVELOPMENT PROJECT III 4.00 Credits**

This project is dedicated to adding to a game previously worked on by the student or a team of students, for the purpose of improving current features and/or implementing new features to the game. Prerequisite: GAME-230.

**GAME-294 INTERNSHIP IN GAME DEVELOPMENT 12.00 Credits**

Internship in Game Development.

**MGTPT-101 INTRODUCTION TO BUSINESS 3.00 Credits**

Increases student awareness of business functions and the business environment. Crosslisted with BUS-101.

**MGTPT-190 DIRECTED STUDY IN MANAGEMENT 1.00-6.00 Credits****MGTPT-191 WORKSHOP IN MANAGEMENT 1.00-6.00 Credits****MGTPT-192 SPECIAL TOPICS IN MANAGEMENT 1.00-6.00 Credits****MGTPT-194 INTERNSHIP IN MANAGEMENT 1.00-12.00 Credits****MGTPT-194A INTERNSHIP IN MANAGEMENT I 1.00-6.00 Credits**

Internship in Management.

**MGTPT-194B INTERNSHIP IN MANAGEMENT II 1.00-6.00 Credits**

Continuation of MGTPPT 194A as a 100-level internship in Management.

**MGTPT-194C INTERNSHIP IN MANAGEMENT III 1.00-6.00 Credits**

Continuation of MGTPPT 194B as an intermediate 100-level internship in Management.

**MGTPT-194D INTERNSHIP IN MANAGEMENT IV 1.00-6.00 Credits**

Continuation of MGTPPT 194C as an intermediate to advanced 100-level internship in Management.

**MGTPT-205 SMALL BUSINESS MANAGEMENT 3.00 Credits**

Studies basic factors involved in initiating and managing a business enterprise. Emphasis on business objectives, failure and success factors, problems of a new business, locations, facilities, staffing, planning, and financing. Students will relate these factors to local business operations and will develop a business plan.

**MGTPT-220 SUPERVISION 3.00 Credits**

Prepares students for a role as a front line supervisor. It is intended to be a capstone course for any business-type program. Concept applications include employee motivation, hiring, firing, development, mentoring, organization, and other contemporary issues.

**MGTPT-270 BUSINESS ETHICS 3.00 Credits**

This course introduces basic business ethical concepts, principles, and examples. Topics focus on solving moral dilemmas and introduce the stakeholder and issues management methods as a strategic and practical way for applying ethical reasoning in the workplace. Emphasis is placed on establishing solid decision criteria, moral creativity, and responsibility in ethical reasoning. This course also fosters an awareness of corporate responsibility in advertising, product safety and liability, and the environment. Timely ethical issues such as globalization, discrimination, sexual harassment, and whistle-blowing will be discussed as they relate to the workplace.



**MGTPT-275 INTRO HUMAN RESOURCE MANAGEMENT 3.00 Credits**

The course is an introductory course in the principles of planning, directing and controlling people functions in an organization. Emphasis is on the effective implementation of a comprehensive human resources program, including the recruitment, development, evaluation, and motivation of employees. The curriculum is designed to provide a basic understanding as well as appreciation of the importance of human resource management in today's competitive business environment, as well as the HR information students will need to be effective managers in either a large or small company setting. The course will also examine the impact of human resource management practices and decisions on both organizational and individual performance.

**MGTPT-290 DIRECTED STUDY IN MANAGEMENT 1.00-6.00 Credits****MGTPT-291 WORKSHOP IN MANAGEMENT 1.00-6.00 Credits****MGTPT-292 SPECIAL TOPICS IN MANAGEMENT 1.00-6.00 Credits****MGTPT-294 INTERNSHIP IN MANAGEMENT 1.00-12.00 Credits****MGTPT-294A INTERNSHIP IN MANAGEMENT I 1.00-6.00 Credits**

Internship in Management.

**MGTPT-294B INTERNSHIP IN MANAGEMENT II 1.00-6.00 Credits**

Continuation of MGTPT 294A as a 200-level internship in Management.

**MGTPT-294C INTERNSHIP IN MANAGEMENT III 1.00-6.00 Credits**

Continuation of MGTPT 294B as an intermediate 200-level internship in Management.

**MGTPT-294D INTERNSHIP IN MANAGEMENT IV 1.00-6.00 Credits**

Continuation of MGTPT 294C as an intermediate to advanced 200-level internship in Management.

**MGTPT-390 DIRECTED STUDY IN MANAGEMENT 1.00-6.00 Credits****MGTPT-391 WORKSHOP IN MANAGEMENT 1.00-6.00 Credits****MGTPT-392 SPECIAL TOPICS IN MANAGEMENT 1.00-6.00 Credits****MGTPT-394 INTERNSHIP IN MANAGEMENT 1.00-12.00 Credits****MGTPT-394A INTERNSHIP IN MANAGEMENT I 1.00-6.00 Credits**

Internship in Management.

**MGTPT-394B INTERNSHIP IN MANAGEMENT II 1.00-6.00 Credits**

Continuation of MGTPT 394A as a 300-level internship in Management.

**MGTPT-394C INTERNSHIP IN MANAGEMENT III 1.00-6.00 Credits**

Continuation of MGTPT 394B as an intermediate 300-level internship in Management.

**MGTPT-394D INTERNSHIP IN MANAGEMENT IV 1.00-6.00 Credits**

Continuation of MGTPT 394C as an intermediate to advanced 300-level internship in Management.

**MGTPT-490 DIRECTED STUDY IN MANAGEMENT 1.00-6.00 Credits****MGTPT-491 WORKSHOP IN MANAGEMENT 1.00-6.00 Credits****MGTPT-492 SPECIAL TOPICS IN MANAGEMENT 1.00-6.00 Credits****MGTPT-494 INTERNSHIP IN MANAGEMENT 1.00-12.00 Credits****MGTPT-494A INTERNSHIP IN MANAGEMENT I 1.00-6.00 Credits**

Internship in Management.

**MGTPT-494B INTERNSHIP IN MANAGEMENT II 1.00-6.00 Credits**

Continuation of MGTPT 494A as a 400-level internship in Management.

**MGTPT-494C INTERNSHIP IN MANAGEMENT III 1.00-6.00 Credits**

Continuation of MGTPT 494B as an intermediate 400-level internship in Management.

**MGTPT-494D INTERNSHIP IN MANAGEMENT IV 1.00-6.00 Credits**

Continuation of MGTPT 494C as an intermediate to advanced 400-level internship in Management.

**MKTPT-130 INTRODUCTION TO MARKETING 3.00 Credits**

This course covers various topics related to marketing and its applications in business and society. The course focuses on key concepts including assessing, understanding, and targeting the market place. The creation of value, pricing, channel selection and integrated marketing communications will also be explored.

**MKTPT-190 DIRECTED STUDY IN MARKETING 1.00-6.00 Credits**

**MKTPT-191 WORKSHOP IN MARKETING 1.00-6.00 Credits**

**MKTPT-192 SPECIAL TOPICS IN MARKETING 1.00-6.00 Credits**

**MKTPT-194 INTERNSHIP IN MARKETING 1.00-12.00 Credits**

**MKTPT-207 RETAILING 3.00 Credits**

This class is designed to provide students with the necessary skills to make efficient and productive decisions in the retailing and service industries. Topics include m-commerce, e-commerce, human resources, operations, merchandising, supply-chain management, and of course, customer service.

**MKTPT-235 CAREER SKILLS 3.00 Credits**

This course presents practical strategies that prepare students to confirm an appropriate career, to conduct a successful job search and to lay the foundation for successful career development. Emphasis is on Career Action assignments to assess skills and interests, to research prospective employers, to learn about current application requirements, to prepare resumes and cover letters, to practice meeting with business people in a targeted career field and to practice interviewing. These assignments polish job search and career management skills so students can apply them directly to achieving immediate and future career goals. This is a capstone course, intended mostly for graduating students.

**MKTPT-255 ORGANIZATIONAL LEADERSHIP 3.00 Credits**

This course is designed to offer students many opportunities of interaction to achieve the goals of an organization. Instruction will focus first on each student's personal knowledge, skills, and attitudes of organizational leadership and leadership examples. The purpose in learning about organizational leaders and leadership is to enable each student to become a better leader and follower. The objective is to provide a forum for the development of analysis, strategies, skills and techniques that promote successful leadership within organizations. As students develop the effective leadership skills, the course will focus on how that individual can effectively work within an organization's mission, structure and culture, members' roles, rules, dynamics, and meeting management. Most of the focus will be on membership organizations.

**MKTPT-270 APPLIED MARKETING 3.00 Credits**

This course is designed to provide an avenue in which students will apply their broader business skills and training to a narrower, more detailed area of expertise. The content includes critical thinking, planning and strategy implementation, presentation skills and management decision-making. Course curriculum integrates curriculum and criteria of Delta Epsilon Chi competitive events including, Sports and Entertainment Marketing, Design, Sales Representatives, Advertising Campaign, and Web Site Development. Students may choose to enter their final project in DEC's annual conferences and competitions.

**MKTPT-290 DIRECTED STUDY IN MARKETING 1.00-6.00 Credits**

**MKTPT-291 WORKSHOP IN BUSINESS 1.00-6.00 Credits**

**MKTPT-292 SPECIAL TOPICS IN MARKETING 1.00-6.00 Credits**

**MKTPT-294 INTERNSHIP IN MARKETING 1.00-12.00 Credits**

**MKTPT-390 DIRECTED STUDY IN MARKETING 1.00-6.00 Credits**

**MKTPT-391 WORKSHOP IN MARKETING 1.00-6.00 Credits**

**MKTPT-392 SPECIAL TOPICS IN MARKETING 1.00-6.00 Credits**

**MKTPT-394 INTERNSHIP IN MARKETING 1.00-12.00 Credits**

**MKTPT-490 DIRECTED STUDY IN MARKETING 1.00-6.00 Credits**

**MKTPT-491 WORKSHOP IN MARKETING 1.00-6.00 Credits**

**MKTPT-492 SPECIAL TOPICS IN MARKETING 1.00-6.00 Credits**

**MKTPT-494 INTERNSHIP IN MARKETING 1.00-12.00 Credits**