Interdisciplinary eBusiness Marketing (EBM)
Major Framework
Curriculum Overview
27 credit hours

Core Courses (5 Courses - 15 Credits)
CIS 2900: Web Applications for Business
CIS 3900: Business Web Architecture
MKTG 2500: Marketing Principles
MKTG 3710: Marketing Research
MKTG 3730: Internet Marketing

Information Systems Track (4 Courses - 12 Credits)
Required Courses
CIS 2800: Internet Programming
CIS 4950: eBusiness Technologies

Two Electives
CIS 2640: Business Reporting and Analysis
CIS 2660: Networking and Data Communications
CIS 3600: Systems Analysis and Design
CIS 3620: Information Technology Project Management
CIS 3640: Business Analytics
CIS 4100: Internship
CIS 4600: Business Database Applications
CIS 4640: Business Data Mining
CIS 4900: Electronic Commerce Development
CIS 5550: Topics in CIS
MKTG 4500: Customer Relationship Management
MKTG 4870: Advanced Internet Marketing

Marketing Track (4 Courses - 12 Credits)
Required Course
MKTG 4870: Advanced Internet Marketing

Three Electives (Limited to one CIS Course)
MKTG 3600: Professional Selling
MKTG 3740: Advertising and Promotion
MKTG 4750: International Marketing
MKTG 4770: Consumer Behavior
MKTG 4780: Special Topics in Marketing
MKTG 4790: Marketing Internship
CIS 2640: Business Reporting and Analysis
CIS 4500: Customer Relationship Management
Core Courses

CIS 2900: Web Applications for Business
This course is designed to introduce students to technologies that can be used to create robust business initiatives such as using micro-blogging to reach customers, Web mashups to repackage and combine Web technologies such as Google maps and Craigslist to create a new niche product, and harness clients input via collaborative Wikis. Students will also learn how to read and analyze personalized tracking technologies and apply them to various business contexts.

No programming knowledge is assumed for this course. It focuses on the application of current Web 2.0 and social technologies to the business and organizational realms using a variety of hands-on projects.

Course Description
In this course students will explore diverse Web applications from micro-blogs, to social networks, to mashups. Students will experience Web application technologies through a series of hands-on projects designed to help them tailor the tools according to the business needs. Students might create a new niche product by combining interactive ads with GIS-enabled maps or harness the power of social media to promote their business in this class. Students will also learn how to read and analyze personalized tracking technologies and apply them to various business contexts.

No programming knowledge is assumed for this course.

Current Prerequisite: (Not an approved course yet but offered as a 5550: Special Topics).
Prerequisites & Corequisites: CIS 1020 or 1100 or equivalent and BCM 1420 or equivalent.

Credits: 3 hours

CIS 3900: Business Web Architecture
We have set this prerequisite to not require any prior programming background. Students will have had certain courses such as their computer literacy (e.g., CIS 1020) and first-year writing (e.g., BCM 1420). In this course, students learn design principles and information architecture. Students create Websites using Microsoft Expression Web that allows them to create working Websites with little programming needed.

Course Description
This course applies human computer interaction theories, principles, and techniques to develop effective and usable Web applications for the business environment. Topics include WWW architecture, modern web-based languages, search engines, interactive content, multimedia, and other technologies for the WWW. Students will evaluate the effectiveness of various websites and develop Web applications to support Internet commerce.

Current Prerequisites and Corequisites: Admission to the Business Administration curriculum; also open to Telecommunications and Information Management majors and e-Business Design minors both with junior standing.
Future Prerequisites and Corequisites: Admission to the Business Administration curriculum; also open to Telecommunications and Information Management majors and EBM majors both with junior standing.

Credits: 3 hours
MKTG 2500: Marketing Principles
Introduction to the role of marketing in the U.S. and global economy. Emphasis on how organizations create customer value through marketing strategy planning. Topics covered include buyer behavior, market segmentation, product planning, service quality, promotion, pricing, and managing channel relationships.

Prerequisites and Corequisites: Sophomore standing.

Credits: 3 hours

Restrictions: This course is open to pre-business and business majors as well as the following other majors: Aviation Science & Administration, Dietetics, Interior Design, Industrial Design, Imaging/Printing, Imaging/Printing:Management, Imaging/Printing:Marketing, Imaging:Business, Secondary Education in Marketing, and Textile & Apparel Studies.

This course is open to the following minors: Accountancy, Advertising & Promotion, General Business, International Business, Integrated Supply Matrix Management, Management, Marketing, EBM, and Secondary Education in Marketing.

MKTG 3710: Marketing Research
An introduction to the research process as it aids decision making in marketing management. The focus is on the stages of research process from the planning of the research to gathering, analysis, and interpretation of data as it relates to marketing management.

Prerequisites and Corequisites: MKTG 2500, STAT 2160 or STAT 3660.

Credits: 3 hours

Restrictions: This course is restricted to Marketing majors and minors, General Business majors, eBusiness Marketing majors, Imaging: Business majors, Imaging/Printing: Marketing majors, and Secondary Education in Marketing majors only.

MKTG 3730: Internet Marketing
This course examines the strategic use of the Internet as an interactive marketing tool and medium. Students will analyze various models for increasing marketing effectiveness and efficiency, and will learn strategies for evaluating and planning web sites and Internet advertising to achieve positive customer relationships. Students will also critically assess the pros, cons, and future developments related to this evolving medium.

Prerequisites and Corequisites: MKTG 2500.

Credits: 3 hours

Restrictions: This course is restricted to eBusiness Marketing, Advertising, Marketing, Sales & Business Marketing or Food & Consumer Pkg Good Marketing majors and minors.
Specific Information Systems Track Courses

Required Courses

CIS 2800: Internet Programming
As eBusiness Marketing majors choosing the Information Systems Track, students need to know basic programming skills. This course is available to any major, but is designed specifically to teach students how to develop basic interactive Web applications using an industry-standard development language designed for this purpose (e.g., PHP, C#, etc.)

Course Description
CIS 2800 is a programming course that develops the basic knowledge and skills needed to implement solutions with Internet programming tools. Students will create Internet solutions using current programming technologies.

Prerequisites & Corequisites: CIS 1020 or 1100 or equivalent and BCM 1420 or equivalent.

Credits: 3 hours

CIS 4950: eBusiness Technologies
As eBusiness Marketing majors choosing the Information Systems Track, students need to understand and apply advanced technologies to create robust interactive Websites tailored to specific business needs. Using advanced techniques, students will create applications using Google Analytics' APIs, implement various Web tracking technologies for site personalization, and create rich Internet applications that can be deployed over the Web, as well as smart phones and other Internet-enabled devices.

Course Description
This course allows students to master Internet marketing technologies to create customized solutions to business marketing challenges. Using technologies such as Google Analytics and Web tracking programs, students will create personalized offerings for diverse customer demographics. Moreover, students will create rich Internet applications that will be deployed not only over Websites but also various Internet-enabled devices such as smart phones and desktop widgets. This course requires a large collaborative project.

After completing the course, students will be able to understand, implement, and manage advanced eBusiness technologies within various organizational contexts.

Current Prerequisites & Corequisites: CIS 3900 and CIS 4600; CIS 4600 may be taken concurrently.
Future Prerequisites & Corequisites: CIS 2800, CIS 2900, CIS 3900 and MKTG 3730.

Credits: 3 hours
Elective Courses (Choose One)

CIS 2640: Business Reporting and Analysis
This course is designed to give students comprehensive skills and in-depth knowledge to plan, design and deliver business reports that will help management analyze and interpret complex business information. Business report solutions that range from personal productivity software to full-scale reporting systems will be studied.

Prerequisites and Corequisites: CIS 1020 or CIS 1100 or CS 1050 or CS 1000 or FCS 2250 or HPER 1490.

Credits: 3 hours

Notes: This course is restricted to students with sophomore status and a major (or pre-major) in Business Administration or General Business.

CIS 2660: Networking and Data Communications
This course provides an introduction to modern computer networking, data communications, network security, and associated technologies. The content focuses on the design, implementation, administration, and security of computer (wired and wireless) networks and data communications. The concepts of business networks as business process integration (BPI) tools to facilitate business-to-business (B2B) and business-to-customer (B2C) operations are also discussed. Case projects and hands-on labs are used throughout the course.

Prerequisites and Corequisites: Admission to the Business Administration curriculum or Admission to the Telecommunications & Information Management program from the College of Arts and Sciences.

Credits: 3 hours

CIS 3600: Systems Analysis and Design
This course focuses on the methodologies that employ multi-phased process for developing information systems to be deployed in an organization. The course introduces various methods, techniques, and tools to determine and meet the information requirements by building proper information models that can be further implemented. This course is not merely a technical or computer course. It is a business course with strong focus on business applications. The course will cover roles, responsibilities, and mindset of the business analyst as well as the project manager rather than those of the programmer.

Prerequisites and Corequisites: BUS 2700 or COM 2000; also open to Telecommunications and Information Management majors with junior standing.

Credits: 3 hours

CIS 3620: Information Technology Project Management
This course enables students to gain a clear and comprehensive understanding of structured Information Technology (IT) project management. The aim is to equip students with general IT project management skills and to give practical experience of applying project management processes. The course is designed to impart a comprehensive understanding of the project management techniques and the diverse organizational and managerial aspects of IT projects.

Prerequisites and Corequisites: BUS 2700 or instructor approval.

Credits: 3 hours
CIS 3640: Business Analytics
This course builds upon the fundamentals of business reporting taught in CIS 2640. The need to transform data into actionable intelligence continues to grow in organizations. Business Analytics addresses that need with three areas of concentration: 1. Robust capability with software tools 2. Application of software tools to business information needs in case scenarios 3. Automation of task and flow control of established processes.

Students receive directed assignments to build competency with software analytical tools, and are expected to apply that knowledge to business cases to create actionable reports.

Prerequisites and Corequisites: CIS 2640.
Credits: 3 hours

CIS 4100: Internship
Under the direction of a faculty advisor, qualified students may engage in a variety of professional experiences. Scheduled meetings with advisor and written experience reports required. May be repeated for a maximum of 4 hours credit.

Prerequisites and Corequisites: Approved application required.
Credits: 1-4 hours

CIS 4600: Business Database Applications
This course focuses on the design and development of business database applications. Content includes data modeling, data dictionary, normalization theory, logical and physical database design, database inquiry using query languages, database implementation using modern database management systems and networking technologies, and data maintenance and administration skills. Students are required to construct and develop a business database using current technology and graphic user interface design packages. Students taking this course are required to have a laptop computer meeting the minimum specifications defined by the Haworth College of Business.

Prerequisites and Corequisites: CIS 3600 or CIS 3900.
Credits: 3 hours

CIS 4640: Business Data Mining
This course focuses on the theoretical understanding and practical applications of data mining as a decision support tool. Specifically, it covers several types of modeling techniques and tools such as prediction, classification, segmentation and association detection algorithms. Students are introduced to the state-of-the-art data mining applications software such as SAS Enterprise Miner or SPSS Clementine for their class assignments and term project.

Prerequisite: BUS 2700 and (MGMT 2500 or MKTG 2500) or instructor approval.
Credits: 3 hours
CIS 4900: Electronic Commerce Development
The trends in e-commerce architecture are studied within the scope of consumer-to-business, business-to-business relations and the enterprise evolution. The impact of e-commerce solutions upon local, national, and global trading are examined in order to plan a customized solution for a given business. A part of the course is skills-oriented with computer projects that employ modern web technologies with interactive database processing in support of cybercash, and other e-commerce components and activities, including security protection. Websites are developed with strong links to real world business applications. Students taking this course are required to have a laptop computer meeting the minimum specifications defined by the Haworth College of Business.

Prerequisites and Corequisites: CIS 3900; CIS 4600 (may be taken concurrently).

Credits: 3 hours

CIS 5550: Topics in CIS (with eBusiness Marketing Advisor Approval)
Special topics appropriate to business applications such as data base management systems, structured concepts, networking, programming documentation and efficiency, planning, organizing and directing management information systems. May be repeated for credit.

Prerequisites and Corequisites: Permission of instructor.

Credits: 3 hours

MKTG 4500: Customer Relationship Management
This course examines customer relationship management (CRM) and its application in marketing, sales, and service. Effective CRM strategies help companies align business process with customer centric strategies using people, technology, and knowledge. Companies strive to use CRM to optimize the identification, acquisition, growth and retention of desired customers to gain competitive advantage and maximize profit. Anyone interested in working with customers and CRM technology will find this course beneficial. Emphasis is given on both conceptual knowledge and hands-on learning using a CRM software.

Prerequisites and Corequisites: BUS2700 – Business Driven Information Technology for all students and an additional prerequisite, MKTG2500 - Marketing Principles for Marketing majors.

Credits: 3 hours

MKTG 4870: Advanced Internet Marketing
MKTG 4870, Advanced Internet Marketing, builds on MKT 3730, Internet Marketing, to provide students with in-depth knowledge of strategies and tactics used by organizations to conduct online marketing. Students will discuss ways that organizations can utilize the Internet to sell and support products and services and communicate effectively with shareholders. Students will study companies, business models and online techniques that illustrate electronic business marketing principles to critically assess the success or failure of evolving online marketing activities. Case studies, current articles, class discussions and projects will be utilized.

Prerequisites and Corequisites: CIS 2900 and CIS 3900 and MKTG 2500 and MKTG 3710 and MKTG 3730.

Credits: 3 hours
Specific Marketing Track Courses

**Required Course**

**MKTG 4870: Advanced Internet Marketing**
MKTG 4870, Advanced Internet Marketing, builds on MKT 3730, Internet Marketing, to provide students with in-depth knowledge of strategies and tactics used by organizations to conduct online marketing. Students will discuss ways that organizations can utilize the Internet to sell and support products and services and communicate effectively with shareholders. Students will study companies, business models and online techniques that illustrate electronic business marketing principles to critically assess the success or failure of evolving online marketing activities. Case studies, current articles, class discussions and projects will be utilized.

**Prerequisites and Corequisites:** CIS 2900 and CIS 3900 and MKTG 2500 and MKTG 3710 and MKTG 3730.

**Credits:** 3 hours

**Elective Courses (Choose Two - Limited to one CIS Course)**

**MKTG 3600: Professional Selling**
An introduction to the principles of selling. Includes study of selling in our present economy, analysis of the steps in the sales process, and a videotaped sales demonstration.

**Prerequisites and Corequisites:** MKTG 2500.

**Credits:** 3 hours

**Restrictions:** This course is restricted to Marketing Department majors and minors, as well as Secondary Education in Marketing majors and minors, and Textile and Apparel Studies majors.

**MKTG 3740: Advertising and Promotion**
A comprehensive survey of basic principles of advertising and promotion. The course will include the study of promotion media, practices and theories and the effects of advertising and promotion in the firm, the economy, and society. Students will be introduced to the fundamentals of Integrated Marketing Communications (IMC).

**Prerequisites and Corequisites:** MKTG 2500.

**Credits:** 3 hours

**Restrictions:** This course is restricted to Marketing majors and minors, General Business majors, Imaging:Business majors, Textile & Apparel Studies majors, and Secondary Education in Marketing majors and minors only.

**MKTG 4750: International Marketing**
An examination of the theories and principles of International Marketing. This course focuses on major concepts and dimensions of international marketing for small and large businesses. Emphasis on developing managerial frameworks within which global or multinational marketing programs can be planned, analyzed and assessed.

**Prerequisites and Corequisites:** MKTG 2500
MKTG 4770: Consumer Behavior
Investigate, analyze and interpret the extensive body of research information on consumer behavior considering both the theoretical and practical implications.

Prerequisites and Corequisites: MKTG 2500 and 3710 (3710 may be taken concurrently).

Credits: 3 hours

Restrictions: This course is restricted to Marketing Department majors and minors, General Business majors, International Business minors, and Textile & Apparel Studies majors only.

MKTG 4780: Special Topics in Marketing
Study of advanced topics within the marketing discipline. The course topic will be indicated in the student record. Repeatable for different topics.

Prerequisites and Corequisites: MKTG 2500 and instructor approval.

Credits: 3 hours

MKTG 4790: Marketing Internship*
Marketing internship experience under the supervision of participating employers. Variable credit at the rate of approximately 100 hours of approved internship experience per credit hour. May be repeated for a maximum of 6 hours. Term reports required. Employer must submit a written performance appraisal.

Prerequisites and Corequisites: MKTG 2500, MKTG 3710, and instructor approval.

Credits: 3 hours

Restrictions: This course is restricted to Marketing, Sales & Business Marketing, and Advertising & Promotion majors only.

Notes: Graded on a credit/no credit basis. Cannot be counted toward major requirements.

*We will put through a curriculum change that will allow the internship to be counted toward the eBusiness Marketing major. The new course will have a different number.

CIS 2640: Business Reporting and Analysis
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Prerequisites and Corequisites: CIS 1020 or CIS 1100 or CS 1050 or CS 1000 or FCS 2250 or HPER 1490.

Credits: 3 hours
Notes: This course is restricted to students with sophomore status and a major (or pre-major) in Business Administration or General Business.

CIS 4500: Customer Relationship Management
This course examines customer relationship management (CRM) and its application in marketing, sales, and service. Effective CRM strategies help companies align business process with customer centric strategies using people, technology, and knowledge. Companies strive to use CRM to optimize the identification, acquisition, growth and retention of desired customers to gain competitive advantage and maximize profit. Anyone interested in working with customers and CRM technology will find this course beneficial. Emphasis is given on both conceptual knowledge and hands-on learning using a CRM software.

Prerequisites and Corequisites: BUS2700 – Business Driven Information Technology for all students and an additional prerequisite, MKTG2500 - Marketing Principles for Marketing majors.

Credits: 3 hours