

## DEPARTMENT OF BUSINESS EDUCATION

<b>Major Code:</b> <b>0292</b>
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Departmental Course Check 2006-07

Student: \_\_\_\_\_ Major: **Business Education—(Information Technology—IT)**  
 Student Number: \_\_\_\_\_ Date First Enrolled: \_\_\_\_\_  
 Cluster Theme: \_\_\_\_\_

Freshman Year

<u>Course and Number</u>	<u>Description</u>	<u>Credits</u>
<u>First Semester</u>		
_____ BUAD 220	Business Environment	3
_____ MATH 111	College Algebra and Trigonometry	4
_____ <b>UNST 100</b>	<b>University Experience</b>	<b>1</b>
_____ <b>UNST 110</b>	<b>Critical Thinking</b>	<b>3</b>
_____ <b>UNST 120</b>	<b>Contemporary World</b>	<b>3</b>
_____ <b>UNST 130</b>	<b>Analytical Reasoning</b>	<b>3</b>
		<u>17</u>

Second Semester

_____ BUED 334	Microcomputer Usage in Business	3
_____ GEEN 102	Introduction to Computer Programming	2
_____ MATH 112	Calculus for Non-Math Majors	4
_____ <b>UNST 140</b>	<b>The African American Experience</b>	<b>3</b>
_____ <b>UNST 221</b>	<b>Thematic Writing and Speaking</b>	<b>3</b>
_____ HPED Elective	(Golf, Racquetball or Tennis)	<u>1</u>
		16

Sophomore YearFirst Semester

_____ ACCT 221	Principles of Accounting I	3
_____ BUAD 341	Introduction to Management Information Systems	3
_____ ECON 200	Principles of Economics (Micro)	3
_____ ECON 305	Elementary Statistics	3
_____ SPCH 250	Fundamentals of Speech	3
_____ HPED Elective	(Golf, Racquetball or Tennis)	<u>1</u>
		16

Second Semester

_____ ACCT 222	Principles of Accounting II	3
_____ ECON 201	Principles of Economics (Macro)	3
_____ ECON 310	Advanced Statistics	3
_____ PSYC 320	General Psychology	3
_____ <b>UNST Cluster Theme Elective<sup>a</sup></b>		<b>3</b>
_____ BUED 339 <sup>b</sup>	Information Processing Applications	<u>3</u>
		18

<sup>a</sup>**Cluster Theme Electives:** Students are required to select one cluster theme and select four elective courses within that theme; however, the selection of either the Energy & Environment theme or the Community & Conflict theme will **allow BUAD 361 to be used as one of the four theme electives.**

<sup>b</sup>Students who do not pass the Proficiency Test for Digital Data Input should first enroll in BUED 301.

### Junior Year

#### First Semester

_____ BUAD 422	Management Concepts	3
_____ BUAD 481	Management Science	3
_____ BUED 342	Business Programming	3
_____ BUED 360	Business Communication	3
_____ <i>Information Technology—IT Elective</i>		3
_____ BUED 670	Directed Work Experience	<u>1</u>
		16

#### Second Semester

_____ <b>BUAD 361<sup>c</sup></b>	<b>Legal Environment of Business</b>	<b>3</b>
_____ BUAD 430	Marketing Concepts	3
_____ BUAD 453	Business Finance	3
_____ BUED 671	Directed Work Experience	1
_____ <b>UNST Cluster Theme Elective<sup>a</sup></b>		<b>3</b>
_____ <i>Information Technology—IT Elective</i>		<u>3</u>
		16

### Senior Year

#### First Semester

_____ BUAD 426	Organizational Behavior	3
_____ BUED 400	Business Reports and Presentations	3
_____ BUAD 440	Business Information Systems	3
_____ <i>Information Technology—IT Elective</i>		3
_____ <i>Information Technology—IT Elective</i>		<u>3</u>
		15

#### Second Semester

_____ BUAD 522	Human Resource Management	3
_____ <i>Information Technology—IT Elective</i>		3
_____ <i>Information Technology—IT Elective</i>		3
_____ <b>BUAD 520</b>	<b>Strategic Management (UNST Capstone Experience)</b>	<b><u>3</u></b>
		12

**Total Credit Hours: 126**

### MAJOR PROGRAM REQUIREMENTS

### SEMESTER HOURS

BUED 342	Business Programming	3
BUED 360	Business Communication	3
BUED 400	Business Reports and Presentations	3
BUAD 440	Business Information Systems	3
BUAD 520	Strategic Management	3
BUAD 522	Human Resource Management	3
<i>Information Technology—IT Elective</i>		3
<i>Information Technology—IT Elective</i>		3
<i>Information Technology—IT Elective</i>		3
<i>Information Technology—IT Elective</i>		<u>3</u>
		30

<sup>c</sup>Selection of cluster theme *Energy, Environment and Justice* or *Community and Conflict* will allow BUAD 361—Legal Environment of Business—to be used as one of the four cluster theme electives.

## **Bachelor of Science in Business Education (Information Technology Concentration)**

Select 18 hours in the concentration, to be taken from the following courses. No more than one course can be taken from the **Animation/Graphics** section.

### **SOFTWARE SYSTEMS**

#### **BUED-447** Advanced Microcomputer Applications Credit 3(2-1)

Emphasis in this course is on Windows-based graphical user interface and advanced computing concepts and applications related to information design, production, management, and dissemination in business. This course includes hands-on desktop publishing applications using integrated software packages. A capstone unit will deal with the future of the computing industry. Prerequisite: BUED 334 or ECT 201 or approval of chairperson.

#### **BUED-624** E-Commerce Design and Implementation Credit 3(3-0)

This hands-on course will focus on the design and implementation of an e-business site on a live server. Emphasis will be given to effective design of Web pages, particularly the data collection forms such as the order and credit forms and how they interface with other business systems. A final project will require students to demonstrate the efficiency of their design to a panel of external evaluators. Prerequisite: BUED 334 or ECT 201 or approval of chairperson.

**BUAD 448** Systems Analysis – This course focuses on the analysis, design, selection and construction phases of systems development, using the traditional life cycle techniques and rapid application development techniques. Such issues as the organizational structure of the Management Information Systems department and its relationship to other functional areas, productivity tools for systems analysis and design, and preparation for a career in MIS are discussed. Prerequisite: BUAD 341 or BUED 342 or COMP 280.

**ITT 420** Introduction to Unix/Linux - The course will cover network management utilizing various Unix products, such as Linux and Solaris operating systems. Topics will include networking operating system (NOS) setup, network resource management, user and group management, and the security model. Prerequisites: ECT 201 or BUED 342 or GEEN 102.

**ITT 431** Advanced Programming Techniques with an OOP Language - This course uses programming examples (employing an object-oriented programming language such as Visual C++ / J++ to introduce concepts in advanced data structures (stacks, queues, trees, graphs, hash tables, etc.) and algorithms (sorting, searching, etc.). Object-oriented programming techniques are also detailed. Application to design of large scale programs and software engineering. Prerequisite: ECT 201 or BUED 342 or GEEN 102.

**ITT 601** Wireless Application Protocols - This course takes you through the basics of Wireless Application Protocols (WAPs), and provides all the information needed to create WAP pages using the Wireless Markup Language (WML). The course will include an introduction to WAP and WML, cards and decks, text formatting elements, navigational commands in WML, and WML variables. Prerequisites: ECT 201 or BUED 342, GEEN 102 or BUED 444.

### **NETWORKING**

#### **BUED-444** Data Communications and Networks Credit 3(3-0)

This course emphasizes a formal approach to modern data communications and networks, including a theoretical and practical framework. It places special attention on enterprise and global systems covering voice, data, software, hardware, cellular/wireless, and bluetooth standards. Prerequisites: BUED 334 or BUAD 341 or ECT 213 or permission of instructor.

**ITT 301** Hardware and Software Installation and Maintenance - This course will introduce the student to the practical hardware and software aspects of personal computers. Topics include operating systems, installation of hardware and software, configuration, troubleshooting, I/O and basic networking. Prerequisite: Sophomore Standing and ECT 101 or BUED 342 or GEEN 102.

**ITT 629** Computer Networking I - This course introduces the student to Local Area Networks (LAN) and Wide Area Networks (WAN). The course will also provide the basic understanding of network concepts and router programming. Prerequisite: ECT 299 or ECT 211 or ECT 212 or ECT 213 or BUAD 341 or BUED 334.

**ITT 630** Computer Networking II - The course covers the advanced study of Local Area Networks (LAN) and Wide Area Networks (WAN). The students will develop competences in designing and implementing enterprise-wide networks using routers and switches. Prerequisites: ITT 629

## **SECURITY**

**COMP 620** Information, Privacy and Security – This course examines the security and privacy issue associated with information systems. There are cost/risk tradeoffs to be made. Discussed are topics such as technical, physical, and administrative methods of providing security, access control, identification, and authentication. Encryption is examined, including Data Encryption Standards (DES) and public key crypto-systems. Management considerations such as key protection and distribution, orange book requirements, and OST data security standards are covered. Privacy legislation is covered, as is current cryptographic research.

**COMP 627** Wireless Network Security – This course covers the security issues associated with wireless networks. Emerging wireless technologies, standards and protocols are explored. The course will define and demonstrate various threats to wireless security. Topics include security service, security protocol, and security architecture for wireless. Details of wireless encryption techniques are examined

## **ANIMATION/GRAPHICS**

**GCS 418** Web Design for Graphic Communications – This course is designed to provide tight integration of graphic communications applications and streamlined workflow for students to build Web sites. Students will be able to create interactive graphics and animations.

**GCS 632** Graphic Animation – This course deals with the creation and manipulation of computer generated geometric shapes and models. Topics include 3D scenes, assignment of materials, lights, and textures, key framing, rendering, and animation. Prerequisite: GCS 631

**TECH 382** Computer Applications for Technological Studies – This course provides an overview of computer concepts and applications in order to teach problem-solving techniques and interactive applications, and to encourage independent study. Practical problems from academic and real world environments will be integrated into the content.