

INFORMATION TECHNOLOGY, INTERDISCIPLINARY

Degree: Bachelor of Science
Specializations: Bioinformation
Digital Enterprise
Human Computer Interaction
Information Technology
Networking & Telecommunication
Technology
Coordinator: M. Lockhart
Building 79, Room 102
(850) 474-2542
<http://uwf.edu/it/>
it@uwf.edu
Semester Hours Required for Degree: 120

The Interdisciplinary Information Technology (IIT) degree is a cooperative effort among all three colleges at UWF. Students complete a set of prerequisites, a common core, and courses from one of five IIT specializations: Bioinformation, Information Technology, Digital Enterprise, Human Computer Interaction or Networking & Telecommunication Technology. Each track includes a Minor or a Certificate and a senior capstone experience.

PROGRAM REQUIREMENTS

In addition to general University requirements, students seeking the B.S. in Interdisciplinary Information Technology must meet the requirements listed below.

No more than 24% of the program requirements for this degree may be in traditional business subjects.

Students should consult with their academic advisor for courses which may satisfy both the General Studies requirements and common prerequisites. All major courses should be completed with a C- or higher.

BIOINFORMATION SPECIALIZATION

The Bioinformation Specialization is a collaborative effort between the Departments of Biology and Computer Science. The purpose of this specialization is to provide students with sufficient training in both fields to allow them to enter the rapidly growing market for personnel capable of storing, extracting, organizing, analyzing, interpreting, and utilizing the increasing mass of biological data. The skills provided to students within this specialization will address the major challenge of utilizing the immense storehouse of biological and medical data to solve problems and develop new products for the biomedical, pharmaceutical, and biotechnology industries. For further information about this specialization, contact the Department of Biology at (850) 474-2885 or biology@uwf.edu.

General Studies (36 sh)

For additional information see the General Studies section of this *Catalog*.

Common Prerequisites (37 Hours)

State mandated common prerequisites must be completed prior to graduation, but are not required for admission to the program. Courses in brackets indicate substitutes from Florida public community/junior colleges and universities.

Core Program Common Prerequisites (21 sh)

Choose one:

COP 2253	Programming Using Java.....	3
	[COP 2xxx-computer programming]	
COP 2334	Programming Using C++	3
	[COP 2xxx-object oriented computer programming]	
ECO 2013	Principles of Economics Macro	3
+MAC 1140	Precalculus Algebra.....	3
	[MAC 1140 or MAD 2104]	
+PHI 2603	Ethics in Contemporary Society	3
	[PHI xxx-ethics]	
+PSY 2012	General Psychology	3
	[PSY xxx]	
+STA 2023	Elements of Statistics	3

Choose one:

CGS 2570	Personal Computer Applications.....	3
	[CGS xxxx-database concepts]	
CGS 3523	Computer Graphic Applications.....	3
	or other CGSXXXX advisor-approved course.....	3

Additional Bioinformation Common Prerequisites (16 sh)

+CHM 2045/L	General Chemistry I/Lab.....	4
+CHM 2046/L	General Chemistry II/Lab.....	4
+PCB 2131/L	Cell Biology/Lab	4

Choose one:

+BOT 2010/L	General Botany/Lab.....	4
+ZOO 1010/L	General Zoology/Lab	4

+ Indicates common prerequisites which can be used to satisfy General Studies requirements.

Lower Division Electives (0-10 sh)

Sufficient 1000/2000 level electives to complete at least 60 semester hours in the lower division. Current UWF students may use elective courses at any level (1000-4999) to meet this elective requirement.

Major Courses (51 Hours)

Major-Related (4 sh)

MAC 2311	Analytic Geometry and Calculus I.....	4
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Upper Division Electives (5 sh)

Sufficient 3000/4000 level electives to meet UWF's requirement of 48 semester hours in the upper division or completion of all departmental requirements at the 3000/4000 level, whichever is greater.

DIGITAL ENTERPRISE SPECIALIZATION

The Digital Enterprise specialization provides applied study of Internet programming concepts, networking principles, website graphics and design development, and digital commerce technology. This curriculum features practical, hands-on experience with cutting-edge Internet computer applications. Successful graduates of the program will be prepared for high tech positions such as Internet programmer, webmaster, and Internet commerce technology analyst. Capstone experience is the Digital Enterprise Senior Project. Degree includes a minor in e-Business and Computer Information Systems. For further information concerning this specialization, contact the Department of Computer Science at (850) 474-2542 or iit@uwf.edu.

No more than 24% of the program requirements for the degree may be taken in traditional business subjects.

General Studies (36 sh)

For additional information see the General Studies section of this *Catalog*.

Common Prerequisites (24 sh)

State mandated common prerequisites must be completed prior to graduation, but are not required for admission to the program. Courses in brackets indicate substitutes from Florida public community/junior colleges and universities.

CGS 2570	Personal Computer Applications 3 [CGS xxxx-data base concepts]
COP 2253	Programming Using Java..... 3 [COP 2xxx-computer programming]
COP 2830	Script Programming 3 [COP 2xxx-object oriented computer programming]
+ECO 2013	Principles of Economics Macro 3
+MAC 1140	Precalculus Algebra..... 3 [MAC 1140 or MAD 2104]
+PHI 2603	Ethics in Contemporary Society 3 [PHI xxxx-ethics]
+PSY 2012	General Psychology..... 3 [PSY xxxx]
+STA 2023	Elements of Statistics..... 3

+ Indicates common prerequisites which can be used to satisfy General Studies requirements.

Lower Division Electives (0-15 sh)

Sufficient 1000/2000 level electives to complete at least 60 semester hours in the lower division. Current UWF students may use elective courses at any level (1000-4999) to meet this elective requirement

Major (48 sh)

Interdisciplinary Information Technology Common Core (15 sh)

CNT 4007C	Networking Principles 3
CGS 3604	Applications of Information Technology..... 3
COP 4710	Database Systems..... 3
GEB 3032	Business Foundations for Non-Business Majors..... 3

Choose one Writing Course:

CIS 3512	Software Documentation 3
ENC 3250	Professional Writing..... 3
GEB 3212	Writing For Business: Theory and Practice. 3

Digital Enterprise Specialization Courses (24 sh)

MAN 3025	Management Fundamentals 3
MAR 3023	Marketing Fundamentals 3
MAR 4721	Internet Marketing Principles 3
MAR 4728	High Tech Marketing Strategy 3
COP 3813	Internet Programming 3
CIS 4595C	Capstone Systems Project 3

Choose one of:

ISM 3011	e-Business Systems Fundamentals..... 3
CGS 3464	Programming Using Visual Basic for Non-majors 3

Choose one of:

CIS 4340	Web Server Technologies 3
CGS 3172	Web Design for e-Commerce 3

Digital Enterprise Electives (Choose 9 sh)

See Department of Computer Science for the approved list of 3000/4000 level electives from the following prefixes: CAP, CGS, CIS, CNT, COP, or COT.

Major-Related (12 sh)

Electives to support secondary concentrations, minors or certificates should be chosen through discussion with the faculty advisor regarding the student's career goals. Electives must be approved by the Computer Science department.

Upper Division Electives (0 sh)

HUMAN-COMPUTER INTERACTION SPECIALIZATION

The Human-Computer Interaction Specialization provides a foundation in computer applications, programming principles, statistics, database concepts, and behavioral aspects of computer technology. Graduates of this program will have a foundation in computer-related and behavioral skills required for many entry-level positions in computer applications, database applications, systems analysis, computer usability, statistical and other quantitative analyses, computer-related research in behavioral areas, and human-computer interfacing. For further information about this specialization, contact the Department of Computer Science at (850) 474-2542 or iit@uwf.edu.

General Studies (36 sh)

For additional information see the General Studies section of this *Catalog*.

Common Prerequisites (24 sh)

State mandated common prerequisites must be completed prior to graduation, but are not required for admission to the program. Courses in brackets indicate substitutes from Florida public community/junior colleges and universities.

CGS	2570	Personal Computer Applications 3 [CGS xxxx-data base concepts]
COP	2253	Programming Using Java 3 [COP 2xxx-computer programming]
COP	2830	Script Programming 3 [COP 2xxx-object oriented computer programming]
+ECO	2013	Principles of Economics Macro 3
+MAC	1140	Precalculus Algebra 3 [MAC 1140 or MAD 2104]
+PHI	2603	Ethics in Contemporary Society 3 [PHI xxxx-ethics]
+PSY	2012	General Psychology 3 [PSY xxxx]
+STA	2023	Elements of Statistics 3

+ Indicates common prerequisites which can be used to satisfy General Studies requirements.

Lower-Division Electives (0-15 sh)

Sufficient 1000/2000 level electives to complete at least 60 semester hours in the lower division. Current UWF students may use elective courses at any level (1000-4999) to meet this elective requirement.

Major (51 sh)

Information Technology Common Core (15 sh)

CNT	4007C	Networking Principles 3
CGS	3604	Applications of Information Technology 3
COP	4710	Database Systems 3
GEB	3032	Business Foundations for Non-Business Majors 3

Choose one Writing Course:

CIS	3512	Software Documentation 3
ENC	3250	Professional Writing 3
GEB	3212	Writing For Business: Theory and Practice... 3

Human-Computer Interaction Specialization Courses (18 sh)

CEN	4721	Human-Computer Interaction 3
EXP	4250	Human Factors Psychology 3
CGS	3464	Programming Using Visual Basic for Non-Majors 3
CIS	4595C	Capstone Systems Project 3

Choose one:

CGS	3172	Web Design for e-Commerce 3
COP	3813	Internet Programming 3

Choose one:

EXP	4404	Psychology of Learning 3
PSB	4002	Brain, Behavior and Experience 3

Human-Computer Interaction Electives Choose (18 sh)

Approved list of 3000/4000 level electives from the following prefixes: EXP, INP, SOP, CAP, CGS, CIS, CNT, COP, or COT.

Major-Related (9 sh)

Electives to support secondary concentrations, minors or certificates should be chosen through discussion with the faculty advisor regarding the student's career goals. Electives must be approved by the Computer Science department.

Upper-Division Electives (0 sh)

**INFORMATION TECHNOLOGY
SPECIALIZATION**

The Information Technology Specialization provides a firm foundation of course work including programming principles, database concepts, end user support, security, administration and systems planning. Graduates of this program will have a strong knowledge of information technology skills required for entry-level positions including Application Support Analyst, Business Requirements Analyst, Database Analyst, Infrastructure Manager, Operations Manager, Network Manager, Project Manager, IT Manager/Director, Systems Architect, Web Architect. For further information about this specialization, contact the Department of Computer Science at (850) 474-2542 or it@uwf.edu.

General Studies (36 sh)

For additional information see the General Studies section of this *Catalog*.

Common Prerequisites (24 sh)

State mandated common prerequisites must be completed prior to graduation, but are not required for admission to the program. Courses in brackets indicate substitutes from Florida public community/junior colleges and universities.

CGS	2570	Personal Computer Applications 3 [CGS xxxx-data base concepts]
COP	2253	Programming Using Java 3 [COP 2xxx-computer programming]
COP	2830	Script Programming 3 [COP 2xxx-object oriented computer programming]
+ECO	2013	Principles of Economics Macro 3
+MAC	1140	Precalculus Algebra 3 [MAC 1140 or MAD 2104]
+PHI	2603	Ethics in Contemporary Society 3 [PHI xxxx-ethics]
+PSY	2012	General Psychology 3 [PSY xxxx]
+STA	2023	Elements of Statistics 3

+ Indicates common prerequisites which can be used to satisfy General Studies requirements.

Lower Division Electives (0-15 sh)

Sufficient 1000/2000 level electives to complete at least 60 semester hours in the lower division. Current UWF students may use elective courses at any level (1000-4999) to meet this elective requirement.

Major (42 sh)

Information Technology Common Core (15 sh)

CGS	3604	Applications of Information Technology 3
CIS	3512	Software Documentation 3
CNT	4007C	Networking Principles 3
COP	4710	Database Systems 3
GEB	3032	Business Foundations for Non-Business Majors 3

Information Technology Specialization Courses (27 sh)

CTS	4817	Web Server Administration 3
CAP	4723	Database Administration 3

CGS	3464	Programming Using Visual Basic for Non-majors	3
CTS	3159	End User Support	3
CEN	4340C	IT Infrastructure Planning, Acquisition and Integration.....	3
CNT	4014C	IT Administration.....	3
CIS	4361C	IT Security	3
CIS	4595C	Capstone Systems Project	3
COP	44610C	Theory and Fundamentals of Operating Systems.....	3

Major-Related (18 sh)

Electives to support secondary concentrations, minors or certificates should be chosen through discussion with the faculty advisor regarding the student's career goals. Electives must be approved by the Computer Science department.

Upper Division Electives (0 sh)

NETWORKING AND TELECOMMUNICATION TECHNOLOGIES SPECIALIZATION

This specialization provides an alternative path to the application-specific skills training provided by commercial training concerns and/or community colleges. It provides additional emphasis on educational and training technologies with respect to networking and telecommunications, web environments, and distance education. For further information contact the Department of Engineering and Computer Technology at (850) 474-2484 or at ect@uwf.edu

General Studies (36 sh)

For additional information see the General Studies section of this *Catalog*.

Common Prerequisites (24 sh)

State mandated common prerequisites must be completed prior to graduation, but are not required for admission to the program. Courses in brackets indicate substitutes from Florida public community/junior colleges and universities.

CGS	2570	Personal Computer Applications	3
		[CGS xxxx-data base concepts]	
COP	2253	Programming Using Java.....	3
		[COP 2xxx-computer programming]	
COP	2830	Script Programming	3
		[COP 2xxx-object oriented computer programming]	
+ECO	2013	Principles of Economics Macro	3
+MAC	1140	Precalculus Algebra.....	3
		[MAC 1140 or MAD 2104]	
+PHI	2603	Ethics in Contemporary Society	3
		[PHI xxxx-ethics]	
+PSY	2012	General Psychology.....	3
		[PSY xxxx]	
+STA	2023	Elements of Statistics.....	3

+ Indicates common prerequisites which can be used to satisfy General Studies requirements.

Lower Division Electives (0-15 sh)

Sufficient 1000/2000 level electives to complete at least 60 semester hours in the lower division. Current UWF students may use elective courses at any level (1000-4999) to meet this elective requirement.

Major (36 sh)

Interdisciplinary Information Technology Common Core (16 sh)

CGS	3604	Applications of Information Technology	3
COP	4710	Database Systems	3
EME	4622	Technology Tools: Site-Based Educational Networks.....	4
GEB	3032	Business Foundations for Non-Business Majors	3

Choose one Writing Course:

CIS	3512	Software Documentation	3
ENC	3250	Professional Writing	3
GEB	3212	Writing For Business: Theory and Practice..	3

Networking and Telecommunication Technologies Specialization Courses (20 sh)

EME	3402	Information Engineering Technology: An Overview.....	3
EME	3406	Web Environments for Learning & Information	4
EME	4313	Multimedia Applications for e-Learning	3
EME	4454	Distance Education Technologies.....	3
EME	4627	Education and Training Technology Support Systems	4
EME	4944	Internship/Practica in Technology	3

Major-Related (12 sh)

Choose one option:

Advanced Topics in Computer Information Technologies (12 sh)

Choose from approved list available in the Computer Science Department of 3000/4000 level electives from the following prefixes: CAP, CGS, CIS, CNT, COP, & COT.

Business and Communications (12 sh)

ISM	3011	e-Business Systems Fundamentals.....	3
ISM	4300	Systems Planning, Design & Control	3
SPC	2016	Basic Communication Skills.....	3
SPC	3425	Group & Team Communication	3

Upper Division Electives (12 sh)

Sufficient 3000/4000 level electives to meet UWF's requirement of 48 semester hours in the upper division or completion of all departmental requirements at the 3000/4000 level, whichever is greater.