

# IS APPLICATION ENVIRONMENTS

## BAIS and BSIS

Revised starting Spring 2008

The IS Application Environment significantly enhances the value of your IS degree, both for your own intrinsic career and professional perspectives in IS, as well as from the viewpoint of potential employers. The IS Application Environment is a cohesive set of 15 credits from outside the College of Computing Sciences applying the IS knowledge and insights you have gained through your studies. This is a standard requirement of professional societies (including ACM) which recommend IS curricula, and the ABET-CAC accreditation board.

In consultation with your academic advisor, you must select a cohesive set of five courses from one of the following three IS Application Environments:

1. Business
2. Legal Arts & Criminal Justice
3. Graphic Design, Digital Media & Communications

(In special circumstance with the formal written approval of both the IS Undergraduate Advisor and the IS Undergraduate Director, a student may be granted permission to either substitute for a specified course in an IS Application Environment, or to create an individual IS Environment.)

### **1. Business**

The IS Application Environment in Business allows you to focus on either the general area of, or specialized areas within, Business and Management. This functional area knowledge combined with your IS coursework will enable you to design, use and deploy IS applications in business, as well as to eventually enter career positions in these areas.

This IS Application Environment can qualify for a formal NJIT minor in Business, which will be denoted on your transcript. Students seeking this minor must apply to the minor, and complete the first 5 courses listed below.

*The following 5 starred courses qualify for NJIT's formal Business Minor*

ACCT 115 *	Principles of Accounting I
ACCT 116 *	Principles of Accounting II ( <i>prereq: ACCT 115</i> )
FIN 315 *	Principles of Financial Management ( <i>prereq: ACCT 116</i> )
MRKT 330 *	Principles of Marketing
OM 375 *	Management Science ( <i>prereq: Mgmt 216 or Math 105</i> )

*The following advanced Business/Management courses are in the Marketing area*

MRKT 360	Internet Marketing ( <i>prereq: MRKT 330</i> )
MGMT 380	Principles of E-Commerce ( <i>prereq: MIS 246</i> )
R29:630:363	Introduction to Advertising ( <i>prereq: MRKT 330</i> )
R29:630:368	Retail Marketing ( <i>prereq: MRKT 330</i> )
MRKT 338	Product Development ( <i>prereq: MRKT 330</i> )

R29:630:370	Business-to-Business Marketing ( <i>prereq: MRKT 330</i> )
R29:630:372	Services Marketing ( <i>prereq: MRKT 330</i> )
MRKT 331	Consumer Behavior ( <i>prereq: MRKT 330</i> )

*The following advanced Business/Management courses are in the Global Business area*

MGMT 491	International Business ( <i>prereq: ECON 266, FIN 315 and GUR Management course</i> )
R29:630:371	International Marketing ( <i>prereq: MRKT 330</i> )
R790:387	International Law
FIN 416	Corporate Finance ( <i>prereq: FIN 315</i> )
FIN 402	Financial Risk Measurement & Mgmt ( <i>prereq: FIN 315</i> )
ENTR 420	Technological Entrepreneurship

*The following advanced Business/Management courses are in the Accounting area*

R29:010:203	Introduction to Financial Accounting
R29:010:204	Introduction to Managerial Accounting
R29:010:305	Intermediate Accounting I
R29:010:306	Intermediate Accounting II
R29:010:304	Cost and Quality Management
R29:010:485	Computer Augmented Accounting

*The following advanced Business/Management courses are in the Project Management area*

HRM 301	Organizational Behavior
HRM 305	Supervision & Employee Relations
IE 334	Engineering Economy and Capital Investment Analysis
IE 335	Engineering Cost Analysis and Control
IE 355	Human Factors
IE 492	Engineering Management
ENG 353	Electronic Publishing
EM 636	Project Management ( <i>graduate course, requires instructor permission</i> )
EM 637	Project Control ( <i>graduate course, requires instructor permission</i> )

## **2. Legal Arts & Criminal Justice**

The IS Application Environment in Legal Arts and Criminal Justice prepares you for work in law firms, forensic science, criminal justice and law enforcement agencies, designing and using legal and criminal justice applications. It also is relevant for attending law school. You also have the option to obtain a formal NJIT minor in Legal Studies. Consult the Legal Studies Advisor for details, Dr. Doris Sher ([sherd@njit.edu](mailto:sherd@njit.edu) - (973) 596-3379).

*The following courses are in the Legal Studies area*

MGMT 290	Legal Environment of Business
IE 447	Legal Aspects of Engineering
IE 472	Product Liability Engineering
HIST 369	Law and Society in History
R190:335	Ancient Law
R512:365	American Legal History

R512:379	U.S. History in the Courts
STS 300	Legal Reasoning, Writing, and Technology
PHIL 300	Philosophy of Law & Social Justice
HSS 408	Capstone Seminar: Communication, Ethics & Law
R202:302	Constitutional Issues in Criminal Justice
R202:305	Case Processing: Law and Courts
R790:304	Introduction to Law and Legal Research*
R790:367	Jurisprudence and Legal Theory
R790:381	Judicial Processes*
R790:387	International Law
R790:401,402	American Constitutional Law I, II*
R790:409	Law and Public Policy*
R920:349	Law and Society

*The following courses are in the Criminal Justice area*

R202:201	Introduction to Criminal Justice
R202:301	White Collar Crime
R202:302	Constitutional Issues in Criminal Justice
R202:303	Criminology
R202:305	Case Processing: The Law and the Courts
R790:409	Law and Public Policy*

\* *These courses have an RU prerequisite of R790:201 (American National Government), which may be taken to fulfill the GUR in Basic Social Science at NJIT.*

### **3. Graphic Design, Digital Media & Communications**

The IS Application Environment in Graphic Design, Digital Media & Communications involves various multimedia and graphical application areas such as advertising, publishing, journalism, training, CAD/CAM, Design systems, and recreational systems. These applications require you to develop an understanding of Art and Design principles. Students with prior graphic and artistic experience may choose to seek instructor permission for a given course to waive its formal prerequisites.

*The following courses are in the area of Graphical Design*

R21&62:080:102	Design Fundamentals
R21&62:080:103	3-D Design Fundamentals
R21&62:080:121	Introduction to Drawing
R21&62:080:231	Graphics Design I ( <i>prereqs: R21&amp;62:080:102 and R21&amp;62:080:121</i> )
R21&62:080:232	Graphics Design II ( <i>prereq: R21&amp;62:080:231 or instructor permission</i> )
R21&26:080:236	Illustration ( <i>prereq: R21&amp;62:080:102</i> ) <i>not offered</i>
R21&26:080:245	Introduction to Computer Art ( <i>prereq: R21&amp;62:080:102</i> )
COM 266 (NJIT)	Foundations of Game Production
COM 335 (NJIT)	3-D Modeling and Animation
COM 345 (NJIT)	Character Modeling and Animation
COM 376 (NJIT)	Game Design Studio

*The following courses are in the area of Digital Media*

- R21&62:965:203 Introduction to Mass Media  
R21&62:965:204 Introduction to Video Production  
R21&62:965:319 Studio Production/Multi Camera Techniques  
(prereq: R21&62:965:204)  
R21&62:965:333 Field Production/Single Camera Techniques (prereq: R21&62:965:204)  
R21&62:965:410 Theory and Practice of Video Art  
(prereq: R21&62:965:319 AND permission of the instructor)  
R21&62:965:434 Advanced Field Production (prereq: R21&62:965:333)  
COM 350 (NJIT) Digital Video Production  
COM 351 (NJIT) Documentary Studies  
COM 352 (NJIT) Non-Fiction Writing and Digital Photography

*The following courses are in the area of Communications*

- Eng 200 Communicating in Organizations  
Eng 339 Practical Journalism  
Eng 347 Technical, Professional and Scientific for Publication  
Eng 349 Advanced Journalism Skills  
Eng 351 Online Journalism  
Eng 353 & Eng 353A Electronic Publishing & Electronic Publishing Lab  
(prereq: ENG352)  
Eng 354 Advanced Electronic Publishing  
Eng 355 Television News Writing and Production  
Eng 356 Technical Writing in Distributed Environments  
Eng 360 Collaborative Communication: Community & Global Perspectives