Information Technology and Analytics Department

Information Systems and Technology (IST) and Business Analytics (BAn) Specializations and Minors

Prof. Alberto Espinosa, IST & Analytics Curriculum Coordinator (<u>alberto@american.edu</u>) Last revised 11/18/2020

Information Systems and Technology (IST)

(Specialization: 9 cr. Core + 12 cr; Minor: 18 cr)

IST education focuses on learning how IT can be best
utilized and managed to innovate products and
processes, transform firms and create business value.

IST encompasses technology, people, business
processes, and business models. IST professionals serve
as a bridge between business and IT. Students who
understand the functional areas (e.g., marketing,
finance, accounting, HR, etc.) but also have a solid
understanding of how IT works and how it can support
business processes and models are ideally suited for IST
careers such as consultants, business analysts,
cybersecurity specialists, and IT project managers.

Business Analytics (BAn)

(Specialization: 9 cr. Core + 15 cr; Minor: 18 cr.) Business analytics is about extracting meaningful insights from data for decision making. **BAn** permeates most aspects of every business domain (e.g., sports, healthcare, marketing, accounting forensics, management consulting, etc.). No business strategy or decision is adopted these days without a solid understanding of its data. **BAn** education provides students with a strong foundation for business analytics, data management, analytics modeling and software tools (e.g., R, Python) with the goal of extracting powerful meaning from data for decision making.

Legend: (RK) Required for all Kogod students; (GE) General electives
(IST) Required for IST specialization; (EIST) Electives for IST specialization and minor;
(BAn) Required for BAn specialization; (EBAn) Electives for BAn specialization and minor

Core Courses	PreRequisites (C) Concurrent	Program Requirements
ITEC 200 The Edge of Information Technology	None	RK
ITEC 320 Business Analytics	ITEC 200	RK
ITEC 355 Production and Operations Management	ITEC 200	RK
Required for Specializations		
ITEC 300 Programming Tools for Analytics (R)	ITEC 200; STAT 204	BAn
ITEC 321 Business Analytics 2	ITEC 300 (C); ITEC 320	BAn
ITEC 455 Business Process Analysis	ITEC 200	IST EBAn
ITEC 470 Database and Big Data	ITEC 200	IST BAn
Electives		
ITEC 333 Topics in Information Technology	ITEC 200	EIST
ITEC 334 Online Business Development (Python)	ITEC 200	EIST, EBAn
ITEC 350 Digital Leadership	None	EIST
ITEC 400 Programming Tools for Analytics (Python)	ITEC 200; ITEC 300	EBAn
ITEC 423 Social and Organizational Network Analytics	ITEC 200; ITEC 300	EBAn
ITEC 460 Business Intelligence	ITEC 200; STAT 204	EBAn
ITEC 466 Cybersecurity Risk Management	ITEC 200	EIST
ITEC 467 Cybersecurity Governance	ITEC 200	EIST
ITEC 468 Cybersecurity Analytics	ITEC 200; STAT 204	EIST EBAn
ITEC 477 Microsoft Certifications	ITEC 200	GE

BS/MS Dual Degree in Analytics → You can double count up to 9 credits 6XX for 4XX, or 5XX:

ITEC 623 for ITEC 423; ITEC 630 for ITEC 455; ITEC 660 for ITEC 460; ITEC 670 for ITEC 470; ITEC 666 for ITEC 466; ITEC 667 for ITEC 467; ITEC 668 for ITEC 468; ITEC 5XX; Others as approved by MS Program Director