

ANALYTICS AND INFORMATICS (B.S.)

The Bachelor of Science (B.S.) in Analytics and Informatics prepares students for careers in industry, consulting, nonprofit, government, and other sectors. Recent decades have seen an exponential growth in the volume and types of data available, and analytics professionals are needed to process and understand these data so organizations can improve operations, marketing, profitability, and service. Sometimes called big data, data mining, knowledge discovery, business intelligence, data science, and business analytics, the Data Analytics field is essential in modern organizations. The program focuses on data extraction and preparation, data warehousing, an array of analytics techniques, visualization, ethics and sustainability, and strategy.

Concentrations

- Data Analytics Concentration
- Health Informatics Concentration

Program Progression and Additional Graduation Requirements

Degree-seeking students are classified as pre-majors prior to formal transition into a Lutgert College of Business (LCOB) major. As pre-majors, students may enroll in lower division (1000-2999 level) courses to satisfy general education and common prerequisite requirements; lower level electives; and business common core courses, except GEB 4890, if course prerequisites are met. Pre-majors may not enroll in upper division (3000-4999 level) courses for the major.

Transition from a LCOB pre-major to a major happens following:

1. Completion of all common prerequisites with a minimum grade of C or higher in each course; and
2. Completion of 50 earned credits with a minimum FGCU GPA of 2.0.

For timely degree completion, FTIC (First Time in College) students are expected to complete the following:

- MAC 1105 College Algebra with a minimum grade of B (or relevant accelerated credit or placement exam), ECO 2023 Principles of Microeconomics or ECO 2013 Principles of Macroeconomics with minimum grade of C, one additional common prerequisite, and an overall 2.4 FGCU GPA within one calendar year from admission.
- Four common prerequisites by the end of the third semester (excluding summer) from admission.
- Seven common prerequisites and an overall 2.7 FGCU GPA by the end of the fourth semester (excluding summer) from admission.
- FIN 3403 Business Finance with minimum grade of C by the end of the sixth semester (excluding summer) from admission.

For timely degree completion, transfer students are expected to complete the following:

- Seven common prerequisites and an overall 2.7 FGCU GPA by the end of the third semester (excluding summer) from admission.
- FIN 3403 Business Finance with minimum grade of C by the end of the fifth semester (excluding summer) from admission.

- Students should refer to the Degree Map for milestone information. Degree maps for each major can be found at <https://www.fgcu.edu/cob/>.

In addition to the program requirements, students must:

- Attempt ACG 2021 no more than two times.
- Earn a grade of C or higher in the common prerequisites, business common core, required courses in the major, and restricted electives/concentration.
- Complete a minimum of 48 of the 120 credits at the upper division (3000-4999 level).
- Complete the last 30 credits of business courses at FGCU.
- Complete a minimum of 12 credits of courses in the major at FGCU.
- Earn a minimum cumulative GPA of 2.0 for all coursework attempted at FGCU.
- Satisfy the College-Level Skills and foreign language entrance requirements.
- Satisfy the Service-Learning requirement.
- Complete the standardized business knowledge assessment exam administered during the last semester in GEB 4890 Business Strategy.
- Satisfy the Civic Literacy requirement.
- Complete the summer course enrollment requirement.
- Submit an Application for Graduation by the deadline listed in the FGCU Academic Calendar.

Program Requirements

Code	Title	Credits
FGCU General Education Program (https://www.fgcu.edu/academics/undergraduatestudies/generaleducation/)		
To prevent or minimize excess hours, select general education courses that satisfy common prerequisite requirements for your intended major.		
Common Prerequisites		
For this major, common prerequisite courses with an asterisk (*) require prior knowledge and skills demonstrated through degree acceleration programs (e.g., the College Board's Advanced Placement Program [AP], International Baccalaureate Program [IB], College-Level Examination Program [CLEP], Advanced International Certificate of Education Program [AICE]); dual enrollment; placement exam; or college coursework.		
A minimum grade of C is required in each course		
ACG 2021	Intro. to Financial Acctg. (Acceptable Substitute: ACGX021 or ACGX022 or (ACGX001 and ACGX011))	3
ACG 2071	Intro. to Managerial Acctg. (Acceptable Substitute: ACGX021 or ACGX022 or (ACGX001 and ACGX011))	3
CGS 1100	Computer Software & Technology (Acceptable Substitute: CGSX100 or CGSX100C or CGSX530 or CGSX570 or CGSX060 or CGSX531 or CGSX000 or ISMX000 or CGSX518)	3
ECO 2013	Principles of Macroeconomics (Acceptable Substitute: ECOX013)	3
ECO 2023	Principles of Microeconomics (Acceptable Substitute: ECOX023)	3

MAC 2233	Elementary Calculus I (Acceptable Substitute: MACX233 or MACX230 or MACX311) ^{*, 1}	3	Total Credits Required: 120
STA 2023	Statistical Methods (Acceptable Substitute: STAX023 or STAX122 or QMBX100)	3	
Business Common Core		(27 credits)	
A minimum grade of C is required in each course			
BUL 3130	Legal & Ethical Enviro of Bus	3	
FIN 3403	Business Finance	3	
GEB 4890	Business Strategy (capstone)	3	
ISM 3011	Information Systems	3	
MAN 3025	Principles of Management	3	
MAR 3023	Introduction to Marketing	3	
SCM 3005	Supply Chain Management	3	
ENC 3250	Professional Writing	3	
or GEB 3523	Critical Think&Writing for Bus		
Complete one from the following:		3	
GEB 3085	Professional Development	3	
SPC 1608	Effective Speaking	3	
SPC 2023	Public Speaking	3	
Required Courses in the Major		(15 credits)	
A minimum grade of C is required in each course			
CAP 3786	Introduction to Data Mgmt	3	
CAP 3793	Advanced Data Management	3	
CGS 3102	Data Analysis Spreadsheets	3	
CGS 3126	Tools for Data Analytics	3	
QMB 3302	Business Analytics	3	
Concentration		(12 credits)	
A minimum grade of C is required in each course			
Select one of the following concentrations:			
Health Informatics Concentration			
HIM 3218	Analysis of Healthcare Data	3	
or CAP 4941	Internship in Analytics		
HSA 4191	Health Care Info Systems	3	
HSC 3537	Medical Terminology	3	
PHC 4069	Biostatistics in Society	3	
Data Analytics Concentration			
CAP 4744	Data Visualization	3	
CAP 4763	Predictive Analytics	3	
ISM 4332	Project Management	3	
or CAP 4941	Internship in Analytics		
QMB 4600	Prescriptive Analytics	3	
Sustainability Course Graduation Requirement		(3 credits)	
Select at least 3 credits in sustainability coursework (SCGR Attribute)			
Additional Electives			
As needed to reach total credits required for the degree			

¹ Prerequisites of MAT 1033 Intermediate Algebra minimum grade of C then MAC 1105 College Algebra minimum grade of B; or relevant accelerated credit; or placement exam