

# B.S. in Economics - Data Analytics Concentration

Click on the course number to view course title and description.

Code	Title	Semester Hours
<b>BS Economics - Data Analytics Degree Plan (120 hours)</b>		
<b>Core Requirements (43 hours)</b>		
First Year Seminar		3
FYE 1301	First Year Seminar	
Freshmen Composition I		3
EN 1311	Rhetoric and Composition	
or EN 1313	Rhetoric and Composition for International Students	
Literature		3
Any EN 23XX literature course		
History		3
Any 1000, 2000, or 3000-level HS course		
Social Science		3
Select one from the following: BA 1310, CPH 1301, ED 2330, HU 3300, HU 3303, PO 1311, PO 1312, PO 1314, PO 2302, PO 2312, PS 1301, PS 2310, PS 2353, PS 2355, PS 2363, PS 2337, SC 1311, SC 2321, SC 2371, 3 hrs. of Communication Studies (CM 1341, CM 2333, CM 2334)		
Mathematics		4
MT 2412		
Natural or Physical Sciences		3
Select one: BL 1301, BL 1302, BL 3311, CH 1303, CH 1304, CH 1401, CH 1402, ES 1300, ES 1301, ES 1302, ES 1303, ES 1304, ES 1305, ES 1373, PY 1300, PY 1310, PY 1401, PY 1402		
Fine Arts		3
Select one course from the following: AR 1300, AR 1301, AR 1311, AR 1312, AR 2301, AR 2321, AR 2361, AR 2362, AR 3331, AR 3351, AR 3381, AR 3392, any 3 hr. DM course, MU 1300 or 3 hrs. of any MU		
Foreign Language and International Engagement		6
This requirement is satisfied through one of four ways: (1) One 3-hour course in any language at the 3000 level or above, with a grade of B or better; (2) Two courses (1311 and 1312) in a language not previously studied; (3) Two courses (2311 and 2312) in a language previously studied at the high school or college level; (4) Qualifying scores on an AP or CLEP exam, or both the ACTFL OPI and WPT exams		
Philosophy - Self		3
PL 1301	Intro to Philosophy	
Philosophy - Ethics		3
PL 2301	Foundations of Ethics	
Theology - God		3
TH 1301	Introduction to Theology	
Intermediate Theology		3
Any TH 33xx course		
<b>Economics Core Courses (33 hours)</b>		
EC 2301	Introductory Macroeconomic Theory	3
EC 2303	Introductory Microeconomic Theory	3
EC 3310	International Economics	3
EC 3346	Intermediate Macroeconomic Theory	3
EC 3347	Intermediate Microeconomics Theory	3
EC 4335	Econometrics	3
EC 4345	Mathematical Economics	3
EC 4350	Introduction to Complexity in Economics	3
EC 4386	Senior Project in Economics	3
MT 2303	Introduction to Probability and Statistics	3
Advanced Economics Elective (Choose 1)		3

EC 3302	World Economic Geography	
EC 3311	Economic Growth & Development	
EC 3315	Latin American Development	
EC 3325	Economic Thought	
EC 3330	Money and Banking	
EC 3340	Public Sector Economics	
EC 3350	Labor Economics	
EC 3355	Economic of Natural Resources and Environment	
EC 4340	Selected Topics in Economics	
<b>Data Analytics Emphasis Concentration (15 hours)</b>		
CS 1310	Programming I in C	3
CS 1311	Data Structures	3
CS 2313	Object Oriented Programming I	3
or CS 3300	Introduction to Programming for Data Analytics (in Python)	
Advanced Computer Science Elective (Choose 1)		3
CS 4315	Artificial Intelligence & Machine Learning	
CS 4375	Advanced Topics (Programming for Data Science)	
EG 4303	Special Topics I (Data Science Using Python)	
Advanced Data Analytics Elective (Choose 1)		3
CS 3330	Computer Networks	
CS 4315	Artificial Intelligence & Machine Learning (in Python)	
CS 4375	Programming for Data Science	
CPH 3301	Fundamentals of Epidemiology	
AE 4387	Test and Measurements	
PS 4387	Tests and Measurements	
<b>Electives (29 hours)</b>		<b>29</b>
An elective can be any course taken from any discipline. Students can use these hours to pursue certificates, minors, or second majors.		
<b>Total Semester Hours</b>		<b>120</b>

This is a recommended degree plan subject to changes. Please meet with your adviser on a regular basis.

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### First Year

Fall	Semester Spring Hours	Semester Hours
FYE 1301	3 Literature	3
EN 1311	3 PL 1301	3
EC 2303	3 Foreign Language II	3
Foreign Language I	3 EC 2301	3
MT 2412	4 MT 2413	4
	<b>16</b>	<b>16</b>

### Second Year

Fall	Semester Spring Hours	Semester Hours
TH 1301	3 Fine Arts	3
MT 4331	3 EC 3347	3
History	3 EC 3310	3
EC 3346	3 Mathematics Concentration Elective (1 of 2)	4
General Elective	3 General Elective	3
	<b>15</b>	<b>16</b>

**Third Year**

<b>Fall</b>	<b>Semester Spring Hours</b>	<b>Semester Hours</b>
PL 2301	3 Intermediate Theology	3
EC 4350	3 Social Science	3
Advanced Economics Elective	3 EC 4345	3
Mathematics Concentration Elective (2 of 2)	3 General Elective	3
General Elective	3 General Elective	3
	<b>15</b>	<b>15</b>

**Fourth Year**

<b>Fall</b>	<b>Semester Spring Hours</b>	<b>Semester Hours</b>
Natural or Physical Science	3 EC 4386	3
EC 4335	3 General Elective	3
General Elective	3 General Elective	3
General Elective	3 General Elective	3
General Elective	3	
	<b>15</b>	<b>12</b>

**Total Semester Hours 120**