

FLORIDA ATLANTIC UNIVERSITY – INTELLECTUAL FOUNDATION PROGRAM 2023 – 2024

All courses are three (3) credits unless otherwise indicated. Course selections should be made in consultation with an academic advisor.

Bachelor of Science in Data Science & Analytics (BSDSA) – Data Science in Engineering Concentration (2023-2024)

College of Engineering & Computer Science

FOUNDATIONS OF WRITTEN COMMUNICATION

(6 credit hours required – Writing Across the Curriculum - WAC)
Grade of “C” or higher is required in each course

- ___ ENC 1101.....College Writing I **(Required)**
- ___ ENC 1102.....College Writing II +

THE FOLLOWING COURSES BELOW MAY BE SUBSTITUTED FOR ENC 1102:

- ___ ENC 1939 +Special Topic: College Writing
- ___ HIS 2050 +Writing History

Note: Students must take four Writing-Across-the-Curriculum (WAC) courses, two of which must be taken from Foundations of Written Communication.

FOUNDATIONS OF MATHEMATICS & QUANTITATIVE REASONING

(6 credit hours required – Grade of “C” or higher is required)
Student must take 2 of the following courses, 1 must be from group A.
The second course may be from group A or group B.

Group A

- ___ MGF 1106 Math for Liberal Arts 1
- ___ MGF 1107 Math for Liberal Arts 2
- ___ MAC 1105 College Algebra **(Required)**
- ___ STA 2023 Introductory Statistics **(Required)**
- ___ MAC 2311 Calculus with Analytic Geometry 1 (4 credits)
or any mathematics course for which one of the above courses is the direct prerequisite

Group B

- ___ MAC 1147 Precalculus Algebra & Trigonometry (4 credits)
- ___ MAC 2210 Intro Calculus w/Applications (4 credits) **(Permit Only)**
- ___ MAC 2233 Methods of Calculus
- ___ MAC 2241 Life Science Calculus 1 (4 credits)
- ___ MAC 2312 Calculus with Analytic Geometry 2 (4 credits)
- ___ PHI 2102 Logic

FOUNDATIONS OF SCIENCE & THE NATURAL WORLD

(6 credit hours required - **One of the courses must have a lab**)
Student must take 2 of the following courses, 1 must be from group A.
The second course may be from group A or group B.

Group A

Group B

- | | |
|--|---|
| <ul style="list-style-type: none"> ___ AST 2002
Intro. to Astronomy ___ BSC 1005 & L
Life Science (3 cr. w/Lab) ___ CHM 1020C
Contemp. Chemical Issues ___ ESC 2000
The Blue Planet (online) ___ EVR 1001
Env. Sci. and Sustainability | <ul style="list-style-type: none"> ___ ANT 2511 & L
Intro to Biological Anthropology (4 cr. w/ Lab) ___ ETG 2831
Nature: Inter. of Sci., Eng., & the Humanities ___ GLY 2010C
Physical Geol. (4 cr. w/Lab) ___ GLY2100
History of Earth and Life ___ IDS 2382
Human Mission to Mars ___ MET 2010
Weather, Climate & Climate Change ___ PSC 2121
Physical Science |
|--|---|

FOUNDATIONS OF SOCIETY & HUMAN BEHAVIOR

(6 credit hours required)
Student must take 2 of the following courses, 1 must be from group A.
The second course may be from group A or group B.

Group A

- ___ AMH 2020 & D..... United States History Since 1877 **♦**
- ___ ANT 2000 & D Introduction to Anthropology **(WAC)**
- ___ ECO 2013 Macroeconomic Principles **§**
- ___ POS 2041 Government of the United States **♦**
- ___ PSY 1012 Introduction to Psychology
- ___ SYG 1000..... Sociological Perspectives

Group B

- ___ AMH 2010 & D..... United States History to 1877
- ___ CCJ 2002 Law, Crime & the Criminal Justice System **±**
- ___ DIG 2202 Digital Culture
- ___ ECO 2023 Microeconomic Principles **§**
- ___ ECP 2002 Contemporary Economic Issues
- ___ EEX 2091 Disability and Society
- ___ EME 2620..... Digital Literacy in a Globally Connected World **✚**
- ___ EVR 1110..... Climate Change: The Human Dimensions
- ___ EVR 2017..... Environment and Society
- ___ LIN 2001..... Introduction to Language **(online course)**
- ___ PAD 2081 Risk Resilience and Rising Seas **±**
- ___ PAD 2258 Changing Environment of Soc., Bus., & Gov't
- ___ SYG 2010..... Social Problems
- ___ URP 2051 Designing the City

(D) = Discussion, (L) = Lab

Courses indicating a (D) or (L) are linked with a lecture, a lab, and/or a discussion. If you select one of these courses, you must register for the lecture, lab, and/or discussion. You **must** attend the lecture, lab, and/or discussion.

♦ Civic Literacy Requirement ♦

<https://www.fau.edu/ugstudies/civic-literacy-requirement/>

Beginning in Summer 2021, Florida Legislature amended the statute and now requires students to complete **both** a civic literacy course (AMH 2020 or POS 2041) and an assessment exam.

FOUNDATIONS IN GLOBAL CITIZENSHIP

(6 credit hours required)

Student must choose two (2) courses from among the following:

- ___ ANT 2410.....Culture and Society
- ___ EDF 2854Educated Citizen in Global Context
- ___ GEA 2000.....World Geography
- ___ INR 2002.....Introduction to World Politics
- ___ JST 2452Global Jewish Communities Ω
- ___ LAS 2000.....Intro to Caribbean & Latin American Studies
- ___ LIN 2607Global Perspectives on Language
- ___ MAR 2142Culture, Consumers and the Global Marketplace ✕
- ___ MUH 2121.....Music in Global Society Ω
- ___ POT 2000.....Global Political Theory
- ___ SYP 2450.....Global Society
- ___ SOW 1005Global Perspectives of Social Services
- ___ SOW 1130Race and Cultural Inclusion in Social Work
- ___ WOH 2012 & D.....History of Civilization 1 (WAC) ++
- ___ WOH 2022.....History of Civilization 2
- ___ WST 2351Gender and Climate Change

FOUNDATIONS OF HUMANITIES

(6 credit hours required)

Student must take 2 of the following courses, 1 must be from group A. The second course may be from group A or group B.

Group A

- ___ ARH 2000Art Appreciation
- ___ MUL 2010.....Music Appreciation
- ___ PHI 2010 & DIntroduction to Philosophy (WAC) ++
- ___ THE 2000Theatre Appreciation

Group B

- ___ ARC 2208Culture & Architecture
- ___ DAN 2100Appreciation of Dance
- ___ FIL 2000 & DFilm Appreciation
- ___ HUM 2471Racism and Anti-Racism
- ___ LIT 2010.....Interpretation of Fiction (WAC) ++
- ___ LIT 2030.....Interpretation of Poetry (WAC) ++
- ___ LIT 2040.....Interpretation of Drama (WAC) ++
- ___ LIT 2070.....Interpretation of Creative Nonfiction (WAC) ++
- ___ LIT 2100.....Introduction to World Literature
- ___ LIT 2931.....Special Topics in Literature (WAC) ++ Ω
- ___ SPC 2608Public Speaking ±

Legend

- + - ENC 1101 is a prerequisite.
- ++ - Two Foundations of Written Communications classes are required before taking this course.
- § - Sophomore standing (30 credits earned) is a requirement to take this course.
- * - MAC 2311 is a prerequisite for this course.
- ** - MAC 2233 is a prerequisite for this course. If a lab is needed, then take General Physics 1 Lab (PHY 2048 Lab).
- ‡ - Co-requisite of College Algebra (MAC 1105) or a prerequisite of Introductory Chemistry (CHM 1025).
- ± - Starting Spring 2022
- Ω - Starting Spring 2023
- ✕ - Starting Fall 2023
- ◇ - See information box regarding Civic Literacy Requirement
- WAC - (WAC) Writing across the curriculum course.

§ Writing Across the Curriculum (WAC)/Gordon Rule

Students must attain grades of "C" or higher. 12 credits of writing (WAC) and 6 credits of mathematics are required.

Please note:

Students must take four (4) WAC courses. Two (2) courses are to be taken from Foundations of Written Communication. We strongly recommend the two additional WAC courses come from these courses: ANT 2000, PHI 2010, WOH 2012, LIT 2010, LIT 2030, LIT 2040, LIT 2070 or LIT 2931. See advisor for additional details.

Credit Summary – IFP/Major Core/College Requirements/Electives

36 Credits	Intellectual Foundations Program
48 Credits	Data Science in Engineering Required Courses
36 Credits	Data Science Electives or Free Electives
	<i>(Free electives are courses in any college, any department needed to meet the 120 credits required for graduation).</i>
120 Credits	TOTAL

Elective Credits

The number of elective credits allowed varies by major. Please consult with an academic advisor to determine the number of elective credits required for your major. **Certain majors do not allow any electives.**

Advising Information

Incoming Freshman & Transfer Students w/ less than 30 credits contact:

[University Advising Services \(UAS\)](#)

Phone: (561) 297 – 3064

Email: Advisingservices@fau.edu

Transfer students with more than 30 credits contact:

[Division of Engineering Student Services & Advising \(DESSA\)](#)

Phone: (561) 297 – 2780

Website: <https://www.fau.edu/engineering/dessa/organization/>