

DATA SCIENCES, B.S. (ENGINEERING)

Begin Campus: Any Penn State Campus

End Campus: University Park

Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2023-24 academic year. To access previous years' suggested academic plans, please visit the archive (<https://bulletins.psu.edu/undergraduate/archive/>) to view the appropriate Undergraduate Bulletin edition (*Note: the archive only contains suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin*).

Computational Data Sciences Option: Data Sciences, B.S. at University Park Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

If you are starting at a campus other than the one this plan is ending at, please refer to: <http://advising.engr.psu.edu/degree-requirements/academic-plans-by-major.aspx>

First Year

Fall	Credits Spring	Credits
CMPSC 121 or 131 (GQ) ^{*#†}	3 CMPSC 122 or 132 ^{*#}	3
MATH 140 (GQ) ^{*†#†}	4 MATH 141 (GQ) ^{*†#}	4
DS 200 or STAT 200 ^{*#}	4 DS 220 [*]	3
General Education Course	3 ENGL 15 (GWS) [†]	3
First-Year Seminar	1 General Education Course	3
	15	16

Second Year

Fall	Credits Spring	Credits
CMPSC 221 [*]	3 CMPSC 360 [*]	3
STAT 184 [*]	2 STAT 380 [*]	3
MATH 230 [*]	4 STAT 414 [*]	3
MATH 220 [*]	2 General Education Course	3
CAS 100A or 100B (GWS) ^{††}	3 General Education Course	3
General Education Course	3	
	17	15

Third Year

Fall	Credits Spring	Credits
CMPSC 442 or DS 442 [*]	3 CMPSC 410 or DS 410 [*]	3
CMPSC 465 [*]	3 CMPSC 448	3
DS 435 [*]	3 CMPSC 461 [*]	3
STAT 415 [*]	3 General Education Course	3
General Education Course	3 General Education Course	3
	15	15

Fourth Year

Fall	Credits Spring	Credits
DS 340W [*]	3 DS 440W [*]	3
List A Course	3 List A Course	3
List B Course	3 List B Course	3
ENGL 202C (GWS) ^{††}	3 General Education Course	3
Department List (General Elective)	3 General Education Course (GHW)	1.5
General Education Course (GHW)	1.5	
	16.5	13.5

Total Credits 123

- * Course requires a grade of C or better for the major
- † Course requires a grade of C or better for General Education
- # Course is an Entrance to Major requirement
- † Course satisfies General Education and degree requirement

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and satisfy a portion of that General Education requirement. If the student's program prescribes GWS these courses will replace both ENGL 15/ENGL 30H and CAS 100A/CAS 100B/CAS 100C. Each course is 3 credits.

College Notes:

- **Health and Wellness Elective:** Students who complete the ROTC program may substitute 3 ROTC credits for the GHW requirement.
- **Natural Sciences Elective:** Nine credits of Natural Science (GN) are required. Any GN courses except the following may be used: ASTRO 1, 7N, 10, 11, 120, 140; all BI SC courses; All courses below CHEM 110 (except 3 credits of CHEM 106 may be used); PHYS 250, 251, and any course below PHYS 211; GEOSC 20
- **OPTION A:** CMPEN 454, CMPSC 450, CMPSC 455, CMPSC 456, MATH 484, or MATH 452
- **OPTION B:** CMPSC 431W, EE 456, IST 441, MATH 486, MATH 448, STAT 416, STAT 440, STAT 460, STAT 461, or STAT 462
- **Department List Course (General Elective):** See handbook at [eecs.psu.edu](https://www.eecs.psu.edu) (<https://www.eecs.psu.edu>)