

DATA SCIENCES, B.S. (ABINGTON)

Seven Penn State campuses are scheduled for closure after Spring 2027: DuBois, Fayette, New Kensington, Mont Alto, Shenango, Wilkes-Barre, and York. New students are not being admitted at these campuses.

Begin Campus: Any Penn State Campus

End Campus: Abington

Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2026-27 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.

Applied Data Sciences Option: Data Sciences, B.S. at Abington 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.

First Year

Fall	Credits	Spring	Credits
MATH 140 (GQ)*†#†	4	MATH 141 (GQ)*†#†	4
CMPSC 131*#	3	CMPSC 132*#	3
ENGL 15 (GWS)†	3	CAS 100A, 100B, or 100C (GWS)†	3
General Education Course (GS) (Recommended: SRA 111)	3	Elective (Recommended: IST 210)	3
STAT 184*	2	Application Focus Selection (Recommended: IST 220)	3
PSU 1*	1		
16		16	

Second Year

Fall	Credits	Spring	Credits
DS 200*#	4	DS 220*	3
IST 230*	3	MATH/STAT 318*	3
MATH 220*	2	STAT 380*	3
Application Focus Selection (Recommended: SRA 221)	3	ENGL 202 (GWS)†	3

General Education Course (GN)	3 General Education Course (Inter-Domain)	3	
15		15	
Third Year			
Fall	Credits	Spring	Credits Summer
DS 300*	3	DS 310*	3 IST 495*
DS 305*	3	DS 320*	3
DS 330*	3	CMPSC 410*	3
Application Focus Selection (Recommended: IST 451)	3	Application Focus Selection (Recommended: IST 454)	3
General Education Course (GA)	3	General Education Course (GH)	3
15		15	1
Fourth Year			
Fall	Credits	Spring	Credits
DS 340W*	3	DS 440 (W)*	3
DS 435*	3	Additional Course Selection (Recommended: DS 402)	3
Additional Course Selection (Recommended: DS 494)	3	General Education Course (GHW)	3
General Education Course (GN)	3	General Education Course (Inter-Domain)	3
General Education Course (Exploration)	3	General Education Course (Exploration)	3
15		15	

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.

Advising Notes:

- DS, IST, SRA, and MATH courses have enforced prerequisites.

Application Focus Areas:

- Select a minimum of 12 credits from your chosen focus area; at least 6 credits must be at the 300- or 400-levels. Students may also propose a custom application focus, with guidance and approval by an academic adviser or the program coordinator of the Applied DS Option. The focus areas that can be completed at Penn State Abington are listed below.
- **Business Fundamentals**
 - Select 12 credits from the following list of courses, at least 6 credits must be at the 300- or 400-levels:
 - ACCTG 211, BA 301 or FIN 100 or FIN 301, BA 302 or SCM 301, BA 303 or MKTG 221W or MKTG 301 or MKTG 301W, BA 304 or MGMT 100 or MGMT 100W or MGMT 301 or MGMT 301W, BLAW 243, DS 402, ECON 102, ECON 104, IB 303, SCM 200, STAT 200
- **Economics**
 - Select 12 credits from the following list of courses, at least 6 credits must be at the 300- or 400-levels:
 - DS 402, ECON 102, ECON 104, ECON 106, ECON 302, ECON 304, ECON 315, ECON 323, ECON 333, ECON 342, ECON 402, ECON 407, ECON 410, ECON 415, ECON 425, ECON 428, ECON 442, ECON 445, ECON 447, ECON 471, ECON 479, ECON 480, SCM 200, STAT 200
- **Human-Centered Design and Development**
 - Select 12 credits from the following list of courses, at least 6 credits must be at the 300- or 400-levels:
 - DS 402, HCDD 113, HCDD 113S, HCDD 264, HCDD 311 or IST 311, HCDD 331 or IST 331, HCDD 340, HCDD 364W, HCDD 411 or IST 411, HCDD 412 or IST 412, HCDD 413 or IST 413, IST 140, IST 210, IST 220, IST 240, IST 242, IST 261, IST 402
- **Information and Cybersecurity Sciences**
 - Select 12 credits from the following list of courses, at least 6 credits must be at the 300- or 400-levels:
 - CYBER 100, CYBER 100S, CYBER 221 or SRA 221, CYBER 262, CYBER 451 or IST 451, CYBER 454 or IST 454, DS 402, IST 140, IST 210, IST 220, IST 240, IST 242, IST 261, IST 456, SRA 111, SRA 211, SRA 231, SRA 365, SRA 450, SRA 468, SRA 480, STAT 200
- **Psychology**
 - Select 12 credits from the following list of courses, at least 6 credits must be at the 300- or 400-levels:
 - DS 402, PSYCH 100, PSYCH 200, PSYCH 212, PSYCH 221, PSYCH 243, PSYCH 253, PSYCH 256, PSYCH 260, PSYCH 261, PSYCH 270, PSYCH 370, PSYCH 404, PSYCH 410, PSYCH 412, PSYCH 413, PSYCH 419, PSYCH 423, PSYCH 424, PSYCH 425, PSYCH 441, PSYCH 449, PSYCH 452, PSYCH 455, PSYCH 456, PSYCH 457, PSYCH 458, PSYCH 473, PSYCH 484, STAT 200
- **Custom Application Focus**
 - There is an option for a student to create a custom 4-course application focus sequence. It must be a coherent sequence of courses that provides context for the student in terms of content

relevant to the Data Sciences program. This sequence gives the student an opportunity to receive cross-training in another domain so that the student can effectively formulate and solve data science problems in the context of the chosen domain. The sequence should contain at least six credits of 300- or 400-level coursework. It must be selected in consultation with an academic adviser or the program coordinator for the Applied Option of the Data Sciences program.

Statistical Modeling Data Sciences Option: Data Sciences, B.S. at Abington Campus

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First Year

Fall	Credits Spring	Credits
MATH 140 (GQ) ^{*†‡†}	4 MATH 141 (GQ) ^{*†‡†}	4
CMPSC 131 ^{*#}	3 CMPSC 132 ^{*#}	3
ENGL 15 (GWS) [‡]	3 CAS 100A, 100B, or 100C (GWS) [‡]	3
General Education Course (GA)	3 MATH 220 [*]	2
STAT 184 [*]	2 General Education Course (GH)	3
PSU 1 [*]	1	
	16	15

Second Year

Fall	Credits Spring	Credits
DS 200 ^{*#}	4 DS 220 [*]	3
CMPSC 360 [*]	3 MATH/STAT 414 [*]	3
MATH 230 [*]	4 STAT 380 [*]	3
General Education Course (GN)	3 ENGL 202 (GWS) [‡]	3
General Education Course (GHW)	1.5 General Education Course (Inter-Domain)	3
	15.5	15

Third Year

Fall	Credits Spring	Credits
List B Selection: (Recommended: DS 330)	3 DS 310 [*]	3
List A Selection (Recommended: CMPSC 455)	3 List B Selection (Recommended: DS 320 or 410)	3
MATH/STAT 415 [*]	3 STAT 440 [*]	3
General Education Course (GN)	3 General Education Course (GS)	3
Elective	3 Elective	3
	15	15

Fourth Year

Fall	Credits Spring	Credits
STAT 462 [*]	3 List A Selection (Recommended: STAT 463)	3
DS 340W [*]	3 DS 440 (W) [*]	3
DS 435 [*]	3 Elective	3
General Education Course (Inter-Domain)	3 Elective	3
General Education Course (Exploration)	3 General Education Course (Exploration)	3

General Education Course (GHW)	1.5
	16.5
	15

Total Credits 123

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Advising Notes:

- Depending on your year of entrance, total credits required may be different. Please consult an adviser to make sure you are satisfying the degree requirement and total credits adds up to the required amount.
- Classes that listed under US and IL must be unique so that total credits adds up to what's needed. That is, if these classes are in either GN, GA, GS, GH, GHW or Exploration, you will need more credits to meet the total.
- List A Courses (6 credits required from this list):
 - MATH 435
 - MATH 436 or MATH 441
 - MATH 451 or MATH 455
 - MATH 484
 - MATH 416/STAT 416
 - STAT 461
 - STAT 463
 - STAT 466
 - STAT 483
- List B Courses (6 credits required from this list):
 - DS 320
 - DS 330
 - DS 410
 - DS 402
 - IST 461
 - CMPSC 442
 - CMPSC 465