

ARTIFICIAL INTELLIGENCE METHODS AND APPLICATIONS, B.S. (INFORMATION SCIENCES AND TECHNOLOGY)

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 2025-26 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.

Artificial Intelligence Methods and Applications, 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.

First Year

Fall	Credits Spring	Credits
MATH 140 (GQ) ^{*†‡†}	4 CMPSC 132 ^{*#}	3
CMPSC 131 ^{*#}	3 STAT 200 or DS 200 (GQ) ^{*†‡†}	4
A-I 100 (GS) ^{*#}	3 ENGL 15 (GWS) [†]	3
First-Year Seminar [*]	1 CAS 100A, 100B, or 100C (GWS) [†]	3
General Education Course	3 General Education Course	3
	14	16

Second Year

Fall	Credits Spring	Credits
CMPSC 360 or MATH 311W [*]	3 DS 305, CMPSC 465, or CMPSC 462 [*]	3
MATH 225 [*]	4 STAT 401 [*]	3
General Education Course	3 ENGL 202A, 202B, 202C, or 202D (GWS) [†]	3
General Education Course	3 General Education Course	3
Elective	3 General Education Course	3
	16	15

Third Year

Fall	Credits Spring	Credits
DS 310, CMPSC 448, or CMPSC 445 [*]	3 A-I 375 [*]	3
A-I 341W [*]	3 Support Course Selection (Technical or Application) [*]	3

A-I 370 [*]	3 Support Course Selection (Technical or Application) [*]	3
Support Course Selection (Technical or Application) [*]	3 General Education Course	3
Elective	3 Elective	3
	15	15

Fourth Year

Fall	Credits Spring	Credits
AIMA 430 or A-I 494 [*]	3 AIMA 440 or A-I 494 [*]	3
Support Course Selection (Technical or Application) [*]	3 Support Course Selection (Technical or Application) [*]	3
Support Course Selection (Technical or Application) [*]	3 General Education Course	3
General Education Course	3 General Education Course	3
Elective	3 Elective	2
	15	14

Total Credits 120

* 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.

Technical Supporting Courses:

- Select 9 credits; at least 3 credits must be at the 400-level:
 - Artificial Intelligence (A-I):**
 - A-I 285 (1-3 credits)
 - A-I 494 (1-12 credits)
 - A-I 495 (1-18 credits)
 - Computer Science (CMPSC):**
 - CMPSC 432
 - CMPSC 442/DS 442 or CMPSC 441
 - CMPSC 446

• **Cybersecurity (CYBER):**

- CYBER 100
- CYBER 262
- Any CYBER course at the 300- or 400-level
- IST 220
- IST 451
- IST 454
- IST 456
- SRA 111
- SRA 221

• **Data Sciences (DS):**

- DS 220
- DS 300
- DS 320
- DS 330
- DS 402
- DS 410/CMPSC 410
- DS 420
- DS 441

• **Electrical Engineering (EE):**

- EE 483
- EE 454
- EE 456

• **Human-Centered Design and Development (HCDD):**

- IST 140
- IST 240
- IST 242
- IST 250
- IST 256
- IST 311
- IST 331
- IST 411
- IST 413

• **Mathematics (MATH):**

- MATH 318/STAT 318
- MATH 414/STAT 414
- MATH 425
- MATH 429
- MATH 430
- MATH 448
- MATH 452
- MATH 455
- MATH 486

• **Statistics (STAT):**

- STAT 380
- STAT 462
- STAT 463
- STAT 464

• **Agricultural Sciences Focus:**

- AEE 216
- AGBM 101
- AGBM 200
- AGBM 445
- CED 102N
- CED 160
- VBSC 340
- VBSC 418
- VBSC 433
- VBSC 435
- VBSC 444
- VBSC 455
- VBSC 485

• **AI and National Security Focus:**

- PLSC 14
- PLSC 290N
- PLSC 408
- PLSC 410
- PLSC 418 or PLSC 418W
- PLSC 420
- PLSC 437
- PLSC 438
- PLSC 439
- PLSC 440
- PLSC 449
- PLSC 467
- PLSC 478
- PLSC 479
- PLSC 483
- PLSC 491

• **Business Fundamentals Focus at University Park Campus:**

- ACCTG 211
- BA 301
- BA 302
- BA 303
- BA 304
- BLAW 243
- IB 303
- ECON 102

• **Business Fundamentals Focus at Commonwealth Campuses:**

- ACCTG 211
- BLAW 243 or (BA 241 and BA 242)
- ECON 102
- FIN 301
- MGMT 301
- MKTG 301
- SCM 301

• **ETI Focus:**

- ETI 300W
- ETI 435
- ETI 461
- IST 256

Application Supporting Courses:

- Select 9 credits; at least 3 credits must be at the 300- or 400-level; up to 6 credits of ROTC.
- It is required that students choose a focus area and take a sequence of courses from the chosen focus area:

- IST 301/ETI 301
- IST 302/ETI 302
- **Health Policy and Administration Focus:**
 - HPA 101
 - HPA 200
 - HPA 210
 - HPA 211
 - HPA 301
 - HPA 311
 - HPA 332
 - HPA 410
 - HPA 445
 - HPA 450
 - HPA 470
- **Human Development and Family Studies Focus:**
 - HDFS 129
 - HDFS 200
 - HDFS 210
 - HDFS 215N
 - HDFS 216
 - HDFS 249N
 - HDFS 434
 - HDFS 447
 - HDFS 492
- **Nutritional Sciences Focus:**
 - NUTR 100
 - NUTR 119
 - NUTR 251
 - NUTR 291N
 - NUTR 358
 - NUTR 360
 - NUTR 407
 - NUTR 487
- **PHIL Focus:**
 - PHIL 103
 - PHIL 107
 - PHIL 110
 - PHIL 125
 - PHIL 127
 - PHIL 131N
 - PHIL 404
 - PHIL 416
 - PHIL 418
 - PHIL 427
 - PHIL 433
- **PSYCH Focus:**
 - PSYCH 100
 - PSYCH 212
 - PSYCH 221
 - PSYCH 253
 - PSYCH 260
 - PSYCH 413
 - PSYCH 425
- PSYCH 426
- PSYCH 451
- PSYCH 452
- PSYCH 455
- PSYCH 458
- **ROTC Focus:**
 - AIR
 - ARMY
 - NAVSC