

B.S. in Computer Science – Advising Check Sheet

Requirement Term:

Student Name:

ID#

Date:

Program GPA:

Major GPA:

Both GPAs must be minimum of 2.000 for graduation.

Minor:

Minor:

Minor:

Requirement	Enrolled/Completed	Needed	Required
Total Program Hours			120
300+ Level			30
CSCI-B,C,H,P,Y 200+			45
CSCI-B,C,H,P,Y 300+			26
CSCI at IUB			12

Common Ground - IUB General Education Requirements

IUB GenEd English Composition credit

IUB GenEd Mathematical Modeling credit (MATH-M 211)

IUB GenEd A&H credit (6cr) still need:

IUB GenEd S&H credit (6cr) still need:

IUB GenEd N&M credit - Natural Science

IUB GenEd World Language, Culture, or Overseas Study

Luddy Additional Requirements

Apply to Graduate

Luddy-Approved Diversity in the US

IUB GenEd English Composition credit, grade of C or higher

Luddy-Approved Intensive Writing

Luddy-Approved Natural Science (12cr) still need:

Major Grade of C- or above required for all major and minor courses.

Core Courses (5 required)

CSCI

CSCI

CSCI

CSCI

CSCI-Y 395 Required?

Mathematics MATH-M 211

MATH-M 211

Mathematical Courses; 2 required

Specialization:

Advisor: Kelsey Karum

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means Completed or In Progress

MAJOR REQUIREMENTS

Students must complete a minimum of 45 credit hours of CSCI-B, C, P, H or Y, including the core, an area of specialization, and CS electives. At least 26 of the 45 hours must be at the 300 level or above. Minimum grade of C- in all CS/Math/Specialization courses.

Computer Science Core (16 credits)

- CSCI-C/H211 or CSCI-C/H200
- CSCI-C/H212 (P: C211 or C200)
- CSCI-C/H241 (P: C211, R: M211)
- CSCI-C/H343 (P: C212, P: C241)
- CSCI-Y 395

CS Electives (to reach 45 CSCI hours)

- CSCI-A 290 (at most 3 hours)
- CSCI B, C, P, or H 200 level or above
- CSCI-Y 390, Y391, Y399, Y499 (at most 6 hours)
- CSCI-H 498 Honors Seminar (at most 1 hour)
- MATH-M 471, MATH-M 472
- INFO-I 101 or ENGR-E 101 (if taken before or with CSCI-C 212)
- INFO-I 494/INFO-I 495 (need permission)

Mathematics (10-12 credits)

- MATH-M 211 Calculus I
- **Two additional mathematical science courses from the following:**
MATH-M 212 (recommended), MATH-M 300 or higher, MATH-T 336, MATH-T 403, PHIL-P 251, STAT-S 350, STAT-S 352

LUDDY-APPROVED NATURAL SCIENCE COURSES

Approved Departments:

- AST
- BIOL
- BIOT
- CHEM
- EAS
- MSCI
- PHYS

Approved Course Exceptions:

- COGS-Q 370
- MUS-A 111
- PSY-P 155
- PSY-P 211
- PSY-P 300 or higher
- SPEA-E 272
- VSCI-V 250

Specialization - Must complete ONE

Artificial Intelligence (STAT course must be in addition to the upper-level math requirement for the major): 15-16 credits

- Two of: CSCI-B 351, CSCI-B 365, or CSCI-B 455
- Two of (if not used above): CSCI-B 351, CSCI-B 355, CSCI-B 363, CSCI-B 365, CSCI-B 455, CSCI-B 456, CSCI-B 457, or STAT-S 350
- One of: CSCI-B 401, CSCI-B 403 (P:M212), CSCI-B 405, CSCI-P 415 (P:C311)

Data Science (STAT course must be in addition to the upper-level math requirement for the major): 15-16 credits

- All: CSCI-B 461
- One of: CSCI-B 403 (P:M212) or CSCI-B 405
- One of: CSCI-B 365 or CSCI-B 455
- One of (if not used above): CSCI-B 351, CSCI-B 365, CSCI-B 455, CSCI-C 311, CSCI-P 434, or CSCI-P 462
- One of: CSCI-B 401, STAT-S 350, or CSCI-P 415 (P:C311)

Foundations (MATH courses must be in addition to the upper-level math requirement for the major): 15-16 credits

- All: CSCI-B 401 and CSCI-B 403 (P:M212)
- One of: CSCI-P 415 or CSCI-B 461
- Two of: CSCI-C 311, CSCI-B 455, CSCI-B 504, MATH-M 453, MATH-M 301 or M303, MATH-M 365, or MATH-M 471 (P: multiple)

Game Development (MSCH courses do not count as CSCI major hours): 9 MSCH credits, 21-22 CSCI major credits

- All: MSCH-C 210, MSCH-G 300, and MSCH-G 310
- All: CSCI-C 292, CSCI-B 453, CSCI-C 460, and CSCI-C 470
- One of: CSCI-C 290 (topic: Games and Puzzles) or CSCI-B 351
- One of: CSCI-B 481, CSCI-C 323, CSCI-P 465, or CSCI-P 438
- One of: CSCI-B 401, CSCI-B 403 (P:M212), CSCI-B 405, or CSCI-B 461

Programming Languages: 17-19 credits

- All: CSCI-C 311 and CSCI-P 423
- Two of: CSCI-C 335, CSCI-P 436, CSCI-B 441, CSCI-B 461, CSCI-B 490 (approved topic), or CSCI-P 424
- One of: CSCI-B 401, CSCI-B 403 (P:M212), CSCI-B 405, or CSCI-P 415 (P:C311)

Security: 14 MATH credits, 22.5 CSCI major credits

- All: MATH-M 211, MATH-M 212, MATH-M 301, and MATH-M 365 (do not count as CSCI major credits)
- All: CSCI-C 231, CSCI-C 291, CSCI-C 335, CSCI-B 430, CSCI-B 433, CSCI-P 436, and CSCI-P 438

Software Engineering: 19-22 credits

- All: CSCI-B 461 and CSCI-P 465
- One of: CSCI-C 322 or CSCI-P 466
- One of: CSCI-C 323 or CSCI-C 335
- One of: CSCI-B 403 (P:M212), CSCI-B 405, CSCI-P 423 (P:C311), CSCI-P 415 (P:C311), or CSCI-P 436 (P:C335)
- One additional CSCI-P course not used above

Systems: 15.5-16.5 credits

- All: CSCI-C 291 and CSCI-C 335
- One of: CSCI-P 436, CSCI-P 438, CSCI-P 442, or CSCI-P 545
- One of: CSCI-P 434, CSCI-P 436, CSCI-P 438, CSCI-B 441, CSCI-P 442, CSCI-B 443, CSCI-B 490 (approved topic), or CSCI-P 545
- One of: CSCI-B 401, CSCI-B 403 (P:M212), CSCI-B 405, or CSCI-P 415 (P:C311)