



Indiana Department of Education

Dr. Katie Jenner, Secretary of Education

To: Dr. Katie Jenner, Indiana Secretary of Education; Indiana General Assembly; Indiana Commission for Higher Education; Indiana State Board of Education

From: Lynn Schemel, Chief Academic Officer

Date: December 1, 2024

Subject: 2024 Computer Science Report

Pursuant to [Indiana Code \(IC\) 20-30-5-23](#), the Indiana Department of Education (IDOE) is required to prepare an annual report on statewide school progress for the implementation of high school computer science courses. This report includes data highlighting the number and percentage of unique computer science enrollment and course completion. This data is disaggregated by student populations, including race, gender, grade, ethnicity, English language proficiency status, free or reduced lunch status, and special education eligibility. Data regarding computer science instructors and educators is also highlighted.

As part of Governor Holcomb's Next Level Agenda, all public high schools were required to begin offering foundational computer science during the 2021-2022 school year. During the 2024 legislative session, [IC 20-32-4-18](#) was passed to build on this requirement, requiring the completion of a foundational computer science course and providing flexibility to allow students to complete this coursework in eighth grade beginning with the 2029 cohort. Computer science courses must, to the extent feasible, be taught in-person and cover key areas to satisfy the upcoming high school graduation requirement (algorithms and programming, computing systems, data and analysis, impacts of computing, networks and the internet). Currently, 91% of public Indiana high schools offer a foundational computer science course, yet only 7% of Indiana high school students are currently enrolled in one of these courses. By requiring all students to take computer science to earn a high school diploma, Indiana will close this gap, positioning more students to gain key digital literacy skills.

Pursuant to [IC 20-32-4-18](#), IDOE and the Indiana Commission for Higher Education (CHE) defined [guidance](#) to support schools in the implementation of the computer science course graduation requirement. IDOE and CHE identified Indiana's Next Level Programs of Study (NLPS) course *Computing Foundations for a Digital Age* and other eligible courses to accommodate additional pathways. Learning standards for this course became available for schools in late summer 2024, and data for this new course will be featured beginning with the December 2025 report.

Since 2018, when Governor Holcomb and the Indiana General Assembly prioritized computer science coursework in schools, Indiana has seen a significant increase in student access and participation in computer science. This includes the integration of computer science in all K-8 Indiana Academic Standards for science, as well as the requirement for all Indiana high schools to offer a computer science course.

In 2017 (prior to the passage of Senate Enrolled Act [SEA] 295 in 2018), 39% of Indiana high schools had students taking a computer science course. Thanks to the work of educators, principals, superintendents, supportive communities, and other statewide partners, that number has grown to 75%. Indiana now leads the Midwest and was identified as one of the top states in the country for offering foundational computer science courses in schools.¹

Recently, Code.org, the Computer Science Teachers Association, and the Expanding Computing Education Pathways Alliance recently recognized Indiana as one of the top states in the nation for computer science in the [2024 State of Computer Science Education](#). Indiana ranked seventh in the nation in terms of access to computer science courses at the high school level, with 91% of public high schools in Indiana offering a foundational computer science course. Indiana has also adopted all [10 policies](#) recommended by the [Code.org Advocacy Coalition](#).

Developing educators to design and deliver foundational computer science courses to meet the demands of increasing high school enrollment has been a primary focus in Indiana since 2018. Participation in computer science has simultaneously increased year over year since 2018 among Indiana's K-8 student population. Based on 2023 student enrollment data, only 7% of Indiana high school students in grades 9-12 enrolled in a computer science course, indicating a clear need to maintain and expand upon current efforts to build capacity for and provide access to computer science education opportunities while supporting initiatives to increase participation in computer science education.

Through the ongoing collaboration with and commitment of school leaders, educators, state lawmakers, and industry partners, IDOE continues to support expanded computer science efforts for Hoosier students and maintain Indiana as a national leader in computer science education.

¹ *2023 State of Computer Science Education Report - advocacy.code.org*. (n.d.). Retrieved from https://advocacy.code.org/2023_state_of_cs.pdf

Figure 1. Computer Science (CS) Course Completion by Enrollment Year

High School Enrollment		Year								
Course Code	Course Title	2016	2017	2018	2019	2020	2021	2022	2023	2024
4568	AP CS Principles	0	559	764	1,301	1,659	1,940	1,729	1,621	1,203
4570	AP Computer Science A	958	1,070	1,098	1,180	1,247	1,025	1,009	986	1,121
4584	IB CS Higher Level	0	0	0	0	0	0	0	0	0
4586	International Baccalaureate (IB) CS Standard Level	28	33	29	30	30	34	83	3	0
4803	Introduction to CS	1,428	2,446	3,553	5,357	7,585	8,068	7,824	5,880	2,668
5252	CS: Special Topics			120	195	0	213	120	67	237
7179	CS: Cybersecurity Fundamentals									294
7183	Principles of Computing							1,625	7,071	5,696
7184	Software Development							40	193	442
7243	CS: Cybersecurity Capstone									14
7253	Software Development Capstone								16	99
7351	Topics in CS								712	1,136
7352	Computer Science (CS)								438	627
7353	CS Capstone								4	23
Total Enrollment		2,414	4,108	5,564	8,063	10,521	11,280	12,430	16,991	13,560

Figure 2. Statewide CS General Course Completion by Race/Ethnicity

Race	CS Course Completion	% CS Course Completion
American Indian	25	0.19%
Native Hawaiian or Pacific Islander (PI)	8	0.06%
Asian	1,025	7.61%
Black	1,734	12.87%
Hispanic	1,813	13.46%
Multiracial	633	4.7%
White	8,233	61.11%

Figure 3. Statewide Detailed CS Course Completion by Race/Ethnicity

Course	White	Asian	American Indian	Black	Hispanic	Native Hawaiian or Pacific Islander	Multiracial
AP CS Principles	786	118	5	100	134	0	60
AP Computer Science A	668	239	0	77	84	1	52
Introduction to CS	1,819	124	5	283	294	0	142
CS: Special Topics	139	3	0	47	35	0	13
CS: Cybersecurity Fundamentals	177	27	1	31	36	2	20
CS: Cybersecurity Capstone	10	1	0	1	0	0	1
Principles of Computing	3,275	362	10	879	858	3	256
Software Development	279	20	0	55	57	1	17
Software Development Capstone	62	11	0	5	8	1	6
Topics in CS	690	73	2	128	193	0	45
Computer Science (CS)	316	38	2	128	112	0	21
CS Capstone	12	9	0	0	2	0	0
Total CS Course Completion	8,233	1,025	25	1,734	1,813	8	633

Figure 4. Statewide Detailed CS Course Completion by Gender

Course	Male	% Male	Female	% Female
AP CS Principles	854	70.99%	349	29.01%
AP Computer Science A	865	77.16%	256	22.84%
Introduction to CS	1,888	70.76%	780	29.24%
CS: Special Topics	167	70.46%	70	29.54%
CS: Cybersecurity Fundamentals	247	84.01%	47	15.99%
CS: Cybersecurity Capstone	13	100%	0	0%
Principles of Computing	4,377	77.57%	1,266	22.43%
Software Development	360	83.92%	69	16.08%
Software Development Capstone	77	82.80%	16	17.20%
Topics in CS	941	83.20%	190	16.80%
Computer Science (CS)	482	78.12%	135	21.88%
CS Capstone	21	91.30%	2	8.70%
Total	10,292		3,180	

Figure 5. Statewide Detailed CS Course Completion by Grade Level

Course	Grade Level							Total
	7	8	9	10	11	12	13	
AP CS Principles	4	2	153	320	384	339	1	1,203
AP CS A			48	221	399	453	0	1,121
Introduction to CS	0	208	1,249	757	254	198	2	2,668
CS: Special Topics			43	44	131	19		237
CS: Cybersecurity Fundamentals			3	74	126	91		294
CS: Cybersecurity Capstone					2	11		13
Principles of Computing	1	1	1,724	1,961	1,102	847	8	5,644
Software Development			2	37	231	158	1	429
Software Development Capstone					8	85		93
Topics in CS			9	321	535	262	4	1,131
Computer Science (CS)			2	66	233	316		617
CS Capstone					1	22		23
Total	5	211	3,233	3,801	3,406	2,801	16	13,473

Figure 6. Statewide Detailed CS Course Completion for English Learners (ELs) by English Language Proficiency

Course	EL Course Completion	% EL	Non-EL Course Completion	% Non-EL
AP CS Principles	39	3.24%	1,164	96.76%
AP CS A	15	1.34%	1,106	98.66%
Introduction to CS	121	4.54%	2,547	95.46%
CS: Special Topics	7	2.95%	230	97.05%
CS: Cybersecurity Fundamentals	23	7.82%	271	92.18%
CS: Cybersecurity Capstone	1	7.69%	12	92.31%
Principles of Computing	389	6.90%	5,254	93.10%
Software Development	32	7.46%	397	92.54%
Software Development Capstone	2	2.15%	91	97.85%
Topics in CS	60	5.31%	1,071	94.69%
Computer Science (CS)	47	7.62%	570	92.38%
CS Capstone	0	0.00%	23	100.00%
Total	736	5.46%	12,736	94.54%

Figure 7. Statewide Detailed CS Course Completion by Free/Reduced Lunch Status

Course	F/R Status Total	% F/R Status	Paid Meals	% Paid
AP CS Principles	294	24.44%	909	75.56%
AP CS A	200	17.84%	921	82.16%
Introduction to CS	1,037	38.87%	1,631	61.13%
CS: Special Topics	150	63.29%	87	36.71%
CS: Cybersecurity Fundamentals	104	35.37%	190	64.63%
CS: Cybersecurity Capstone	3	23.08%	10	76.92%
Principles of Computing	2,640	45.34%	3,183	54.66%
Software Development	183	42.66%	246	57.34%
Software Development Capstone	20	21.51%	73	78.49%
Topics in CS	402	35.54%	729	64.46%
Computer Science (CS)	281	45.54%	336	54.46%
CS Capstone	8	34.78%	15	65.22%
Total	5,322	38.98%	8,330	61.02%

Figure 8. Statewide Detailed CS Course Completion by Eligibility for Special Education Services

Course	Special Education	% Special Education	General Education	% General Education
AP CS Principles	25	2.08%	1,178	97.92%
AP CS A	23	2.05%	1,098	97.95%
Introduction to CS	175	6.56%	2,493	93.44%
CS: Special Topics	7	2.95%	230	97.05%
CS: Cybersecurity Fundamentals	28	9.52%	266	90.48%
CS: Cybersecurity Capstone	1	7.69%	12	92.31%
Principles of Computing	296	5.25%	5,347	94.75%
Software Development	36	8.39%	393	91.61%
Software Development Capstone	10	10.75%	83	89.25%
Topics in CS	73	6.45%	1,058	93.55%
Computer Science (CS)	45	7.29%	572	92.71%
CS Capstone	1	4.35%	22	95.65%
Total	720	5.34%	12,752	94.66%

Appendices

Appendix A: CS Course Completion by High School

Appendix B: CS Instructor Information

Please contact IDOE's [Office of Teaching and Learning](#) with any questions.