

Transfer Program in Computer Science

Listed below are the courses offered at Vermilion Community College that apply to the Bachelor of Science degree in Computer Science at the University of Minnesota Duluth. After successful completion of the listed Vermilion courses, students may complete the B. S. in Computer Science with additional full-time study at UMD.

Vermilion Community College Courses to Complete	cr.	UMD Requirements Satisfied by Vermilion Courses	cr.
Engl 1511 College Composition	4	Comp 1120 College Writing	3
SP6 1555 Introduction to Speech	3	Comm 1112 Public Speaking	3
Math 1561 Calculus & Analyt. Geom. I	5	Math 1296 Calculus I	5
Math 1562 Calculus & Analyt. Geom II	5	Math 1297 Calculus II	5
Biol 1541-42, or Chem 1522-23, or Phys 2562-63	10	Lab Science Sequence (Biol, Chem, Geol (3 sem.), Phys)	10 to 15
Lab Science Elective	4	Lab Science Elective	4
Liberal Education Electives/Minor Req.	39		

Courses to Complete at UMD:

CS 1511 Computer Science I	5	Breadth continued:	
CS 1521 Computer Science II	5	CS 4611 Database Management Sys.	4
CS 2511 Software Development	4	CS 5541 Artificial Intelligence	4
CS 2522 Computer Organization	4	CS 5551 User Interface Design	4
ECE 1315 Digital System Design	4	CS 5621 Computer Architecture	4
Math 3355 Discrete Mathematics	4	CS 5631 Operating Systems	4
Stat 3611 Probability & Statistics	4	CS 5641 Compiler Design	4
Comp, 3150 Adv. Writing	3	CS 5651 Computer Networks	4
Phil 3242 Values & Technology	3	Electives:	
		CS 4711 Computer Security	4
Advanced Courses - 6 courses required		CS 4811 Systems Programming	4
with at least 3 chosen from "breadth" field		CS 5721 Computer Graphics	4
Breadth:		CS 5731 Information & Text Processing	4
CS 4511 Automata, Comp. & Formal Lang.	4	CS 5741 Obj.-Oriented Software Design	4
CS 4521 Adv. Data Struct. & Algorithms	4	CS 5751 Machine Learning	4
CS 4531 Software Engineering	4	Minor Field Courses & Remaining Liberal Education	

Bachelor of Science in Computer Science

The computer industry has been growing rapidly over the past 20 years and the use of computers is now indispensable in the operations of virtually all medium and large business firms, governmental agencies, scientific research establishments, hospitals, and most other institutions. UMD's B.S. in Computer Science is designed to give the student a thorough introduction to contemporary computer science while allowing sufficient flexibility to pursue individual interests.

2 + 2 Program in Computer Science

Further Information:

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