

COURSE	ACADEMIC YEAR	TERM	TITLE	REQUIREMENTS
CISC101	2013-14	F	Elements of Computing Science I	Experience with multiple programming languages and approaches to teaching introductory programming. Knowledge of JAVA, familiarity with SWING. Effective communication in English
CISC101-F	2013-14	F	Elements of Computing Science I	Substantial knowledge of and experience with Matlab. Effective communication in English
CISC101	2013-14	W	Elements of Computing Science I	Knowledge of elementary Python or willingness to learn. Effective communication in English
CISC121	2013-14	F	Intro to Computing Science I	2 terms of experience programming in a procedural language similar to Python and willingness to learn Python. Effective communication in English
CISC121	2013-14	W	Intro to Computing Science I	Willingness to learn fundamentals of PYTHON language. Effective communication in English
CISC124	2013-14	F	Intro to Computing Science II	3 terms of programming experience, at least 2 in Java or a similar object-oriented language. Some experience with basic GUI interfaces such as Swing. Effective verbal and written communication in English.

CISC124	2013-14	W	Intro to Computing Science II	3 terms of programming experience, at least 2 in Java or a similar object-oriented language. Some experience with basic GUI interfaces such as Swing. Effective verbal and written communication in English.
CISC203	2013-14	F	Discrete Math for Computing Science	strong mathematical background. Effective communication in English
CISC204	2013-14	W	Logic for Computing Science	Upper class standing or graduate student in computer science. Course in logic for computing with at least an A- grade. Effective communication in English
CISC220	2013-14	F	System-Level Programming	3 terms of programming experience, at least one using C. Must have experience with shell programming in Linux (not using the Linux GUI interfaces). Effective verbal and written communication in English.
CISC221	2013-14	W	Computer Architecture	Familiarity with assembly language (Intel and/or MIPS), and C. Effective communication in English
CISC223	2013-14	W	Software Specifications	Good knowledge of finite state machines, regular expressions and context-free grammars. Effective communication in English
CISC226	2013-14	W	Game Design	Programming in C# and Unity. Enthusiasm for gaming and game design. Effective communication in English

CISC235	2013-14	W	Data Structures	Must know Java and PYTHON well. Effective communication in English
CISC260	2013-14	W	Programming Paradigms	3 terms of programming experience. Must have experience with Haskell or with a similar functional language and willingness to learn Haskell. Must have experience with Prolog. Effective verbal and written communication in English.
CISC271	2013-14	W	Scientific Computing	Knowledge of Numerical Analysis, Calculus, Linear Algebra, MATLAB. Effective communication in English
CISC282	2013-14	W	Web Development	Knowledge of HTML, Javascript and PHP.
CISC320	2013-14	W	Fundamentals of Software Development	Must know ISO C++ well. Experience with agile programming on small teams is an asset. Effective communication in English
CISC322	2013-14		Software Architecture	Knowledge of design patterns and architecture styles, UML, C++, and a scripting language (e.g. Perl). Good knowledge of Makefiles. Effective communication in English
CISC324	2013-14	W	Operating Systems	Knowledge of concurrent programming in Java (threads, wait, notify) or willingness to learn. Effective communication in English

CISC325	2013-14	W	Human Computer Interaction	Have followed 325 or comparable experience in HCI. Effective communication in English
CISC326	2013-14	F	Game Architecture	Deep Knowledge of software architecture and design patterns. Must have developed at least one game using a tool such as Unity or XNA. Effective communication in English
CISC327	2013-14	F	Software Quality Assurance	MS-DOS/Windows Command Line Programming (DOS and Batch file Commands), UNIX C Shell Scripting, Software engineering processes and their steps. Effective communication in English
CISC330	2013-14	F	Computer-Intergrated Surgery	Experience in computer-assisted Surgery. Effective communication in English
CISC332	2013-14	W	Database Management Systems	Knowledge of SQL and relational schema design. Familiarity with a DBMS such as DB2 or MySQL, Java and database application development. Effective communication in English
CISC333	2013-14	F	Data Mining	Some experience with data mining, and some familiarity with Rapidminer. Effective communication in English
CISC340	2013-14	F	Digital Systems	Must have experience with the VHDL hardware description language. Effective communication in English

CISC352	2013-14	F	Artificial Intelligence	Previously taken CISC352 or an equivalent course, using the Russell & Norvig textbook "Artificial Intelligence: A Modern Approach". Effective communication in English
CISC365	2013-14	F	Algorithms I	Solid Knowledge of algorithm design and analysis. Effective communication in English
CISC432	2013-14	F		Knowledge of SQL and relational database management system implementation issues. Familiarity with a DBMS such as DB2, MySQL or PostgreSQL. Effective communication in English
CISC452	2013-14	F	Neural Networks and Genetic Computing	Background in Neurocomputing. Familiarity with a variety of programming languages.
CISC454	2013-14	W	Computer Graphics	Solid knowledge of linear algebra. Substantial experience programming in C++. An undergraduate computer graphics course (grade B or better). Some knowledge of GPU programming. Effective communication in English
CISC457	2013-14	F	Image Processing	medical image processing. Extensive experience with image processing algorithms in Matlab. Previous record of passing a graduate or senior undergraduate course in Image processing, or research experience in the field.
CISC458	2013-14	W	Programming Language Processors	Familiarity with multi-phase compiler construction using S/SL. Effective communication in English

CISC471	2013-14	W	Computational Biology	Working Knowledge of PERL and MATLAB, and some familiarity with common web-based bioinformatics resources (e.g. those of NCBI). Effective communication in English
CISC490	2013-14	F	Topics in Computing Science I - The History of Personal Computing	Has a broadly based interest in/passion for historical aspects of computing. Effective communication in English
CISCP81	2013-14	F	Computers: Applications & Implications	Familiarity with HTM and CSS. Be able to read and understand simple JavaScript. Be somewhat knowledgeable about computer representations of data. Effective communication in English
CISCP81	2013-14	W	Computers: Applications & Implications	Familiarity with HTM and CSS. Be able to read and understand simple JavaScript. Be somewhat knowledgeable about computer representations of data. Effective communication in English
CMPE212	2013-14	W	Computing Science for Engineers	Familiarity with JAVA. Effective communication in English
COGS100	2013-14	F	Intro to Cognitive Science	Previously taken a Cognitive Science course, or familiarity with Cognitive Psychology, and Artificial Intelligence. Effective communication in English
COCA201	2013-14	F	Intro to Computing and the Creative Arts	Experience with Arduino and Processing. Familiarity with Kinect.