

CSCI - Computer Science/ Programming

CSCI 107. Joy and Beauty of Computing. 3 Credits. (3 Lec) F,S

Examines the computing field and how it impacts the human condition. Introduces exciting ideas and influential people. Provides a gentle introduction to computational thinking using the Python programming language.

Term	CRN	Section	Session/Dates	Days	Location	Time
2020 Summer Semester	11371	001	June-start: 4x4	MTWR	-	11:00am - 1:35pm

CSCI 112. Programming with C I. 3 Credits. (2 Lec, 1 Lab) F,S

PREREQUISITE: CSCI 111 or CSCI 127 or EELE 101. C Programming knowledge. Introduces imperative programming and the C standard library. Course covers pointers, memory management and structures.

Term	CRN	Section	Session/Dates	Days	Location	Time
2020 Summer Semester	11372	001	May-start: 4x4	MTWR	-	2:00pm - 4:35pm

CSCI 127. Joy and Beauty of Data. 4 Credits. (3 Lec, 1 Lab) F,S

COREQUISITE: M 151Q Provides a gentle introduction to the exciting world of big data and data science. Students expand their ability to solve problems with Python by learning to deploy lists, files, dictionaries and object-oriented programming. Data science libraries are introduced that enable data to be manipulated and displayed. To succeed in this course, either basic computer literacy or CSCI 107 is recommended.

Term	CRN	Section	Session/Dates	Days	Location	Time
2020 Summer Semester	11025	001	First Half Session	MTWRF	BARNAR126	1:45pm - 2:50pm
2020 Summer Semester	11025	001	First Half Session	MWF	BARNAR254	3:00pm - 5:20pm

CSCI 132. Basic Data Structures and Algorithms. 4 Credits. (3 Lec, 1 Lab) F,S

PREREQUISITE: CSCI 111 or CSCI 127 and M 151Q. An examination of advanced Java and basic data structures and their application in problem solving. Data structures include stacks, queues and lists. An introduction to algorithms employing the data structures to solve various problems including searching and sorting, and recursion. Understanding and using Java class libraries. The laboratory uses Java. Introduces Big-O Notation.

Term	CRN	Section	Session/Dates	Days	Location	Time
2020 Summer Semester	10673	001	Second Half Session	MTWRF	ROBERT208	1:45pm - 2:50pm
2020 Summer Semester	10673	001	Second Half Session	MWF	BARNAR254	3:00pm - 5:20pm

CSCI 215CS. Social & Ethical Issues in Computer Science. 3 Credits. (2 Lec, 1 Rec) F,S

PREREQUISITE: W core and US core. Social and ethical issues as they relate to computing, including privacy, risks, computer abuse, commerce, professionalism, free speech, intellectual property, social justice, and current issues. History of computing.

Term	CRN	Section	Session/Dates	Days	Location	Time
2020 Summer Semester	10674	001	July-start: 4x4	MTWR	ROBERT307	11:00am - 1:35pm

CSCI 232. Data Structures and Algorithms. 4 Credits. (3 Lec, 1 Lab) F,S

PREREQUISITE: CSCI 132. Advanced data structures and programming techniques and their application. Topics include: trees, balanced trees, graphs, dictionaries, hash tables, heaps. Examines the efficiency and correctness of algorithms. The laboratory uses Java. CSCI 246 is recommended as a prerequisite.

Term	CRN	Section	Session/Dates	Days	Location	Time
2020 Summer Semester	10425	001	First Half Session	MTWRF	BARNAR254	1:45pm - 2:50pm
2020 Summer Semester	10425	001	First Half Session	MWF	ROBERT301	3:00pm - 5:20pm

CSCI 246. Discrete Structures. 3 Credits. (3 Lec) F,S

PREREQUISITE: M 171Q or M165 COREQUISITE: CSCI 132. This course covers logic, discrete probability, recurrence relations, Boolean algebra, sets, relations, counting, functions, maps, Big-O notation, proof techniques including induction, and proof by contradiction.

Term	CRN	Section	Session/Dates	Days	Location	Time
2020 Summer Semester	10899	001	May-start: 4x4	MTWR	ROBERT218	11:00am - 1:35pm

CSCI 491. Special Topics. 1-4 Credits. (1-4 Lec; 12 cr max) On Demand

Max 12 cr. PREREQUISITE: To be determined based on actual topic offered. Courses not required in any curriculum for which there is a particular one-time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number. Co-convened with CSCI 591.

Term	CRN	Section	Session/Dates	Days	Location	Time
2020 Summer Semester	11416	001	Non-standard term dates 08-JUL-20 16-AUG-20	MTWRF	-	10:00am - 1:00pm

CSCI 581. Computational Thinking Tchrs. 2 Credits. (1 Lec, 1 Lab) Su

PREREQUISITES: A minimum of 2 years high school teaching experience. The course examines the computing field and how it impacts the human condition. Exciting ideas and influential people are introduced. A gentle introduction to computational thinking using the Python programming language is provided. The course also introduces participants to robotic platforms.

Term	CRN	Section	Session/Dates	Days	Location	Time
2020 Summer Semester	11117	001	Intersession	-	-	-

CSCI 582. Joy Beauty Data for Teachers. 2 Credits. (1 Lec, 1 Lab) Su

PREREQUISITES: A minimum of 2 years teaching experience at the 7-12 grade level, and CSCI 581, Computer Science in the Classroom: Computational Thinking for Teachers or prior computer science experience, is a pre-requisite. Teachers who enroll in this course will extend their knowledge of the Python programming language and be gently introduced to the world of data science. The course builds upon the pre-requisite course that is the 2-credit, MSSE course entitled Computer Science in the Classroom: An Introduction to Computational Thinking. Teachers who complete this course will be better prepared to teach material covered in CSCI 127, The Joy and Beauty of Computing.

Term	CRN	Section	Session/Dates	Days	Location	Time
2020 Summer Semester	11118	001	Non-standard term dates 06-JUL-20 10-JUL-20	MTWR	BARNAR259	8:00am - 5:00pm

CSCI 599. Graduate Consultation. 1-3 Credits. (1-3 Ind; 3 cr max) On Demand

PREREQUISITE: Master's standing, consent of instructor and approval of director of the School of Computing. This course may be used only by students who have completed all of their course work, and thesis, if on a thesis plan but who need additional faculty or staff time or help.

Term	CRN	Section	Session/Dates	Days	Location	Time
2020 Summer Semester	10051	001	Full Semester	-	-	-

Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.