

B.S. Computer Science Catalog Year 2021-2022 Unofficial Record Sheet
University of Southern Maine
College of Science, Technology, and Health

Name: _____

Student ID: _____

University Core	<i>Class</i>	<i>Cr</i>	<i>Grade</i>	<i>Notes</i>
Writing, Reading, Inquiry I	ENG 100	3		Waived for students with 60 or more transfer credits
Writing, Reading, Inquiry 2	ENG 102	3		Waived for students with 90 or more transfer credits
Quant. Reasoning				usually met by CS Math Requirement; hope to have MAT 145 meet it someday; many courses we accept meet QR; I'll mark the ones below that meet QR with ***)
Creative Expression	THE 170	3		required for COS major
Cultural Interp.				
Science Expl.				See item D(3) COS Reqs below
Science Expl. Lab				
Socio-Cultural Analysis				
Ethical Inquiry (EISRC)	COS 398	3		required for COS major (see notes below)
Engaged Learning				taken at any stage and may overlap with other courses
Diversity				taken at any stage and may overlap with other courses
International				taken at any stage and may overlap with other courses
Writing, Reading, Inquiry 3	ITP 210			Required for COS major (see notes below)

CS Requirements	<i>Class</i>	<i>Cr</i>	<i>Grade</i>	<i>Notes</i>
Section A				
Struct. Problem Solving	COS 160	3		
Struct. Problem lab	COS 170	1		
Algorithms in Prog.	COS 161	4		
Comp. Organization	COS 250	3		
Comp. Org. lab	COS 255	1		
Data Structures	COS 285	4		
Systems Programming	COS 350	3		
Prog. Languages	COS 360	3		
Prof. Ethics and Social Impact of Computing	COS 398	3		counts for EISRC (see notes below)
Object-Orient. Design	COS 420	4		counts for Capstone

B.S. Computer Science Catalog Year 2021-2022 Unofficial Record Sheet
University of Southern Maine
College of Science, Technology, and Health

Name: _____

Student ID: _____

Design and Analysis of Comp. Algorithms	COS 485	3		
Section B: Computer Systems	COS 450 or 457	3		choose one: Operating Systems or Database Systems
Section C: COS Elect.	COS			COS elective 300 and above, excluding COS 498
	COS			
	COS			
Section D (1) Discrete Math I	MAT 145	3		
Discrete Math II	COS 280	4		
D (2)	MAT			Successful completion of enough additional courses from the list on the back, with the two required courses of the last item, at least 15 credit hours (***)
	MAT			
D (3)	Sci			Successful completion of any two sciences (with labs) from the list on the back.
	lab			
	Sci			
	lab			

	Class	Cr.	Grade	Notes
Section E				
Public Speaking	THE 170	3		Also fulfills Creative Expression Requirement
Technical Writing	ITP 210	3		Satisfies WRI3 Core requirement

B.S. Computer Science Catalog Year 2021-2022 Unofficial Record Sheet
University of Southern Maine
College of Science, Technology, and Health

Name: _____

Student ID: _____

Appropriate Math course to fulfill D (2):

EGN 181/MAT 181 Computing with
Mathematica [1 Cr]

EGN 248 Intro to Lin. Alg. and Diff. Eq.

MAT 148 Applied Calculus *** or

MAT 152 Calculus A ***

MAT 153 Calculus B

MAT 220 Stats for Biological Sciences

MAT 252 Calculus C

MAT 281 Introduction to Probability

MAT 282 Statistical Inference

MAT 295 Linear Algebra

MAT 350 Differential Equations

MAT 352 Real Analysis

MAT 355 Complex Analysis

MAT 364 Numerical Analysis

MAT 366 Deterministic Models in Operations
Research

MAT 380 Probability and Statistics

MAT 383 System Modeling and Simulation

MAT 392 Theory of Numbers

MAT 395 Abstract Algebra

MAT 460 Mathematical Modeling

MAT 461 Stochastic Models in Operations
Research

MAT 470 Non-Euclidean Geometry

BIO 105, 106 Biological Principles I: Cellular
Biology with Lab

BIO 107 Biological Principles II: Evolution,
Biodiversity, and Ecology

ESP 101, 102 Fundamentals of Environmental
Science with Lab

ESP 125, 126 Introduction to Environmental
Ecology with Lab

***Notes:**

*** Minimum of 120 credits is required for graduation.**

*** All major-required courses must be passed with a C- or above [does not include General Core that are also not CS requirements]. All prerequisite courses in the major must be passed with a C or above.**

*** Core prerequisites for EISRC courses are: EYE, College Writing and any three of the four second tier courses--Creative Expression, Cultural Interpretation, Science Exploration, Socio-Cultural Analysis.**

MAT 490 Topology

MAT 492 Graph Theory and Combinatorics

Appropriate Science courses for D (3):

CHY 113, 114 Principles of Chemistry I with Lab

CHY 115, 116 Principles of Chemistry II with Lab

PHY 121, 114 General Physics I with Lab

PHY 123, 116 General Physics II with Lab