Name: **Date:** **23-24 Catalog**

PeopleSoft ID:

Checklist for BS in Computer Science

Tr	UH	**COMPUTER SCIENCE (45 Hours, 30 hours Advanced):**	
		COSC 1336	Computer Science and Programming
		COSC 1437	Introduction to Programming
		COSC 2436	Programming and Data Structures
		COSC 2425	Computer Organization and Architecture
		COSC 3320	Algorithms and Data Structures
		COSC 3340	Introduction to Automata and Computability
		COSC 3360	Fundamentals of Operating Systems
		COSC 3380	Database Systems
		COSC 4351	Fundamentals of Software Engineering
		OR COSC 4353	Software Design
		COSC __3___	3 hours Advanced COSC elective*
		COSC __3___	3 hours Advanced COSC elective*
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		COSC __3___	3 hours Advanced COSC elective*
		COSC __3___	3 hours Advanced COSC elective*

		MATHEMATICS :	
		MATH 2413	Calculus I
		MATH 2414	Calculus II
		MATH 2305	Discrete Mathematics
		OR COSC 2305	Computing Structures
		MATH 2318	Linear Algebra
		OR MATH 3321	Engineering Mathematics
		MATH 3339	Statistics for the Sciences

		NSM APPROVED NATURAL SCIENCES (14 Hours):	
			1 hr NSM Natural Science Lab
			1 hr NSM Natural Science Lab
			3 hr NSM Natural Science Lecture
			3 hr NSM Natural Science Lecture
			3 hr NSM Natural Science Lecture
			3 hr NSM Natural Science Lecture

CORE (Check UH Catalog or UH Core Website for Pre-Requisites)

Tr	UH	**COMMUNICATION (6 Hours):**
		ENGL 1301 First Year Writing I
		ENGL 1302 First Year Writing II

		HIST & GOVT REQUIREMENTS (12 Hours):	
		HIST 1301	American History (3 Hours)
		HIST 1302	American History (3 Hours)
		GOVT 2305	U.S. Government: Congress, President, and Court
		GOVT 2306	U.S. and Texas Constitutions and Politics

		ADDITIONAL CORE (12 Hours): Choose from UH Core Website	
			Language, Philosophy & Culture (3 Hours)
			Creative Arts (3 Hours)
			Social & Behavioral Sciences (3 Hours)
			Writing in the Disciplines (3 Hours)

RULES YOU NEED TO KNOW:

1. MINIMUM of a **2.00 GPA** in cumulative, major, and minor GPA to graduate
2. **PRE-REQ RULE:** Must earn C- or better in pre-requisite for COSC courses
3. **C- RULE**: MAXIMUM of **6 hours of grades below C-** allowed in **UH COSC** courses
4. See Residency Rule here: https://publications.uh.edu/content.php?catoid=56&navoid=21157
5. MAXIMUM of **6 W's** allowed during entire undergraduate career
6. MINIMUM of **36 advanced hours** and **120 total hours** to graduate
7. MAXIMUM of **66 lower level transfer hours** may be applied towards UH degree

***EXAMPLES OF COMPUTER SCIENCE ELECTIVES**

(Check Catalog for Full List & Pre-Requisites)

COSC	3337	Data Science I #
COSC	3371	Cybersecurity #
COSC	4315	Programming Languages and Paradigms
COSC	4321	Immersive Technology & Spatial Computing
COSC	4332	Medical Robotics and Image Guided Interventions
COSC	4337	Data Science II #
COSC	4348	Introduction to Gaming Art and Animation
COSC	4354	Software Development Practices #
COSC	4355	Introduction to Ubiquitous Computing #
COSC	4358	Introduction to Interactive Game Development #
COSC	4359	Intermediate Interactive Game Development #
COSC	4364	Numerical Methods
COSC	4368	Artificial Intelligence Programming
COSC	4370	Interactive Computer Graphics
COSC	4371	Security Analytics #
COSC	4372	Fundamentals of Medical Imaging
COSC	4377	Introduction to Computer Networks
COSC	4393	Digital Image Processing
COSC	4397	Selected Topics in Computer Science

#May be taken as an elective if not applied towards Capstone

NSM CAPSTONE OPTIONS

	Minor
	Double Major
	Dual Degree
	Senior Research Project
	Senior Honors Thesis
	teachHOUSTON
	Software Design (COSC 4353 & COSC 4354/4355) ** ++
	Game Development (COSC 4358 & COSC 4359) ** ^^
	Data Science (COSC 3337 & COSC 4337) **

****** Courses taken for these capstones cannot be used towards the COSC Advanced Elective

++ COSC 4353 cannot be used for Software requirement, must take COSC 4351

^^ COSC 4359 also requires COSC 4370 as a pre-requisite

FREE ELECTIVES

Tr	UH	(Additional hours to complete a total of **120 hours**)