

Check List for BS in Computer Science

Effective Fall 2015

Tr	UH	COMPUTER SCIENCE (42 Hours MINIMUM):
		COSC 1306 (1410) Computer Science and Programming
		COSC 1430 (1320) Introduction to Programming
		COSC 2430 (2320) Programming and Data Structures
		COSC 2440 (2410+3330) Computer Organization and Architecture
		COSC 3320 Algorithms and Complexities
		COSC 3340 Introduction to Automata and Computability Fall, Spring, Sum
		COSC 3360 Fundamentals of Operating Systems Fall, Spring
		COSC 3380 Design of File and Database Systems Fall, Spring
		COSC 4351 Fundamentals of Software Engineering Fall, Spring
		OR COSC 4353 Software Design Fall, Spring, Sum
		COSC __3__ 3 hours Advanced COSC elective*
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(###) Courses in parentheses are former course numbers associated with the class

Tr	UH	MATHEMATICS (14 Hours MINIMUM):
		MATH 1431 Calculus I Fall, Spring, Sum
		MATH 1432 Calculus II Fall, Spring, Sum
		MATH 2331 Linear Algebra Fall, Spring, Sum
		OR MATH 3321 Engineering Mathematics Fall, Spring, Sum
		MATH 3336 Discrete Mathematics Fall, Spring, Sum
		OR COSC 3336 Computing Structures
		MATH 3339 Statistics for the Sciences Fall, Spring, Sum

Tr	UH	NATURAL SCIENCES (14 Hours):
		1 hr Natural Sciences Lab*** (Lab must be in the same discipline)
		1 hr Natural Sciences Lab*** (Lab must be in the same discipline)
		3 hours NSM Approved Natural Science***
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		3 hours NSM Approved Natural Science

***Indicates courses must be in the same discipline

Tr	UH	CORE (Check UH Catalog or UH Core Website for Pre-Requisites)
		COMMUNICATION (6 Hours):
		ENGL 1303 First Year Writing I
		ENGL 1304 First Year Writing II

Tr	UH	STATE REQUIREMENTS (12 Hours):
		HIST 1376 or 1377 The United States to 1877
		HIST 1378 or 1379 The United States Since 1877
		POLS 1336 U.S. and Texas Constitutions and Politics
		POLS 1337 U.S. Government: Congress, President, and Court

Tr	UH	FROM APPROVED CORE LIST (12 Hours): Choose from UH Core Website
		Language/Philosophy/Culture (3 Hours)
		Creative Arts (3 Hours)
		Social & Behavioral Science (3 Hours)
		Writing in the Disciplines (3 Hours)

RULES YOU NEED TO KNOW:

- MINIMUM of a 2.00 GPA in cumulative, major, and minor GPA to graduate
- C- RULE:** MAXIMUM of 6 hours of grades below C- allowed in UH COSC courses
- LAST 30 hours must be exclusively completed at UH
- MAXIMUM of 6 W's allowed during entire undergraduate career
- MINIMUM of 36 advanced hours and 120 total hours to graduate
- MAXIMUM of 66 lower level transfer hours may be applied towards UH degree
- At 60 hours, must request a Major Degree Plan ***REQUIRED TO GRADUATE***

*EXAMPLES OF COMPUTER SCIENCE ELECTIVES		
(Check Catalog for Pre-Requisites)		
COSC 4315	Programming Languages and Paradigms	Fall
COSC 4332	Medical Robotics and Image Guided Interventions	Spring
COSC 4335	Data Mining**	
COSC 4348	Introduction to Gaming Art and Animation	Fall
COSC 4349	Intermediate Gaming Art and Animation	Spring
COSC 4354	Software Development Practices	Spring #
COSC 4355	Introduction to Ubiquitous Computing	Fall #
COSC 4358	Introduction to Interactive Game Development	Fall
COSC 4359	Intermediate Interactive Game Development	Spring
COSC 4364	Numerical Methods	Spring
COSC 4368	Artificial Intelligence Programming**	
COSC 4370	Interactive Computer Graphics	Fall
COSC 4371	Web Security	Spring
COSC 4372	Fundamentals of Medical Imaging	Fall
COSC 4377	Introduction to Computer Networks**	
COSC 4390	Introduction to Internet Computing**	
COSC 4393	Introduction to Digital Image Processing	Fall
COSC 4397	Selected Topics in Computer Science	Fall, Spring, Sum

**Indicates the course is not offered at consistent intervals
#May be taken as an elective if not applied towards Capstone

*CHOOSE ONE OPTION FROM:

Tr	UH	*OPTION #1: COSC SENIOR SEQUENCE
		COSC 4353 Software Design Fall, Spring
		COSC 4354 Software Development Practices Spring
		OR COSC 4355 Introduction to Ubiquitous Computing Fall

*OPTION #2: NSM CAPSTONE		
<input type="checkbox"/> Minor	<input type="checkbox"/> Senior Research Project	
<input type="checkbox"/> Double Major	<input type="checkbox"/> Senior Honors Thesis	
<input type="checkbox"/> Double Degree	<input type="checkbox"/> teachHouston	

Tr	UH

FREE ELECTIVES		
(Additional hours to complete a total of 120 hours, including at least 36 advanced hours)		

Advisor: _____