Date:

PeopleSoft ID:

Checklist for BS in Computer Science

			
Tr UH	COMPUTER SCIENCE (45 Hours, 30 hours Advanced): COSC 1336 Computer Science and Programming		*EXAMPLES OF COMPUTER SCIENCE ELECTIVES
			(Check Catalog for Full List & Pre-Requisites)
	COSC 1437 Introduction to Programming		COSC 3337 Data Science I #
	COSC 2436 Programming and Data Structures		COSC 3371 Cybersecurity #
	COSC 2425 Computer Organization and Architecture		COSC 4315 Programming Languages and Paradigms
	COSC 3320 Algorithms and Data Structures		COSC 4321 Immersive Technology & Spatial Computing
	COSC 3340 Introduction to Automata and Computability		COSC 4332 Medical Robotics and Image Guided Interventions
	COSC 3360 Fundamentals of Operating Systems		COSC 4337 Data Science II #
	COSC 3380 Database Systems		COSC 4348 Introduction to Gaming Art and Animation
	COSC 4351 Fundamentals of Software Engineering		COSC 4354 Software Development Practices #
	OR COSC 4353 Software Design		COSC 4355 Introduction to Ubiquitous Computing #
	COSC 3 3 hours Advanced COSC elective*		COSC 4358 Introduction to Interactive Game Development #
	COSC 33 hours Advanced COSC elective*		COSC 4359 Intermediate Interactive Game Development #
	COSC 3 3 hours Advanced COSC elective*		COSC 4364 Numerical Methods
	COSC 3 3 hours Advanced COSC elective*		COSC 4368 Artificial Intelligence Programming
	COSC3 3 hours Advanced COSC elective*		COSC 4370 Interactive Computer Graphics
			COSC 4371 Security Analytics #
	MATHEMATICS :		COSC 4372 Fundamentals of Medical Imaging
	MATH 2413 Calculus I		COSC 4377 Introduction to Computer Networks
	MATH 2414 Calculus II	$ \longrightarrow $	COSC 4393 Digital Image Processing
	MATH 2305 Discrete Mathematics		COSC 4397 Selected Topics in Computer Science
	OR COSC 2305 Computing Structures		#May be taken as an elective if not applied towards Capstone
	MATH 2318 Linear Algebra		minay be taken as an elective in not applied towards capstone
	OR MATH 3321 Engineering Mathematics		
	MATH 3339 Statistics for the Sciences		
			NSM CAPSTONE OPTIONS
	NSM APPROVED NATURAL SCIENCES (14 Hours):		
	1 hr NSM Natural Science Lab		Minor
	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab		Double Major
	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab 3 hr NSM Natural Science Lecture		Double Major Dual Degree
	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab		Double Major Dual Degree Senior Research Project
	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab 3 hr NSM Natural Science Lecture		Double Major Dual Degree
	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		Double Major Dual Degree Senior Research Project
	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab 3 hr NSM Natural Science Lecture		Double Major Dual Degree Senior Research Project Senior Honors Thesis
	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab 3 hr NSM Natural Science Lecture		Double Major Dual Degree Senior Research Project Senior Honors Thesis teachHOUSTON
	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab 3 hr NSM Natural Science Lecture		Double Major Dual Degree Senior Research Project Senior Honors Thesis teachHOUSTON Software Design (COSC 4353 & COSC 4354/4355) ** ++
Tr UH	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab 3 hr NSM Natural Science Lecture		Double Major Dual Degree Senior Research Project Senior Honors Thesis teachHOUSTON Software Design (COSC 4353 & COSC 4354/4355) ** ++ Game Development (COSC 4358 & COSC 4359) ** ^^
Tr UH	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab 3 hr NSM Natural Science Lecture		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) **
Tr UH	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab 3 hr NSM Natural Science Lecture CORE (Check UH Catalog or UH Core Website for Pre-Requisites) COMMUNICATION (6 Hours):		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) ** Cybersecurity (COSC 3371 & COSC 4371)**
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Tr UH	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab 3 hr NSM Natural Science Lecture B hr NSM Natural Science Lecture CORE (Check UH Catalog or UH Core Website for Pre-Requisites) COMMUNICATION (6 Hours): ENGL 1301 First Year Writing I ENGL 1302 First Year Writing II HIST & GOVT REQUIREMENTS (12 Hours): American History (3 Hours)		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) ** Cybersecurity (COSC 3371 & COSC 4371)** ** Courses taken for these capstones cannot be used towards the COSC Advanced Elective
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	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab 3 hr NSM Natural Science Lecture COMMUNICATION (6 Hours): ENGL 1301 First Year Writing I ENGL 1302 First Year Writing II HIST & GOVT REQUIREMENTS (12 Hours): 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)		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) ** Cybersecurity (COSC 3371 & COSC 4371)** ** 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
	1 hr NSM Natural Science Lab 1 hr NSM Natural Science Lab 3 hr NSM Natural Science Lecture B hr NSM Natural Science Lecture COMMUNICATION (6 Hours): ENGL 1301 First Year Writing I ENGL 1302 First Year Writing II HIST & GOVT REQUIREMENTS (12 Hours): American History (3 Hours) American History (3 Hours) GOVT 2305 U.S. Government: Congress, President, and Court GOVT 2305 U.S. and Texas Constitutions and Politics ADDITIONAL CORE (12 Hours): Choose from UH Core Website Language, Philosophy & Culture (3 Hours)		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) ** Cybersecurity (COSC 3371 & COSC 4371)** ** 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

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. LAST 30 hours must be exclusively completed at UH

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