BS Computer Science Eight Semester Plan 2024-2025

Semester 1 and 2 | Semester 3 and 4 | Semester 5 and 6 | Semester 7 and 8

CS 1436*
Programming Fundamentals

CS 1337*
Computer Science I
CS 1436

CS 2336 or 2337*
Computer Science II
CS 2305
CS 1337

ECS 2390
Professional and Technical Comm.
RHET 1302

CS 4337
Programming Language Paradigms
CS 2336 | CS 2305
CS 2340

CS 4349
Advanced Algorithm Design and Analysis
CS 2305
CS 3345

CS 4384
Automata Theory
CS 2305

CS 4485
Computer Science Project
CS 3345 | CS 3354
3 CS 4XXX

MATH 2413 or 2417*
Calculus I
ALEKS 80% or MATH 2312

MATH 2414 or 2419*
Calculus II
MATH 2413 or 2417

CS 2340
Computer Architecture
CS 1337
CS 2305

CS 3341
Probability and Statistics in CS and SE
MATH 2414 or 2419
CS 2305 | MATH 2418

CS 4341/4141
Digital Logic Computer Design and Lab
PHYS 2326/2126
CS 2340

CS 3162
Professional Responsibility
CS 3354
CS 3345

CS 4347
Database Systems
CS 3345

Technical Elective
See Catalog

ECS 1100
Intro to Eng and CS
First Year

PHYS 2325/2125
Mechanics and Lab
MATH 2413 or 2417
MATH 2414 or 2419

PHYS 2326/2126
Electricity and Magnetism and Lab
PHYS 2325/2125
MATH 2414 or 2419

CS 3345
Data Structures and Algorithms
CS 2336 or CS 2337
CS 2305
CS 3341

CS 3354
Software Engineering

CS 4348
Operating Systems Concepts
CS 2340
CS 3377

Technical Elective
See Catalog

Free Elective (1SCH)

CS 1200
Introduction to CS and SE

CS 2305*
Discrete Mathematics
MATH 2413 or 2417

MATH 2418*
Linear Algebra
MATH 2413 or 2417

CS 3377
Systems Programming
CS 2336 or 2337

Core

Technical Elective
See Catalog

Free Elective

Free Elective

Core

Core

Core

Core

Core

Technical Elective
See Catalog

Free Elective

Core

Free Elective

Technical Elective
See Catalog

Core

	First Year Only Transfer Sub with Technical Elective	Major Preparatory Core
	Pre-requisite	Pre /Co-requisite
		critical path

CORE CURRICULUM CHOICES

RHET 1302	GOVT 2305	GOVT 2306	American History (060)	American History (060)	Language, Philosophy and Culture (040)	Creative Arts (050)	Social and Behavioral Sciences (080)

* GRADE REQUIREMENTS

D- or better required unless noted by *

CS 1436, CS 1337, CS 2305, CS 2336 or 2337, MATH 2413 or 2417, MATH 2414 or 2419, MATH 2418: C or better required

ERIK JONSSON SCHOOL
OF ENGINEERING AND COMPUTER SCIENCE