

Computer Information Systems B.S.C.I.S Teacher Certification, 7-12 Computer Science

Secondary and All-Level Education

See for information: Secondary and All-Level Education (<http://coursecatalog.tamuc.edu/undergrad/colleges-and-departments/education-human-services/curriculum-instruction/secondary-and-all-level-education/>)

Core Curriculum Courses

See the Core Curriculum Requirements (<http://coursecatalog.tamuc.edu/undergrad/core-curriculum-requirements/>) 42

Required courses in the major

COSC 1436	Introduction to Computer Science and Programming	4
COSC 1437	Programming Fundamentals II	4
COSC 2325	Introduction to Machine Language and Digital Logic.	3
COSC 2336	Data Structures and Algorithms	3
CSCI 303	Technical Communication for Computing Professionals	3
CSCI 340	Database	3
CSCI 415	GLB/Ethics, Law & Cybersecurity	3
CSCI 434	Computer Networks	3
CSCI 359	Systems Analysis & Design	3
CSCI 380	Web Programming and Interface Design	3
CSCI 333	Applied Data Analytics with Python	3
CSCI 440	App Software Project Dev	3
Adv. CSci		6

Teacher education courses

SED 330	Foundations of Secondary Education	3
SED 331	Instructional Design for Diverse Learners	3
SED 332	Creating an Engaging Learning Environment	3
SED 400	Pedagogy and Classroom Management in Field-based Environments	3
SED 401	Technology Infused Curriculum and Assessment in Field-based Environments	3
SED 404	Secondary Teaching Practicum	3
SED 405	Secondary Residency in Teaching	6
RDG 380	Comprehension and Vocabulary in Middle and High Schools	3

Required support courses

MATH 1325	Mathematics for Business Applications II *	
ECO 302	Business and Economic Statistics	3
or MATH 453	Essentials of Statistics	
TMGT 358	Essentials of Project Management	3
PSY 300	Learning Processes and Development	3

Total Hours

122

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This course will satisfy the core curriculum requirement.

A grade of "C" or higher must be earned in all courses in this Major with the exception of the Support Course a grade of "D" is acceptable.