

EAST CENTRAL UNIVERSITY
COMPUTER SCIENCE 0510
2025-26 Catalog Year

Requirements for Bachelor's Degrees

- 30 hours at ECU
- 60 hours at senior level college
- 40 hours upper level courses
- OSRHE computer proficiency requirement

I. General Education 40 hours

A maximum of 12 hours may be counted in both the major/related work and general education.

II. Major in Computer Science 45 hours

A. Required Computer Science Major Core 27 hours

- CMPSC 1113 Computer Programming I
- CMPSC 1133 Computer Programming II
- CPSMA 2103 Data Structures
- CPSMA 3103 Algorithm Analysis
- CMPSC 3113 Operating Systems
- CMPSC 3613 Computer Architecture
- CMPSC 3943 Software Design & Development
- CMPSC 4213 Data Base Design
- CMPSC 4473 Theory of Programming Languages

B. Required Electives 18 hours

Eighteen hours in upper level Computer Science with at least 12 hours in CMPSC courses

III. Related Work 11-18 hours

- CPSMA 3913 Discrete Mathematics
- MATH 1513 College Algebra*
- MATH 1713 Trigonometry*

One of the following:

- MATH 2825 Calculus & Analytical Geometry I OR
- MATH 2613 Calculus for Bus, Life & Soc Sci

If MATH 2613 taken, then choose EITHER

- MATH 1223 Intro to Prob & Statistics OR
- BSEC 2603 Business & Economic Statistics

One of the following:

- BUCOM 3133 Bus Communic & Report Writing
- COMM 1113 Fundamentals of Human Comm
- ENG 3183 Technical and Professional Writing

IV. Minor (Not Required)

V. Electives 26-36 hours

VI. Total Hours Required 120 hours

VII. Special Requirements

*With departmental approval, students may omit MATH 1513 and MATH 1713 and begin with MATH 2825