

CURRICULUM GUIDE
Computer Science, B.S. (Interactive Multimedia Concentration)
2019-2020

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The schedule below is an **EXAMPLE** of how you can arrange your class schedule.
 Please consult your advisor for specific changes that may need to be made.

| | Fall Semester | Spring Semester |
|---|--|---|
| Freshman Year | SCO 1001 1 CSC 185 3 CSC 190 3 [¶] MAT 234 (fulfills Gen. Ed. 2) 4 Gen. Ed. 1A (ENG 101) 3 Gen. Ed. 6 (Diversity) 3 | CSC 140 3 CSC 191 3 CSC 195 3 MAT 239 3 Gen. Ed. 1B (ENG 102) 3 |
| | TOTAL 17 | TOTAL 15 |
| Sophomore Year | CSC 313 3 CSC 310 3 MAT 244 4 [¶] PHY 201 (fulfills Gen. Ed. 4) 5 | CSC 340 3 EET 252 3 STA 270 4 † CSC Restricted Elective 3 Gen. Ed. 1C (Oral Comm.) 3 |
| | TOTAL 15 | TOTAL 16 |
| Junior Year | [¶] ART 200 (fulfills Gen. Ed. 3A) 3 CSC 315 3 CSC 308 3 ‡ Sequence Elective (class 1) 3 MUS 290 (fall only) 2 | ARH 390 <u>or</u> 391 3 CSC 316 3 CSC 499 1 ‡ Sequence Elective (class 2) 3 Gen Ed. 4 (Nat. Sci.) 3 Free Elective 3 |
| | TOTAL 14 | TOTAL 16 |
| Senior Year | CSC 550 3 [¶] BEM 200 (fulfills Gen. Ed. 5B) 3 ART 100, TEC 190, <u>or</u> GCM 313 3 CSC 494, 495, <u>or</u> 496 1 Gen. Ed. 3B (Humanities) 3 | CSC 491 (ACCT) 3 CSC 520 <u>or</u> 555 3 Gen. Ed. 5A (History) 3 Gen. Ed. 6 (Diversity) 3 ♣ Free Electives (upper division) 2 |
| | TOTAL 13 | TOTAL 14 |
| TOTAL HOURS TO DEGREE COMPLETION | | 120 |

* **PREREQUISITES:** Consult with your advisor and/or the University catalog regarding prerequisites for upper division CSC courses. ART 164(art majors only) or 200; ENG 102 or 105; GEO 210 and/or 353; GLY 102, 108, 109, 172 or 174 HON 102; MAT 108, 109, 122, 124, 124H, 234, 234H, 244, and/or 244H; MGT 300 or 301; MKT 301; and/or MUS 190 and/or 191. See University catalog for details.

Upper division courses: All students are required to have a minimum of 42 hrs. upper division (300 level or above) courses distributed throughout Major/Supporting/Gen Ed/Free Electives categories. If 300 level classes are taken for Gen. Ed. or elsewhere in the program, they can be used to fulfill the 42 hours instead of upper division free electives.
 ♣ (2016-17: Due to curriculum changes (STA 270 going from 3-4 hrs.), this program as outlined does not have sufficient number of upper division coursework hours. Please ensure you take courses that will fulfill the 42 hrs. of upper division).

Refer to the University Catalog at <http://www.catalogs.eku.edu/> regarding University and General Education Requirements. All baccalaureate degree seeking students who enter the University are required to successfully complete one writing intensive course following completion of the ENG 102, ENG 105, or HON 102/103. Writing intensive courses are designated with the suffix "W" following the course prefix and number (e.g. HUM 300W).

Applied Critical & Creative Thinking (ACCT) Requirement: Computer Science majors will fulfill ACCT with CSC 349, 440, 491, 549, or 495 with a program-approved topic. (Credit hours are incorporated into program requirements.)

| Course Number | Course Name |
|---|---|
| GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37) | |
| SCO 1001 | Student Success Seminar for Computer Science (1) |
| CORE COURSE REQUIREMENTS (25) | |
| CSC 185 | Intro to Computer Concepts (3) |
| CSC 190 | Object-Oriented Programming I (3) |
| CSC 191 | Object-Oriented Programming II (3) |
| CSC 195 | Intro to Discrete Structures (3) |
| CSC 308 | Mobile App Dev for iOS (3) |
| CSC 310 | Data Structure (3) |
| CIS 313 | Database Systems (3) |
| CSC 340 | Ethics & Software Engineering (3) |
| CSC 499 | Computer Science Career Preparation (1) |
| INTERACTIVE MULTIMEDIA CONCENTRATION REQUIREMENTS (22) | |
| CSC 140 | Introduction to Computer Game Design (3) |
| CSC 315 | 3D Modeling (3) |
| CSC 316 | 3D Game Engine Design (3) |
| CSC 491 | Console Game Design (3) |
| CSC 550 | Graphics Programming (3) |
| CSC 520 <u>or</u> CSC 555 | Multimedia Sys. & Forensics (3) Topics in Multimedia: ____ (3) |
| † PLUS ONE (1) COURSE selected from the following (restricted elective): | |
| CSC 300 | Intro. To Numerical Methods (3) |
| CSC 309 | Mobile App Dev for Android (3) |
| CSC 311 | Algorithms I (3) |
| CSC 320 | Algorithms II (3) |
| CSC 330 | System Environments & Networks (3) |
| CSC 332 | Digital Storage Device Forensics (3) |
| CSC 350 | Principles of Prog. Languages (3) |
| CSC 360 | Computer Org & Architecture (3) |
| CSC 390 | Adv. Prog. Techniques with ____ (3) |
| CSC 400 | Operating Systems (3) |
| CSC 425 | Compiler Construction (3) |
| CSC 440 | Intro. to Software Engineering (3) |
| CSC 460 | Comp. Network & System Admin. (3) |
| CSC 490 | Seminar in ____ (1-3) |
| CSC 507 | Seminar in Computer Science: ____ (1-3) |
| CSC 538 | Computer Crime & Forensics (3) |
| CSC 540 | Integrated DB Applications (3) |
| CSC 541 | Software Testing (3) |
| CSC 542 | Internet Forensics (3) |
| CSC 544 | Database Admin & Security (3) |
| CSC 545 | Theory of Database Systems (3) |
| CSC 546 | Artificial Intelligence (3) |
| CSC 547 | Network Forensics & Investigation (3) |
| CSC 548 | Personal Electronic Device Forensics (3) |
| PLUS ONE (1) HOUR selected from: | |
| CSC 494 | Innovative Problem Solving (1-3) |
| CSC 495 | Independent Work (1-3) |
| CSC 496 | Senior Seminar (1) |
| INTERACTIVE MULTIMEDIA CONCENTRATION SUPPORTING COURSE REQUIREMENTS (31) | |
| [¶] BEM 200 | Mass Media and Society (3) |
| EET 252 | Digital Electronics (3) |
| [¶] MAT 234 | Calculus I (4) |
| [¶] MAT 239 | Linear Algebra & Matrices (3) |
| [¶] MAT 244 | Calculus II (4) |
| [¶] MUS 290 | Film Scoring (2) (fall only) |
| [¶] PHY 201 | University Physics I (5) |
| STA 270 | Applied Statistics I (4) |
| PLUS TWO (2) courses chosen from the following: | |
| [¶] ART 200 <u>and either</u> | Art Appreciation: Orientation (3) |
| * ARH 390 <u>OR</u> | Survey of Art History I: Non-West. Art (3) |
| * ARH 391 | Survey of Art History II: West. Art (3) |
| PLUS ONE (1) course chosen from the following: | |
| ART 100 | Drawing I (3) |
| TEC 190 | Technical Graphics (3) |
| GCM 313 | Digital Photography (3) |
| ‡ PLUS ONE (1) of the following sequences: | |
| [¶] GEO 353: Geographic Information Systems (3) | } |
| [¶] GEO 453: Advanced GIS (3) | |
| <u>OR</u> | } |
| MKT 301: Principles of Marketing (3) | |
| *MKT 310: Personal Selling (3) | } |
| <u>OR</u> | |
| MGT 301 Principles of Management (3) | } |
| *MGT 465: Innovation and Entrepreneurship (3) | |
| FREE ELECTIVES (5) | |

[¶] Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.