**KEAN UNIVERSITY: COLLEGE OF NATURAL, APPLIED & HEALTH SCIENCES**

**78305 B.S. COMPUTER SCIENCE: 120 SEMESTER HOURS (S.H.)**

**For students graduating from Brookdale Community College with the A.S. in Computer Science and transferring to Kean University**

**Kean University Courses are in BLUE (58-60 S.H.) Brookdale Community College Courses are in RED (60-62 S.H.)**

**EFFECTIVE: FALL 2021 KEAN G.P.A. REQUIREMENTS: Declaration G.P.A. requirement 2.5; Graduation G.P.A. Requirement: 2.5**

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| **GENERAL EDUCATION REQUIREMENTS: 33 S.H.** | | | **ACADEMIC MAJOR: 44 S.H.** (all major courses require a minimum grade of C) | | |
| **Foundation Requirements: 13 S.H.** | | | **Major Core: Required: 14 S.H.** | | |
| GE 3000 Transfer Transitions | | 1 | CPS 2231 Computer Org. & Prog | COMP 271 Programming II + 1 Credit from COMP 228 | 4 |
| ENG 1030 English Comp | ENGL 121 English Composition | 3 | CPS 2232 Data Struct. & Algorithms |  | 4 |
| MATH 1054 Precalculus | MATH 153 Pre-Calculus Math1 | 3 | CPS 2390 Comp Org. & Architect. | COMP 135 Comp Arch w/Assembly Lang | 3 |
| COMM 1402 Speech Comm | COMP 126 Comp Logic & Design2 | 3 | CPS 3250 Computer Operating Sys. |  | 3 |
| GE 2024 Research & Technology | ENGL 122 English Composition II | 3 |  | | 3 |
|  | | | **Major Concentration 12 S. H.** | | |
| **DISCIPLINARY & INTERDISCIPLINARY DISTRIBUTION COURSES** | | | CPS 3440 Analysis of Algorithms | | 3 |
| **Humanities: 6 S.H.** | | | CPS 3962 Obj. Oriented Analysis & Des. | | 3 |
| ENG 2403 World Literature | BCC Humanities Requirement2 | 3 | CPS 4150 Computer Architecture or  CPS 4200 Systems Programming | | 3 |
| ***Take one “GE Approved” course from one area below*** | | |
| Fine Arts/Art History | BCC Humanities/Social Sciences Requirement2 | 3 | CPS 4222 Principles of Networking | | 3 |
| Philosophy or Religion |  | | |
| Foreign Languages | **Major Electives: Required: 15 S. H.** | | |
| Music or Theatre | CPS 3xxx or 4xxx | COMP 269 Database Concept | 3 |
| Interdisciplinary | CPS 3xxx or 4xxx | COMP 296 Adv Software | 3 |
|  | | | CPS 3xxx or 4xxx | | 3 |
| **Social Sciences: 6 S.H.** | | | CPS 3xxx or 4xxx or 5xxx | | 3 |
| HIST 1062 Worlds of History | COMP 226 Sys Analysis & Des2 | 3 | CPS 3xxx or 4xxx or 5xxx | | 3 |
| ***Take one “GE Approved” course from one area below*** | | |  | | |
| Psychology | BCC Social Sciences  Requirement2 | 3 | **Major Capstone: 3 S.H.** | | |
| Economics or ES 1010 Worlds Geog | CPS 4951 CS Capstone or CPS 4961 Senior research in Comp Sci | | 3 |
| Political Science |
| Sociology or Anthropology |  | | |
| Interdisciplinary | **FREE ELECTIVES: 7-10 S.H.**  **At least 50% must be completed at the 3000-4000 course level.** | | |
|  | | |
| **Science and Mathematics: 8 S.H.** | | |
| CPS 1231 Fund. Of Comp. Sci. | COMP 171 Programming I + 1 credit from electives1,,2 | 4 |  | Electives credit1 | 0-1 |
|  | 2 credits from COMP 228 | 2 |
| Lab Science (BIO 1000, CHEM 1083, or PHYS 2091/PHYS 2095) | PHYS 121 General Physics I | 4 | Any Kean 1000-4000 level course(s) to total 120 credits for degree | | 2-5 |
| Any Kean 3000-4000 level course | | 3 |
|  | | |  | | |
| **Additional Required Courses**: **32-36 S. H.**  **(All additional and supporting courses require a minimum grade of C)** | | | **TOTAL CREDITS 120 S.H.** | | |
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| Lab Science II (BIO 1300, CHEM 1083, PHYS 2092/PHYS 2096) | PHYS 122 General Physics II | 4 | 1Passing MATH 153 with a grade of C or better is a prerequisite for MATH 171. Should students directly place into MATH 171, this requirement is waived at Kean and the Kean Free Elective requirement would increase by 3 credits. MATH 153 fulfills the Electives requirement at BCC so 0 credits would apply to Kean’s Free electives, otherwise 2 Elective credits would be required at BCC. | | |
| Tech 2920 Computer Systems | COMP 225 Op Sys Tech | 3 |
| ENG 3091 Technical Writing | | 3 |
| MATH 2110 Discrete Structures | | 3 |
| MATH 2415 Calculus I | MATH 171 Calculus I | 4 | 2This substitution is allowed under the NJ Statewide Transfer Agreement if you graduate with the A.S. in Computer Science from Brookdale Community College. | | |
| MATH 2416 or MATH 2995 | MATH 172 Calculus II | 4 |
| MATH 2526 Applied Statistics I | | 3 |
| MATH 3120; 3155; 3225; 3415; 3455; 3526; 3544; 3815; or 3940 | | 3/4 |  | | |
| Math or Science (2000-4000 level) |  | 3/4 |  | | |
| Math or Science (2000-4000 level) |  | 3/4 |  | | |