# KEAN UNIVERSITY THE DOROTHY AND GEORGE HENNINGS COLLEGE OF SCIENCE, MATHEMATICS AND TECHNOLOGY (78201) B.A. IN MATHEMATICAL SCIENCES (Statistics Option) 120 S.H Minimum GPA Required for Declaration: 2.0 Minimum GPA Required for Major: 2.0 Overall Minimum GPA Required for Graduation: 2.0 EFFECTIVE DATE: FALL 2019

| Transitions2   Interfact on position   3   MATH 2416 Calculus II     WATH 036 Precalculus <sup>3,4</sup> 3   MATH 2416 Calculus II     COMM 1402 Speech Communication   3   MATH 3415 Calculus III     GE 2024 Research & Technology   3   MATH 3544 Probability and Math Statistics     Disciplinary & Interdisciplinary   **Concentration Courses:<br>16 S.H.   Interdisciplinary     Humarities   9 S.H. (from different areas)   MATH 3560 Applied Statistics I     **ENG 2403 World Literature   3   MATH 3560 Applied Statistics II     Select two *GE Approved* courses from different areas:   MATH 3560 Applied Statistics II     Philosophy or Religion   3   MATH 3580 Experimental Design     Foreign Language (Must take I and II for credit)   3   MATH 4545 Mathematical Statistics     Music or Theatre   3   Interdisciplinary   3     Social Sciences   9 S.H. (from different areas)   MATH 4540   MATH     **Major Elective Courses (With advisement, 3000-4000)   8 S.H.   S.H.     Social Sciences   9 S.H. (from different areas)   MATH   MATH     Take two *GE Approved* courses from two different areas)   MATH   S.H.   S.H.     Political Science   |  |  |  |                                 |   |
|--|--|--|--|---------------------------------|---|
| GE 1000 Transition to Kean2 - or- GE 3000 Transfer   1   MATH 2415 Calculus 1     Transitions2   3   MATH 2416 Calculus II     WATH 1054 Precalculus <sup>3,6</sup> 3   MATH 2416 Calculus II     COMM 1402 Speech Communication   3   MATH 315 Calculus II     GE 2024 Research & Technology   3   MATH 315 Calculus II     Disciplinary & Interdisciplinary   3   MATH 3414 Probability and Math Statistics     Disciplinary & Interdisciplinary   **Concentration Courses:   16 S.H.     Jumanifes   9 S.H. (from different areas)   MATH 3526 Applied Statistics I     FIG 2403 World Literature   3   MATH 3600 Regression Analysis of MATH 3570     Jumanifes   9 S.H. (from different areas)   MATH 3580 Experimental Design     Fine Arts/At History   3   MATH 3580 Experimental Design     Philosophy or Religion   3   MATH 3580 Regression Analysis of MATH 3570     Music or Theate   3   MATH 4545 Mathematical Statistics     Interdisciplinary   3   MATH 4545 Mathematical Statistics     Freign Language (Must take I and II for credit)   3   MATH 4545 Mathematical Statistics     Music or Theate   3   MATH     Take two "GE Approved" courses fr  |  |  |  |                                 |   |
| Transitions2   -   -     "ENG 1030 Composition   3   MATH 12416 Calculus II     MATH 1054 Precalculus <sup>3,4</sup> 3   MATH 2995 Matrix and Lincar Algebra     COMM 1402 Speech Communication   3   MATH 315 Calculus III     GE 2024 Research & Technology   3   MATH 3145 Calculus III     Disciplinary & Interdisciplinary   -   -     Disciplinary & Interdisciplinary   -   -     Uniciplinary & Interdisciplinary   -   -     Transitions   9 S.H. (from different areas)   MATH 3500 Statistical Software     Select two "GE Approved" courses from different areas)   MATH 3500 Experimental Design     Philosophy or Religion   3   MATH 3500 Experimental Design     Foreign Language (Must take I and II for credit)   3   MATH 4545 Mathematical Statistics     Music or Theatre   3   -   -     Nation Theatre   3   -   -     Scielal Sciences   9 S.H. (from different areas)   MATH   - <   | -  |  | **Foundation Core Courses: 18 S.H.   |                                 |   |
| MATH 1064 Precalculus <sup>3,4</sup> 3 MATH 2995 Matrix and Linear Algebra   COMM 1402 Speech Communication 3 MATH 3415 Calculus III   GE 2024 Research & Technology 3 MATH 3444 Probability and Math Statistics   Disciplinary & Interdisciplinary **Concentration Courses:<br>16 S.H.   Disciplinary & Interdisciplinary **Concentration Courses:<br>16 S.H.   Find Atts/Art History 3 MATH 3526 Applied Statistics I   Fine Arts/Art History 3 MATH 3506 Regression Analysis or MATH 3570<br>Multivariate Analysis   Philosophy or Religion 3 MATH 3506 Regression Analysis or MATH 3570<br>Multivariate Analysis   Philosophy or Religion 3 MATH 3506 Regression Analysis or MATH 3570<br>Multivariate Analysis   Philosophy or Religion 3 MATH 3506 Depermental Design   Foreign Language (Must take I and II for credit) 3 MATH 3506 Depermental Design   Music on Theatre 3 MATH   Interdisciplinary 3 MATH   Y*HIST 1062 Worlds of History 3 MATH   Take two "GE Approved" courses from two different<br>areas: 3 MATH 4890 Senior Seminar in Mathematics (WE)   Economics or ES 1000 World Geography 3 MATH 4890 Senior Seminar in Mathematics (WE)   Economics or ES 1000 World Geography 3 Interdisciplinary   Political Science <td>Transitions2</td> <td>1</td> <td>MATH 2415 Calculus I</td> <td>4</td>  | Transitions2   | 1  | MATH 2415 Calculus I   | 4                               |   |
| COMM 1402 Speech Communication   3   MATH 3415 Calculus III     GE 2024 Research & Technology   3   MATH 3544 Probability and Math Statistics     Disciplinary & Interdisciplinary   ***Concentration Courses:     Disciplinary & Interdisciplinary   ***Concentration Courses:     Disciplinary & Interdisciplinary   MATH 3500 Statistical Software     Select two "GE Approved" courses from different areas:   MATH 3500 Statistical Software     Select two "GE Approved" courses from different areas:   MATH 3500 Statistical Software     Philosophy or Religion   3   MATH 3506 Regression Analysis or MATH 3570     Philosophy or Religion   3   MATH 3506 Regression Analysis or MATH 3570     Philosophy or Religion   3   MATH 3500 Statistical Software     Foreign Language (Must take I and II for credit)   3   MATH 3500 Regression Analysis or MATH 3570     Musico T Theatre   3   MATH 4545 Mathematical Statistics     Interdisciplinary   3   MATH     **Major Elective Courses (With advisement, 3000-4000)   6 S.H.     Social Sciences   9 S.H. (from different areas)   MATH     **Major Elective Courses from two different areas:   3     Psychology   3   MATH     E   |  | 3  | MATH 2416 Calculus II  | 4                               |   |
| GE 2024 Research & Technology   3   MATH 3544 Prohability and Math Statistics     Disciplinary & Interdisciplinary   **Concentration Courses:     Distribution Requirements:1   **Concentration Courses:     Umanifies   9 S.H. (from different areas)   MATH 3500 Statistical Software     Select two "GE Approved" courses from different areas:   MATH 3500 Statistical Software     Fine Att3Art History   3   MATH 3500 Statistical Software     Philosophy or Religion   3   MATH 3500 Experimental Design     Foreign Language (Must take I and II for credit)   3   MATH 4450 Mathematical Statistics     Music or Theatre   3   MATH     3   MATH   Statistical Statistics     Music or Theatre   3   MATH 4500 Mathematical Statistics     Music or Theatre   3   MATH     ***Major Elective Courses (With advisement, 3000-4000)   6 S.H.     Social Sciences   9 S.H. (from different areas)   MATH     ***Major Elective Courses (With advisement, 3000-4000)   6 S.H.     Social Sciences   9 S.H. (from different areas)   MATH     **Mem "GE Approved" courses from two different areas)   MATH     **IHST 1062 Worlds of History   3   MAT  | MATH 1054 Precalculus <sup>3,4</sup>   | 3  | MATH 2995 Matrix and Linear Algebra  | 3                               |   |
| Disciplinary & Interdisciplinary **Concentration Courses:   Disciplinary & Interdisciplinary **Concentration Courses:   Disciplinary & Interdisciplinary **Concentration Courses:   16 S.H. MATH 3500 Statistical Software   Select two "GE Approved" courses from different areas: MATH 3500 Statistical Software   Select two "GE Approved" courses from different areas: MATH 3500 Specification III   Fine Arts/Art History 3 MATH 3500 Specification III   Fine Arts/Art History 3 MATH 4545 Mathematical Statistics   Philosophy or Religion 3 MATH 4545 Mathematical Statistics   Foreign Language (Must take I and II for credit) 3 MATH 4545 Mathematical Statistics   Music or Theatre 3 **Major Elective Courses (With advisement, 3000-4000) 6 S.H.   Social Sciences 9 S.H. (from different areas) MATH   **Major Elective Courses (With advisement, 3000-4000) 6 S.H. **Major Elective Courses (With advisement, 300-4000) 6 S.H.   Take two "GE Approved" courses from two different areas: 3 MATH 4890 Senior Seminar in Mathematics (WE)   Economics or ES 1000 World Geography 3 MATH 4890 Senior Seminar in Mathematics (WE)   Economics or ES 1000 World Geography 3 Interdisciplinary   Political Science 3 Science And Mathematics 10 or 11 S.H.   ***CPS 1231   | COMM 1402 Speech Communication   | 3  | MATH 3415 Calculus III   | 4                               |   |
| Distribution Requirements:1   16 S.H.     Humanities   9 S.H. (from different areas)   MATH 3500 Statistical Software     Select two "GE Approved" courses from different areas:   MATH 3500 Regression Analysis or MATH 3570<br>Multivariate Analysis     Philosophy or Religion   3   MATH 3500 Regression Analysis or MATH 3570<br>Multivariate Analysis     Philosophy or Religion   3   MATH 3500 Experimental Design     Foreign Language (Must take I and II for credit)   3   MATH 4545 Mathematical Statistics     Music or Theatre   3   interdisciplinary   3     Interdisciplinary   3   MATH   500 for Sign Elective Courses (With advisement, 3000-4000) 6 S.H.     Social Sciences   9 S.H. (from different areas)   MATH     "HIST 1062 Worlds of History   3   MATH     Take two "GE Approved" courses from two different areas:   3   MATH 4890 Senior Seminar in Mathematics (WE)     Economics or ES 1000 World Geography   3   MATH 4890 Senior Seminar in Mathematics (WE)     Political Science   3   Science and Mathematics 10 or 11 S.H.   Additional courses in Computer Science, Physics, or other Science, Technology. Economics or Mathematics courses allowed other than MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.   4   MATH   | GE 2024 Research & Technology  | 3  | MATH 3544 Probability and Math Statistics  | 3                               |   |
| *ENG 2403 World Literature   3   MATH 3500 Statistical Software     Select two "GE Approved" courses from different areas:   MATH 3526 Applied Statistics II     Fine Ants/Art History   3   MATH 3560 Regression Analysis or MATH 3570 Multivariate Analysis     Philosophy or Religion   3   MATH 3580 Experimental Design     Foreign Language (Must take I and II for credit)   3   MATH 4545 Mathematical Statistics     Music or Theatre   3   Interdisciplinary   3 <i>Social Sciences</i> 9 S.H. (from different areas)   MATH <b>Take two "GE Approved" courses from two different areas</b> :   MATH     Psychology   3   MATH 4890 Senior Seminar in Mathematics (WE)     Economics or ES 1000 World Geography   3   Sectology or Anthropology     Political Science   3   FREE ELECTIVES   31-32 S.H.     Profilical Science   3   Additional courses in Computer Science, Physics, or other Sciences, Technology, Economics, or Management Science     Interdisciplinary   3   FREE ELECTIVES   31-32 S.H.     Science and Mathematics   10 or 11 S.H.   Additional courses in Computer Science, Physics, or other Science, Technology, Economics, or Management Science     ***CPS 1231 Fund of Comp Science   4   MATH 199  |  |  |  |                                 |   |
| Select two "GE Approved" courses from different areas:     MATH 3526 Applied Statistics II       Fine Arts/Art History     3     MATH 3506 Regression Analysis or MATH 3570<br>Multivariate Analysis       Philosophy or Religion     3     MATH 3580 Experimental Design       Foreign Language (Must take I and II for credit)     3     MATH 4545 Mathematical Statistics       Music or Theatre     3     MATH 3500 Experimental Design       Interdisciplinary     3     ***Major Elective Courses (With advisement, 3000-4000)<br>6 S.H.       Social Sciences     9 S.H. (from different areas)     MATH       **INST 1062 Worlds of History     3     MATH 4890 Senior Seminar in Mathematics (WE)       Take two "GE Approved" courses from two different<br>areas:     3     MATH 4890 Senior Seminar in Mathematics (WE)       Political Science     3     S.H.     Seciology or Anthropology     3       Political Science     3     Science, Technology, Economics, or Management Science, Physics, or other<br>Science, Technology, Economics, or Management Science recommended. At least 50% of free electives must be taken at the<br>3000-4000 level. No Mathematics courses allowed other than<br>MATH 11000 and Optional Internship Courses       Science and Mathematics 10 or 11 S.H.     ***CPS 1231 Fund of Comp Science     4     MATH 1996 Research Methods       Rea  | Humanities 9 S.H. (from different areas  | )  | MATH 2526 Applied Statistics I   | 3                               |   |
| Fine Arts/Art History   3   MATH 3560 Regression Analysis or MATH 3570     Multivariate Analysis   MATH 3580 Experimental Design     Philosophy or Religion   3   MATH 4545 Mathematical Statistics     Music or Theatre   3   MATH 4545 Mathematical Statistics     Music or Theatre   3   **Major Elective Courses (With advisement, 3000-4000)     Scial Sciences   9 S.H. (from different areas)   MATH     Social Sciences   9 S.H. (from different areas)   MATH     Take two "GE Approved" courses from two different areas:   7**GE and Major Capstone Course     Sychology   3   MATH 4890 Senior Seminar in Mathematics (WE)     Economics or ES 1000 World Geography   3   MATH 4890 Senior Seminar in Mathematics (WE)     Political Science   3   Sociology or Anthropology   3     Interdisciplinary   3   FREE ELECTIVES   31-32 S.H.     Free ELECTIVES   31-32 S.H.   Additional courses in Computer Science, Physics, or other Sciences, Technology, Economics, or Management Science recommended. At least 30% of free electives must be taken at the 300-4000 evel. No Mathematics courses allowed other than MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.   ***CPS 1231 Fund of Comp Science   4   MATH 1996 Research Methods  | *ENG 2403 World Literature   | 3  | MATH 3500 Statistical Software   | 1                               |   |
| Multivariate Analysis     Philosophy or Religion   3   MATH 3580 Experimental Design     Foreign Language (Must take I and II for credit)   3   MATH 3580 Experimental Design     Music or Theatre   3   Interdisciplinary   3     Interdisciplinary   3   **Major Elective Courses (With advisement, 3000-4000)<br>6 S.H.     Social Sciences   9 S.H. (from different areas)   MATH     **HIST 1062 Worlds of History   3   MATH     Take two "GE Approved" courses from two different areas:   3   S.H.     Psychology   3   MATH 4890 Senior Seminar in Mathematics (WE)     Economics or ES 1000 World Geography   3   FREE ELECTIVES     Political Science   3   Additional courses in Computer Science, Physics, or other Science, Technology, Economics, or Management Science recommended. At least 50% of free electives must be taken at the 3000-4000 kevel. No Mathematics courses allowed other than MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.   ***CPS 1231 Fund of Comp Science   4     "**CPS 1231 Fund of Comp Science   4   Optional First-Year Research Course:     PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended)   Additional Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Science <td colspan<="" td=""><td>Select two "GE Approved" courses from different areas:</td><td></td><td>MATH 3526 Applied Statistics II</td><td>3</td></td> | <td>Select two "GE Approved" courses from different areas:</td> <td></td> <td>MATH 3526 Applied Statistics II</td> <td>3</td>            | Select two "GE Approved" courses from different areas: |  | MATH 3526 Applied Statistics II | 3 |
| Philosophy or Religion   3   MATH 3580 Experimental Design     Foreign Language (Must take I and II for credit)   3   MATH 4545 Mathematical Statistics     Music or Theatre   3   ***Major Elective Courses (With advisement, 3000-4000)<br>6 S.H.     Social Sciences   9 S.H. (from different areas)   MATH     ***INST 1062 Worlds of History   3   MATH     Take two "GE Approved" courses from two different areas:   3 S.H.     Psychology   3   S.H.     Economics or ES 1000 World Geography   3     Political Science   3     Social Sciences   9 S.H.     Political Science   3     Sociogy or Anthropology   3     Interdisciplinary   3     FREE ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other Sciences, Technology, Economics, or Management Science recommended. At least 50% of free electives must be taken at the 3000-4000 level. No Mathematics courses allowed other than MATH 1000 and Optional Internship Courses     Science, and Mathematics 10 or 11 S.H.   ***CPS 1231 Fund of Comp Science     ***Yop S1231 Fund of Comp Science   4     PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended)   MATH 1996 Research Methods     Additional Sc  | Fine Arts/Art History  | 3  | MATH 3560 Regression Analysis or MATH 3570   | 3                               |   |
| Foreign Language (Must take I and II for credit)   3   MATH 4545 Mathematical Statistics     Music or Theatre   3     Interdisciplinary   3     **Major Elective Courses (With advisement, 3000-4000)<br>6 S.H.     Social Sciences   9 S.H. (from different areas)     ***Major Elective Courses (With advisement, 3000-4000)<br>6 S.H.     Social Sciences   9 S.H. (from different areas)     ***GE and Major Capstone Course<br>areas:   MATH     Take two "GE Approved" courses from two different areas:   3     Psychology   3     Economics or ES 1000 World Geography   3     Political Science   3     Sociology or Anthropology   3     Interdisciplinary   3     Free ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other Science and Mathematics   31-32 S.H.     Science and Mathematics   10 or 11 S.H.     ***CPS 1231 Fund of Comp Science   4     PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended)   4     Additional Science Course: Biology, Chemistry, Environmental Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Science   3-4     Earth Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Scie  |  |  |  |                                 |   |
| Music or Theatre   3     Interdisciplinary   3     **Major Elective Courses (With advisement, 3000-4000)     6 S.H.     Social Sciences   9 S.H. (from different areas)     ***IST 1062 Worlds of History   3     Take two "GE Approved" courses from two different areas:   3     Psychology   3     Economics or ES 1000 World Geography   3     Political Science   3     Sociology or Anthropology   3     Interdisciplinary   3     Free ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other Sciences, Technology. Conomics, or Mathematics courses allowed other than MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.   ***CPS 1231 Fund of Comp Science     ***CPS 1231 Fund of Comp Science   4     PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended.)   4     Additional Science Course: Biology, Chemistry, Environmental Science, Farensic Science, Farensic Science, Interdisciplinary, Physics, or Sustainability Science   3-4     Optional Internships Courses*:   0  |  | _  |  | 3                               |   |
| Interdisciplinary   3     Social Sciences   9 S.H. (from different areas)     MATH     *HIST 1062 Worlds of History     Take two "GE Approved" courses from two different areas:     Psychology     Economics or ES 1000 World Geography     Political Science     Sociology or Anthropology     Interdisciplinary     Generation and the matics     Sociology or Anthropology     Sociology or Anthropology     Sociology or Anthropology     Science and Mathematics     Science and Mathematics     PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended)     Additional Science Course: Biology, Chemistry, Environmental Science, Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Science     Optional Internships Courses*:  |  | -  | MATH 4545 Mathematical Statistics  | 3                               |   |
| ***Major Elective Courses (With advisement, 3000-4000)     Social Sciences   9 S.H. (from different areas)     **HIST 1062 Worlds of History   3     Take two "GE Approved" courses from two different areas:   3 S.H.     Psychology   3     Economics or ES 1000 World Geography   3     Political Science   3     Sociology or Anthropology   3     Interdisciplinary   3     FREE ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other Science, Technology. Economics, or Management Science recommended. At least 50% of free electives must be taken at the 3000-4000 level. No Mathematics courses allowed other than MATH 1000 and Optional Internship Courses     Science, And Mathematics 10 or 11 S.H.   ***CPS 1231 Fund of Comp Science     PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended)   4     Additional Science Course: Biology, Chemistry, Environmental Science, Earth Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Science   3-4     Optional Internships Courses*:   Optional Internships Courses*:   |  | -  |  |                                 |   |
| Social Sciences   9 S.H. (from different areas)   MATH     *HIST 1062 Worlds of History   3   MATH     Take two "GE Approved" courses from two different areas:   ***GE and Major Capstone Course     Psychology   3   MATH 4890 Senior Seminar in Mathematics (WE)     Economics or ES 1000 World Geography   3   MATH 4890 Senior Seminar in Mathematics (WE)     Political Science   3   Sociology or Anthropology   3     Interdisciplinary   3   FREE ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other Science and Mathematics 10 or 11 S.H.   ***CPS 1231 Fund of Comp Science   4     PHYS 2091 General Physics 1 or PHYS 2095 Physics 1 (Recommended)   4   MATH 1996 Research Methods   3-4     Additional Science, Science, Interdisciplinary, Physics, or Sustainability Science   3-4   4   MATH 1996 Research Methods   | Interdisciplinary  | 3  |  |                                 |   |
| Social Sciences   9 S.H. (from different areas)   MATH     *HIST 1062 Worlds of History   3   MATH     Take two "GE Approved" courses from two different areas:   3   MATH     Psychology   3   MATH 4890 Senior Capstone Course 3 S.H.     Psychology   3   MATH 4890 Senior Seminar in Mathematics (WE)     Economics or ES 1000 World Geography   3   MATH 4890 Senior Seminar in Mathematics (WE)     Political Science   3   3     Sociology or Anthropology   3   Interdisciplinary     Interdisciplinary   3   FREE ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other Sciences, Technology, Economics, or Management Science recommended. At least 50% of free electives must be taken at the 3000-4000 level. No Mathematics courses allowed other than MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.   ****CPS 1231 Fund of Comp Science   4   Optional First-Year Research Course:     PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended)   3-4   3-4   3-4     Additional Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Science   3-4   Optional Internships Courses*:  |  |  |  |                                 |   |
| *HIST 1062 Worlds of History   3   MATH     Take two "GE Approved" courses from two different areas:   /***GE and Major Capstone Course 3 S.H.     Psychology   3   MATH 4890 Senior Seminar in Mathematics (WE)     Economics or ES 1000 World Geography   3   MATH 4890 Senior Seminar in Mathematics (WE)     Political Science   3   3   MATH 4890 Senior Seminar in Mathematics (WE)     Sociology or Anthropology   3   1   1     Interdisciplinary   3   FREE ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other Sciences, Technology, Economics, or Management Science recommended. At least 50% of free electives must be taken at the 3000-4000 level. No Mathematics courses allowed other than MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.   ***CPS 1231 Fund of Comp Science   4   Optional First-Year Research Course:     PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended)   3-4   MATH 1996 Research Methods     Additional Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Science   3-4   Optional Internships Courses*:  | Social Sciences 9 S H (from different areas  |  |  | 3                               |   |
| Take two "GE Approved" courses from two different areas:   '**GE and Major Capstone Course 3 S.H.     Psychology   3   MATH 4890 Senior Seminar in Mathematics (WE)     Economics or ES 1000 World Geography   3   MATH 4890 Senior Seminar in Mathematics (WE)     Political Science   3   Sociology or Anthropology   3     Interdisciplinary   3   FREE ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other Sciences, Technology, Economics, or Management Science recommended. At least 50% of free electives must be taken at the 3000-4000 level. No Mathematics courses allowed other than MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.   ***CPS 1231 Fund of Comp Science   4     PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended)   3-4   MATH 1996 Research Methods     Additional Science Course: Biology, Chemistry, Environmental Science   3-4   S-4     Earth Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Science   3-4   S-4     Optional Internships Courses <sup>5</sup> :   Optional Internships Courses <sup>5</sup> :   S-4  |  |  |  | 3                               |   |
| areas:   3 S.H.     Psychology   3     Economics or ES 1000 World Geography   3     Political Science   3     Sociology or Anthropology   3     Interdisciplinary   3     FREE ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other<br>sciences, Technology, Economics, or Management Science<br>recommended. At least 50% of free electives must be taken at the<br>3000-4000 level. No Mathematics courses allowed other than<br>MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.   4     ****CPS 1231 Fund of Comp Science   4     PHYS 2091 General Physics I or PHYS 2095 Physics I<br>(Recommended)   4     Additional Science Course: Biology, Chemistry, Environmental<br>Science,<br>Earth Science, Forensic Science, Interdisciplinary, Physics, or<br>Sustainability Science   3-4     Optional Internships Courses <sup>5</sup> :   Optional Internships Courses <sup>5</sup> :   |  | Ŭ  |  | 5                               |   |
| Psychology   3   MATH 4890 Senior Seminar in Mathematics (WE)     Economics or ES 1000 World Geography   3     Political Science   3     Sociology or Anthropology   3     Interdisciplinary   3     FREE ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other<br>Sciences, Technology, Economics, or Management Science<br>recommended. At least 50% of free electives must be taken at the<br>3000-4000 level. No Mathematics courses allowed other than<br>MATH 1000 and Optional Internship Courses     Science and Mathematics   10 or 11 S.H.     ***CPS 1231 Fund of Comp Science   4     PHYS 2091 General Physics I or PHYS 2095 Physics I<br>(Recommended)   4     Additional Science Course: Biology, Chemistry, Environmental<br>Science,<br>Earth Science, Forensic Science, Interdisciplinary, Physics, or<br>Sustainability Science   3-4     Optional Internships Courses <sup>5</sup> :   Optional Internships Courses <sup>5</sup> :   |  |  |  |                                 |   |
| Political Science   3     Sociology or Anthropology   3     Interdisciplinary   3     FREE ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other<br>Sciences, Technology, Economics, or Management Science<br>recommended. At least 50% of free electives must be taken at the<br>3000-4000 level. No Mathematics courses allowed other than<br>MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.   ***CPS 1231 Fund of Comp Science     ****CPS 1231 Fund of Comp Science   4     PHYS 2091 General Physics I or PHYS 2095 Physics I<br>(Recommended)   4     Additional Science Course: Biology, Chemistry, Environmental<br>Science,<br>Earth Science, Forensic Science, Interdisciplinary, Physics, or<br>Sustainability Science   3-4     Optional Internships Courses <sup>5</sup> :   Optional Internships Courses <sup>5</sup> :  |  | 3  |  | 3                               |   |
| Sociology or Anthropology   3     Interdisciplinary   3     FREE ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other Sciences, Technology, Economics, or Management Science recommended. At least 50% of free electives must be taken at the 3000-4000 level. No Mathematics courses allowed other than MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.   4     ***CPS 1231 Fund of Comp Science   4     PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended)   4     Additional Science, Course: Biology, Chemistry, Environmental Science, Earth Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Science   3-4     Optional Internships Courses <sup>5</sup> :   0ptional Internships Courses <sup>5</sup> :   | Economics or ES 1000 World Geography   | 3  |  |                                 |   |
| Interdisciplinary   3   FREE ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other Sciences, Technology, Economics, or Management Science recommended. At least 50% of free electives must be taken at the 3000-4000 level. No Mathematics courses allowed other than MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.   ***CPS 1231 Fund of Comp Science   4     PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended)   4   MATH 1996 Research Methods     Additional Science, Eorensic Science, Interdisciplinary, Physics, or Sustainability Science   3-4   Optional Internships Courses <sup>5</sup> :  | Political Science  | 3  |  |                                 |   |
| Interdisciplinary   3   FREE ELECTIVES   31-32 S.H.     Additional courses in Computer Science, Physics, or other Sciences, Technology, Economics, or Management Science recommended. At least 50% of free electives must be taken at the 3000-4000 level. No Mathematics courses allowed other than MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.   ***CPS 1231 Fund of Comp Science   4     PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended)   4   MATH 1996 Research Methods     Additional Science, Earth Science, Earth Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Science   3-4     Optional Internships Courses <sup>5</sup> :   0ptional Internships Courses <sup>5</sup> :  | Sociology or Anthropology  | 3  |  |                                 |   |
| Additional courses in Computer Science, Physics, or other     Sciences, Technology, Economics, or Management Science     recommended. At least 50% of free electives must be taken at the     3000-4000 level. No Mathematics courses allowed other than     MATH 1000 and Optional Internship Courses     Science and Mathematics 10 or 11 S.H.     ***CPS 1231 Fund of Comp Science     PHYS 2091 General Physics I or PHYS 2095 Physics I     (Recommended)     Additional Science Course: Biology, Chemistry, Environmental     Science,     Earth Science, Forensic Science, Interdisciplinary, Physics, or     Sustainability Science     Optional Internships Courses <sup>5</sup> :  |  | 3  | FREE ELECTIVES 31-32 S.H.  |                                 |   |
| PHYS 2091 General Physics I or PHYS 2095 Physics I   4   MATH 1996 Research Methods     (Recommended)   Additional Science Course: Biology, Chemistry, Environmental Science,   3-4     Barth Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Science   3-4     Optional Internships Courses <sup>5</sup> :   0   |  |  | Sciences, Technology, Economics, or Management Science<br>recommended. At least 50% of free electives must be taken at the<br>3000-4000 level. No Mathematics courses allowed other than | L                               |   |
| PHYS 2091 General Physics I or PHYS 2095 Physics I (Recommended)   4   MATH 1996 Research Methods     Additional Science Course: Biology, Chemistry, Environmental Science, Earth Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Science   3-4     Optional Internships Courses <sup>5</sup> :   0   | Science and Mathematics 10 or 11 S.H.  |  |  | 1                               |   |
| (Recommended)   3-4     Additional Science Course: Biology, Chemistry, Environmental Science,   3-4     Earth Science, Forensic Science, Interdisciplinary, Physics, or Sustainability Science   3-4     Optional Internships Courses <sup>5</sup> :   0   | ***CPS 1231 Fund of Comp Science   | 4  | Optional First-Year Research Course:   | 1                               |   |
| Science,     Earth Science, Forensic Science, Interdisciplinary, Physics, or     Sustainability Science     Optional Internships Courses <sup>5</sup> :  |  | 4  | MATH 1996 Research Methods   | 1                               |   |
|  | Additional Science Course: Biology, Chemistry, Environmental Science,<br>Earth Science, Forensic Science, Interdisciplinary, Physics, or | 3-4  |  |                                 |   |
| MATH 3291, 3292, 3293  |  |  | · ·  |                                 |   |
| MATH 3171, 3172, 3173  |  |  |  | 1-6                             |   |

|   |        |   | Special Notes:   |  |
|---|--------|---|--|--|
| ADDITIONAL REQUIRED COURSES:              | 4 S.H. |   | <sup>1</sup> See prerequisites and equivalencies.                        |  |
|   |        |   | <sup>2</sup> University Requirement for Graduation for all               |  |
| ****CPS 2231 Computer Org and Programming |        | 4 | undergraduate students that must be satisfied in one of two ways:        |  |
|   |        |   | Complete GE 1000 (all freshmen and transfers entering with 0-29          |  |
|   |        |   | credits)   |  |
|   |        |   | OR complete GE 3000 (transfers entering with 30 credits or more)         |  |
|   |        |   | <sup>3</sup> Students who do not qualify on the placement test to        |  |
|   |        |   | take MATH 1054 must take MATH 1000 first.                                |  |
|   |        |   | <sup>4</sup> Students whose qualifying score on the placement test makes |  |
|   |        |   | them eligible to take Math 2415 may take that course instead. In         |  |
|   |        |   | that case the student must take another 3 credits in free electives to   |  |
|   |        |   | total 120 S.H.   |  |
|   |        |   | <sup>5</sup> May take up to 6 credits                                    |  |
|   |        |   | *G.E. required course  |  |
|   |        |   | **Eng 1030 and all major courses require a grade of C or better.         |  |
|   |        |   | *** MATH 1000 and ENG 1030 prereqs for CPS 1231                          |  |
|   |        |   | ****CPS 1231 and MATH 1054 prereq for CPS 2231                           |  |
|   |        |   | WE: Writing Intensive  |  |
|   |        |   |  |  |
|   |        |   |  |  |

Rev. 7.18.19

# **GENERAL EDUCATION AND UNIVERSITY REQUIREMENTS**

# GENERAL EDUCATION INFORMATION AND REQUIREMENTS

### **Testing and Placement**

Incoming freshmen and transfer students may be placed in specific GE Foundations, Developmental or ESL courses as a result of testing prior to registration. Students may be exempt from testing due to SAT scores or prior college work.

#### Prerequisites and Equivalencies for GE Foundations Courses

#### GE 1000

Required of all freshmen & transfers entering with 0-29 credits Prereq: None

Equiv: ID 1001

#### GE 3000

Required of transfers entering with 30 credits or more Prereq: 30 credits <u>and</u> ENG 1030

#### ENG 1030

Prereq: Placement testing or exemption from placement testing Equiv: ENG 1031/1032, ENG 1033/1034, ENG 1430, ENG 1620, ENG 1020, ENG 1400

# MATH 1000 or 1010 or 1016 or 1030

Prereq: MATH 0901 if required by placement testing Equiv of MATH 1000: MATH 1001/1002, MATH 1003/1004. MATH 1051

#### MATH 1044 or 1054

Prereq: MATH 0901 if required by placement testing and MATH 1000

## COMM 1402

Prereq: CS 0412 if required by placement testing ENG 1031/1032 or ENG 1033/1034 if required by placement testing May be taken concurrently with ENG 1030 Equiv: COMM 1400

GE 2021- 2026 Research and Technology is offered as college-based course GE 2021 College of BPM GE 2022 College of EDU GE 2023 College of CLA GE 2024 College of NAHS & NJCSTM & NWGC GE 2025 SVPA & Michael Graves College GE 2026 Undecided Majors and other special populations Prereqs: CS 0412 if required by placement testing ENG 1030 or equivalent COMM 1402 Equiv: GE 2020 GE Distribution Courses

#### \_\_\_\_\_

# Approved GE Distribution Courses

All courses taken under the General Education Disciplinary/Interdisciplinary Distribution requirements must be selected from the Approved General Education

Distribution Course List. These courses are designated as GEHU, GESS, and GESM. GEHU Humanities

- GESS Social Sciences
- GESM Science and Mathematics

#### **Required GE Distribution Courses**

**ENG 2403** is a required Humanities Distribution course with an emphasis on diversity. Prereq: CS 0412 if required by placement testing; ENG 1030 or equivalent Equiv: ENG\*2203

**HIST 1062** is a required Social Sciences Distribution course. Prereq: None

#### Foreign Language Credit

The three credits for a foreign language that may satisfy the GE Disciplinary/Interdisciplinary Distribution Requirement are awarded only upon successful completion of the second of two semesters of study at the introductory or intermediate level. Credit for the first semester may be used as elective credit.

# UNIVERSITY REQUIREMENTS

# GE 1000/3000 Requirement

All undergraduate students must satisfy this University Requirement for Graduation by successfully completing one of the following courses at Kean University: GE 1000 Transition to Kean (all freshmen and transfers entering with 0-29 credits) or GE 3000 Transfer Transitions (transfers entering with 30 credits or more).

# Writing-Emphasis Requirement

All students are required to complete one "Writing-Emphasis" course. The "W-E" course must be within the major portion of your program. Consult your major program advisor for specific information.