# GENERAL SCIENCE / SECONDARY EDUCATION

## BACHELOR OF SCIENCE (B.S.)

| CORE Requirements | Credits |
|---|---|
| CORE 090 First Yr Exp. | 1 |
| CORE 100 Lib Arts Sem. | 3 |
| CORE 110 Effect Writ. | 3 |
| CORE 115 or 116 Oral Comm. | 3 |
| CORE 131 or 133 Civilization | 3 |
| CORE 140 or 141-145 Forgn. | 3 |
| CORE 150-159 Soc. Sci. [1] | 3 |
| CORE 160-164 Literature | 3 |
| CORE 170-179 The Arts | 3 |
| CORE 180-189 Amer. Studies[1] | 3 |
| CORE 190-199 Global Studies[1] | 3 |
| CORE 250-259 Syst. Theology | 3 |
| CORE 260-269 Mor. Theology | 3 |
| CORE 280 Philos. I | 3 |
| CORE 281-289 Philos. II | 3 |
| Total Credits for CORE | 43 |

| Major Requirements | Credits |
|---|---|
| Take 2 of the following with labs: | |
| *BIOL 113* | |
| *BIOL 113L* | |
| *BIOL 210* | 8 credits |
| *BIOL 210L* | |
| *BIOL 213* | |
| *BIOL 213L* | |
| CHEM 113 | 1 |
| CHEM 113L | 3 |
| CHEM 114 | 1 |
| CHEM 114L | 3 |
| PHYS 111 or 113 | 1 |
| PHYS 111L or 113L | 3 |
| PHYS 112 or 114 | 1 |
| PHYS 112L or 114L | |
| MATH 125 & 128 **OR** MATH 129 & 130 | 8 |
| Total **Minimum** Credits for Major | 60** |

| Minor Concentration | Credits |
|---|---|
| Track Course* | 3 - 4 |
| Track Course* | 3 - 4 |
| Track Course* | 3 - 4 |
| Track Course* | 3 - 4 |
| Track Course* | 3 - 4 |
| Track Course* | 3 - 4 |
| Track Course** | 3 - 4 |
| Track Course** | 3 - 4 |
| (Track Course**) | (3 – 4) |

| Secondary Education | Credits |
|---|---|
| EDUC 202 | 3 |
| EDUC 231 | 1 |
| EDUC 232 | 1 |
| EDUC 235[2] | 3 |
| EDUC 240[2] | 3 |
| EDUC 270[2] | 3 |
| **EDUC 299[3]** | 0 |
| EDUC 302[2,3] | 3 |
| EDUC 305[2,3] | 3 |
| EDUC 350[2,3] | 3 |
| EDUC 366,[3] | 3 |
| EDUC 440[3] | 3 |
| EDUC 467[2,3] | 10 |
| EDUC 468[2,3] | 2 |
| Total Credits for Secondary Education | 41 |

## Total Credits Required for Graduation = 144 – 155

**\*A student majoring in General Science must choose one of the following Tracks (minor concentrations) below:**

**\*\*Elective courses in Science and/or Math to accumulate a minimum of 60 credits in Science and Math.**
**NOTE:** Some courses required for certain minor programs will have prerequisites that must be fulfilled.

| Biology | Chemistry | Mathematics | Neuroscience | Environmental Science | Physics |
|---|---|---|---|---|---|
| BIOL 370 | CHEM 241 | MATH 126 | CORE 154 | ENST 201 | PHYS 231 |
| BIOL 490 | CHEM 242 | MATH 129 | NEUR 211 | ENST 202 | PHYS Elective* |
| BIOL Elective* | CHEM 243 | MATH 130 | NEUR 212 | | PHYS Elective* |
| BIOL Elective* | CHEM 493 | MATH 237 | NEUR 310 | *One of the following:* | PHYS Elective* |
| BIOL Elective* | CHEM 494 | MATH Capstone | NEUR 480 | ENST 490 | MATH 129 |
| BIOL Elective* | CHEM Elective* | | | ENST 491 | MATH 130 |
| | | *Plus one (1) of the following:* | *Plus two (2) of the following:* | ENST 499 | |
| | | | | *Plus three (3) of the following:* | *Plus one (1) of the following:* |
| *Minimum of Four (4) BIOL electives approved by the departmental advisor.* | | MATH 231 | NEUR 342 | | MATH 231 |
| | | MATH 238 | NEUR 346 | ENST 200 | MATH 237 |
| | *One chemistry elective, excluding CHEM 351.* | | NEUR 348 | ENST 355 | |
| | | | NEUR 349 | ENST 401 (A-L) | *Three PHYS elective courses numbered 300 or higher with lab if offered* |
| | | | NEUR 390 | ENST 410 | |

[1]Students are required to take CORE 150, CORE 180 **OR** CORE 190 to fulfill the Interdisciplinary CORE requirement.

- If a student takes CORE 150, then he/she should choose from 181 – 188 to fulfill the 18x requirement AND from 191 – 198 to fulfill the 19x requirement.
- If a student takes CORE 180, then he/she should choose from 151 – 158 to fulfill the 15x requirement AND from 191 – 198 to fulfill the 19x requirement.
- If a student takes CORE 190, then he/she should choose from 151 – 158 to fulfill the 15x requirement AND from 181 – 188 to fulfill the 18x requirement.

[2] Updated Child Abuse & Criminal Record & FBI Clearances **REQUIRED** for EDUC 235, EDUC 240, EDUC 270, EDUC 302, EDUC 305, EDUC 350, EDUC 467 and EDUC 468.

[3] EDUC 299 Basic Skills is a pre-requisite for all 300 and 400 level education courses. In order to register for this course, you must take and pass all basic skills tests. Formal application to the Education Department between 48 and 60 credits – failure to complete EDUC 299 by 60 credits will result in the dropping of teacher certification in compliance with PDE regulations.

**General Information:**
A student must earn a minimum of 120 credit hours to be awarded the baccalaureate degree. The number of credit hours required for graduation may be higher in certain major programs **or** if the student elects to pursue a second major. Beyond the requirements of the Core Curriculum and of a student's chosen major program, the balances of the credit hours required for graduation are "free electives." **Because of the CORE, Major, and Secondary Education requirements, there are no "Free Electives" for students majoring in General Science/Secondary Education.**

*Updated 05/01/17*

# GENERAL SCIENCE / SECONDARY EDUCATION

## SUGGESTED SEQUENCE

- Use the information below as a guide when selecting courses.
- Refer to the reverse side when selecting major courses, major electives, core courses, and free electives when applicable.
- Consult your Academic Advisor prior to course registration.
- Refer to the King's College Catalog and/or website for course titles and descriptions.
- Choose one course from each CORE category as listed on the reverse side.
  - CORE courses may be taken in any order approved by the academic advisor with the following conditions:
    - CORE 100 and CORE 110 should be taken in the first year.
    - CORE 115 (or 116) should be taken within the first two years.
    - For students selecting a Foreign Language (CORE 14x), every effort should be made to register for that language in the first semester at King's.

| 1st Year - Fall | cr. | 1st Year - Spring | cr. |
|---|---|---|---|
| ⬧BIOL 113 or BIOL 213 | 3 | ⬧BIOL 210 Organisms & Their Ecosystems | 3 |
| ⬧BIOL 113L or BIOL 213L | 1 | ⬧BIOL 210L Organisms & Their Ecosystems Lab | 1 |
| CHEM 113 General Chemistry I | 3 | CHEM 114 General Chemistry II | 3 |
| CHEM 113L General Chemistry I Lab | 1 | CHEM 114L General Chemistry II Lab | 1 |
| MATH 128 Intro. to Statistics & Data Analysis | 4 | MATH 125 Calculus | 4 |
| CORE | 3 | CORE | 3 |
| CORE 090 First Year Experience | 1 | | |
| | **16** | | **15** |

| Summer Session*** | | | |
|---|---|---|---|
| CORE | 3 | | |

| 2nd Year - Fall | | | |
|---|---|---|---|
| Track Course* | 3-4 | Track Course* | 3 - 4 |
| Track Course* | 3-4 | Track Course* | 3 - 4 |
| CORE | 3 | CORE | 3 |
| EDUC 202 Educ. Philos., Ethics, Issues & Trends | 3 | EDUC 240[2] Sec. Multicult., Linguistic & Inst. Meth. | 3 |
| EDUC 235[2] Sec. Development, Cognition, & Learn. | 3 | EDUC 270 Introduction to Special Education | 3 |
| EDUC 231 Technology Module I | 1 | **EDUC 299[3]** | 0 |
| | **17-18** | | **15-17** |

**Admission to Candidacy** (Complete and return "Application for Teacher Education Program Candidacy" to Education Administrative Assistant no sooner than the completion of 48 credits and no later than 65 credits)

| 3rd Year – Fall | | 3rd Year – Spring | |
|---|---|---|---|
| ⬧PHYS 111 or 113 General Physics I | 3 | ⬧PHYS 112 or 114 General Physics II | 3 |
| ⬧PHYS 111L or 113L General Physics I Lab | 1 | ⬧PHYS 112L or 114L General Physics II Lab | 1 |
| Track Course* | 3-4 | Track Course* | 3-4 |
| CORE | 3 | CORE | 3 |
| CORE | 3 | CORE | 3 |
| EDUC 305[2,3] Assessment I | 3 | EDUC 366[2,3] Meth. For Teaching Diverse Sec. Stud. | 3 |
| EDUC 232 Technology Module II | 1 | | |
| | **17-18** | | **15-17** |

| 4th Year - Fall | | 4th Year - Spring | |
|---|---|---|---|
| Track Course* | 3 - 4 | Track Course** | 3 - 4 |
| CORE | 3 | Track Course** | 3 - 4 |
| CORE | 3 | CORE | 3 |
| CORE | 3 | CORE | 3 |
| EDUC 302[2,3] Secondary Science Methods | 3 | EDUC 350[2,3] Secondary Classroom Management | 3 |
| | **15-17** | | **15-17** |

| 5th Year - Fall | | |
|---|---|---|
| EDUC 467[2,3] Observation & Student Teach. (Sec Ed) | 10 | **Students who wish to finish in four (4) years (including Student Teaching) MUST take summer courses.** |
| EDUC 468[2,3] Student Teaching Seminar | 2 | |
| EDUC 440[3] Inclusive Education | 3 | |
| **Take Praxis II** | | |
| | **15** | |

**Total Credits Required for Graduation = 144 - 155**

⬧ Students considering the Physics track should take PHYS 113, 113L, 114, & 114L during their freshman year in exchange for the Biology courses.

***Summer Session is suggested.

**NOTE:** All Secondary Teacher Certification candidates must complete six credits of college level mathematics and six credits of college level English:

| Math Courses | MATH 125 | MATH 128 |
|---|---|---|
| English Courses | CORE 110 | CORE 16__ |

The Pennsylvania Department of Education requires secondary teachers to have a degree in the content area for certification. Students seeking secondary certification must meet with his/her specific content area department for content area courses required for the degree. The Education Division is not responsible for content area or CORE courses for secondary certification candidates.