# Master of Science (MS) Biological Sciences Program Option Water Sciences Concentration: 0642 2025-2026

The Master of Science: Biological Sciences - Water Sciences Concentration is delivered in a fully onground format. This 30-hour program has an estimated residential tuition and fees cost of \$10,000 (www.ecok.edu/bursar).

This concentration is designed to strengthen the scientific portfolio and provide specialized preparation for those individuals seeking careers in the health industry, water science, ecology, or the natural sciences. The curriculum will strengthen student understanding of biology and increase competitiveness in their career of choice.

|      | Required Courses (6 Hours) |             |   |           | Legend placed after course rotations |           |  |
|------|----------------------------|-------------|---|-----------|--------------------------------------|-----------|--|
| I.   |                            |             |   | <u>FA</u> | <u>SP</u>                            | <u>SU</u> |  |
|      | _BIOL                      | 5013        | Experimental Design/Data Analysis               | L         |                                      |           |  |
|      | _BIOL                      | 5223        | Grant/Science Writing & Communication           |           | L                                    |           |  |
| II.  |                            |             | k Courses (9-12 Hours)                          | FA        | SP                                   | SU        |  |
|      | Thesis T                   |             |   |           |                                      |           |  |
|      | _BIOL                      |             | 3Thesis (6hrs)                                  | T         | T                                    | T         |  |
|      | _BIOL                      |             | Teaching the Sciences                           | L         | L                                    |           |  |
|      | _ BIOL                     |             | Graduate Examination: Oral                      | T         | T                                    | T         |  |
|      |                            | OR          |   |           |                                      |           |  |
|      |                            |             | ck (9 Hours)                                    |           |                                      |           |  |
|      | _BIOL                      |             | Report  | T         | T                                    | T         |  |
|      | _BIOL                      |             | Field Work in the Sciences                      | L         | L                                    |           |  |
|      | _ BIOL                     | 5873        | Graduate Examination: Written                   | T         | T                                    | T         |  |
|      |                            | ~           |   |           | ~-                                   | ~         |  |
| III. |                            |             | es (12-15 Hours: Four to Five of the Following) | <u>FA</u> | <u>SP</u>                            | <u>SU</u> |  |
|      | _BIOL                      |             | Special Topics in Evolution                     | Е         |                                      |           |  |
|      | _BIOL                      |             | Freshwater Invertebrate Zoology                 | E         |                                      |           |  |
|      | _BIOL                      |             | Special Topics in Entomology                    |           | E                                    |           |  |
|      | _BIOL                      | 5313        | Advanced Cell & Molecular Biology               | L         |                                      |           |  |
|      | _BIOL                      |             | Advanced Topics in Ecology                      |           | L                                    |           |  |
|      | _BIOL                      |             | Advanced Plant Ecophysiology                    | O         |                                      |           |  |
|      | _ BIOL                     |             | Advanced Plant Ecology                          |           | O                                    |           |  |
|      | _ BIOL                     |             | Advanced Limnology                              |           | E                                    |           |  |
|      | _EHS                       |             | Watershed Management                            |           |                                      | T         |  |
|      | _EHS                       |             | Water Quality & Treatment                       | E         |                                      |           |  |
|      | _EHS                       | 5623        | Advanced Biostatistics                          | L         |                                      |           |  |
|      | _EHS                       | 5654        | Environmental Health Lab                        |           |                                      | T         |  |
|      | _EHS                       | 5683        | Environmental Toxicology                        | O         |                                      |           |  |
| _    | _GIS                       |             | Digital Mapping                                 | E         |                                      |           |  |
| _    | _GIS                       |             | Spatial Programming                             |           | E                                    |           |  |
|      | _GIS                       | 5913        | Spatial Analysis                                | O         |                                      |           |  |
|      | OTO                        | <b>5010</b> | OTO TIL 1 C                                     |           | _                                    |           |  |

-- O --

GIS

5913 GIS Workflows

# Legend

| <b>FA:</b> Fall  | <b>SP:</b> Spring                       | SU: Summer         | : Not Offered         |  |  |  |
|--|---|--------------------|-----------------------|--|--|--|
| A: 1 <sup>st</sup> 8-Weeks (WEB)   | <b>B:</b> 2 <sup>nd</sup> 8-Weeks (WEB) | F: Full Sem (WEB)  | BL: Blended           |  |  |  |
| L: Live (Face-to-Face)   | T: To Be Determined                     | Y: Synchronous Web | E: Offered Even Years |  |  |  |
| O: Offered Odd Years V: Various Formats (Half-Day, Full-Day, Weekends, Nights, etc.) |   |                    |                       |  |  |  |

Course Offerings are subject to change, and are not necessarily in sequential order

## IV. Enrollment, Overload, and Full-Time Equivalents

### Fall/Spring

- Full-time is nine (9) hours per 16-week semester
- Financial aid requires five (5) hours per 16-week semester
- Graduate Dean approval is required for thirteen (13) hours per 16-week semester

## Summer

- Full-time is six (6) hours per 8-week semester
- Financial aid requires five (5) hours per 8-week semester
- Graduate Dean approval is required for eleven (11) hours per 8-week semester

# V. Graduation and Commencement

Students should apply for graduation just after they have enrolled for their last semester. This triggers a Degree Audit, which will inform the student of any course changes, course additions, or course substitutions required for graduation.

- Fall Graduates will **ONLY** be allowed to walk at December Commencement
- Spring and Summer Graduates will **ONLY** be allowed to walk at May Commencement

### VI. Financial Aid Regulations for Graduate Students

Students, please be advised that the courses you choose to enroll in **MUST** be a required course or an elective course in your degree program. Financial Aid regulations dictate that any graduate student who is seeking financial aid must be enrolled in **AT LEAST** five (5) credit hours during the fall, spring, or summer semester and the courses **MUST** be in the degree program.

- Certificate Programs **DO NOT** qualify for financial aid.
- For questions contact the Office of Financial Aid: 580-559-5638 or financialaid@ecok.edu