

**Master of Science (MS)**  
**Biological Sciences - Water Sciences Option: 0642**  
**2026-2027**

The Master of Science: Biological Sciences - Water Sciences Option ([www.ecok.edu/ms-watersci](http://www.ecok.edu/ms-watersci)) is delivered in a fully on-ground format. This 30-hour program option has an estimated residential tuition and fees cost of \$10,300 ([www.ecok.edu/bursar](http://www.ecok.edu/bursar)).

The Water Sciences Option is designed to strengthen the scientific portfolio of those wishing to specialize in the water sciences, including graduate courses and work in Water Quality and Treatment, Environmental Toxicology, Advanced Limnology, Freshwater Invertebrate Zoology, Digital Mapping and GIS Workflows. Thesis and non-thesis options are also available in this concentration further optimizing student preparedness towards active research and field work (thesis) or content breadth and expansion (non-thesis).

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|                                                                |      |        |                                        | Legend placed after course rotations |           |           |
|----------------------------------------------------------------|------|--------|----------------------------------------|--------------------------------------|-----------|-----------|
|                                                                |      |        |                                        | <u>FA</u>                            | <u>SP</u> | <u>SU</u> |
| <b>I. Required Courses (6 Hours)</b>                           |      |        |                                        |                                      |           |           |
| _____                                                          | BIOL | 5013   | Experimental Design/Data Analysis      | L                                    | --        | --        |
| _____                                                          | BIOL | 5223   | Grant/Science Writing & Communication  | --                                   | L         | --        |
| <b>II. Required Track Courses (9 Hours)</b>                    |      |        |                                        | <u>FA</u>                            | <u>SP</u> | <u>SU</u> |
| _____                                                          | BIOL | 5693   | Thesis                                 | T                                    | T         | T         |
| _____                                                          | BIOL | 5713   | Teaching the Sciences                  | L                                    | L         | --        |
| _____                                                          | BIOL | 5773   | Graduate Examination                   | T                                    | T         | T         |
| <b>III. Elective Courses (15 Hours: Five of the Following)</b> |      |        |                                        | <u>FA</u>                            | <u>SP</u> | <u>SU</u> |
| _____                                                          | BIOL | 5021-3 | Thesis II (Thesis-Track Students Only) | T                                    | T         | T         |
|                                                                |      |        | <i>*Thesis-Track Student Only</i>      |                                      |           |           |
| _____                                                          | BIOL | 5133   | Special Topics in Evolution            | E                                    | --        | --        |
| _____                                                          | BIOL | 5144   | Freshwater Invertebrate Zoology        | E                                    | --        | --        |
| _____                                                          | BIOL | 5254   | Special Topics in Entomology           | --                                   | E         | --        |
| _____                                                          | BIOL | 5324   | Advanced Topics in Herpetology         | --                                   | --        | --        |
| _____                                                          | BIOL | 5405   | Advanced Topics in Ecology             | --                                   | --        | --        |
| _____                                                          | BIOL | 5414   | Advanced Topics in Ecology             | --                                   | L         | --        |
| _____                                                          | BIOL | 5424   | Advanced Ethnobotany                   | --                                   | --        | --        |
| _____                                                          | BIOL | 5525   | Advanced Plant Ecophysiology           | O                                    | --        | --        |
| _____                                                          | BIOL | 5535   | Advanced Plant Ecology                 | --                                   | O         | --        |
| _____                                                          | BIOL | 5935   | Advanced Limnology                     | --                                   | E         | --        |
| _____                                                          | BIOL | 5981-4 | Seminar in Biology                     | --                                   | --        | --        |
| _____                                                          | BIOL | 5991-4 | Individual Study in Biology            | --                                   | --        | --        |
| _____                                                          | EHS  | 5223   | Watershed Management                   | --                                   | --        | T         |
| _____                                                          | EHS  | 5553   | Water Quality & Treatment              | E                                    | --        | --        |
| _____                                                          | EHS  | 5802   | Environmental Health Lab               | --                                   | --        | --        |
| _____                                                          | EHS  | 5803   | Environmental Toxicology               | O                                    | --        | --        |
| _____                                                          | GIS  | 5613   | Digital Mapping                        | E                                    | --        | --        |
| _____                                                          | GIS  | 5753   | Spatial Programming                    | --                                   | E         | --        |
| _____                                                          | GIS  | 5913   | Spatial Analysis                       | O                                    | --        | --        |
| _____                                                          | GIS  | 5953   | GIS Workflows                          | --                                   | O         | --        |

### **Legend**

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

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

#### **IV. Graduation Plan Options**

First Semester - Meet w/Advisor to Finalize Program of Study

Fall (1): BIOL 5013, Elective, Elective

- Graduate students are encouraged to review the [BES Master's Student Handbook](#) for department specific policies, thesis versus non-thesis track options, and student expectations.

#### **V. Enrollment, Overload, and Full-Time Equivalents**

Fall/Spring

- Academic full-time is nine (9) hours per 16-week semester
- Full financial aid requires nine (9) hours per 16-week semester
- Graduate Dean approval is required for thirteen (13) hours per 16-week semester

Summer

- Academic full-time is six (6) hours per 8-week semester
- Full financial aid requires nine (9) hours per 8-week summer semester
- Graduate Dean approval is required for eleven (11) hours per 8-week semester

#### **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. Graduate students seeking financial aid must be enrolled in at least nine (9) credit hours to receive full financial aid. Graduate students enrolled in fewer than nine (9) hours will have their financial aid prorated appropriately.

- Certificates and Non-Degree Pathways do not qualify for financial aid.
- For questions contact the Office of Financial Aid: 580-559-5243 or [financialaid@ecok.edu](mailto:financialaid@ecok.edu).

#### **VII. 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.

Commencement/Graduation is held twice a year (December and May):

- Completing Degree in Fall: Will Participate in December Ceremony
- Completing Degree in Spring: Will Participate in May Ceremony
- Completing Degree in Summer: Option to Participate in May or December Ceremony