



## Master of Teaching (M.T.) Secondary Science Resource

Thank you for your interest in teaching, passion for education, and enriching the minds of the next generation. This checklist serves as a resource for students applying to the initial licensure [Master of Teaching \(M.T.\)](#) secondary science concentrations (biology, chemistry, earth science, and physics).

Review the **M.T. application resource** located on [this page](#) for important dates and application support.

### So you want to be a science teacher?

To teach in VA, you need a major in biology, chemistry, physics, environmental science, geology and EXTRA coursework for your area of endorsement. Endorsement for teaching secondary science can only be obtained for **biology, chemistry, earth science, or physics**. Add-on endorsements in any science area can be obtained with appropriate coursework in that content area.

### Specific Science Content Area Requirements per VDOE

- A. **Biology** – Completed a major in biology or 32 semester hours in biology, including genetics/molecular biology, botany, zoology, anatomy/physiology, ecology, evolution and other preparation consistent with the competencies for the endorsement or earned an endorsement in another science discipline and at least 18 credits in biology, including preparation in each of the following areas: genetics/molecular biology, botany, zoology, anatomy/physiology, evolution and ecology. One undergraduate earth science course.
- B. **Chemistry** - Completed a major in chemistry or 32 semester hours in chemistry, including inorganic chemistry, organic chemistry, physical chemistry, and analytical chemistry and other preparation consistent with the competencies required for the endorsement or earned an endorsement in another science discipline and at least 18 credits in chemistry, including preparation in each of the following areas: inorganic chemistry, organic chemistry, and analytical chemistry. One undergraduate earth science course.
- C. **Earth Science** - Completed a major in geology or environmental science/studies with at least one course in each of the following: oceanography, meteorology and astronomy, and a course in geology for environmental science majors, or 32 semester hours in Earth Sciences, including geology (18 semester hours), oceanography, meteorology and astronomy and other preparation consistent with the competencies required for the endorsement; or earned an endorsement in another science discipline

- D. and at least 18 credits in Earth sciences, including preparation in each of the following areas: geology, oceanography, meteorology or astronomy.
- E. **Physics** – Completed a major in physics or 32 semester hours in physics, including mechanics, electricity and magnetism, and optics and other preparation consistent with the competencies required for the endorsement; or earned an endorsement in another science discipline and at least 18 credits in physics, including preparation in each of the following areas: mechanics, electricity and magnetism and optics. One undergraduate earth science course.

### **Transcript Review Request**

If you would like a pre-application transcript review, please complete the [transfer credit request form](#) and include all unofficial transcripts from all institutions attended for our licensure team and faculty coordinator concentration to review.

**If you have any questions about the M.T. application process, please email [soeinfo@vcu.edu](mailto:soeinfo@vcu.edu).**