



## PhD (Doctor of Philosophy) Integrative STEM Education

### Admission Requirements

Master's degree (3.3 GPA min.); GRE scores; 2 writing samples; Faculty interview (face-to-face or Internet audio); 3 letters of recommendation; Resume

### PhD Degree Requirements

90 SH, (including coursework from master's degree and as outlined below); Approved Plan of Study; Dissertation; Residency (12 SH of coursework taken in each of two consecutive semesters, which could include one full summer); Qualifying and Preliminary Exams. The Integrative STEM Education coursework for this degree (shown below) is available online. Graduate coursework from other universities may be transferred in, or taken online or conventionally from Virginia Tech (subject to approval by the student's graduate committee).

### Integrative STEM Education Courses (12+ SH)

- EDCI 5804: STEM Education Foundations (3 SH)
- EDCI 5814: STEM Education Pedagogy (3 SH)
- EDCI 5824: STEM Education Trends and Issues (3 SH)
- EDCI 5834: STEM Education Research (3 SH)
- EDCI 5844: STEM Education Seminar (1 SH)
- EDCI 5854: Biotechnology Literacy by Design (3 SH)
- EDCI 5964: Field Study [Integrative STEM Education] (3 SH)
- EDCI 5774: Readings in Technology Education (1 SH)

### Education Electives

Learning sciences, Educational foundations, Educational administration, etc.

### Research & Dissertation Courses

15+ SH of coursework and 30+ SH of EDCI 7994 (dissertation), as approved by the graduate student's committee

### For more information

Mark Sanders, *Integrative STEM Education*, 540/231-8173 [msanders@vt.edu](mailto:msanders@vt.edu)