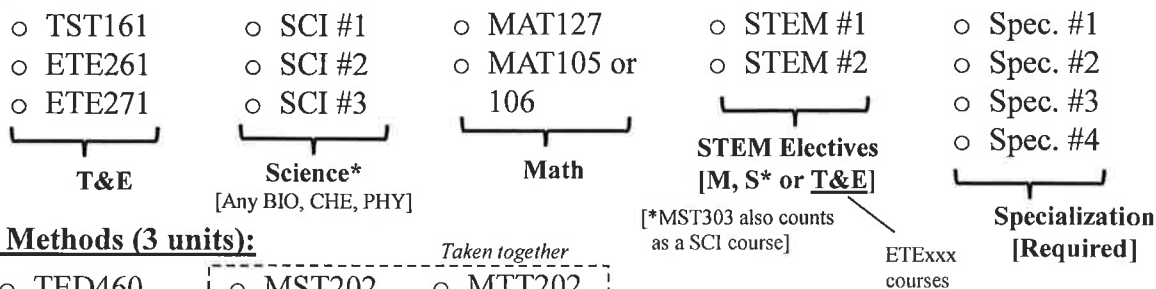
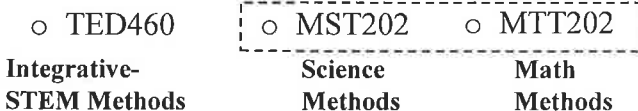


Integrative-STEM (i-STEM) Education Major

STEM Core (14 units):



STEM Methods (3 units):



Middle School endorsement in Math or Science, requires (i) 15 cr. of content courses in Math (and/or Science) and (ii) pass middle school praxis exam for Math (and/or Science). Approximately 100% of iSTEM students complete courses for one of these endorsements, and large majority complete both.

i-STEM Specialization Descriptions

(1) Technology & Engineering Specialization

- ETE131** ○ PHY201 or PHY103 [**ETE131 is approved by NJ State as a math course]

T&E Specialization consists of four additional units selected from (1 course needs to be ≥ 300 level):

- ETE111 ○ ETE275 ○ ETE281 ○ ETE341 ○ ETE361 ○ ETE371
○ ETE381 ○ ETE461 ○ ETE492

*T&E Specialization allows **Secondary endorsement** in T&E Education: (i) 30 credits in T&E courses (with 12 credits at ≥ 300 level) and (ii) pass the Tech. Education PRAXIS exam.*

(2) Mathematics Specialization

- MAT128

Math Specialization courses consists of any 4 additional MAT units numbered above MAT128.

There are exceptions for only 2 of these units: (i) STA215, or above and (ii) one of MAT 111, 112, 114, 115, or 117 (middle school math content courses)]

(3) Biology Specialization

- BIO185 ○ CHE201 ○ CHE202

Biology specialization courses consists of 4 additional units, as described below:

- (a) two of the following three courses: BIO211, BIO221, BIO231
(b) two units of BIO electives ≥ 200 level

(4) Chemistry Specialization

- MAT128 ○ CHE201 ○ CHE202 ○ Any 1 unit non-Chemistry science course

Chemistry specialization courses consists of 4 additional units, as described below:

- (a) ○ CHE321 ○ CHE322 (b) Any 1 unit CHE elective ≥ 300 level
(c) Any 1 unit STEM elective (typically to support a middle school endorsement)

(5) Physics Specialization

- MAT128 ○ PHY201 ○ PHY202

The Physics specialization courses consists of 4 additional units: (a) three courses from: PHY120, PHY161, PHY171, Any ≥ 300 level PHY course and (b) any 1 unit STEM elective (typically to support a middle school endorsement).