Request for Establishing a New
M.S. in Secondary STEM Education (certification track)

Degree History

A. Statement of Purpose

The M.S. in Secondary STEM Education degree will provide the training and experience to teach middle and high school STEM subjects in diverse and inclusive settings. It is a one-year program that leads to institutional recommendation for certification in grades 7-12 in agriscience, biology, chemistry, earth science, integrated science, physics, physical science, mathematics, or technology education. The degree is open to the following majors: biology, chemistry, earth science, agricultural and veterinary sciences, physics, mathematics, or engineering fields. Students who complete the requirements are eligible for institutional recommendation for teacher certification in their disciplines.

Rationale for the Program

Since the Great Recession, enrollment in educator preparation programs (EPPs) have declined significantly (see Table 1). Enrollment in traditional educator preparation programs declined nationally by 35% between 2010 and 2018. During the same time period, the decrease in Delaware was significantly greater than the national average, about 60% decline in enrollment and 43% decline in program completion in traditional EPPs[1]. Even with steady to increasing enrollments in alternative EPPs (both IHE- and not IHE-based), this does not make up for the shortfall in traditional EPP enrollments. At the same time, teacher turnover in Delaware is 3% higher than the national average. In 2014, Delaware teachers who left their school or the profession was 17.3%, whereas nationally it was 14.2%[2]. Attrition is highest among teachers within their first five years of practice, ranging between 19% and 30%[3].

Table 1. *Number of students enrolled in Delaware educator preparation programs by academic year.*

	Academic Year							
	2010-11	2011-12	2012-13	2013-14	2014-15	2016-17	2017-18	2018-19
Traditional	3,037	3,418	2,735	1,974	1,809	1,761	1,227	1,297
Alternative, IHE-based	0	0	0	0	0	116	146	159
Alternative, not IHE-based	105	144	123	94	150	5	16	n.d.

[1] Partelow, L. (2019). *What to make of declining enrollment in teacher preparation programs.* Washington, DC: Center for American Progress.

[2] Learning Policy Institute. (2016). *Understanding teacher shortages 2016*. Retrieved from: https://learningpolicyinstitute.org/product/understanding-teacher-shortages-interactive-2016

[3] Darling-Hammond, L., & Sykes, G. (2003). Wanted: A national teacher supply policy for education: The right way to meet the "highly qualified teacher" challenge. *Education Policy Analysis Archives, 11*(33), 1–55.

Data obtained from: https://title2.ed.gov/Public/Home.aspx

In addition, student enrollment is expected to increase nationally by 3 million students (53 million total) in the next decade. Meanwhile student-to-teacher ratios are projected to shrink to pre-recession levels (from 16:1 to 15:1), which would require an additional 145,000 teachers by 2025[4]. These data, combined with rates of teacher attrition, indicate a need for programs and policies that mitigate attrition and support rapid and ongoing preparation of highly-qualified PK-12 teachers that extends beyond traditional four-year undergraduate programs.

In Delaware, there is a documented critical shortage of highly qualified secondary mathematics and science teachers, especially in physics, chemistry, and engineering[5]. This mirrors a national trend, which also includes critical shortages in special education and world languages.

Shortcomings of current secondary education undergraduate programs at University of Delaware include:

i. No pathway currently exists for initial certification in career and technology education (CTE) fields including agricultural sciences, computer science (i.e., information technology), engineering, and health sciences. This means that if a prospective educator wants to become certified to teach in one of these areas, their only option is an alternative routes program. In light of Delaware's career and college readiness policies for high school students, the need for high qualified teachers in these fields is likely to continue[6].
ii. The combination of education and content area course requirements, coupled with requirements for clinical field experiences makes it difficult for late entrants or transfer students into secondary science and mathematics education programs to graduate in four years.
iii. Undergraduate students who complete a secondary science or mathematics program of study are awarded an education degree, not a content area degree. for example, secondary education life science students are awarded a degree in biology education, not biological sciences and a secondary education student in mathematics is awarded a mathematics education degree, not a mathematics degree.
iv. Undergraduate secondary education programs currently reside within the content area departments; thus, each secondary education program is a part of the portfolio of academic programs offered by those departments. Human and economic resources devoted to recruiting and retaining students in secondary education is uneven across departments.

Affordances of the proposed M.S. of Secondary STEM Education include a yearlong residency in a Delaware middle or high school under the mentorship of a highly qualified clinical educator. This is more than double the field experience hours of current

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[4] Partelow, L. (2019). *What to make of declining enrollment in teacher preparation programs.* Washington, DC: Center for American Progress.

[5] Hoe, N., Robertson-Kraft, C., Wright, M., & Bird, A. (2018). Excellent educators hiring report. Fels ImpactEd, University of Pennsylvania. Retrieved from: https://www.doe.k12.de.us/domain/355
Delaware Department of Education. (2019). Excellent educators report: An analysis of recruitment, hiring, and retention in Delaware schools. Retrieved from: https://www.doe.k12.de.us/domain/355

[6] Delaware Pathways Steering Committee. (2020). Learning to work: Delaware Pathways Strategic Plan. Retrieved from: https://delawarepathways.org/strategic-plan/

secondary education programs, in which students complete only 14 weeks of student teaching. The yearlong teacher residency includes a stipend, which is paid by charter school or district, which would help alleviate some of the financial burden of completing a graduate degree. Teacher residents are expected to teach in a high needs field and/or high needs school in the same district or in Delaware upon graduation. Graduates complete a Master's degree, which garners a higher starting wage than that of a Bachelor's degree in Delaware schools.* Locating the program in the Center for Secondary Education allows for targeted recruitment and retention of students in the program by full time professional staff. Unlike current secondary education programs of study, courses in this M.A. program integrate foundational education concepts and pedagogical skills with content area teaching through coursework tailored to the needs of secondary teachers in STEM fields. For example, issues of equity, diversity, access and inclusion will undergird all of the courses in this program rather than being covered in a single course. We anticipate this feature will allow for more integrated knowledge and skill development by teachers in this program.

A Sampling of Salaries Across the State

District	Entry Level Salary BA	Entry Level Salary MA	BA/5 Years	MA/5 Years	BA/ 10 Years	MA/10 Years
Appoquinimink	42,866	47,993	48,620	53,532	57,997	64, 582
Christina	41,392	47,704	46,622	54,290	57,594	66,803
Colonial	40,731	46,916	45,803	53,243	56,450	65,425
New Castle	43,228	51,478	50,276	57,835	60,953	70,058
Red Clay	42,305	47,250	48,144	52,976	58,614	64,993
Smryna	42,794	49,374	46,837	53,050	53,515	61,894
Woodbridge	42,695	48,666	45,971	52,145	53,479	60,781

The degree will be offered through the Center for Secondary Teacher Education within the College of Arts and Sciences. The Center employs a director, an assistant director of STEM education, and field supervisors. The Director is responsible for developing and scheduling courses, advising students, hiring instructors, providing scholarships and

working with the office of Clinical Studies. The Director of Secondary Education reports to the Associate Dean of CAS, Dr. Suzanne Burton.

B. Date of Permanent Status: pending

C. Degrees Offered

Master of Science (M.S.) in Secondary STEM Education, with institutional recommendation for initial secondary teacher certification in a STEM field (grades 7-12 in agriscience, biology, chemistry, earth science, integrated science, physics, physical science, mathematics, or technology education)

D. Term when first students may enroll

Summer 2021

E. Factors that identify student demand for the program

University of Delaware (UD) is the only institution of higher education (IHE) that currently provides a pathway for undergraduates to simultaneously pursue a bachelor's degree and initial certification for secondary science (grades 9-12) in the state. Three years ago, Delaware State University closed its secondary science program due to low enrollment. Other IHEs, including Wilmington University and Wesley College have degree programs in elementary education (grades K-8) but do not offer initial credentialing in secondary STEM (science, technology, engineering, or mathematics) education. Despite the lack of competition from other IHEs, there has been declining enrollment, more than a 40% decline, on average, in secondary STEM education programs at UD. This trend is greater than the national average.[7] Table 2 shows the number of UD secondary education graduates in science and mathematics who pursued initial certification during their undergraduate programs during the last seven years. Moreover, on average, only about 25% of secondary STEM education graduates obtain initial employment in Delaware (see Table 2). Most are hired in nearby states – Pennsylvania, New Jersey, New York, and Maryland. The reasons for this are multifarious; however, the majority of elementary and secondary education majors hail from aforementioned states where in-state tuition in their home state is significantly higher than out-of-state tuition at UD. In 2018-2019, 49% of first-year students were from PA, NJ, NY and MD combined while only 39% were from DE.[8] Thus, once education majors complete their degrees, they tend to return to their home states. In addition, starting salaries for teachers in Delaware are lower (ca. $5K on average) and Delaware Local Education Agencies (LEAs) generally hire later than those in surrounding states.

Table 2. Number of secondary STEM education degrees by awarded discipline at UD from 2013-2020.

Year	Biology Education	Chemistry Education	Earth Sci Education	Physics Education	Math Education	Total 2^{O} Education	# DE employed

[7] Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Palo Alto, CA: Learning Policy Institute.

[8] UD Office of Institutional Research. (2019). Facts & figures: Institutional research and effectiveness. Retrieved from: https://ire.udel.edu/ir/facts-figures/

2019-2020*	1	3	1	0	10	15	
2018-2019	4	1	0	0	9	14	5
2017-2018	1	0	3	0	6	10	3
2016-2017	1	1	0	0	10	12	4
2015-2016	1	1	0	1	13	16	5
2014-2015	1	2	1	0	18	22	7
2013-2014	4	1	2	0	13	20	6

*anticipated graduates, currently enrolled in student teaching
Note: UD does not currently offer undergraduate programs of study in K-12 engineering education or technology education.

Despite the low numbers of secondary STEM teacher candidates yielded by UD's programs, the institution enrolls large numbers of STEM majors each year. Biological sciences, mechanical engineering, and computer science are among the 25 most popular undergraduate majors.[9] Table 3 lists the number of first-year undergraduates in each discipline. Note in AY18-19, total first year undergraduate enrollment was 4,708 students.

Table 3. Number of first-year students enrolled in STEM academic programs, AY2018-19

Major	**#undergrads**
Agriculture and Natural Resources[1]	195
Biological Sciences	216
Chemistry	60
Geological Sciences	12
Engineering[2]	750
Mathematical Sciences	62
Physics	25

[9] ibid.

[1] includes agriculture & natural resources, animal & food sciences, entomology & wildlife ecology, and plant & soil sciences
[2] includes biomedical, chemical, civil & environmental, electrical & computer science, and mechanical engineering

At the same time, there has been a steady increase in the number of teacher candidates enrolled in UD's Alternative Routes to Certification (ARTC). In the last three years (2017-2019), there have been, on average, about 15 teachers per year enrolled in ARTC to pursue their initial certification in science alone. The affordance of this program is that teachers are placed immediately in classrooms on emergency certificates and fulfill education coursework requirements for certification while teaching full time. This allows Delaware K-12 school districts to hire teachers in hard to fill positions, such as science, mathematics, engineering and computer science. The constraint of this program is that teacher candidates, who are frequently career changers from business and industry, are placed in classrooms with no formal preparation in education. In fact, teacher candidates are not admitted into UD ARTC's program until they have secured employment in a school.

Although UD's ARTC provides a pathway to teaching, it is not accredited, and thus not bound to professional standards such as *Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards*[10], *International Society for Technology in Education Standards for Educators*[11], *National Science Teacher Association (NSTA) Standards for Science Teacher Preparation*[12] and/or Standards for Mathematics Teacher Preparation[13]. Per Delaware code, ARTC candidates are only required to complete 24 credit hours of coursework in a relevant field (14 DE Reg. § 1262); this is roughly half the number required for a science or mathematics degree at UD, which is 47 to 49 credits in the major. Currently, there are ARTC teacher candidates pursuing initial certification in life sciences (n=3), chemistry (n=3), physics (n=3) physical science (n=2), earth science (n=1), general science (n=5), special education (n=11), and mathematics (n=15). In the last decade, UD's ARTC has been the primary source of high school science and mathematics teachers hired by Delaware LEAs. While alternative certification programs fast-track teacher professionals into classrooms, studies have indicated higher attrition among teachers who receive certification through alternative routes than those from traditional routes to certification where field experience, mentoring, and induction tend to be more robust and of longer duration.[14] In addition, there is research showing alternative-entry teachers are less effective in high school mathematics and science.[15]

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[10] Council of Chief State School Officers. (2011). *Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards: A Resource for State Dialogue*. Washington, DC: CCSSO.

[11] International Society for Technology in Education. (n.d.). *ISTE standards for educators*. Retrieved from: https://www.iste.org/standards/for-educators

[12] National Science Teaching Association. (2012). NSTA standards for science teacher preparation. Retrieved from: https://www.nsta.org/preservice/

[13] National Council of Teachers of Mathematics. (2012). *NCTM CAEP standards for mathematics teacher preparation*. Retrieved from: https://www.nctm.org/Standards-and-Positions/CAEP-Standards/

[14] Alt, M.N., and Henke, R.R. (2007). *To teach or not to teach? Teaching experience and preparation among 1992–93 bachelor's degree recipients 10 years after college* (NCES 2007-163). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
Heilig, J. V., Cole, H. A., & Springel, M. A. (2011). Alternative certification and Teach for America: The search for high-quality teachers. *Kansas Journal of Law & Public Policy, 20*(3), 388-412.

[15] Henry, G., Bastian, K.C., Fortner, C.K., Kershaw, D.C., Purtell, K.M., Thompson, C.L., & Zulli, R.A. (2014). Teacher preparation policies and their effects on student achievement. *Education Finance & Policy*, (*9*)3, 264-303.

Owing to factors outlined above, there remains a considerable shortage of highly qualified teachers in all areas of science and mathematics in Delaware, but especially in physics and chemistry, and also career and technology education, such as engineering and computer science. These facts square with previously published national data[16,17] which indicate an increasing shortage of highly qualified teachers in science, mathematics, and special education.[18]

Because there is a shortage of high school STEM teachers and a steadily increasing enrollment in the state's public schools, ca. 8% annually, Delaware LEAs are forced to assign teachers to teach courses outside of their credentialed area, hire teachers with emergency certification, and offer fewer elective science and mathematics courses. For instance, 45% of teachers in Delaware are assigned to teach physics as part of their workload but do not have a related degree such as physics, physics education, or mechanical engineering. Of Delaware high school teachers who are assigned to teach physics, only 25% have a course load that only includes physics, astronomy and/or AP Physics.[19] This means 75% of Delaware high school teachers who are assigned to teach physics also teach courses that are not physics related (e.g., chemistry, biology, environmental science, anatomy and physiology). This issue compounds the problem of providing high quality education to an increasingly diverse student population. Of the more than 140,000 students served by Delaware schools, more than half identify as minority (53%) and over a third are from low income households (35%).[20] Further, in the last 20 years the English language learner population has increased 428% in Delaware schools.[21]

F. College and Department/School in which the program will reside

College of Arts and Sciences administered through the Center for Secondary Education

The costs of the program will be absorbed by the Center for Secondary Teacher Education's state-line funding and grants as appropriate. The courses will be taught by center staff, Kristin Nelson and Diana Roscoe; Adjunct Amy Trauth and up to three additional adjunct hires. Advising, recruiting and other general expenses also will be absorbed by the center.

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16 American Association for Employment in Education (AAEE). (2018). *Teacher supply and demand report 2016-17: Executive summary*. Slippery Rock, PA: AAEE.

17 Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). *A coming crisis in teaching? Teacher supply, demand, and shortages in the U.S.* Palo Alto, CA: Learning Policy Institute.

18 Ingersoll, R. M., & May, H. (2012). The magnitude, destinations, and determinants of mathematics and science teacher turnover. *Educational Evaluation and Policy Analysis, 34*(4), 435-464.
Ingersoll, R. M., & Perda, D. (2010). Is the supply of mathematics and science teachers sufficient? *American Educational Research Journal*, *47*(3), 563–594.

19 Trauth, A. E. (in prep). Characterizing the extent of out-of-field teaching in Delaware high schools. Unpublished manuscript to be submitted to *Journal of Science Teacher Education*.

20 Rodel Foundation of Delaware. (2016). *Overview: Education landscape in Delaware*. Retrieved from: http://rodelde.org/report/delaware-education-overview/

21 Rodel Foundation of Delaware. (2018). *English learners in Delaware*. Retrieved from: http://rodelde.org/report/english-learners/

I. Admission

A. Admissions Requirements

1. A baccalaureate degree in a science, mathematics, or engineering field from an accredited college or university
2. An undergraduate cumulative grade index of 3.0 on a 4.0 scale, or demonstrate mastery of general knowledge, including the ability to read, write, and compute, by achieving a score deemed by the state of Delaware to be college ready on a test of general knowledge normed to the college-bound population.
3. A graduate cumulative grade index of at least 3.0 if graduate courses were taken.
4. Passing scores on Praxis Subject Assessment in the secondary education area or career and technical education area of related to candidate's discipline of study
5. Transcripts of all previous academic work at the undergraduate and graduate (if applicable) level. Applicants may upload unofficial copies of their transcripts and if admitted, all transcripts will be verified by the Office of Graduate and Professional Education. Applicants who previously attended the University of Delaware still need to upload an unofficial transcript, but *do not* need to provide official transcripts for verification.
6. GRE scores are not required. For students whose native language is not English, an officially reported TOEFL test score of at least 600 (paper-based) or 100 (Internet-based). IELTS scores are also accepted. The minimum score is 7.0.
7. It is a Delaware State Board of Health Regulation and a University of Delaware mandate that all entering graduate students born after January 1, 1957 give proof of proper immunization for measles, mumps, and rubella. If TB immunization requirements are not met, the student will not be eligible to register. Specific information may be obtained from the Student Health Service (302) 831-2226.

Admissions decisions are made by the Secondary STEM Education graduate committee composed of the Director of Secondary Education, Assistant Director of STEM Education, Associate Dean in the College of Arts and Sciences, and/or associated program faculty. Students will be admitted to the program based on program capacity, the applicant's qualifications, and the applicant fit with program goals and objectives.

B. Prior Degree Requirements

A baccalaureate degree in a science, mathematics, engineering or computer science field from an accredited college or university or current enrollment in a UD science, mathematics, engineering or computer science baccalaureate degree program

C. Application Deadlines

The application deadline is February 15 for priority consideration with rolling admissions until the first day of the summer semester in which the student intends to enroll

D. Special Competencies Needed

Fluency in verbal and written English is required. For students whose native language is not English, an officially reported TOEFL test score of at least 600 (paper-based) or 100 (Internet-based). IELTS scores are also accepted. The minimum score is 7.0.

E. Admission Categories

Regular

F. Other Documents Required

1. Three letters of recommendation from professors or supervisors.
2. A resume detailing the candidate's academic, professional, and/or volunteer experience.
3. Responses to the following two graduate application essays:
    a. *Essay 1*
    Outline your educational plans and career goals and discuss how your proposed plan of graduate study relates to them. Some areas of discussion might include: Specific attributes of the program at UD that lead you to believe that this degree is appropriate to help you achieve your professional goals.
    b. *Essay 2*
    The applicant should address one of the following questions in a brief essay of 500 words or less:
        - Select an important problem facing students who are learning science, mathematics, engineering, or computer science, their teachers, or other people who work with them and propose a solution to this problem; or,
        - Describe an experience in your own life that influenced your decision to become a K-12 teacher in a STEM field.
4. Interview – each applicant will be expected to participate in an interview with one or more or secondary STEM education faculty and staff. The purpose of this interview is to determine each applicants' suitability to the purpose and goals of the program.

G. University Statement

Admission to the graduate program is competitive. Those who meet stated requirements are not guaranteed admission, nor are those who fail to meet all of those requirements necessarily precluded from admission if they offer other appropriate strengths.

II. Academic Requirements

A. Degree Requirements

1. Course Requirements

Table 1 below outlines the required courses for this program:

Table 1. List of courses required for completion of the M.S. of Secondary STEM Education

Current Required Coursework for Certification			
Course	**CH**	**Offered**	**Notes**
SMED600 Issues in STEM Education (adolescent development, diversity, equity and inclusion issues in STEM, learning theory, science and math standards)	3	Online, self-paced (Anytime and competency based)	4+1 to take in their senior year; masters in the summer or during residency year

SMED601 Inclusive STEM Classroom Management (PBIS framework, SEL strategies)	3	Online, self-paced (Anytime and competency based)	4+1 to take in their senior year; masters in the summer or during residency
SMED602 Inclusive STEM Assessment (culturally competent/reliable & valid formative & summative)	4	Summer 1 (F2F or hybrid, 48 class hours)	4+1 and masters
SMED603 Inclusive STEM Instruction (backwards design lesson and unit planning, Universal Design for Learning framework, cultural competence)	4	Summer 2 (F2F or hybrid, 48 class hours)	4+1 and masters
SMED604/605 STEM Ed Internship I. & II. (**yearlong residency**)	8	M-F following LEA calendar	
SMED606/607 Methods & Seminar I. & II.	8	F2F F & S -- issues around instruction, curriculum, assessment using assess data to inform instruction, completing edTPA	During residency, meets at residency school site
Total	**30 credits to be completed**		

2. Non-registered Requirements

a. Background check and child protection clearance prior to the first day of classes
b. Passing score on ETS Praxis Subject Area assessment in the candidate's discipline prior to program completion

Discipline	**ETS Praxis Subject Assessment**	**DE Passing Score**
Agriculture	Agriculture (5701)	147
Biology	Biology Content Knowledge (5235)	157
Chemistry	Chemistry Content Knowledge (5245)	158
Earth Science	Earth Science Content Knowledge (5571)	150
Engineering	Technology Education (5051)	159
Mathematics	Mathematics Content Knowledge (5161)	160
Physical Science	General Science: Content Knowledge (5435)	160
Physics	Physics Content Knowledge (5265)	144

c. Passing score on an exit performance assessment: edTPA score of 38 or higher in any certification area (discipline) prior to program completion

3. Procedures for Petition to Vary Degree Requirements

Core Course Substitution

Students are expected to complete all core courses in the degree program. On rare occasions, extenuating circumstances may warrant a course substitution. On those occasions, students may write a petition to the Secondary STEM Education Graduate Committee. The petition should describe the extenuating circumstances that warrant the request and explain the benefits that accrue to the students' scholarly development. The Secondary STEM Education Graduate Committee must approve the petition.

Transfer of Credit from Another Institution

Graduate credit earned at another institution will be evaluated at the written request of the student following UD's Graduate College policy on Transfer Credit. Such a request should be submitted first to the Assistant Director of STEM Education using a Request for Transfer of Graduate Credit form. A maximum of 9 credits required for the degree will be accepted provided that such credits (1) were earned with a grade of no less than B, (2) are approved by the Assistant Director of STEM Education and the College of Arts and Sciences or Designee, (3) are in accord with the student's program requirements, (4) are not older than five years, (5) are graduate courses, and (6) were completed at an accredited college or university. The credits, but not the grades or quality points, are transferable to University of Delaware graduate records. Graduate courses counted toward a degree received elsewhere may not be used. Credits earned at another institution while the student was classified as a continuing education student at that institution are not eligible to be transferred to one's graduate degree at the University of Delaware. Credits from institutions outside of the United States are generally not transferable to the University of Delaware.

4. Grade Minimums

Students must have a minimum overall cumulative grade point average of 3.0 to be eligible for the degree. In addition, the grades in courses applied toward the degree program must equal at least 3.0. All graduate-numbered courses taken with graduate student classification at the University of Delaware are applied to the cumulative index. Credit hours and courses for which the grade is below "C-" do not count toward the degree even though the grade is applied to the overall index.

5. Courses that Fulfill Degree Requirements

See section A.1. above for a list of courses that fulfill degree requirements.

6. English Language Competency Minimums

For students whose native language is not English, an officially reported TOEFL test score of at least 600 (paper-based) or 100 (Internet-based). IELTS score of at least 7.0.

B. Committees for Exams, Thesis, or Dissertations

This graduate program **does <u>not</u> require a thesis or dissertation**. Because students in this program will be eligible for institutional recommendation for initial secondary teacher certification, they will be required to complete a performance exit assessment called the edTPA, a portfolio-based examination of proficiency in core teaching competencies. Passing the edTPA is required by the state of Delaware for recommendation for initial teacher certification by an educator preparation program. It is also required in surrounding states, such as New York, New Jersey, and Pennsylvania; thus, completion of this exit performance assessment allows degree completers to garner certification more easily outside of the state of Delaware.

1. Initial procedure for advisor and advisement procedures: **N/A**
2. Student committee needed and procedures for selecting committee members: **N/A**
3. Deadlines for establishing and preparation requirements for comprehensive examinations: **N/A**
4. Policies for dates of examinations, grading of committee examinations and retake options: **N/A**
5. Guidelines for approving research proposals involving human or animal subjects: **N/A**
6. Procedures for thesis/dissertation approval in the department (e.g., role of department chair, dean, etc.): **N/A**
7. Departmental and student obligations for finding committee members: **N/A**
8. Departmental and student obligations and procedures for changes in committee members: **N/A**

C. Timetable and Definition of Satisfactory Progress

1. **Academic Expectations**: A student must be classified as full-time to be eligible for a scholarship or teacher residency stipend. Students holding a tuition scholarship or teacher residency stipend must register for at least 6 credit hours of graduate-level courses each fall and spring semester to meet full-time status. Normal progress in the degree program is four consecutive semesters of 6 credit hours each, beginning in the summer of admission year. Students will be expected to submit a progress report to the Center for Secondary Education annually beginning with the first full year after admission until their program is complete. The Director of Secondary Education, or designated representative, will review each student's progress and provide them with feedback or advisement as needed.
2. **Grade Requirements**: Students must have a minimum overall cumulative grade point average of 3.0 to be eligible for the degree. Grades in courses applied toward the degree program must be a letter grade of C or better. Failure to achieve grade minimums in the course(s) will require the student to re-enroll in the course(s) in subsequent semesters.
3. **Thesis/dissertation progress timetable guidelines**: N/A
4. **Thesis/dissertation defense guidelines**: N/A
5. **Forms required**: N/A
6. **Consequences for failure to make satisfactory progress**: While it is expected that students in this program will normally complete the program in five semesters, it is possible that students may choose to take fewer classes per semester with the exception of fall and spring of the teaching residency when students are required to enroll in the internships and seminars. The

University time limit is ten consecutive semesters to complete the degree requirements for students entering a master's degree program beginning with the date of matriculation. This program follows the same policies as the Graduate College for satisfactory progress, degree time limits, and student dismissal from the program: https://grad.udel.edu/policies/graduate-academic-policies/#time-limits

7. **Protocol for grievance procedure if student has been recommended for termination for failure to make satisfactory progress**: Requests for time extensions for degree completion must be made in writing and approved by the Director of Secondary Education. The Director will forward the request to the Graduate College. The Director reserves the right to an in-person meeting with the student to discuss a progress plan for degree completion. The Graduate College will determine the student's eligibility for a time extension and will notify the student in writing of its decision to grant an extension of time. This program follows the same policies as the Graduate College for satisfactory progress, degree time limits, and student dismissal from the program: https://grad.udel.edu/policies/graduate-academic-policies/#time-limits

III. Assessment Plan

The Director for The Center for Secondary Teacher Education will work with the Associate Director, and Delaware Center for Teacher Education to ensure program assessment according to the accrediting body's (CAEP) Advanced Program Standards. (See attachment for details).

IV. Financial Aid

A. Financial Awards

1. Types of Awards and Duration: Scholarship awards and teacher residency stipends are contingent upon available funding. Teacher residency stipends are provided for one full academic year and requires enrollment in two consecutive semesters (fall and spring) of the internship and methods seminar. Responsibilities of Students on Contract: teacher candidates will sign residency contracts with the partner district.
2. Evaluation of Students on Contract – CAEP accreditation metrics – course outcomes, edTPA pass rate, etc.

V. Departmental Operations

A. General Student Responsibilities

1. Up-to-date addresses, etc.
2. Laboratories and research equipment: **N/A**
3. Hazardous Chemical Information Act: **N/A**
4. Vehicles: **N/A**
5. Keys, offices, mail, telephone, copy machine, computer terminals: **N/A**

B. Student Government and Organizations

Secondary Educators of Tomorrow (SET)

C. Travel for Professional Meetings

Not provided