

MA in STEM Education Program Handbook

(G845)

2025-2026

Table of Contents

Rowan University & College of Education Mission & Vision Statements	Page	3
About Rowan University	Page	3
Teacher Preparation at Rowan University	Page	3
College of Education Policies and Procedures	Page	3
MA STEM Program Statement	Page	4
MA STEM Program Overview	Page	5
MA STEM Program Goals	Page	5
MA STEM Course Descriptions	Page	5
MA in STEM Education Course Schedule	Page	9
MA STEM Entry Requirements	Page	9
Sustainability in Program	Page	10
Program Completion	Page	10
Graduation and Certification	Page	10
Pass/ No Credit Option	Page	11
Financial Assistance	Page	11
Registration	Page	11
Meetings and Events	Page	11
Professional Development	Page	11
Performance Hindering Issues	Page	12
Proposed Course Sequence	Page	12-13

Rowan University Mission Statement

A leading public institution, Rowan University combines liberal education with professional preparation from the baccalaureate through the doctorate. Rowan provides a collaborative, learning-centered environment in which highly qualified and diverse faculty, staff, and students integrate teaching, research, scholarship, creative activity and community service. Through intellectual, social and cultural contributions, the university enriches the lives of those in the campus community and surrounding region.

About Rowan University

Since its founding in 1923, Rowan University has evolved from a teacher preparation college to a bustling regional university that's ranked among the best public universities in the North by *U.S. News and World Report*. Today, Rowan's more than 14,000 students choose from more than 80 bachelor and 60 master's degree programs, five doctoral programs and two professional programs. The university is one of just 56 institutions in the country with accredited programs in business, education, engineering and medicine.

Rowan University College of Education Vision Statement

The College of Education will be a leading force in preparing and supporting reflective practitioners who use education to transform our global society.

Rowan University College of Education Mission Statement

To positively impact and develop local, regional, national and global educational communities by:

- collaborating with partners in the field to promote learning and the mental and physical health of diverse learners in all settings
- integrating teaching, research, and service to advance knowledge in the field
- preparing and supporting professionals through the development of knowledge, skills and dispositions with the ultimate goal of ensuring equitable educational opportunities for all learners.

Teacher Preparation at Rowan University

The College of Education offers programs in teacher education and other human services fields. Rowan University enjoys an outstanding reputation as a teacher preparatory institution. Rowan University was awarded the first Program of Distinction in Teacher Education by the New Jersey State Department of Higher Education. The Rowan University teacher education program is large and comprehensive and has consistently earned national accreditation from the National Council for the Accreditation of Teacher Education (NCATE). In addition to teacher education, the College of Education offers baccalaureate and graduate degree program options and concentrations in other professional and human services fields. Many of these programs are in the fields that serve the changing needs of our educational society and offer broad opportunities for employment or continued study.

College of Education Policies and Procedures

Please see: <https://education.rowan.edu/about-the-college/policies-procedures/>

MA STEM Program Purpose Statement

The purpose of the MA STEM education program at Rowan is to prepare secondary science and math teachers who can positively impact and develop local, regional, national and global educational communities through their understanding, and engagement in the practice of teaching science and math. The program allows students to collaborate with partner schools (e.g. students, cooperating teachers) through their practicum and clinical field experiences, integrate teaching research and service through the requirements in the method courses, prepare and support students in their outreach projects to the community as well as engage them in professional development opportunities.

MA STEM Program Overview

The Master of Arts in STEM Education offers the unique opportunity for students who have undergraduate degrees in mathematics, engineering, or the sciences to pursue an initial New Jersey teaching certificate in mathematics and/or the sciences and a Master's degree simultaneously. This program is carefully designed such that all coursework has a STEM (Science, Technology, Engineering, Mathematics) focus that provides the ideal pedagogical preparation for prospective Biology, Chemistry, Earth Science, Mathematics, Physical Science, Physics or Computer Science teachers in the K-12 setting, particularly in grades 6-12.

MA STEM Program Goals

The goals of the Master of Arts in STEM Education are:

- To develop future science and math teacher candidates who are well informed in their current reform-based content and pedagogy
- To expand the STEM-capable teacher workforce and broaden the participation of women and minorities in the STEM teacher preparation
- To prepare science and math teacher candidates who identify that STEM education exists in social/historical/political contexts and is not separate from human's sense-making of the world.
- To prepare science and math teacher candidates who are cognizant of the need to view STEM education as a venue for social justice practices and addressing Diversity, Equity and Inclusion within and beyond the secondary classroom.
- To prepare science and math teacher candidates to attend to culture and equity of opportunity for all students.
- To provide science and math teacher candidates with access to specialized tools and routines and co-develop tools and routines with them that support their attempts at STEM education instruction, planning and assessment
- To prepare science and math teacher candidates to sequence instructional and learning experiences to help integrate ideas together and revise understandings of "big ideas" of STEM fields.

MA STEM Course Descriptions

STEM 60501: STEM: Teaching & Research Methods I

3 s.h.

Prerequisite: Matriculation in the MA in STEM Education

Corequisites: No Co Requisites

This is the first course in the 3-course STEM methods sequence for candidates in the Master of Arts in STEM Education program. Through integrated STEM coursework, candidates will focus on learning how to make content explicit; eliciting and interpret students' thinking; engage in strategic relationship-building conversations with students; analyze instruction for the purpose of improving it; and communicate with other professionals.

STEM 60502: STEM: Teaching & Research Methods II: Math

4 s.h.

Prerequisite: B- or higher in: STEM Teaching & Research Methods I (STEM 60501),

Corequisites: STEM 60512 Clinical Practice I; STEM 60524: STEM Teaching and Research Seminar I

This is the second course in the 3-course STEM methods sequence for candidates in the mathematics specialization in the Master of Arts in STEM Education program. Grounded in national and state mathematics standards, the course introduces teaching models that support good mathematics teaching practices. Course activities and assignments are directly connected to the co-requisite residency experiences. The course will help prepare pre-service mathematics teachers to develop STEM pedagogy in the teaching of mathematics. This course is offered annually during the Fall semester.

STEM 60503: STEM: Teaching & Research Methods III: Math

5 s.h.

Prerequisites: B- or higher in STEM 60502 STEM: Teaching & Research Methods II: Math, ,STEM 60512: STEM Clinical Practice I STEM 60524: STEM Teaching and Research Seminar I

Corequisites: STEM 60513: STEM Clinical Practice II; STEM 60525: STEM Teaching and Research Seminar II

This is the final course in the 3-course STEM methods sequence for math candidates in the Master of Arts in STEM Education program. Grounded in relevant research in math teaching, This course continues to build on teaching models that support good math teaching practices. This course is offered annually during the Spring semester. completion of the course, candidates will demonstrate the ability to: Set long and short-term learning goals for students referenced to external benchmark; Appraise, choose, and modify tasks and texts for a specific learning goal; Design a sequence of lessons toward a specific learning goal; Select and use particular methods to check understanding and monitor student learning; Compose, select, interpret, and use information from methods of summative assessment; Analyze instruction for the purpose of improving it; Communicate with other professionals

STEM 60504: Professional Seminar for STEM Educator

3 s.h.

Prerequisite(s): B- or higher in STEM 60513: STEM Clinical Practice II; STEM 60525: STEM Teaching and Research Seminar II; STEM 60503: STEM: Teaching & Research Methods III: Math OR STEM 605023 STEM: Teaching & Research Methods III: Science

This is the capstone course in the MA in STEM Education and will prepare candidates for their teaching positions by focusing on issues critical to new teachers. The course is designed to support candidates in their final transition from teacher candidate to teacher. Topics include understanding school climate, developing a professional development plan, developing a plan for communicating with families, planning for the first six weeks (or unit) of school, and preparing for a substitute teacher.

STEM 60510: Teaching STEM in Diverse Settings

3 s.h.

Prerequisite(s): Matriculation in the MA in STEM Education

Corequisites: No Co Requisites

This course will enable STEM Education candidates to gain a multifaceted understanding of the individual and institutional elements that impact student achievement in STEM. Candidates will investigate the role that gender, SES, race, ethnicity, home language, religion, and other identity-based aspects shape school experiences, learning, and achievement in STEM. Candidates will then learn about specific approaches and instructional practices that they can use in the classroom to promote learning for non-mainstream students, including teaching academic language, differentiating instruction and assessments, and supporting home, community and school partnerships.

STEM 60512: STEM: Clinical Practice I

1 s.h.

Prerequisite(s): B- or higher in: STEM 60501 STEM: Teaching & Research Methods I, STEM 60510 Teaching STEM in Diverse Settings

Corequisite(s): STEM 60524: STEM Teaching and Research Seminar I; STEM 60502: Teaching & Research Methods II: Math OR STEM 60522 Teaching & Research Methods II: Science,

This course serves as the first semester of the yearlong teacher residency required for candidates in-MA in STEM Education. Each resident is placed in a middle or high school and attends that placement 3 full days per week during the Fall semester. Using both Rowan and placement school district measures of teaching effectiveness, supervisors will evaluate residents on demonstrated mastery of subject area content, lesson planning, and multiple instructional strategies to meet varied student needs and demonstrated ability to assess learner progress and modify instruction accordingly, manage all aspects of classroom activity, and work collaboratively with all instructional, administrative, parental, and community members of the classroom and school community. Candidates will attend their field placement 4 full days per week during the Fall semester.

STEM 60513: STEM: Clinical Practice II

3 s.h.

Prerequisite(s): B- or higher in STEM 60502: Teaching & Research Methods II: Math OR STEM 60522 Teaching & Research Methods II: Science, STEM 60512: STEM: Clinical Practice I; STEM 60524: STEM Teaching and Research Seminar I

Corequisite(s):STEM: Teaching & Research Methods III: Math OR STEM 60523: Teaching & Research Methods III: Science; STEM 60525: STEM Teaching and Research Seminar II

This is the second of the two field experiences required for candidates in the MA in STEM Education. Continuing in their field placement from STEM Education Residency I, candidates will attend their field placement 4 full days per week during the Spring semester. Using both Rowan and placement school district measures of teaching effectiveness, supervisors will evaluate residents on requires demonstrated mastery of subject area content, lesson planning, and multiple instructional strategies to meet varied student needs and demonstrated ability to assess learner progress and modify instruction accordingly, manage all aspects of classroom activity, and work collaboratively with all instructional, administrative, parental, and community members of the classroom and school community. The course will run from January through June to enable candidates to engage in all end-of-year activities at their residency sites.

STEM 60522: STEM: Teaching & Research Methods II: Science

5 s.h.

Prerequisite: B- or higher in Prerequisite: STEM 60501: STEM: Teaching & Research Methods I

Co-requisite: STEM 60512: STEM Clinical Practice I; STEM 60524: STEM Teaching & Research Seminar I

This is the second course in the 3-course STEM methods sequence for science candidates in the Master of Arts in STEM Education program. Grounded in national and state science standards, the course introduces teaching models that support good science teaching practices. Course activities and assignments are directly connected to the co-requisite residency experiences. The course will help prepare pre-service science teachers to develop STEM pedagogy in the teaching of science. This course is offered annually during the Fall semester.

STEM 60523: STEM: Teaching & Research Methods III: Science

5 s.h.

Prerequisites: B- or higher in Prerequisites: STEM 60522: STEM: Teaching & Research Methods II: Science; STEM 60512: STEM Clinical Practice I; STEM 60524: STEM Teaching & Research Seminar I

Corequisite: STEM 60513: STEM Clinical Practice II; STEM 60525: STEM Teaching & Research Seminar II

This is the final course in the 3-course STEM methods sequence for science candidates in the Master of Arts in STEM Education program. Grounded in relevant research in science teaching-this course continues to build on teaching models that support good science teaching practices. In addition, this course explores contemporary issues in science and STEM education. Course activities and assignments are directly connected to the co-requisite residency experiences. This course is offered annually during the Spring semester. Upon completion of the course, candidates will demonstrate the ability to: Set long and short-term learning goals for students referenced to external benchmark; Appraise, choose, and modify tasks and texts for a specific learning goal; Design a sequence of lessons toward a specific learning goal; Select and use particular methods to check understanding and monitor student learning; Compose, select, interpret, and use

information from methods of summative assessment; Analyze instruction for the purpose of improving it; Communicate with other professionals

STEM 60524: STEM Teaching & Research Seminar I

1s.h.

Prerequisites: B- or higher in STEM 60501: STEM: Teaching & Research Methods I

Corequisite: STEM 60522: STEM: Teaching & Research Methods II: Science OR STEM 60502: STEM: Teaching & Research Methods II: Math; STEM 60512: STEM Clinical Practice I

This is the first course in a **two** clinical seminar course sequence for all candidates in the Master of Arts in STEM Education program. This course is specifically designed to create a professional community of mutual support for MA STEM teacher candidates as they navigate and make sense of their clinical experience. Teacher candidates will learn about general pedagogical and school-related issues, and develop professional supports and dispositions that will enable them to engage with teaching as life-long learners while maintaining essential wellness and work-life balance. In addition, candidates will learn about preparing and conducting a successful search for a secondary STEM teaching position. This course is offered annually during the Fall semester.

STEM 60525: STEM Teaching & Research Seminar II

1s.h.

Prerequisites: B- or higher in STEM 60524 STEM Teaching & Research Seminar I; STEM 60522: STEM: Teaching & Research Methods II: Science OR STEM 60502: STEM: Teaching & Research Methods II: Math; STEM 60512: STEM Clinical Practice I; Corequisite: STEM 60523: STEM: Teaching & Research Methods III: Science OR STEM 60503: STEM: Teaching & Research Methods III: Math; STEM 60513: STEM Clinical Practice II

This is the second course in a **two** clinical seminar course sequence for all candidates in the Master of Arts in STEM Education program. This course is specifically designed to create a professional community of mutual support for MA STEM teacher candidates as they navigate and make sense of their clinical experience. Teacher candidates will learn about general pedagogical and school-related issues, and develop professional supports and dispositions that will enable them to engage with teaching as life-long learners while maintaining essential wellness and work-life balance. In addition, candidates will learn about preparing and conducting a successful search for a secondary STEM teaching position. This course is offered annually during the Spring semester.

READ 30520: Adolescent Literacies

3 s.h.

This course is designed for reading and non-reading majors interested in increasing knowledge and skills in teaching reading in the content areas. It is a required course for those seeking an M.A. in reading. Instruction is provided in the developmental aspects of reading with little emphasis on corrective or remedial practices. The content of the course may be oriented toward the subject matter areas represented by the students enrolled in the course. Special emphasis is also given to developing vocabulary, comprehension, and study skills as well as to assessing pupil ability to read content material and to select suitable materials for instruction.

SMED 60550 - Schools & Society: Foundations for Secondary Teaching

3 s.h.

This introductory course addresses a number of foundational questions in the field of education, including: Who goes to school and for what purposes? What is taught and who decides? How are schools organized and who funds them? How are schools different now than they were 100 years ago? What legal precedents and reform movements have shaped education today? How are schools in the United States similar to and different from those abroad? In addition to reading and discussing works by seminal scholars in the field of education, students will also be required to engage in a field-based service-learning project in order to build a bridge between theory and practice. Students are expected to spend 3 hours/week in the field engaged in their project. Placements will be facilitated by the Office of Field Experiences.

SELN 60576: Inclusive Instruction in STEM Classrooms

3 s.h.

Prerequisites: B- or higher in: STEM 60501: STEM: Teaching & Research Methods I

Corequisites: No Corequisites

With a focus on STEM education for students with special needs, this course is designed to begin developing the knowledge, skills, and dispositions necessary for STEM teachers to understand and education students in inclusive classrooms. Emphasis will be on: (a) understanding the legal foundations for inclusive instruction, (b) recognizing students' diverse strengths and needs, (c) designing, implementing, and assessing effectively differentiated lessons that feature research-based strategies, and (d) organizing and managing a flexible, student-centered classroom.

EDTC 33700: STEM Teaching & Research Methods II: Computer Science

4 s.h.

Prerequisite: B- or higher in: STEM 60501: STEM: Teaching & Research Methods I

Co-requisite: STEM 60512: STEM Clinical Practice I; STEM 60524: STEM Teaching & Research Seminar I

This is the second course in the 3-course STEM methods sequence specific for computer science candidates in the Master of Arts in STEM Education program. Grounded in national and state computer science standards, the course introduces teaching models that support good computer science teaching practices. Course activities and assignments are directly connected to the co-requisite residency experiences. The course will help prepare pre-service computer science teachers to develop STEM pedagogy in the teaching of computer science. This course is offered annually during the Fall semester.

CS 60600: STEM Teaching & Research Methods III: Computer Science.....5 s.h.

Prerequisites: B- or higher in: EDTC 33700: STEM Teaching & Research Methods II: Computer Science STEM 60512: STEM Clinical Practice I; STEM 60524: STEM Teaching & Research Seminar I

Corequisite: STEM 60513: STEM Clinical Practice II; STEM 60525: STEM Teaching & Research Seminar II

This is the final course in the 3-course STEM methods sequence for science candidates in the Master of Arts in STEM Education program. Grounded in relevant research in computer science teaching this course continues to build on teaching models that support good computer science teaching practices. Course activities and assignments are directly connected to the co-requisite residency experiences. This course is offered annually during the Spring semester.

MA in STEM Education Course Schedule and Offering Status

(Please note if you are coming in from a STEM Education Accelerated track (ADD), courses listed for the entry summer session should have already been taken. A B- or higher MUST be achieved in all courses regardless of requisite status)

**Rowan University Master of Arts in STEM Education
2024-2025 Cohort Course Schedule**

Summer 2025 <i>Doesn't apply to STEM Ed. Accelerated entry candidates</i>	Fall 2025	Spring 2026	Summer 2026
<p>STEM 60501: STEM Teaching & Research Methods I (3 SH) Offered face-to-face across 8 weeks beginning and ending with the standard start and end dates for the term</p>	<p>STEM 60512: STEM Clinical Practice I (1 SH) Offered face-to-face across 15 weeks beginning and ending with the standard start and end dates for the term</p> <p>STEM 60524: STEM Teaching and Research Seminar I (1 SH) Offered face-to-face across 15 weeks beginning and ending with the standard start and end dates of the school placement</p>	<p>STEM 60503: STEM Teaching & Research Methods III: Math (5 SH) Offered face-to-face across 15 weeks beginning and ending with the standard start and end dates for the term</p> <p>STEM 60523: STEM Teaching & Research Methods III: Science (5 SH) Offered face-to-face across 15 weeks beginning and ending with the standard start and end dates for the term</p> <p>*CS60600 STEM Teaching & Research Methods III: Computer Science (5SH) Offered face-to-face across 15 weeks beginning and ending with the standard start and end dates for the term</p>	<p>STEM 60504: Professional Seminar for STEM Educators (3 SH) Offered face-to-face dates TBA – last date June 30th</p> <p>*Note: STEM 60504 is for students in their final semester</p>
<p>READ 30520: Adolescent Literacies Area Literacy (3 SH) Offered as a HYBRID course across 8 weeks.</p>	<p>STEM 60502: STEM Teaching & Research Methods II: Math (4 SH) Offered face-to-face across 15 weeks beginning and ending with the standard start and end dates for the Term</p> <p>STEM 60522: STEM Teaching & Research Methods II: Science (4 SH) Offered face-to-face across 15 weeks beginning and ending with the standard start and end dates for the term</p> <p>*EDTC 33700: STEM Teaching & Research Methods II: Computer Science (4 SH) Offered face to face across 15 weeks beginning and ending with the standard start and end dates of the term</p>	<p>STEM 60513: STEM Clinical Practice II (3 SH) Offered face-to-face across 18 weeks beginning with the standard start date and ending by June 30th.</p> <p>STEM 60525: STEM Teaching and Research Seminar II (1 SH) Offered face-to-face across 15 weeks beginning and ending with the standard start and end dates for the term</p>	
<p>STEM 60510: Teaching STEM in Diverse Settings (3 SH) Offered as a HYBRID course across 8 weeks.</p>	<p>SELN 60576: Inclusive Instruction in STEM Classrooms (3 SH) Offered ONLINE across 8 weeks beginning October and ending December.</p>		
<p>SMED 60550 - Schools & Society: Foundations for Secondary Teaching (3 SH) Offered face-to-face: Meeting dates TBA</p>	<p>*Only taken by candidates seeking computer science teaching certification</p>		

MA STEM Entry Requirements

If applying from a STEM Education Accelerated track (ADD) in any science/ math:

- Meet all requirements of undergraduate (BA/BS) degree in content area. Undergraduate transcript must clearly show a minimum of 30 credits in a coherent sequence in the specific subject area with **at least 12 course credits completed at the advanced level of study for the specific subject area (300 level or above – junior, senior or graduate level)**.
- Cumulative Transcript GPA must be 3.0 (if between 2.75 and 3.0 – possibility of entry pending entry cohort average) with all undergraduate **education courses a C- or better**.
- Submission of Transfer & Transition Forms
- Proof of completion of BA/ BS requirements in the specific Science major or Math major demonstrating a coherent sequence of at least 30 credit hours of content specialization courses; 12 of which are at the 300 level or higher.
- Complete successfully the following two undergraduate required courses:
 - Adolescent Psychology (or confirmed state equivalent)
 - Health & Wellness or Nutrition or Biology (human related preferable). If not completed see graduate advisor regarding alternative.
- Grades B- or better in **any graduate education courses relevant to MA STEM program**. Required graduate courses for entry into the MA in STEM Education program may only be attempted twice.
- Passing scores on relevant Praxis II exams **submit scores by April 30th prior to starting Clinical Practice I**
- Submission of NJDOE Criminal Background check **by August 1st** prior to entry into Senior year
- Submission of clear TB test **by August 1st** prior to entry to Senior year. Mantoux (TB) Tests: School districts are now requiring current TB tests for all field placements. Please visit <http://www.rowan.edu/colleges/education/ofe/mantoux.html> for details.
- Completed Full-Year Residency application in the Tk20 system (**Between November 1- November 30 during senior year**)
 - *Note: Students will be placed in the 7 most southern NJ counties for their Clinical Practice Placement; Burlington, Camden, Gloucester, Atlantic, Cumberland, Salem and Cape May. No exceptions will be made.*

If applying to MA STEM with a BA/BS in any science/ math/ engineering:

- **Candidates must hold a bachelor degree (BA/BS) showing clearly** a minimum of 30 credits in a coherent sequence in the specific subject area. A coherent sequence requires that **at least 12 credits are completed at the advanced level of study (300 level or above – junior, senior or graduate level)**.
- Cumulative Transcript GPA must be 3.0 (if between 2.75 and 3.0 – possibility of entry pending entry cohort average) with all undergraduate education courses **a C- or better**.
- All credits must appear on a regionally accredited college/university transcript as required by the New Jersey Department of Education.
- Complete successfully the following two undergraduate required courses or equivalents
 - Adolescent Psychology (or confirmed state equivalent)
 - Health & Wellness or Nutrition or Biology (human related preferable)
- Passing scores on relevant Praxis II exams **submit scores by April 30th prior to starting Clinical Practice I**
- Submission of NJDOE Criminal Background check **by December 1st** prior to entry into program
- Submission of clear TB test **by December 1st** prior to entry into program. Mantoux (TB) Tests: School districts are now requiring current TB tests for all field placements. Please visit <http://www.rowan.edu/colleges/education/ofe/mantoux.html> for details.
- Completed Full-Year Residency application in the Tk20 system (**Between November 1- November 30 prior to entry into program**)

- *Note: Students will be placed in the 7 most southern NJ counties for their Clinical Practice Placement; Burlington, Camden, Gloucester, Atlantic, Cumberland, Salem and Cape May. No exceptions will be made.*

Alternative Entry & Certification Measures

Upon completion, all candidates in the program will receive a CEAS (Certificate of Eligibility for Advanced Standing) per NJDOE. However, those intending to follow a Limited CEAS, please note that regardless, if you are entering via a STEM Education Accelerated program (ADD) or via traditional route (i.e. having been awarded a BA/ BS), per NJDOE newly implemented form 2024, candidates can now apply for a Limited CEAS. Please see: <https://www.nj.gov/education/certification/CE-CEAS-pilotprogram.shtml> for details and conditions in order to meet requirements. Please note the flexibilities or alternatives in N.J.A.C. 6A:9B-8.2(c)(2), and N.J.A.C. 6A:9B-9.1(a)(2) cannot be utilized for meeting these requirements for the Limited CEAS.

Should candidates have trouble addressing required Praxis II cut scores, candidates can still enter the program in either one of NJ state approved alternative conditions:

- Using the GPA Flex Rule** – Candidate must have a minimum overall cumulative GPA of 3.0 (or 3.5) or above to be able to be considered for alternative scores on the Praxis II as identified by NJDOE. New Jersey requires that candidates for certification achieve a cumulative GPA of at least 3.00 where a GPA of 4.00 equals an A grade for students graduating on or after September 1, 2016 (**2.75 for students graduating before September 1, 2016**) in a baccalaureate degree program, higher degree program or a State-approved post-baccalaureate certification program with a minimum of 13 semester-hour credits. A high **Praxis score** or a high **GPA** may qualify for flexibility. See the graduate advisor for more information and the possibility if you are eligible to use this rule. Upon graduation, processing of certification will be the responsibility of the candidate. (See: <https://www.nj.gov/education/certification/testing/flex/>)
- Limited CEAS** – Candidate can announce to follow a Limited CEAS path. Limited CEAS applicants must meet all certification requirements, except one of the following: GPA (3.0 and above); **OR** Content knowledge assessment (Praxis II) . The limited CEAS is only valid for employment in a school district, charter school, or renaissance school approved to participate in this pilot program. As this is a pilot pathway issued by state, please be advised that by 2027 this pathway will end. Upon processing of certification will be the responsibility of the candidate (also see: <https://www.nj.gov/education/certification/CE-CEAS-pilotprogram.shtml>)

Sustainability in Program

To successfully continue in the MA STEM program, you must ensure that:

- You meet all course and field requirements. This includes but not limited to field hours in the school and successful passing of all graduate courses with a minimum of a B- grade.
- Maintain a 3.0 Cumulative GPA
- You don't repeat a course(s) (including field) **more than once.**
- Constant communication with your graduate program advisor. Your program advisor is also the program coordinator so any academic or personal issues (scheduling, registration etc....) must be addressed to that person only. The coordinator and advisor for this year is Dr. Issam Abi-El-Mona (abi-el-mona@rowan.edu ; x4736; James Hall Rm 2042).
- All required documents are provided, up to date and meet the required deadlines (ex: certification, graduation applications, program and college forms as well as updated transcript and praxis scores)
- You attend all mandatory program meetings/events
- You always display professional behavior (this includes but is not limited to proper and positive dispositional attitudes and respect for others)

Program Completion

To successfully complete the program, the following requirements need to be met:

- Overall GPA of 3.0 or better (*nonnegotiable / non-appealable*) at exit of the program with no course grade lower than B- and no *Incompletes*.
- Passing scores on relevant Praxis II exams

- Meets minimum expectations on all signature assignments
- Successful submission and completion of NJDOE approved summative teacher performance project (as assigned by the College).
- Final clinical practice evaluation demonstrates “Basic” or higher on all Danielson Framework indicators and “Proficient” or higher on all SPA addendum indicators as evidence by successful completion of STEM 60512 AND 60513
- Successful completion and recommendation for certification from Rowan University Clinical Practice supervisor and Program Coordinator.
- No dispositional issues as reported during full clinical practice and by instructors, advisors and supervisors.
- Transcript shows no incompletes.

Graduation and Certification

Please note the completion and submission of both graduation and teaching certification applications. See dates listed on the Registrar’s webpage at www.rowan.edu/Registrar . Students apply for graduation electronically through banner self-service and apply for certification through the College of Education Advising Center (CEAC). A student can obtain a cert application through the College of Education Advising Center or online on the College of Education webpage. **It is important that these forms be submitted to the appropriate office by the printed deadline dates.** “Walking” papers are not a means to graduate. It is only a means to participate in the commencement ceremony. Go to www.rowan.edu/registrar (under forms) for the Commencement Participation Form and deadline/details (signatures are needed). Completed certification application with OCE at College of Education. Deadline: **January 15th -March 31st of graduate year.**

Certification: The state of New Jersey no longer requires teacher candidates to do and pass an edTPA exam for certification however candidates are still required to pass summative assessments assigned by their academic institution during their clinical practice experience. Further detail can be provided to you via Ms. Laurie Haines(Assistant Director of the Office of Educational Support and Partnerships; see: <https://education.rowan.edu/contactus/facultystaff/haines-laurie.html>. Failing to meet program requirements and passing required summative assessments can lead to the the state of New Jersey will not issuing your teacher certification. Further information about required summative program summative assessments can also be found in the MA STEM Clinical Practice Handbook.

Essential Notes:

- *Please note that required values and passing for GPA, all praxis exams are non-negotiable and non-appealable*
- *Incomplete tasks/ coursework will/ may delay graduation and certification*
- *Should any personal circumstance intervene in your ability to complete the program then your re-entry into the program is pendant review by the program coordinator and Department Chair.*
- *Please make sure that you also review the MA STEM Clinical Practice Handbook for all requirements you will need to meet in the field for graduation.*

Pass/ No Credit Option

MA STEM program courses comply with all College of Education policies and procedures. In effect, MA STEM program courses are not eligible for Pass or No Credit **except for the clinical field practice courses: STEM 60512 and STEM 60513.**

Financial Assistance

If you require financial assistance throughout the program, please check with your advisor and he/ she will share with you the options available.

Registration

Registration begins as soon as you are accepted into the program. You can still register any time before the start of the semester. Should you have any registration issues you must inform the advisor ASAP.

Meetings and Events

Throughout the year there will be meetings and events held specifically for all MA STEM graduates current and incoming cohorts. You are highly encouraged to attend these meetings and events as important information is dissipated and the events provide an opportunity for you to increase your network.

Professional Development

There will be various opportunities for you to attend, participate and/or perform a professional development workshop. These will count towards your clinical practice experience as well as certain coursework and will help enhance your professional growth as a future STEM teacher. It is encouraged that you take advantage of such opportunities throughout your experience in the program.

Performance Hindering Issues

If for some reason you have medical/personal issues that will hinder your ability to maintain a standard of excellence or continue in the program, then you must communicate with the program advisor ASAP so that a possible solution can be provided for your specific situation. Hardship situations are considered with provided substantial evidence.

Proposed Course Sequence

The program takes 13 months to complete. The following **demonstrate a sample of course sequence throughout the MA STEM program. Courses listed are courses that are taken in the program. Candidates who entered through a STEM Education Accelerated track take the first 12 credits during their senior year. During the fall and spring terms, Science and Math method courses** are separate so ensure that you are registering the course relevant to your subject area.

Year 1 Entry point in May	Semester 1 (Summer Semesters- 12 credits)	s.h.
Courses that should normally be taken in the summer if entered as traditional MA STEM Candidates on a STEM Education Accelerated track take these courses during the undergraduate senior year Fall/ Spring Terms	READ 30520: Adolescent Literacies	3
	*SMED 60550: Schools & Society: Foundations for Secondary Teaching Free Elective	3
	*STEM 60510: Teaching STEM in Diverse Settings	3
	*STEM 60501: STEM Teaching & Research Methods I	3
TOTAL CREDITS ACHIEVED FOR SEMESTER		12

Year 1 (cont'd)	Semester 2 (Fall Semester- 9 credits)	s.h.
Courses that should normally be taken in the Fall term for all candidates i.e. STEM Ed. Accelerated included who are <u>SCIENCE</u>	STEM 60522: STEM Teaching & Research Methods: Science II EDTC 33700: STEM Teaching & Research Methods II: Computer Science (ONLY FOR CS teacher candidates)	4
	*STEM 60512: STEM Clinical Practice I	1
	STEM 60524: STEM Teaching and Research Seminar 1	1
	SELN 60576: Inclusive Instruction in STEM Classrooms	3
TOTAL CREDITS ACHIEVED FOR SEMESTER		9

Year 1 (cont'd)	Semester 2 (Fall Semester- 9 credits)	s.h.
Courses that should normally be taken in the Fall term for all candidates i.e. STEM Ed Accelerated included who are MATH	STEM 60502: STEM Teaching & Research Methods: Math II	4
	*STEM 60512: STEM Clinical Practice I	1
	STEM 60524: STEM Teaching and Research Seminar I	1
	SELN 60576: Inclusive Instruction in STEM Classrooms	3
TOTAL CREDITS ACHIEVED FOR SEMESTER		9

Year 1 (cont'd)	Semester 3 (Spring Semester- 10 credits)	s.h.
Courses that should normally be taken in the Fall term for all candidates i.e. STEM Ed Accelerated who are SCIENCE	STEM 60523: STEM Teaching & Research Methods: Science III CS60600 STEM Teaching & Research Methods III: Computer Science (ONLY for CS teacher candidates)	5
	*STEM 60513: STEM Clinical Practice II	3
	STEM 60525: STEM Teaching and Research Seminar II	1
TOTAL CREDITS ACHIEVED FOR SEMESTER		10

Year 1 (cont'd)	Semester 3 (Spring Semester- 10 credits)	s.h.
Courses that should normally be taken in the Fall term for all candidates i.e. STEM Ed Accelerated included who are MATH	STEM 60503: STEM Teaching & Research Methods: Math III	5
	*STEM 60513: STEM Clinical Practice II	3
	STEM 60525: STEM Teaching and Research Seminar II	1
TOTAL CREDITS ACHIEVED FOR SEMESTER		10

Year 1 (cont'd)	Semester 4 (Final Summer Semester-3 credits)	s.h.
Final course for completion of Master's program	STEM 60504: Professional Seminar for STEM Educators	3
TOTAL CREDITS FOR SUMMER TERM		3
TOTAL CREDITS COMPLETED FOR GRADUATION		33

**Courses indicating field requirement*