

MASTER OF ARTS IN TEACHING (MAT)

Degree: Master of Arts in Teaching
<https://www.towson.edu/coe/departments/teaching/>

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The Master of Arts in Teaching (MAT) is designed for those without formal training in the field of education who wish to enter the teaching profession. It is well suited to recent graduates and to those seeking to change careers. A graduate of this program will be eligible for initial teacher certification within the General Education concentrations of Early Childhood (ECED), Elementary (ELED) or Secondary Education (SCED). A student may also choose a Special Education track in Infant/Primary, Elementary/Middle or Secondary/Adult Education. In addition to completing the MAT program requirements, the Maryland State Department of Education (MSDE) requires that all applicants for state teaching licensure successfully complete the required content exams for their respective area. Teacher candidates pursuing certification as French or Spanish world language teachers must provide a passing score on the ACTFL OPI exam at the Advanced Low level prior to beginning EDUC 798. All world language teacher candidates must pass the ACTFL WPT at the Advanced Low level as an MSDE certification requirement.

Teacher candidates with a concentration in General Education have two options for program completion: One-Year (full-time) and Part-Time. The One-Year option requires a full-time commitment to courses and internship. This program encompasses a summer, fall and extended spring term. The Part-Time option allows teacher candidates to design a course of study to fit their schedules (generally one, two or three evening courses per term). Both options require teacher candidates to complete substantial daytime internship hours (typically 2 days per week) during

their enrollment in EDUC 797 and full-time internship during EDUC 798. Participation in the Part-Time option requires candidates to complete all MAT program requirements within seven years. The Special Education tracks are only available as Part-Time options.

The MAT Program offers a hybrid option (both online and on-campus courses) and fully online option. The online program is available statewide and designed for convenience and flexibility.

Internships for teacher candidates pursuing a General Education certification are completed in partner school settings. Internships for teacher candidates pursuing Special Education certification are completed in appropriate special education classroom settings. Teacher candidates are responsible for transportation to internship placements. All placements must be completed in subject areas and grade levels appropriate to the desired certification area. Understanding of assessment and literacy, application of effective instructional strategies, demonstrated evidence of PreK-12 student learning and development of essential dispositions for educators are integrated throughout the program and assessed during course work and internships.

Requirements

Admission Requirements

Application deadlines and a full listing of materials required for admission can be found on the website.

Prerequisites for Admission

Early Childhood and Elementary certifications for both General Education and Special Education require a well-rounded content background, including specific courses in English, math, science and the social sciences. These requirements are aligned with professional association accreditation standards. In addition, Special Education teacher candidates enrolled in the Infant/Primary and Elementary/Middle tracks must take two MSDE approved reading courses as prerequisites to the program: ECED 618 or ELED 611; and EDUC 717.

Special Education teacher candidates enrolled in the Secondary/Adult track must take one graduate-level reading course as a prerequisite to the program: SPED 670. Contact the MAT office for evaluation of transcripts to determine any needed content area course work. This should be done prior to application.

Certification in Secondary General Education requires a minimum of 30 specific units in a content area: biology, chemistry, earth-space science, English, math, physics, history / social studies or one of the world languages (French or Spanish). Content area requirements are aligned with professional association accreditation standards. Contact the MAT office for evaluation of transcripts to determine any needed content area course work. This should be done prior to application.

Program Completion

In order to successfully complete the MAT program and graduate, teacher candidates must maintain a 3.00 GPA in the graduate program, earn no more than two grades of "C" in MAT course work, receive satisfactory grades on all content prerequisites prior to entering EDUC 798, receive a grade of "C" or greater in EDUC 797 prior to entering EDUC 798, and earn a grade of "S" in EDUC 798. Additionally, all teacher candidates must meet the edTPA completion requirement.

Degree Requirements for General Education

The MAT program in Early Childhood or Elementary General Education requires 42 units of course work. The MAT program in Secondary General Education requires 37 units of course work to include 34 graduate units and 3 undergraduate units in secondary methods.

Early Childhood General Education

Code	Title	Units
Core Courses		
EDUC 730	PRINCIPLES OF LEARNING, DEVELOPMENT AND DIVERSITY	3
EDUC 731	CURRICULUM AND ASSESSMENT	3
EDUC 797	INTERNSHIP I WITH SEMINAR ¹	6
EDUC 798	INTERNSHIP II WITH SEMINAR ²	6
SPED 637	INCLUSION FOR THE CLASSROOM TEACHER	3
Early Childhood General Education Courses		
ECED 604	MATH/SCIENCE IN THE EARLY CHILDHOOD EDUCATION PROGRAM	3
ECED 608	INTEGRATED CURRICULUM AND AUTHENTIC LEARNING IN EARLY CHILDHOOD EDUCATION	3
ECED 614	WORKING WITH LINGUISTICALLY DIVERSE YOUNG CHILDREN AND THEIR FAMILIES	3
ECED 618	THINKING THROUGH THE PROCESSES AND ACQUISITION OF LITERACY	3
ECED 621	ASSESSMENT OF READING AND WRITING IN EARLY CHILDHOOD EDUCATION	3
ECED 623	STRATEGIES FOR TEACHING READING AND WRITING: BALANCED LITERACY APPROACHES IN ECED CLASSROOM	3
EDUC 717	CHILDREN'S LITERATURE AND OTHER MATERIALS FOR TEACHING READING	3
Total Units		42

Elementary General Education

Code	Title	Units
Core Courses		
EDUC 730	PRINCIPLES OF LEARNING, DEVELOPMENT AND DIVERSITY	3
EDUC 731	CURRICULUM AND ASSESSMENT	3
EDUC 797	INTERNSHIP I WITH SEMINAR ¹	6
EDUC 798	INTERNSHIP II WITH SEMINAR ²	6
SPED 637	INCLUSION FOR THE CLASSROOM TEACHER	3
Elementary General Education Courses		
ECED 614	WORKING WITH LINGUISTICALLY DIVERSE YOUNG CHILDREN AND THEIR FAMILIES	3
EDUC 717	CHILDREN'S LITERATURE AND OTHER MATERIALS FOR TEACHING READING	3
EDUC 787	LITERACY INSTRUCTION AND ASSESSMENT I	3
ELED 611	PRINCIPLES AND PRACTICES OF LANGUAGE AND LITERACY	3

ELED 621	LITERACY INSTRUCTION AND ASSESSMENT II	3
ELED 685	SEMINAR IN ELEMENTARY SCHOOL SOCIAL STUDIES	3
MATH 621	SEMINAR IN TEACHING ELEMENTARY/ MIDDLE SCHOOL MATHEMATICS	3
Total Units		42

¹ A lab fee is attached to EDUC 797. All teacher candidates must complete a minimum of two days each week in at their internship placement as a requirement of this part-time internship. Successful completion of EDUC 797 is a prerequisite to enrollment in EDUC 798.

² A lab fee is attached to EDUC 798. All teacher candidates complete 18 weeks of full-time, five days per week internship in a PDS. EDUC 798 is completed in the final spring term.

Secondary General Education

Code	Title	Units
Core Courses		
EDUC 730	PRINCIPLES OF LEARNING, DEVELOPMENT AND DIVERSITY	3
EDUC 731	CURRICULUM AND ASSESSMENT	3
EDUC 797	INTERNSHIP I WITH SEMINAR ¹	6
EDUC 798	INTERNSHIP II WITH SEMINAR ²	6
SPED 637	INCLUSION FOR THE CLASSROOM TEACHER	3
Secondary General Education Courses		
ISTC 501	INTEGRATING INSTRUCTIONAL TECHNOLOGY ³	3
EDUC 734	THE TEACHER AS RESEARCHER	3
SCED 560	USING LITERACY IN THE SECONDARY SCHOOL	4
SCED 561	TEACHING LITERACY IN THE SECONDARY CONTENT AREAS	3
Select one of the following based on content area:		3
MATH 423	TEACHING MATHEMATICS IN THE SECONDARY SCHOOLS	
SCED 353	TEACHING MODERN FOREIGN LANGUAGE	
SCED 355	TEACHING SOCIAL STUDIES IN THE SECONDARY SCHOOL	
SCED 357	TEACHING ENGLISH IN THE SECONDARY SCHOOL	
SCIE 380	TEACHING SCIENCE IN THE SECONDARY SCHOOLS	
Total Units		37

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² A lab fee is attached to EDUC 798. All teacher candidates complete 18 weeks of full-time, five days per week internship in a PDS. EDUC 798 is completed in the final spring term.

³ A lab fee is attached to this course.

Degree Requirements for Special Education

The MAT program in Infant/Primary and Elementary/Middle Special Education requires 39 units of course work. The MAT program in Secondary/Adult Special Education requires 40 units of course work.

Infant/Primary Special Education

Code	Title	Units
Core Courses		
EDUC 730	PRINCIPLES OF LEARNING, DEVELOPMENT AND DIVERSITY	3
EDUC 797	INTERNSHIP I WITH SEMINAR ²	3
EDUC 798	INTERNSHIP II WITH SEMINAR ³	6
SPED 525	FORMAL TESTS AND MEASUREMENTS FOR STUDENTS WITH DISABILITIES (PREK-12)	3
SPED 605	WORKING WITH FAMILIES OF STUDENTS WITH DISABILITIES	3
SPED 607	CURRICULUM/METHODS OF CLASSROOM MANAGEMENT FOR STUDENTS WITH DISABILITIES	3
SPED 632	ASSESSMENT ISSUES FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS	3
SPED 637	INCLUSION FOR THE CLASSROOM TEACHER	3
SPED 641	EDUCATION OF STUDENTS WITH DISABILITIES (SWD): METHODS OF INSTRUCTION	3
SPED 646	USING TECHNOLOGY TO DIFFERENTIATE INSTRUCTION ¹	3
Early Childhood Special Education Courses		
ECED 621	ASSESSMENT OF READING AND WRITING IN EARLY CHILDHOOD EDUCATION	3
ECED 623	STRATEGIES FOR TEACHING READING AND WRITING: BALANCED LITERACY APPROACHES IN ECED CLASSROOM	3
Total Units		39

¹ A lab fee is attached to this course.

² A lab fee is attached to EDUC 797. All teacher candidates must complete a minimum of two days each week in at their internship placement as a requirement of this part-time internship. Successful completion of EDUC 797 is a prerequisite to enrollment in EDUC 798.

³ A lab fee is attached to EDUC 798. All teacher candidates complete 18 weeks of full-time, five days per week internship in a special education classroom. EDUC 798 is completed in the final spring term.

Elementary/Middle Special Education

Code	Title	Units
Core Courses		
EDUC 730	PRINCIPLES OF LEARNING, DEVELOPMENT AND DIVERSITY	3
EDUC 797	INTERNSHIP I WITH SEMINAR ²	3
EDUC 798	INTERNSHIP II WITH SEMINAR ³	6

SPED 525	FORMAL TESTS AND MEASUREMENTS FOR STUDENTS WITH DISABILITIES (PREK-12)	3
SPED 605	WORKING WITH FAMILIES OF STUDENTS WITH DISABILITIES	3
SPED 607	CURRICULUM/METHODS OF CLASSROOM MANAGEMENT FOR STUDENTS WITH DISABILITIES	3
SPED 632	ASSESSMENT ISSUES FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS	3
SPED 637	INCLUSION FOR THE CLASSROOM TEACHER	3
SPED 641	EDUCATION OF STUDENTS WITH DISABILITIES (SWD): METHODS OF INSTRUCTION	3
SPED 646	USING TECHNOLOGY TO DIFFERENTIATE INSTRUCTION ¹	3
Elementary/Middle Special Education Courses		
EDUC 787	LITERACY INSTRUCTION AND ASSESSMENT I	3
ELED 621	LITERACY INSTRUCTION AND ASSESSMENT II	3
Total Units		39

¹ A lab fee is attached to this course.

² A lab fee is attached to EDUC 797. All teacher candidates must complete a minimum of two days each week in at their internship placement as a requirement of this part-time internship. Successful completion of EDUC 797 is a prerequisite to enrollment in EDUC 798.

³ A lab fee is attached to EDUC 798. All teacher candidates complete 18 weeks of full-time, five days per week internship in a special education classroom. EDUC 798 is completed in the final spring term.

Secondary/Adult Special Education

Code	Title	Units
Core Courses		
EDUC 730	PRINCIPLES OF LEARNING, DEVELOPMENT AND DIVERSITY	3
EDUC 797	INTERNSHIP I WITH SEMINAR ²	3
EDUC 798	INTERNSHIP II WITH SEMINAR ³	6
SPED 525	FORMAL TESTS AND MEASUREMENTS FOR STUDENTS WITH DISABILITIES (PREK-12)	3
SPED 605	WORKING WITH FAMILIES OF STUDENTS WITH DISABILITIES	3
SPED 607	CURRICULUM/METHODS OF CLASSROOM MANAGEMENT FOR STUDENTS WITH DISABILITIES	3
SPED 637	INCLUSION FOR THE CLASSROOM TEACHER	3
SPED 641	EDUCATION OF STUDENTS WITH DISABILITIES (SWD): METHODS OF INSTRUCTION	3
SPED 646	USING TECHNOLOGY TO DIFFERENTIATE INSTRUCTION ¹	3

Secondary Special Education Courses

SCED 560	USING LITERACY IN THE SECONDARY SCHOOL	4
SCED 561	TEACHING LITERACY IN THE SECONDARY CONTENT AREAS	3
SPED 601	SPECIAL EDUCATION: CURRICULUM & METHODS OF INSTRUCTION FOR SECONDARY TRANSITION	3
Total Units		40

¹ A lab fee is attached to this course.

² A lab fee is attached to EDUC 797. All teacher candidates must complete a minimum of two days each week in a special education classroom. Successful completion of EDUC 797 is a prerequisite to enrollment in EDUC 798.

³ A lab fee is attached to EDUC 798. All teacher candidates complete 18 weeks of full-time, five days per week internship in a special education classroom. EDUC 798 is completed in the final spring term.

Accelerated Program Accelerated Bachelor's to MAT Program

The accelerated Bachelor's - Master's program in Teaching allows students to complete their graduate degrees plus teacher certification in shorter time. Students earn a four-year Bachelor's degree in a non-education related major and a Master of Arts in Teaching that leads to eligibility for initial teacher certification in the State of Maryland. As early as junior year, students may complete the application process to screen into the accelerated Bachelor's - Master's program in Teaching. The accelerated degree program allows qualified undergraduates to take courses that will count towards the Master's of Arts in Teaching while still enrolled as an undergraduate at Towson University.

Selection Criteria for the Accelerated Program

- Current undergraduate with junior or senior standing at Towson University
- A minimum cumulative GPA of 3.00
- Resume and brief statement of purpose (less than 250 words).
- Completion of the "Accelerated Program Agreement."

The "Accelerated Program Agreement," defines program requirements and acknowledges that selection for the accelerated program, as an undergraduate, does not guarantee admission to the Master of Arts in Teaching (MAT) Program. To continue into the master's portion of the accelerated program, students must complete their bachelor's degrees from Towson and formally apply to the MAT Program through Admissions in the final semester of their senior year.

Degree Requirements

- Undergraduate student with 60+ units is screened for the accelerated major by the academic department.
- Students in the accelerated program will take up to 9 units of graduate MAT coursework determined most appropriate for the student's intended teaching certification area.
- In their senior year, accelerated program students will formally apply to the Master of Arts in Teaching (MAT) Program via Admissions. The application fee is waived for Towson graduates.

- Accelerated program students admitted to the master's program will begin the MAT Program the term AFTER they complete their undergraduate degree.
- Accelerated program students admitted to the MAT Program may earn their master's degree in as little as 12 months.

Areas of Certification

- Early Childhood Education, grades Pre-K - 3 (42 units)
- Elementary Education, grades 1 - 6 (42 units)
- Secondary Education, grades 7-12 (37 units)
 - Concentration Areas: Math, Biology, Chemistry, Physics, Earth Space Science; (World Languages-PreK-12 in Spanish & French)
- Special Education (39-40 units)
 - Concentration Areas: Infant/Primary (birth-3rd grade), Elementary/Middle (1st-8th grade), Secondary/Adult (6th-12th grade).
 - All students will complete a part-time and full-time teaching internship.

Withdrawal and Ineligibility

- Students may withdraw by informing the program director in writing. Students who complete the bachelor's but decide not to continue with the MAT portion of the program will terminate their program with the fulfillment of all requirements for the undergraduate degree.
- A student who is ineligible to participate or who withdraws from the accelerated degree program cannot double-count any courses for both undergraduate and graduate degrees.

Learning Outcomes Early Childhood MAT

NAEYC Standard 1. Promoting Child Development and Learning

Candidates prepared in early childhood degree programs are grounded in a child development knowledge base. They use their understanding of young children's characteristics and needs, and of multiple interacting influences on children's development and learning, to create environments that are healthy, respectful, supportive, and challenging for each child.

NAEYC Standard 2. Building Family and Community Relationships

Candidates prepared in early childhood degree programs understand that successful early childhood education depends upon partnerships with children's families and communities. They know about, understand, and value the importance and complex characteristics of children's families and communities. They use this understanding to create respectful, reciprocal relationships that support and empower families, and to involve all families in their children's development and learning.

NAEYC Standard 3. Observing, Documenting, and Assessing to Support Young Children and Families

Candidates prepared in early childhood degree programs understand that child observation, documentation, and other forms of assessment are central to the practice of all early childhood professionals. They know about and understand the goals, benefits, and uses of assessment. They know about and use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with

families and other professionals, to positively influence the development of every child.

NAEYC Standard 4. Using Developmentally Effective Approaches

Candidates prepared in early childhood degree programs understand that teaching and learning with young children is a complex enterprise, and its details vary depending on children's ages, characteristics, and the settings within which teaching and learning occur. They understand and use positive relationships and supportive interactions as the foundation for their work with young children and families. Candidates know, understand, and use a wide array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child's development and learning.

NAEYC Standard 5. Using Content Knowledge to Build Meaningful Curriculum

Candidates prepared in early childhood degree programs use their knowledge of academic disciplines to design, implement, and evaluate experiences that promote positive development and learning for each and every young child. Candidates understand the importance of developmental domains and academic (or content) disciplines in early childhood curriculum. They know the essential concepts, inquiry tools, and structure of content areas, including academic subjects, and can identify resources to deepen their understanding. Candidates use their own knowledge and other resources to design, implement, and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for every young child.

NAEYC Standard 6. Becoming a Professional

Candidates prepared in early childhood degree programs identify and conduct themselves as members of the early childhood profession. They know and use ethical guidelines and other professional standards related to early childhood practice. They are continuous, collaborative learners who demonstrate knowledgeable, reflective and critical perspectives on their work, making informed decisions that integrate knowledge from a variety of sources. They are informed advocates for sound educational practices and policies.

NAEYC Standard 7. Early Childhood Field Experiences

Field experiences and clinical practice are planned and sequenced so that candidates develop the knowledge, skills and professional dispositions necessary to promote the development and learning of young children across the entire developmental period of early childhood – in at least two of the three early childhood age groups (birth – age 3, 3 through 5, 5 through 8 years) and in the variety of settings that offer early education (early school grades, child care centers and homes, Head Start programs).

Elementary Education MAT

CAEP K-6 ELEMENTARY TEACHER PREPARATION STANDARDS

- **STANDARD 1** – Understanding and Addressing Each Child's Developmental and Learning Needs Candidates use their understanding of child growth and development, individual differences, and diverse families, cultures and communities to plan and implement inclusive learning environments that provide each child with equitable access to high quality learning experiences that engage and create learning opportunities for them to meet high standards. They work collaboratively with families to gain a holistic

perspective on children's strengths and needs and how to motivate their learning.

- **STANDARD 2** – Understanding and Applying Content and Curricular Knowledge for Teaching Candidates demonstrate and apply understandings of major concepts, skills, and practices, as they interpret disciplinary curricular standards and related expectations within and across literacy, mathematics, science, and social studies.
- **STANDARD 3** – Assessing, Planning, and Designing Contexts for Learning Candidates assess students, plan instruction and design classroom contexts for learning. Candidates use formative and summative assessment to monitor students' learning and guide instruction. Candidates plan learning activities to promote a full range of competencies for each student. They differentiate instructional materials and activities to address learners' diversity. Candidates foster engagement in learning by establishing and maintaining social norms for classrooms. They build interpersonal relationships with students that generate motivation, and promote students social and emotional development.
- **STANDARD 4** – Supporting Each Child's Learning Using Effective Instruction. Candidates make informed decisions about instruction guided by knowledge of children and assessment of children's learning that result in the use of a variety of effective instructional practices that employ print, and digital appropriate resources. Instruction is delivered using a cohesive sequence of lessons and employing effective instructional practices. Candidates use explicit instruction and effective feedback as appropriate, and use whole class discussions to support and enhance children's learning. Candidates use flexible grouping arrangements, including small group and individual instruction to support effective instruction and improved learning for every child.
- **STANDARD 5**- Developing as a Professional Candidates promote learning and development of every child through participation in collaborative learning environments, reflective self-study and professional learning, and involvement in their professional community.

English MAT (NCTE 2021)

STANDARD 1: LEARNERS AND LEARNING IN ELA

Candidates apply and demonstrate knowledge of learners and learning to foster inclusive learning environments that support coherent, relevant, standards-aligned, differentiated, and antiracist/antibias instruction to engage grade 7–12 learners in ELA.

STANDARD 2: ELA CONTENT KNOWLEDGE

Candidates apply and demonstrate knowledge and theoretical perspectives, including antiracist/antibias ELA, pertaining to texts, composition, language, and languaging.

STANDARD 3: INSTRUCTIONAL PRACTICE: PLANNING FOR INSTRUCTION IN ELA

Candidates apply and demonstrate knowledge of theories, research, and ELA to plan coherent, relevant, standards-aligned, differentiated, antiracist/antibias instruction and assessment.

STANDARD 4: INSTRUCTIONAL PRACTICE: IMPLEMENTING INSTRUCTION IN ELA

Candidates implement planned coherent, relevant, standards aligned, differentiated, and antiracist/antibias ELA instruction and assessment to motivate and engage all learners.

STANDARD 5: PROFESSIONAL RESPONSIBILITY OF ELA TEACHERS

Candidates reflect on their ELA practice, use knowledge and theoretical perspectives to collaborate with educational community members, and demonstrate readiness for leadership, professional learning, and advocacy.

Foreign Languages MAT (ACTFL 2013)

ACTFL Standard 1. Language proficiency: Interpersonal, Interpretive, and Presentational

ACTFL Standard 2. Cultures, Linguistics, Literatures, and Concepts from Other Disciplines

ACTFL Standard 3. Language Acquisition Theories and Knowledge of Students and Their Needs

ACTFL Standard 4. Integration of Standards in Planning, Classroom Practice, and Use of Instructional Resources

ACTFL Standard 5. Assessment of Languages and Cultures – Impact on Student Learning

ACTFL Standard 6. Professional Development, Advocacy, and Ethics

Mathematics MAT (NCTM 2020)

NCTM Standard 1: Knowing and Understanding Mathematics

Candidates demonstrate and apply understandings of major mathematics concepts, procedures, knowledge, and applications within and among mathematical domains of Number; Algebra and Functions; Calculus; Statistics and Probability; Geometry, Trigonometry, and Measurement.

NCTM Standard 2: Knowing and Using Mathematical Processes

Candidates demonstrate, within or across mathematical domains, their knowledge of and ability to apply the mathematical processes of problem solving; reason and communicate mathematically; and engage in mathematical modeling. Candidates apply technology appropriately within these mathematical processes.

NCTM Standard 3: Knowing Students and Planning for Mathematical Learning

Candidates use knowledge of students and mathematics to plan rigorous and engaging mathematics instruction supporting students' access and learning. The mathematics instruction developed provides equitable, culturally responsive opportunities for all students to learn and apply mathematics concepts, skills, and practices.

NCTM Standard 4: Teaching Meaningful Mathematics

Candidates implement effective and equitable teaching practices to support rigorous mathematical learning for a full range of students. Candidates establish rigorous mathematics learning goals, engage students in high cognitive demand learning, use mathematics specific tools and representations, elicit and use student responses, develop conceptual understanding and procedural fluency, and pose purposeful questions to facilitate student discourse.

NCTM Standard 5: Assessing Impact on Student Learning

Candidates assess and use evidence of students' learning of rigorous mathematics to improve instruction and subsequent student learning. Candidates analyze learning gains from formal and informal assessments for individual students, the class as a whole, and subgroups of students disaggregated by demographic categories, and they use this information to inform planning and teaching.

NCTM Standard 6: Social and Professional Context of Mathematics Teaching and Learning

Candidates are reflective mathematics educators who collaborate with colleagues and other stakeholders to grow professionally, to support student learning, and to create more equitable mathematics learning environments.

NCTM Standard 7: Secondary Field Experiences and Clinical Practice

Effective teachers of secondary mathematics engage in a planned sequence of field experiences and clinical practice in diverse settings under the supervision of experienced and highly qualified mathematics teachers. They develop a broad experiential base of knowledge, skills, effective approaches to mathematics teaching and learning, and professional behaviors across both middle and secondary settings that involve a diverse range and varied groupings of students. Candidates experience a full-time student teaching/internship in secondary mathematics supervised by university or college faculty with secondary mathematics teaching experience or equivalent knowledge base.

Science MAT (NSTA 2020)**NSTA Standard 1: Content Knowledge**

Effective teachers of science understand and articulate the knowledge and practices of contemporary science and engineering. They connect

important disciplinary core ideas, crosscutting concepts, and science and engineering practices for their fields of licensure.

NSTA Standard 2: Content Pedagogy

Effective teachers of science plan learning units of study and equitable, culturally-responsive opportunities for all students based upon their understandings of how students learn and develop science knowledge, skills, and habits of mind. Effective teachers also include appropriate connections to science and engineering practices and crosscutting concepts in their instructional planning.

NSTA Standard 3: Learning Environments

Effective teachers of science are able to plan for engaging all students in science learning by identifying appropriate learning goals that are consistent with knowledge of how students learn science and are aligned with standards. Plans reflect the selection of phenomena appropriate to the social context of the classroom and community, and safety considerations, to engage students in the nature of science and science and engineering practices. Effective teachers create an anti-bias, multicultural, and social justice learning environment to achieve these goals.

NSTA Standard 4: Safety

Effective teachers of science demonstrate biological, chemical, and physical safety protocols in their classrooms and workspace. They also implement ethical treatment of living organisms and maintain equipment and chemicals as relevant to their fields of licensure.

NSTA Standard 5: Impact on Student Learning

Effective teachers of science provide evidence that students have learned and can apply disciplinary core ideas, crosscutting concepts, and science and engineering practices as a result of instruction. Effective teachers analyze learning gains for individual students, the class as a whole, and subgroups of students disaggregated by demographic categories, and use these to inform planning and teaching.

NSTA Standard 6: Professional Knowledge and Skills

Effective teachers of science strive to continuously improve their knowledge of both science content and pedagogy, including approaches for addressing inequities and inclusion for all students in science. They identify with and conduct themselves as part of the science education community.

Social Studies MAT (NCSS 2017)

Standard 1. Content Knowledge

Candidates demonstrate knowledge of social studies disciplines. Candidates are knowledgeable of disciplinary concepts, facts, and tools; structures of inquiry; and forms of representation.

Standard 2. Application of Content Through Planning

Candidates plan learning sequences that leverage social studies knowledge and literacies, technology, and theory and research to support the civic competence of learners.

Standard 3. Design and Implementation of Instruction and Assessment

Candidates design and implement instruction and authentic assessments, informed by data literacy and learner self-assessment, that promote civic competence.

Standard 4. Social Studies Learners and Learning

Candidates use knowledge of learners to plan and implement relevant and responsive pedagogy, create collaborative and interdisciplinary learning environments, and prepare learners to be informed advocates for an inclusive and equitable society.

Standard 5. Professional Responsibility and Informed Action

Candidates reflect and expand upon their social studies knowledge, inquiry skills, and civic dispositions to advance social justice and promote human rights through informed action in schools and/or communities.

Special Education MAT

CEC Initial Preparation Standard 1: Learner Development and Individual Learning Differences

- **1.0** Beginning special education professionals understand how exceptionalities may interact with development and learning and use this knowledge to provide meaningful and challenging learning experiences for individuals with exceptionalities.
- **1.1** Beginning special education professionals understand how language, culture, and family background influence the learning of individuals with exceptionalities.
- **1.2** Beginning special education professionals use understanding of development and individual differences to respond to the needs of individuals with exceptionalities.

CEC Initial Preparation Standard 2 Learning Environments

- **2.0** Beginning special education professionals create safe, inclusive, culturally responsive learning environments so that individuals with exceptionalities become active and effective learners and develop emotional well-being, positive social interactions, and self-determination.
- **2.1** Beginning special education professionals through collaboration with general educators and other colleagues create safe, inclusive, culturally responsive learning environments to engage individuals with exceptionalities in meaningful learning activities and social interactions.
- **2.2** Beginning special education professionals use motivational and instructional interventions to teach individuals with exceptionalities how to adapt to different environments.
- **2.3** Beginning special education professionals know how to intervene safely and appropriately with individuals with exceptionalities in crisis.

CEC Initial Preparation Standard 3 Curricular Content Knowledge

- **3.0** Beginning special education professionals use knowledge of general and specialized curricula to individualize learning for individuals with exceptionalities.
- **3.1** Beginning special education professionals understand the central concepts, structures of the discipline, and tools of inquiry of the content areas they teach, and can organize this knowledge, integrate cross-disciplinary skills, and develop meaningful learning progressions for individuals with exceptionalities

- **3.2** Beginning special education professionals understand and use general and specialized content knowledge for teaching across curricular content areas to individualize learning for individuals with exceptionalities
- **3.3** Beginning special education professionals modify general and specialized curricula to make them accessible to individuals with exceptionalities.

CEC Initial Preparation Standard 4 Assessment

- **4.0** Beginning special education professionals use multiple methods of assessment and data-sources in making educational decisions.
- **4.1** Beginning special education professionals select and use technically sound formal and informal assessments that minimize bias.
- **4.2** Beginning special education professionals use knowledge of measurement principles and practices to interpret assessment results and guide educational decisions for individuals with exceptionalities.
- **4.3** Beginning special education professionals in collaboration with colleagues and families use multiple types of assessment information in making decisions about individuals with exceptionalities.
- **4.4** Beginning special education professionals engage individuals with exceptionalities to work toward quality learning and performance and provide feedback to guide them.

CEC Initial Preparation Standard 5 Instructional Planning and Strategies

- **5.1** Beginning special education professionals consider an individual's abilities, interests, learning environments, and cultural and linguistic factors in the selection, development, and adaptation of learning experiences for individual with exceptionalities.
- **5.2** Beginning special education professionals use technologies to support instructional assessment, planning, and delivery for individuals with exceptionalities.
- **5.3** Beginning special education professionals are familiar with augmentative and alternative communication systems and a variety of assistive technologies to support the communication and learning of individuals with exceptionalities.
- **5.4** Beginning special education professionals use strategies to enhance language development and communication skills of individuals with exceptionalities.
- **5.5** Beginning special education professionals develop and implement a variety of education and transition plans for individuals with exceptionalities across a wide range of settings and different learning experiences in collaboration with individuals, families, and teams.
- **5.6** Beginning special education professionals teach to mastery and promote generalization of learning.
- **5.7** Beginning special education professionals teach cross-disciplinary knowledge and skills such as critical thinking and problem solving to individuals with exceptionalities.

CEC Initial Preparation Standard 6 Professional Learning and Ethical Practice

- **6.0** Beginning special education professionals use foundational knowledge of the field and the their professional Ethical Principles and Practice Standards to inform special education practice, to engage in lifelong learning, and to advance the profession.

- **6.1** Beginning special education professionals use professional Ethical Principles and Professional Practice Standards to guide their practice.
- **6.2** Beginning special education professionals understand how foundational knowledge and current issues influence professional practice.
- **6.3** Beginning special education professionals understand that diversity is a part of families, cultures, and schools, and that complex human issues can interact with the delivery of special education services.
- **6.4** Beginning special education professionals understand the significance of lifelong learning and participate in professional activities and learning communities.
- **6.5** Beginning special education professionals advance the profession by engaging in activities such as advocacy and mentoring.
- **6.6** Beginning special education professionals provide guidance and direction to paraeducators, tutors, and volunteers.

CEC Initial Preparation Standard 7 Collaboration

- **7.0** Beginning special education professionals collaborate with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways to address the needs of individuals with exceptionalities across a range of learning experiences.
- **7.1** Beginning special education professionals use the theory and elements of effective collaboration.
- **7.2** Beginning special education professionals serve as a collaborative resource to colleagues.
- **7.3** Beginning special education professionals use collaboration to promote the well-being of individuals with exceptionalities across a wide range of settings and collaborators.