UMBC
Masters of Arts in Education (MAE)
Concentration in STEM Education
Secondary Engineering/Technology Education
Regional Pilot Program

The University of Maryland, Baltimore County (UMBC) is offering a 36-credit, 12-course non-thesis Masters of Arts in Education Degree with a focus on STEM Engineering/Technology Education. This program is designed to provide experienced teachers content knowledge, pedagogical content knowledge and enhance leadership skills across STEM disciplines. Program completion will result in the Masters of Arts degree.

Recruiting for New Cohort
In
Secondary Engineering/Technology Education!
Applications accepted now through July 25th, 2018

Program Schedule
The programs will run from Fall 2018 through Summer 2021 (3-year program). Teachers will attend four courses per year.

Admission Requirements
- Undergraduate degree with a GPA of 3.0 or higher
- Teaching certificate
- Three professional or academic references
- Statement of goals/purpose

Program Delivery
UMBC will offer all courses on UMBC satellite sites near the main campus. Courses will be hybrid with a combination of face-to-face and online class sessions.

Program Cost
Reduced Tuition: Program participants will pay a reduced tuition rate of $1,050.00 per course ($350.00 per credit).

For more information, please email:
Dr. Tracy Irish
Science/STEM Clinical Faculty
UMBC
tirish1@umbc.edu
410-455-3050
The University of Maryland Baltimore County (UMBC)  
STEM Regional Technology Education Program  
Masters of Arts in Education Concentration in STEM  
3-year Course Progression Chart

### Year 1

<table>
<thead>
<tr>
<th>Semester</th>
<th>Fall '18</th>
<th>Spring '19</th>
<th>Summer '19</th>
</tr>
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<tbody>
<tr>
<td>Course Number</td>
<td>STEM 533</td>
<td>STEM 506*</td>
<td>STEM XXX**</td>
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<tr>
<td>Course Name</td>
<td>Culturally Responsive Teaching in STEM</td>
<td>The Designed World</td>
<td>Applications of Engineering</td>
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<tr>
<td>Course Number</td>
<td>EDUC 772</td>
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<td>Course Name</td>
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### Year 2

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<th>Summer '20</th>
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<tr>
<td>Course Number</td>
<td>EDUC 771</td>
<td>EDUC 795</td>
<td>EDUC 502</td>
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<tr>
<td>Course Name</td>
<td>Research Designs in Education</td>
<td>Seminar in the Study of Teaching</td>
<td>The Active Science and Mathematics Classroom</td>
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<tr>
<td>Course Number</td>
<td>STEM XXX</td>
<td></td>
<td></td>
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<tr>
<td>Course Name</td>
<td></td>
<td>Principles of Computer Science for Engineering</td>
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### Year 3

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<tr>
<td>Course Number</td>
<td>EDUC 781</td>
<td>EDUC 785</td>
<td>STEM XXX</td>
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<tr>
<td>Course Name</td>
<td>Teacher Leadership</td>
<td>Advanced Instructional Leadership Practicum</td>
<td>Making by Design</td>
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<tr>
<td>Course Number</td>
<td>STEM 550</td>
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<tr>
<td>Course Name</td>
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<td>Emerging Technologies &amp; Applications</td>
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</table>

*STEM 506 can be replaced with PLTW Introduction to Engineering Design (IED)*  
**Applications of Engineering can be replaced by PLTW Principles of Engineering (POE)**  
Both replacements with accepted graduate coursework through UMBC
Program Overview:
UMBC intends to offer the MAE program for teachers who want to increase their understanding and implementation of technology and engineering content knowledge, strengthen pedagogy and enhance teacher leadership through graduate level courses. Applicants who are admitted to this program will be admitted and registered as bona fide graduate students of UMBC. Participants completing the program with 36 approved graduate credits will be awarded the Master of Arts in Education (MAE) with a concentration in STEM Education.

The regional group will begin in Fall 2018. UMBC will offer program participants four, 3-credit courses or twelve (12) credits per academic year during the spring, summer and fall semesters. Regional group participants are expected to complete the program in three (3) years at the end of Summer 2021. Courses are scheduled after school and will be located in a facility near UMBC.

How to Apply for the STEM MAE Technology Education Regional Group Program:
Prospective participants will begin by mailing the documents outlined in STEP 1 by July 25, 2018 to Dr. Tracy Irish, UMBC Dept. of Education, 1000 Hilltop Circle, Baltimore, MD 21250. Through review of STEP 1 documents, UMBC will determine whether your background and qualifications meet the program acceptance requirements and if the group has substantial numbers to begin. If so, you will be asked to complete STEP 2 of the online graduate application process (instructions enclosed).

Tuition:
Each participant will be responsible to pay tuition each semester for all nine (9) credits taken in each academic year, and will be billed directly by UMBC at the current UMBC discounted tuition at $1,050.00 per course or $350.00 per credit. Participants will automatically be billed the tuition upon registering for the course. Participants can access accounts and pay electronically through myUMBC, “Billing & Financials”. University deadlines and late fees will apply.

Fees:
A Graduate Application fee of $50 will be required when applying online to the Graduate School. Participants will be billed a one-time matriculation fee of $200. A one-time Education Department Accountability System (Tk20) fee of $100 must be paid directly to Tk20. A technology fee, currently $15 per credit, will be charged each semester. Other University fees could be assessed if warranted – e.g. late payment, late registration, library, or parking violations. During the final semester if choosing to walk in commencement, participants will have to pay for regalia rental. These rates are subject to change based on university policies. All other standard fees associated with graduate courses will be waived. All fees are non-refundable.
Textbooks:
Teachers participating in the program will be responsible for purchasing their textbooks. We recommend using an online service such as Amazon.com. The course instructor will provide detailed information regarding textbook requirements each semester.

Registering for Courses:
Registration is completed on-line through myUMBC. Prior to each semester, participants will be contacted by email of the non-published “class number” which will be required to register. Participants are required to register before the start of each class. University deadlines and late registration fees will apply.

Dropping a course, Withdrawing or Leave of Absence:
UMBC Department of Education is committed to each participant’s success as a graduate student. Your participation in the regional group is a personal, as well as, a group commitment. If a participant feels that they must interrupt their studies for any reason, please inform the Academic Program Director of your decision. University policies regarding drop and withdrawal can be found at: www.umbc.edu/sbs/tuition.

Other UMBC Courses or Programs:
The requirements and costs outlined above pertain specifically to courses offered through this regional group program. Participants who wish to pursue coursework or degrees outside of this program will be subject to standard university tuition costs, fees, and procedures for registration and admission.

Final Grades:
Participants can access unofficial and purchase official transcripts on-line through myUMBC. Participants are responsible for obtaining official transcripts and requesting any possible reimbursement from their school system.

Application Process
STEP 1: Submit the following documents to apply to the MAE Regional Group Program:

- 1. Teacher Profile Form – keep a copy for your records and refer to when filling out your application.

- 2. Transcripts – only official copies (sealed) of all of your transcript(s) showing GPA obtained and certifying completion of the bachelor’s degree will be accepted. If you have earned a graduate degree or completed any graduate coursework, include these transcripts as well. Please include all sealed transcripts in this application package. If your college/university sends an electronic transcript, it must be sent directly to UMBC’s Graduate School.

- 3. Goal Statement - two-paged, double-spaced essay addressing the following questions:
  (1) What are your professional goals for participating in the UMBC MAE Regional Group Program?
(2) What do you see as the main benefits of this program, long and short term, for both you and your students?

☐ 4. Three Letters of Recommendation – these should be business or professional only and each should be in a sealed envelope and enclosed in your application packet.

☐ 5. Certified Teacher in Maryland validation - either a copy of your teaching certificate or letter from your principal confirming certification status.

☐ 6. Registration & Tuition Agreement

❖ Use a paperclip; do not staple the application materials.
❖ All “official” transcripts and recommendations must be sealed.
❖ If necessary, transcripts and/or recommendations can be mailed directly to Dr. Tracy Irish (address below).

STEP 2: Submit online Graduate Application upon notification that you eligible to participate in the program within 5 business days. STEP 2 instructions are included in this packet.

☐ 1. UMBC Graduate Application online – you must apply online to be admitted to UMBC Graduate School. Instructions enclosed.

☐ 2. $50.00 Graduate Application Fee

QUESTIONS?
For information regarding eligibility for the UMBC MAE Regional STEM Program, please contact:

Dr. Tracy Irish
Science/STEM/Technology Education Coordinator, MAE
UMBC Department of Education
1000 Hilltop Circle, Baltimore, MD 21250
tirish1@umbc.edu
410-455-3050 Office
410-455-8192 Fax

Mrs. Rita Williams
MAE Program Coordinator
UMBC Department of Education
1000 Hilltop Circle, Baltimore, MD 21250
ritaw@umbc.edu
410-455-6579 Office
410-455-8192 Fax
Teacher Profile Form  
UMBC  
Master of Arts in Education (MAE)  
STEM Regional Secondary Engineering/Technology Education  

Please Print  

1. Name: _________________________________________________________  
2. Address: __________________________________________________________________  
3. Phone number(s): Cell: __________________ Work: __________________  
4. Email(s): Primary: __________________ Secondary: __________________  
5. Current teaching assignment:  
Name of School System: ________________________________________  
Name of School: _____________________________________________  
Grade(s): ______________ Subject(s): ____________________________  
Number of years of teaching experience: _____________________________  
Area(s) of certification: __________________________________________  
6. University Name and Education/Undergraduate Degree: _________________  
Maiden or alternate name on transcript: _________________________________  
Year(s) _______ to _______ Degree Earned: _______ GPA: _______  
7. Education/Other Schools (e.g. Graduate; Community Colleges)  
Name: __________________ Year(s): _____ to _____ Degree: _____ GPA: _____  
Name: __________________ Year(s): _____ to _____ Degree: _____ GPA: _____  
8. Emergency Contact Name & Number:  
_________________________________________________________________________
University of Maryland, Baltimore County (UMBC)  
Master of Arts in Education (MAE)  
STEM Regional Secondary Engineering/Technology Education  
Registration & Tuition Agreement

By signing this form, I understand:

(1) I am responsible to pay $1050.00 for each course. Billing will occur at the time of registration. Payment will be made electronically through myUMBC and university deadlines apply.

(2) As a UMBC Graduate Student, I must maintain a 3.0 GPA or I may be subject to dismissal.

(3) If I receive an incomplete (I) in a course, I will work with the instructor and MAE Academic Program Director to complete the coursework in a timely manner.

(4) If I receive a “D” or “F” (failing grade) for a course, I must retake the course in accordance with the UMBC Graduate School policies. No student may graduate with an unresolved “D”, “F” or “I” in a required MAE course.

(5) If I need to interrupt my studies for any reason, I will inform the Academic Program Director.

(6) I am responsible to drop a course online through myUMBC and will be subject to the University guidelines for refunds.

Print Name: __________________________________________

Signature Required: ______________________________________

Date: _______________

Thank you.  
This form will remain on file in the MAE Program Office