

Indiana Commission for Higher Education
Indiana Board for Proprietary Education

**Out-of-State Institutions and
In-State Proprietary Institutions Offering Instruction in Indiana
with a Physical Presence in the State**

DEGREE APPLICATION
(New or Renewal program)

Use the <tab> key to advance to the next field, or select a field by clicking the cursor.

Name of Institution American College of Education

Name of Program Master of Education in STEM Leadership
(CIP Code: 13.1316 Science Teacher Education)

Level of Degree (AAS, AS, AA, BAS, BA, BS, MBA, MAS, MA, MS, Ph.D.) M.Ed.

Name of Person Preparing this Form Amber Nicole Ying, J.D.

Telephone Number 317.829.9417 Application Type

Date the Form was Prepared October 2, 2015 Initial or Renewal
(Revise date after any revision)

Program Description

The STEM Leadership program prepares K-16 teachers to utilize digital resources to foster the innovative engagement of diverse learners associated with integrated science programs such as STEM. The courses offer a holistic overview of historical and current issues and trends impacting integrated science education while cultivating research-based strategies to improve student learning. The courses are designed to provide the educator experience with integrated curriculum utilizing the technological and didactic skill sets required for empowering 21st century learning in a global, digital society.

Program Rationale

As accountability standards rise and global competition continues to expand, schools across the nation are not only challenged with eliminating achievement gaps, improving student performance, preventing dropouts, and increasing graduation rates among diverse student populations, but also improving postsecondary college and career readiness for business and industry in the areas of science, technology, engineering, and mathematics (STEM). After making the transition from an agricultural, mechanical, and manufacturing economy to a knowledge-based society leaning on technological advances, there has been a major shift in focus to an economy, nation, and world that now relies heavily on science, technology, engineering and math.

During 2001, the *No Child Left Behind Act* sparked an increase in STEM education across the nation which was partly due to concern over low mathematics and science scores when compared to student achievement

in other countries. Another major concern was the critical shortage of mathematics and science teachers which presented not only a global, competitive challenge, but was viewed as posing a serious threat to the nation's economic and national security. During 2006, President Bush unveiled the American Competitiveness Initiative calling for additional research and development funding in the areas of STEM. Furthermore, it encouraged American universities to aggressively recruit additional students to pursue degrees in the areas of science, technology, engineering, and mathematics. Although some progress has been made, in 2015, a need still exists to improve equity and accessibility for diverse student populations in STEM education and areas of employment. According to the U.S. Census Bureau, only 6% African-American, 6.5% Hispanic, and 14.5% of Asians are employed in STEM areas in contrast to 71% white. The disparity in STEM education spills over across gender lines as well, with only 22% of female graduate students in engineering and 25% in computer sciences leading to represent 26% of STEM employees in the workforce during 2011 (Landivar, 2013).

A tremendous need exists for stronger collaboration between colleges and K-12 schools in order to address the growing need for STEM education. According to the STEM Education Coalition, less than 40% of students entering college planning to major in a STEM field graduates with a STEM degree (STEM Education Coalition, 2013). Butz et al., (2003) pointed out that the majority of advanced scientific degrees awarded by American colleges and universities were being awarded to international students who may not necessarily apply their skills in the states. This obviously leaves a major shortfall of qualified teachers who can lead the charge in promoting STEM education, as well as accentuates the need for STEM education training for qualified educators through an affordable, online institution such as American College of Education.

With At universities and other institutions of higher learning, STEM programs gain value and support from research and high-quality teacher preparation programs that focus on the needs of 21st century students and apply real-world applications, knowledge, and skills for teachers to take back to their classrooms, where students may become inspired to serve as future STEM leaders. Statistics show STEM fields are growing 1.7 times faster when compared to non-STEM occupations, and in order to properly address the needs as a result of this rapid growth, school districts need additional support from institutions of higher education that can provide teachers with the knowledge, skills, and experience that is needed to not only instruct, but also inspire 21st century students through STEM education and experienced teacher leadership.

References

- Butz, W. P., Bloom, G. A., Gross, M. E., Kelly, T. K., Kofner, A., & Rippen, H. E. (2003). *Is there a shortage of scientists and engineers? How would we know?* Retrieved November 25, 2007, from the RAND Corporation website: <http://www.rand.org/content/dam/rand/pubs/issue%5Fpapers/2005/IP241.pdf>
- Johnson, C. C. (2013). Conceptualizing integrated STEM education. *School Science & Mathematics, 113*, 367–368. Retrieved December 30, 2013, from EBSCO Online Database Education Research Complete.
- Landivar, L. C. (2013). *Disparities in STEM employment by sex, race, and Hispanic origin*. Retrieved December 30, 2013, from the US Census Bureau website: <http://www.census.gov/prod/2013pubs/acs-24.pdf>
- Mervis, J. (2013). An invisible hand behind plan to realign U.S. science education. *Science, 341* (6144), 338–341. Retrieved December 30, 2013, from EBSCO Online Database Education Research Complete.
- Sadler, P. M., Sonnert, G., Hazari, Z., & Tai, R. (2012). Stability and volatility of STEM career interest in high school: A gender study. *Science Education, 96*, 411–427. Retrieved October 9, 2014, from EBSCO Online Database Education Research Complete.
- STEM Education Coalition. (2013). *The case for STEM education as a national priority: Good jobs and American competitiveness*. Retrieved December 30, 2013, from the STEM Education Coalition website: <http://www.stemedcoalition.org/wp-content/uploads/2013/10/Fact-Sheet-STEM-Education-Good-Jobs-and-American-Competitiveness-June-2013.pdf>

Program Outcomes and Institutional Academic Outcomes

Academic Outcome 1 – Evidenced-Based Learning and Assessment

1. Design - environments for scientific investigations, fostering integrated STEM curriculum which engages diverse learners in authentic problem solving through the utilization of resources.
2. Build capacity for accessing, evaluating, and utilizing learning resources which accurately reflect those used by the scientific and engineering community.

Academic Outcome 2 – Theory, Standards, and Frameworks

3. Utilize theories and standards within a research framework to facilitate scientific inquiry through scaffolding, differentiation, and assessment strategies.
4. Construct a framework for the seamless integration of authentic technology to enhance scientific literacy in a variety of venues, including reading and writing, acquiring and managing information, and communicating ideas effectively.

Academic Outcome 3 – Intellectual Processes

5. Employ strategies to promote intellectual skill development in selecting testable questions, establishing appropriate variables and controls, choosing the kind of data and method of collecting it, and utilizing appropriate tools to correctly make hypotheses and predictions.

Academic Outcome 4 – Communication and Collaboration

6. Establish environments supporting the capacity for collaborative interactions to promote independence and interdependence which support conflict resolution, self-discipline, time management, and team-building.

Academic Outcome 5 – Civic and Global Learning

7. Demonstrate evidence-based decision making appropriate for the needs of a global society.
8. Investigate relevant issues and problems which impact communities, regions, and beyond.

Academic Outcome 6 – Professional Skills and Performance

9. Analyze research in the field of integrated science, technology, engineering, and mathematics education to identify best practices for engaging learners.

Academic Outcome 7 – Leadership

10. Promote personal inquiry as an aspect of developing dynamic relationships between ideas and individuals supporting expectations within the fields of STEM.

II. PROGRAM STRUCTURE: List all courses in the program. Indicate course name, course number, and number of credit hours or clock hours for each course.

Name of Program: Master of Education in STEM Leadership

Total Course Hours: 31 semester credits Check one: Quarter Hours _____
 Semester Hours X
 Clock Hours _____

Tuition : \$7,285.00 Length of Program: 12-18 months

CORE COURSES:

<u>Course Number</u>	<u>Course Title</u>	<u>Course Hours</u>
SCI5203	Foundations of Integrated Science Education	3
SCI5213	Engaging Diversity in the Science Classroom	3
SCI5223	Modern Learning and Integrated Science Education	3
SCI5233	Inventing and Reinventing Mathematics and Science Curriculum: Elementary, Secondary, & College Level	3
ED5023	Assessment Strategies	3
ED5383	Principles of Integration	3
RES5323	Research Design and Application	3
SCI5243	Creating an Environment for STEM Learning	3
SCI5253	Building Scientific Understanding in Students	3
SCI5263	Applied Science and Engineering Practices	3
SCI5091	Capstone Experience for STEM Leadership	1

Number of Credit/Clock Hrs. in Specialty Courses: 31 / 0 Percentage: 100%

Number of Credit/Clock Hrs. in General Courses: 0 / 0 Percentage: 0%

If applicable:

Number of Credit/Clock Hrs. in Liberal Arts: 0 / 0 Percentage: 0%

III. LIBRARY: Please provide information pertaining to the library located in your institution.

1. Location of library; Hours of student access; Part-time, full-time librarian/staff:

Location of library:	Online library: no single physical location
Hours of student access:	24 hours/day; 7 days/week. Always "open."
Librarian:	One full-time Librarian

2. Number of volumes of professional material:

ACE subscribes to specialized fee-based databases that provide students and faculty access to full-text books and journal articles. Using login ids and passwords, from the Library web page, students and faculty can access indices of 33,380 journals, full-text articles from 5,019 journals, 500,000 education documents, 300,000 full text documents, approximately 1,088 e-books, reports or monographs, Educational Resources Information Center (ERIC) documents and all online publications from the Government Printing Office. Students and faculty also benefit from direct subscription to one (1) full-text education magazine.

A. EBSCO Discovery Service

The EBSCO Discovery Service provides users with an easy, yet powerful means of accessing all of an institution's information resources through a single search. This is achieved by harvesting metadata from both internal (library) and external (data base vendors) sources, and creating a pre-indexed service of unprecedented size and speed.

B. Articles and E-Journals

ArticleFirst

ArticleFirst is an index of 27 million articles created from the tables-of-contents of multi-disciplinary journals.

- Produced by: OCLC
- Vendor: OCLC FirstSearch
- Coverage: 16,000+ journals
- Full-text: none
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.
- To locate full-text of a specific article not available in this database, try EBSCO's Education Source or ProQuest Education Journals.

Business Source Complete (EBSCO)

Business Source Complete includes indexing and abstracts for the most important scholarly business journals as far back as 1886. It includes both electronic journals and eBooks, as well as

- Produced by: EBSCO
- Vendor: EBSCO
- Coverage:
- Full-text: 1800+ journals; 1000+ eBooks, reports and monographs
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.

- To locate full-text of a specific article not available in this database, try EBSCO's Education Source or ProQuest Education Journals.

Child Development & Adolescent Studies (EBSCO)

Child Development & Adolescent Studies is an index of book reviews, articles, technical reports, theses, and dissertations related to growth and development of children through age of 21.

- Produced by: National Information Services Corporation, MD. Previously published by Society for Research in Child Development, 1927-2001.
- Vendor: EBSCO
- Coverage: 238 journals
- Full-text: none
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.
- To locate full-text of a specific article not available in this database, try EBSCO's Education Source or ProQuest Education Journals.

ECO Electronic Collections Online

ECO Electronic Collections Online database contains bibliographic records of scholarly electronic journals that are owned and cataloged by OCLC member libraries.

- Produced by: OCLC
- Vendor: OCLC FirstSearch
- Coverage: 4.2+ million records
- Full-text: None
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.
- To locate full-text of a specific article not available in this database, try EBSCO's Education Source or ProQuest Education Journals.

Education Abstracts/Full-Text (Wilson)

Education Abstracts/Full-Text indexes and abstracts articles from education journals published since 1983, education yearbooks published since 1994, and books in education published since 1995. Subjects covered include adult education, continuing education, library science, literacy standards, multicultural/ethnic education, teaching methods, and more.

- Produced by: H. W. Wilson Co., 1920-
- Vendor: EBSCO
- Coverage: 770+ journals, yearbooks, monographs
- Full-text: Yes – 350+ journals back to 1996
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.
- To locate full-text of a specific article not available in this database, try EBSCO's Education Source or ProQuest Education Journals.

Education Source

Education Source is an authoritative online resource for Education research. According to EBSCO, this massive file offers the world's largest and most complete collection of full-text education journals. It is a bibliographic and full-text database covering scholarly research and information relating to all areas of education. Topics covered include all

levels of education from early childhood to higher education, and all educational specialties, such as leadership, curriculum, instruction, multilingual education, health education, testing, administration, policy, funding, and related social issues.

- Produced by: EBSCO
- Vendor: EBSCO
- Coverage: 2,330+ journals plus books, monographs, conference papers, and proceedings
- Full-text: Yes - 1,800+ journals and 550+ books and monographs plus numerous conference papers and proceedings
- Includes: EBSCO's Professional Development Collection
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.
- To locate full-text of a specific article not available in this database, try ProQuest Education Journals.

Education Week

- Produced by: Editorial Projects in Education
- Vendor: <http://www.edweek.org/ew/index.html>
- Coverage: one journal
- Full-text: yes

Educational Administration Quarterly

- Produced by: Sage
- Vendor: EBSCO
- Coverage: one journal
- Full-text: yes

Google Scholar

Google Scholar is a keyword search engine of journal articles harvested daily from the Web, as well as U. S. patents and legal opinions.

- Produced by: Google
- Vendor: www.google.com
- Coverage: all Web pages on the Internet
- Full-text: Yes – full-text articles that are copyright-free; free full-text patents and federal legal opinions
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.
- To locate full-text of a specific article not available in this database, try EBSCO's Education Source, ProQuest Education Journals, or Wilson Select Plus.

GPO Monthly Catalog

GPO Monthly Catalog is the only comprehensive index of government publications. Established in 1876, the U. S. Government Printing Office is the world's largest publisher. Government publications are available on Education and every other subject in every academic discipline. Most are free from GPO or the issuing agency, and newer ones may be available on the Web. GPO estimates that today 50% of all U.S. government documents are now born digital.

- Produced by: U. S. Government Printing Office
- Vendor: <http://www.gpo.gov/> (1861 to date)
- Vendor: FirstSearch (1976 to date)

- Coverage: (GPO): government publications since 1861
- Coverage (FirstSearch): government publications since 1976
- Full-text: Yes – some links to full-text publications are provided by issuing agencies.
- To locate libraries that have government publications collections in your zip code, go to www.worldcat.org.
- To locate full-text of a journals published by government agencies, try the specific agency's web site, EBSCO's Education Source, ProQuest Education Journals, or Wilson Select Plus.

JSTOR Current Education Collection

- Produced by: Editorial Projects in Education
- Vendor: EBSCO
- Coverage: nine selected Education related journals
- Full-text: yes

Library, Information Science & Technology Abstracts with Full Text

- Produced by: EBSCO
- Vendor: EBSCO
- Coverage: 735+ Journals; 30+ eBooks, monographs, conference papers, and pamphlets
- Full-text: yes

Medline

Medline is the premier international bibliographic database covering all fields of medicine including psychology, psychiatry, nursing, dentistry, nutrition, education, and social services.

- Producer: U. S. National Library of Medicine
- Vendors: www.pubmed.gov, FirstSearch
- Coverage: 19,000+ journals; 19+ million citations
- Full-text: Yes – some articles are linked to full-text sources
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.
- To locate full-text of a specific article not available in this database, try EBSCO's Education Source, ProQuest Education Journals, or Wilson Select Plus.

OAIster

OAIster harvests Open Archives Initiative (OAI)-compliant resources in all subjects and disciplines from digital libraries, institutional repositories, and online journals. Its goal is to create a collection of freely available, previously difficult-to-access, academically-oriented digital resources that are easily searchable by anyone. Digital resources include books, articles, born-digital text, audio and image files, datasets, theses, technical and research papers, and image collections.

- Producer: OCLC and University of Michigan University Library
- Vendor: OCLC FirstSearch
- Coverage: 23+ million records
- Full-text: Yes

ProQuest Education Journals

ProQuest Education Journals covers scholarly literature on primary, secondary, and higher education, special education, home schooling, adult education, and hundreds of related topics.

- Producer: ProQuest
- Vendor: ProQuest
- Coverage: 919+ journals published since 1991
- Full-text: Yes – 660 journals
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.
- To locate full-text of a specific article not available in this database, try EBSCO's Education Source or Wilson Select Plus.

ERIC Documents and Educational Tests

ERIC

The ERIC (Educational Resources Information Center) database is created and distributed free by the U. S. Dept. of Education. ERIC indexes and abstracts education journals, as well as published and unpublished books, monographs, curriculum guides, conference papers, proceedings, position papers, teaching guides, and other educational materials.

All ERIC journal articles and ERIC documents are assigned subject headings from the Thesaurus of ERIC Descriptors:

http://www.eric.ed.gov/ERICWebPortal/resources/html/thesaurus/about_thesaurus.html.

- Produced by: U. S. Dept. of Education, 1966-
- Vendors: <http://www.eric.ed.gov>, EBSCO, ProQuest, and others
- Coverage: 1,160+ journals; 500,000+ other publications; 1.3+ million citations
- Full-text: Yes - 244 journals (EJ) and 330,000+ ERIC documents (ED). Some publications have copyright restrictions placed by the author or publisher.
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.
- To locate full-text of a specific article not available in this database, try EBSCO's Education Source, ProQuest Education Journals, or Wilson Select Plus.

Mental Measurements Yearbook including Tests in Print

Mental Measurements Yearbook (MMY) is a comprehensive guide to 2,000+ contemporary testing instruments. The MMY series contains reviews and information essential for a complete evaluation of testing products in psychology, education, business, and leadership. First published by Oscar K. Buros, the MMY series allows users to make knowledgeable judgments and informed selection decisions about the increasingly complex world of testing. MMY database includes the MMY archive of all yearbooks from the first edition in 1938 through the 18th yearbook released in 2010.

Tests in Print (TIP) is a comprehensive bibliography of all known commercially available tests that are currently in print in the English language. TIP provides vital information to users including test purpose, test publisher, in-print status, price, test acronym, intended test population, administration times, publication date(s), and test author(s).

- Producer: Buros Institute of Mental Measurements at the University of Nebraska - Lincoln
- Vendor: EBSCO

- Coverage: 7,000+ reviews
- Full-text: Yes – reviews only [no tests are available online]
- Includes other database? Yes – Tests in Print

Tests in Print

Tests in Print (TIP) is a comprehensive bibliography of all known commercially available tests that are currently in print in the English language. TIP provides vital information to users including test purpose, test publisher, in-print status, price, test acronym, intended test population, administration times, publication date(s), and test author(s).

- Producer: Buros Institute of Mental Measurements at the University of Nebraska - Lincoln
- Vendor: EBSCO
- Coverage: 7,000+ reviews
- Full-text: Yes – reviews only [no tests are available online]
- Included in another database? Yes – Mental Measurements Yearbook including Tests in Print

Books and E-Books

Business Source Complete (EBSCO)

Business Source Complete includes indexing and abstracts for the most important scholarly business journals as far back as 1886. It includes both electronic journals and eBooks, as well as

- Produced by: EBSCO
- Vendor: EBSCO
- Coverage:
- Full-text: 1800+ journals; 1000+ eBooks, reports and monographs
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.
- To locate full-text of a specific article not available in this database, try EBSCO's Education Source or ProQuest Education Journals.

Education Source (EBSCO)

Education Source is an authoritative online resource for Education research. According to EBSCO, this massive file offers the world's largest and most complete collection of full-text education journals. It is a bibliographic and full-text database covering scholarly research and information relating to all areas of education. Topics covered include all levels of education from early childhood to higher education, and all educational specialties, such as leadership, curriculum, instruction, multilingual education, health education, testing, administration, policy, funding, and related social issues.

- Produced by: EBSCO
- Vendor: EBSCO
- Coverage: 2,330+ journals plus books, monographs, conference papers, and proceedings
- Full-text: Yes - 1,400+ journals and 550+ books and monographs plus numerous conference papers and proceedings
- Includes: EBSCO's Professional Development Collection

- To locate libraries that own specific eBooks in your zip code, go to www.worldcat.org.

Ebooks

Ebooks contains bibliographic records of online electronic books (e-books) in all subjects that are owned and cataloged by OCLC member libraries.

- Produced by: OCLC
- Vendor: OCLC FirstSearch
- Coverage: 665,000+ cataloged e-books
- Full-text: none
- To locate libraries that own specific e-books in your zip code, go to www.worldcat.org.

eBooks (EBSCOHost)

eBooks is a collection of full-text education related e-books.

- Producer: EBSCO
- Vendor: EBSCO
- Coverage: 2009+ e-books in Education (88 e-books)
- Full-text: Yes

Future-Focused Leadership by Marx

- Vendor: EBSCO
- Full-text: Yes

GPO Monthly Catalog

GPO Monthly Catalog is the only comprehensive index of government publications. Established in 1876, the U. S. Government Printing Office is the world's largest publisher. Government publications are available on Education and every other subject in every academic discipline. Most are free from GPO or the issuing agency, and newer ones may be available on the Web. GPO estimates that today 50% of all U.S. government documents are now born digital.

- Produced by: U. S. Government Printing Office
- Vendor: <http://www.gpo.gov/> (1861 to date)
- Vendor: FirstSearch (1976 to date)
- Coverage: (GPO): government publications since 1861
- Coverage (FirstSearch): government publications since 1976
- Full-text: Yes – some links to full-text publications are provided by issuing agencies.
- To locate libraries that have government publications collections in your zip code, go to www.worldcat.org.

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Education Source

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specialties, such as leadership, curriculum, instruction, multilingual education, health education, testing, administration, policy, funding, and related social issues.

- Produced by: EBSCO
- Vendor: EBSCO
- Coverage: 2,330+ journals plus books, monographs, conference papers, and proceedings
- Full-text: Yes - 1,400+ journals and 550+ books and monographs plus numerous conference papers and proceedings
- Includes: EBSCO's Professional Development Collection
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.
- To locate full-text of a specific article not available in this database, try ProQuest Education Journals.

Library, Information Science & Technology Abstracts with Full Text

Library, Information Science & Technology Abstracts with Full Text indexes hundreds of core journals plus books, research reports and proceedings. Subject coverage includes librarianship, online information retrieval, information management, technology and more. Coverage in the database extends back as far as the mid-1960s.

- Produced by: EBSCO
- Vendor: EBSCO
- Coverage: 400+ journals plus books, monographs, conference papers, and pamphlets.
- Full-text: Yes - 160+ journals and 550+ books and monographs plus numerous conference proceedings and pamphlets.
- To locate libraries that own specific journals in your zip code, go to www.worldcat.org.
- To locate full-text of a specific article not available in this database, try Ebsco Education Source or ProQuest Education Journals.

OAIster

OAIster harvests Open Archives Initiative (OAI)-compliant resources in all subjects and disciplines from digital libraries, institutional repositories, and online journals. Its goal is to create a collection of freely available, previously difficult-to-access, academically-oriented digital resources that are easily searchable by anyone. Digital resources include books, articles, born-digital text, audio and image files, datasets, theses, technical and research papers, and image collections.

- Coverage: 23+ million records
- Full-text: Yes
- Producer: OCLC and University of Michigan University Library
- Vendor: OCLC FirstSearch.

PapersFirst

PapersFirst is an index of scholarly papers in all academic disciplines presented at worldwide conferences, symposia, expositions, workshops, and meetings that were received by The British Library Document Supply Centre.

- Coverage: 6.5+ million papers since 1993
- Full-text: none
- Producer: OCLC
- Vendor: OCLC FirstSearch

- To locate libraries that own specific papers in your zip code, go to www.worldcat.org.

Proceedings

Proceedings is a multi-disciplinary index of proceedings of worldwide conferences, symposia, expositions, workshops, and meetings that were received by The British Library Document Supply Centre.

- Coverage: 192,000+ proceedings since 1993
- Full-text: none
- Producer: OCLC
- Vendor: OCLC FirstSearch
- To locate libraries that own specific conference proceedings in your zip code, go to www.worldcat.org.

ProQuest Dissertations & Theses Full Text – Volume A

- Producer: ProQuest and UMI
- Vendor: ProQuest
- Coverage: 1,000,000 citations
- Full-text: yes

WorldCat

WorldCat is the online catalog of books and all types of other materials located in 72,000+ libraries worldwide. American College of Education is a member of OCLC and WorldCat (OCLC symbol is ILACE.)

- Producer: OCLC and 72,000 libraries worldwide
- Vendor: www.oclc.org and OCLC FirstSearch
- Coverage: 180+ million records dating before 1000 BC to present
- Full-text: none

WorldCat Dissertations

WorldCat Dissertations is a catalog of dissertations, theses, and published works based on them in all subjects that are owned and cataloged by OCLC member libraries worldwide.

- Producer: OCLC
- Vendor: www.oclc.org and OCLC FirstSearch
- Coverage: 8+ million records; abstracts are not included
- Full-text: none

3. Number of professional periodicals subscribed to: See Above

4. Other library facilities in close geographical proximity for student access:

While most of the information resources required of students are contained in the full-text, online professional journals and e-books subscribed to by the Library, all ACE students are encouraged to obtain library cards for borrowing privileges at libraries near to them.

IV. FACULTY: Attach completed Instructor's Qualification Record for each instructor.
**** Include all required documentation pertaining to the qualifications of each instructor.**

Total # of Faculty in the Program:	12	Full-time:	4	Part-time:	8
Fill out form below: (PLEASE LIST NAMES IN <u>ALPHABETICAL</u> ORDER.)					

*Faculty are listed alphabetically by Concentration.

List Faculty Names (Alphabetical Order)	Concentration	Degree or Diploma Earned	# Years of Working Experience in Specialty	# Years Teaching at Your School	# Years Teaching at Other	Check one:	
						Full-time	Part-time
Bridgette Davis	Science	Ph.D.	26.2	4.2	22.0	x	
Crystal Gomillion	Science	Ph.D.	30.5	1.5	29.0		x
Dennis Debay	Math	Ph.D.	13.9	.9	13.0		x
Terrance Harrington	Math	Ph.D.	26.9	3.9	23.0		x
Ellen Brewer	Technology	Ed.D.	29.2	4.2	25.0		x
Jacqueline Cahill	Technology	Ph.D.	31.2	1.2	30.0	x	
Jason Caudill	Technology	Ph.D.	29.8	3.8	26.0	x	
Susan Hart	Technology	Ph.D.	12.7	.7	12.0		x
Keith Higa	Technology	Ph.D.	19.1	1.1	18.0		x
Rebekah McPherson	Technology	Ph.D.	25.7	4.7	21.0		x
Angie Parker	Technology	Ph.D.	47.0	1.0	46.0	x	
Jennifer Summerville	Technology	Ph.D.	25.2	2.2	23.0		x

**Supplementary Information on
Licensure, Certification, and Accreditation**

Institution: **American College of Education**
Degree Program: **Master of Education in Advanced Studies**
Locations: **Online/Distance**

State Licensure

Does a graduate of this program need to be licensed by the State to practice their profession in Indiana and if so, will this program prepare them for licensure?

Yes, as applicable or according to Senate Bill Act 566, which “requires the Indiana Department of Education to establish a program for individuals to receive a license to teach a “STEM” (Science, Technology, Engineering, and/or Mathematics) content area in an Indiana public or charter school if they hold a bachelor’s degree or graduate degree with a grade point average of at least a 2.5 on a 4.0 scale from an accredited postsecondary educational institution. They must hold a major in any combination of Science, Technology, Engineering, and Mathematics and an education minor or concentration from an accredited teacher preparation program recognized by the state board of education as preparing educators to meet requirements for licensure. The program must allow the individual to teach in a school corporation or charter school while in the process of obtaining the license. This program must be established no later than August 1, 2015.”

The M.Ed. in STEM Leadership program is designed to prepare certified K-16 teachers in Indiana for STEM licensure by utilizing digital resources to foster the innovative engagement of diverse learners associated with integrated science programs such as STEM. The courses offer a holistic overview of historical and current issues and trends impacting integrated science education while cultivating research-based strategies to improve student learning. The courses are designed to provide the educator experience with integrated curriculum utilizing the technological and didactic skill sets required for empowering 21st century learning in a global, digital society.

According to Senate Bill Act 566, the State of Indiana is required to provide a program of licensure for individuals to teach STEM content areas. Additionally, the M.Ed. program is designed for individuals who are currently certified as teachers in the State of Indiana.

Our program provides the foundation for individuals to receive a license to teach “STEM” content areas in Indiana public or charter schools if they hold a bachelor’s or graduate degree with a grade point average of at least a 2.5 on a 4.0 scale from an accredited postsecondary institution. This applies to individuals holding a major in any combination of Science, Technology, Engineering, and Mathematics and a minor in education from an accredited teacher preparation program recognized by the state board of education as preparing educators to meet requirements for licensure. Our program will support the initiative of allowing the individual to teach in a school while in the process of obtaining the STEM license from the state of Indiana.

If so, please identify:

The specific license(s) needed:

Indiana State Certification/Licensure for STEM through IDOE as applicable to Senate Bill Act 566

The State agency issuing the license(s)

Indiana Department of Education.

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Professional Certification

What are the professional certifications that exist for graduates of similar program(s)?

Certifications/Licensure in Science, Engineering, Technology and Math (STEM)

Will a graduate of this program be prepared to obtain national professional certification(s) in order to find employment, or to have substantially better prospects for employment, in a related job in Indiana?

Graduates of the M.Ed. in STEM Leadership program will be prepared to have substantially better prospects for employment in related jobs within Indiana due to the requirements of Senate Bill Act 566 as the courses are designed to provide the educator experience with integrated curriculum in the content areas of Science, Technology, Engineering, and Math by utilizing the technological and didactic skill sets required for empowering 21st century learning in a global, digital society.

If so, please identify:

To be determined by IDOE for Indiana Educator STEM Certification requirements according to Senate Bill Act 566.

The national organization issuing each certification:

Not applicable, IDOE would be the state organization issuing certification.

Please explain the rationale for choosing each professional certification:

Senate Bill Act 566, the State of Indiana is required to provide a program of licensure for individuals to teach STEM content areas.

Please identify the single course or a sequence of courses that lead to each professional certification:

Not Applicable.

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Professional Industry Standards/Best Practices

Does the program curriculum incorporate professional industry standard(s) and/or best practice(s)?

Yes, the program supports several recognized standards within the given fields.

If so, please identify:

The specific professional industry standard(s) and/or best practice(s):

The organization or agency, from which the professional industry standard(s) and/or best practice(s) emanate:

- **Next Generation Science Standards:**
 - **The National Research Council (NRC), and the National Science Teachers Association**
 - **The American Association for the Advancement of Science**
 - **Achieve collaboratively developed the Next Generation Science Standards**

- **Common Core State Standards**
 - **Council of Chief State School Officers (CCSSO)**
 - **National Governors Association Center for Best Practices (NGA Center)**
- **ISTE Standards (International Society for Technology in Education)**
- **Principles and Standards for Mathematics (National Council of Teachers of Mathematics)**
- **Standards and Certification (American Society of Mechanical Engineers)**

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Program Accreditation

Does this program need specialized accreditation in order for a graduate to become licensed by the State or to earn a national professional certification, so graduates of this program can work in their profession or have substantially better prospects for employment? If so, please identify the specialized accrediting agency:

No, specialized accreditation is not needed.

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Transferability of Associate of Science Degrees

Since CHE/BPE policy reserves the Associate of Science designation for associate degrees whose credits apply toward meeting the requirements of a related baccalaureate degree, please answer the following questions:

Does a graduate of this A.S. degree program have the option to apply all or almost all of the credits to a related baccalaureate degree at your institution?

If so, please list the baccalaureate degree(s):

Not Applicable

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Job Titles

List specific job titles and broad job categories that would be appropriate for a graduate of this program:

- **Teachers of STEM subjects**
- **Department Heads in STEM areas**
- **Instructional or Academic Coaches in STEM areas**
- **Career and Technology Leaders**
- **Campus Higher Education Coordinators**
- **Instructional Specialists in STEM areas**
- **Academic Deans of STEM Programs**