ESTABLISHING GRADUATE CERTIFICATES
ARIZONA STATE UNIVERSITY
GRADUATE EDUCATION

This form should be used by programs seeking to establish a new graduate certificate. All sections should be completed.

The graduate certificate is a programmatic or linked series of courses in a single field or in one that crosses disciplinary boundaries. The graduate certificate facilitates professional growth for people who already hold the baccalaureate degree, and it may be freestanding or linked to a degree program. The graduate certificate enables the university to respond to societal needs while promoting university cooperation with corporate, industrial, and professional communities.

Submit the completed and signed (chairs, unit deans) proposal to the **Office of Graduate Academic Programs** in Graduate Education. Mail code: 1003 and electronic copies to eric.wertheimer@asu.edu or amanda.morales-calderon@asu.edu.

Please type.

Contact Name(s): Sherman Dorn, Meredith Toth, Ann Keith, Molly Ott	**Contact Phone(s):** (602) 543-6379

College: Mary Lou Fulton Teachers College
Department/School: Division of Educational Leadership and Innovation (CEDGRAD)
Name of proposed Certificate: Advanced Analytics in Higher Education
Requested Effective Term and Year: Fall 2016 (*e.g. Fall 2014*)
Do Not Fill in this information: <u>Office Use Only</u>   **CIP Code:**

1. OVERVIEW. Below, please provide a brief overview of the certificate, including the rationale and need for the program, potential size and nature of the target audience, information on comparable programs (at ASU and/or peer institutions), how this program would relate to existing programs at ASU, and any additional appropriate information.

Overview of the Certificate

The proposed graduate certificate in Advanced Analytics in Higher Education would be a 15 credit hour online certificate. Topics would include the application of data mining, predictive analytics, sentiment analysis and statistical techniques to management decisions within higher education, as well as coursework on data management and security, data visualization and contextualization within higher education. This program would stress application, not theory. For example, where statistics is discussed, it would be done in the context of helping students understand the correct considerations for a technique, not the underlying calculations. Further, students would use data from within their own work context for a project in every course, allowing them to immediately apply their learning to data with which they are already familiar.

Rationale and Need for the Program

Arizona State University is a leader in using data to improve student outcomes (through analysis of data from tools like e-Advisor and Knewton adaptive learning), maximize our operational efficiency, and make well informed administrative, programmatic, financial, and performance decisions. As such, ASU is uniquely positioned to teach others in the higher education sector the advanced analytic skills necessary to succeed in the current postsecondary landscape.

Size and Nature of the Target Audience

We anticipate approximately 20 students enrolling in the program each year. The target audience includes current higher education professionals whose institution or role is moving in a more analytically focused direction, those working in related sectors (e.g., companies that serve higher education) or other generally experienced professionals involved in strategic decision-making. While many of the initial students are likely to come from an institutional research background, the program is explicitly designed to be useful to professionals in all areas of the university and examples will be used from a wide variety of areas.

The online nature of the program will allow enrollment by professionals across the country and, in some cases, international students. We also believe these courses would appeal to current Teachers College EdD, PhD, and master's students as well as students in the School of Public Affairs. The courses might also be marketed to non-degree students, e.g., current ASU employees working in the area of analytics.

Information on Comparable Programs

The table below summarizes prominent post-undergraduate certificate programs in Data Analytics offered at research universities. Certificates in business analytics are excluded due to their high program fees. We did not find any certificates specific to the field of higher education.

There is a graduate certificates related to analytics in K-12 education at ASU in Institutional Research and Policy Analysis (IRPA), which is a face-to-face program. The IRPA certificate does not include the advanced techniques being addressed in this certificate and could be positioned as an introductory certificate that students interested in building analytic competencies could complete first.

Based upon this review, the primary current competition for this program is the online Predictive Analytics certificate from University of Maryland University College. Their program consists of only 3 courses, two of which are 6 credit hours. Both of those courses (Data Mining and Predictive Modeling) are hands-on, highly technical courses. There is no discussion of any sector/industry context, nor is there coursework addressing issues of data management and cleaning or visualization and presentation.

Name of University	Program/ School	Name of Certificate	# Credits	Program Cost	Modality
Arizona State University	School of Public Affairs	Policy Informatics	15	$11,370 in state / $16,275 out of state	Face-to-face
Columbia University	School of Continuing Education	Sustainability Analytics	12	$20,904	Face-to-face
University of Maryland University College	UMUC World Wide	Predictive Analytics	15	$9,097	Online
George Mason University	Volgenau School of Engineering	Data Analytics	12	$7,407 in state/$15,999 out of state	Face-to-face
University of Delaware	Professional & Continuing Studies	Analytics	12	$2,795	Face-to-face
Rochester Institute of Technology	College of Computing & Information Sciences	Big Data Analytics	12	$19,344	Face-to-face
Seton Hall University	College of Arts & Sciences	Data Visualization and Analysis	18	$19,980	Online & Face-to-face
Stanford University	Center for Professional Development	Data Mining and Applications	9	$10,080-$11,880	Online
University of Washington	Professional and Continuing Education	Cloud Data Management & Analytics	18	$14,454 in state/$24,786 out of state	Online & Face-to-face

How the Program Relates to Existing Programs at ASU

ASU does not currently offer a comparable graduate certificate in Advanced Analytics in Higher Education. The previously mentioned graduate certificate in Institutional Research and Policy Analysis (IRPA) offered by the Mary Lou Fulton Teachers College addresses analytics in K-12 education. The IRPA certificate does not include the advanced techniques being addressed in this certificate and could be positioned as an introductory certificate that students interested in building analytic competencies could complete first.

Two masters programs at ASU address the similar topic of advanced analytics but the programs serve different audiences. On the Downtown campus, the ASU School of Public Affairs offers a Masters in Public Policy (MPP) Concentration in Policy Informatics and a Policy Informatics graduate certificate as well. W. P. Carey offers a

Business Analytics master's degree online and on the Tempe campus. These programs focus on the use of analytics in policy and business decisions.

2. ADMINISTRATION AND RESOURCES

A. **How will the proposed certificate be administered (including recommendations for admissions, student advisement, retention etc.)?** *Describe the administering body in detail, especially if the proposed certificate is part of a larger interdisciplinary agenda. How will the graduate support staffing needs for this proposed certificate program be met?*

Individuals in the Mary Lou Fulton Teachers College Division of Educational Leadership and Innovation currently administer the M.Ed. in Higher and Postsecondary Education and the Institutional Research and Policy Analysis graduate certificate and will administer the proposed graduate certificate if approved. The Teachers College Office of Student Services processes admission and conducts student advisement and retention. The faculty program coordinator and other faculty members will oversee all content and curriculum for the proposed graduate certificate. In addition, an advisory board has been formed to bring together college faculty with higher education professionals working in this field, including Rebecca Barber, Senior Director, Management Analysis in the ASU Office of Planning and Budget.

B. **What are the resource implications for the proposed certificate, including projected budget needs?** *Will new books, library holdings, equipment, laboratory space and/or personnel be required now or in the future? If multiple units/programs will collaborate in offering this certificate, please discuss the resource contribution of each participating program. Letters of support must be included from all academic units that will commit resources to this certificate program.*

Budget needs should be met through existing tuition and anticipated class fees associated with the classes. Because the program and courses would be offered online, the faculty and courses would require support from an instructional designer to develop and maintain the courses. The college has previously funded this support through class fees and would pursue this option. No new books, library holdings, equipment, laboratory space and or personnel will be required at this time.

3. ADMISSIONS PROCEDURES AND CRITERIA

A. **Admission criteria** – A*pplicants must meet the admissions criteria for Graduate Education. Please also include any other additional admission requirements, e.g. type of undergraduate degree, minimum GPA, tests and/or entry-level skills that are required for this certificate program.*
(http://graduate.asu.edu/sites/default/files/GraduatePolicies_1.pdf)

Degree(s): Completion of a bachelor's degree (business, economics, education, psychology or equivalent) or master's degree from a regionally accredited College or University

GPA: Minimum of a 3.00 cumulative GPA (scale is 4.0=A) in the last 60 hours of a student's first bachelor's degree program. Minimum of 3.00 cumulative GPA (scale is 4.0 = A) in the applicable Master's degree.

English Proficiency Requirement for International Applicants: (See Graduate Education policies and procedures) (http://graduate.asu.edu/admissions/international/english_proficiency):

Same as Graduate Education policy.

Required Admission Examinations: ☐GRE ☐GMAT ☐Millers Analogies ☒ None required

Entry-level skills and experience: Applicants would be required to have at least 3 years working in higher education or a related field, and have taken at least one graduate or undergraduate statistics course with a grade of B or better.

B. **Application Review Terms** - *Indicate all terms for which applications for admissions are accepted*:

> To select desired box, place cursor on the left side of the box, right click mouse, select **Properties**, under **Default Value** select **Checked**, press **OK** and the desired box will be checked

> ☒ Fall   (year): 2016

> ☒ Spring   (year): 2017

> ☒ Summer   (year): 2017

> Note: Applications will be rolling every fall/spring/summer terms after this.

C. **Projected annual admission/enrollment:** *How many students will be admitted immediately following final approval of the certificate? What are enrollment projections for the next three years?*

Year 1	Year 2	Year 3
20	35	45

Following approval of the graduate certificate, approximately 5-10 students will be admitted each semester with an enrollment projection of 45 to 90 students over the next three years.

---

4. ACADEMIC REQUIREMENTS

A. **Minimum credit hours required for certificate (15 credit hour minimum)**

15 credit hours

B. **Please describe the primary course delivery mode, (e.g., online, face-to-face, off-site etc.).** *Please note: If this proposed initiative will be offered <u>completely</u> online, clearly state that in this section.*

The graduate certificate will be delivered completely online in partnership with ASU Online.

C. **As applicable, please describe culminating experience required (e.g., internship, project, research paper, capstone course, etc.)**

No culminating experience required for the graduate certificate.

D. **What knowledge, competencies, and skills (learning outcomes) should graduates have when they complete this proposed certificate program?** *Examples of program learning outcomes can be found at (https://uoeee.asu.edu/program-outcomes).*

Upon completion of the program, graduates will be able to:

1. Describe concepts and methodologies of advanced analytics and data driven decision-making in a higher education environment.

2. Prepare sources of data for analysis and integrate it with other data, ensure that it is secure, that data integrity is maintained and that the analyst is aware of the ethical implications of their use of the data.

3. Use statistical and advanced analytical tools for analysis of higher education data.

4. Prepare, visualize and present analytical outputs for decision makers.

5. Implement advanced and/or specialized techniques in use within higher education, such as survey design, development and analysis; sentiment/text analysis; learning analytics; applications and integration.

E. **How will students be assessed and evaluated in achieving the knowledge, competencies, and skills outlined in 4.D. above?** *Examples of assessment methods can be found at (http://www.asu.edu/oue/assessment.html).*

Evaluation of student achievement of the knowledge, competencies and skills outlined in 4D will be assessed via course projects and assignments.

The results of each courses project assignments will contribute to the assessment of the outcomes and whether the student is able to generalize what they have learned from the classroom exercises to a real-world context. Each courses' project assignments self-contained to the material in that course, so that the student can complete the courses out of order or only complete a couple of courses and still demonstrate their knowledge.

A. Outcome 1

Students will describe and apply the concepts and methodologies of advanced analytics and data driven decision-making in a higher education environment.

1. Measure 1.1

Students will demonstrate understanding of statistical methodologies and advanced analytical tools appropriate for analysis of higher education data, and apply this knowledge to a real world setting.

a) Performance Criteria 1.1

At least 80% of certificate students will receive an 80% or higher on the reflection assignments completed in HED 603 (applying the concepts of data driven decision-making in higher education to their own institution) and HED 604 (students to match concepts and process steps with real world examples of advanced analytic applications).

2. Measure 1.2

Students will prepare sources of data for analysis and integrate them with other data, ensuring that data are secure and that data integrity is intact.

a) Performance Criteria 1.2

At least 80% of certificate students will receive an 80% or higher on the integrated assignment completed in HED 605.

B. Outcome 2

Students will use statistical and advanced analytical tools for the analysis of higher education data.

1. Measure 2.1

Students will prepare, visualize and present analytical outputs for decision makers.

a) Performance Criteria 2.1

At least 80% of certificate students will receive an 80% or higher on the signature assignment completed in HED 607 (require students to visualize and present data in a higher education scenario).

2. Measure 2.2

Students will implement advanced and/or specialized techniques in use within higher education.

a) Performance Criteria 2.2

At least 80% of certificate students will receive an 80% or higher on the weekly assignments in HED 606 and the signature assignment completed in HED 608 (summing all processes and techniques used in a format that could be submitted for publication to either an academic or practitioner journal).

F. **Please state the satisfactory student academic progress standards and guidelines (including any time limits for completion).**

The Mary Lou Fulton Satisfactory Academic Progress and Professional Conduct Policy is located online: https://education.asu.edu/sites/default/files/Satisfactory-Academic-Progress-Professional-Conduct-Policy_1-21-14.pdf

G. **Will this proposed certificate program allow sharing of credit hours from another ASU degree program to be used as part of this certificate program?** *(Please note that a maximum of 12 graduate-level credit hours taken as a non-degree student at ASU, including as a part of a certificate program, may be used towards a future graduate degree at ASU).*

Students may share up to 12 hours with approval of the academic unit and Graduate Education if they are concurrently enrolled in the proposed graduate certificate in Advanced Analytics in Higher Education and a degree-seeking program at ASU. Courses other than those listed below may not be used as part of this certificate program.

H. **Below, please list all required and elective courses in the appropriate boxes (you may attach additional pages if necessary).**

Please ensure that all __new__ core course proposals have been submitted to the Provost's office through the Curriculum ChangeMaker online course proposal submission system before this initiative is put on the University Graduate Council and CAPC agendas. Please note: a minimum of 2/3 of the courses required for a graduate certificate must be at the 500-level or above.

Required Courses			**Credit Hours**
(Prefix & Number)	*(Course Title)*	*(New Course?)* Yes or No?	**(Insert Section Sub-total)** **15**
HED 603	Foundation of Data Analytics in Higher Education	Yes	1
HED 604	Analytics Process and Technology in Higher Education	Yes	2
HED 605	Data Management and Preparation for Higher Ed Analytics	Yes	3
HED 606	Advanced Analytic Methods for Higher Education	Yes	3
HED 607	Visualization and Presentation for Higher Education	Yes	3
HED 608	Trends in Analytic Methods for Higher Education	Yes	3
Culminating Experience (if applicable)			**Credit Hours** **(Insert Section Sub-total)**
Total required credit hours			**15**

5. PRIMARY FACULTY PARTICIPANTS - Please list all primary faculty participants for the proposed certificate, including home unit and title. You may attach additional pages if necessary.		
Name	**Home Unit**	**Title**
Molly Ott	Division of Educational Leadership and Innovation, Mary Lou Fulton Teachers College	Assistant Professor

Keon McGuire	Division of Educational Leadership and Innovation, Mary Lou Fulton Teachers College	Assistant Professor
Sherman Dorn	Division of Educational Leadership and Innovation, Mary Lou Fulton Teachers College	Division Director and Professor
Scott Marley	Division of Educational Leadership and Innovation, Mary Lou Fulton Teachers College	Associate Professor
Bryan Henderson	Division of Educational Leadership and Innovation, Mary Lou Fulton Teachers College	Assistant Professor
Margarita Pivovarova	Division of Educational Leadership and Innovation, Mary Lou Fulton Teachers College	Assistant Professor
Steven Zuiker	Division of Educational Leadership and Innovation, Mary Lou Fulton Teachers College	Assistant Professor
Jeongeun Kim	Division of Educational Leadership and Innovation, Mary Lou Fulton Teachers College	Assistant Professor

6. REQUIRED SUPPORTING DOCUMENTS
(Please label accordingly, i.e., Appendix or Attachment A, B, etc.)

Please include the following with your proposal:

    A. Sample plans of study for students in the proposed program – See Appendix II

    B. Statements of support from all deans and heads of impacted academic units – See Appendix III

7. APPROVALS - If the proposal submission involves multiple units, please include letters of support from those units.

DEPARTMENT CHAIR or SCHOOL DIRECTOR (PRINT/TYPE)

Sherman Dorn

SIGNATURE	DATE
	1/8/2016

DEAN (PRINT/TYPE)

Mari Koerner

SIGNATURE	DATE
	1/11/16

The following section will be completed by Graduate Education following the recommendations of faculty governance bodies.

DEAN OF GRADUATE EDUCATION	
SIGNATURE	**DATE**

Please note: Proposals for new certificates also require the review and recommendation of approval from the University Graduate Council, Curriculum and Academic Programs Committee (CAPC), the Academic Senate, and the Office of the Provost before they can be put into operation.

The final approval notification will come from the Office of the Provost.

GF1112G-89

APPENDIX I

OPERATIONAL INFORMATION FOR GRADUATE CERTIFICATES

(This information is used to populate the Graduate Programs Search website.)

1. **Provide a brief** (catalog type - no more than 150 words) **program description.**

The graduate certificate in advanced analytics in higher education prepares professionals in higher education to conduct advanced analytics to assist university personnel in making management decisions within higher education. Coursework addresses topics such as application of data mining, predictive analytics, sentiment analysis and statistical techniques as well as data management and security, data visualization and contextualization within higher education. The program emphasizes application of theory in practice. Students will use data from their own work context for a project in every course, allowing them to immediately apply their learning to data with which they are already familiar.

Breakdown of requirements for the academic catalog:

Core (15)

    HED 603 Foundation of Data Analytics in Higher Education (1)

    HED 604 Analytics Process and Technology in Higher Education (2)

    HED 605 Data Management and Preparation for Higher Ed Analytics (3)

    HED 606 Advanced Analytic Methods for Higher Education (3)

    HED 607 Visualization and Presentation for Higher Education (3)

    HED 608 Trends in Analytic Methods for Higher Education (3)

2. **Contact and Support Information:**

Office Location (Building & Room): **FAB S236**	Campus mail code: **3151**
Campus Telephone Number: **602-543-6358**	Program Director (Name **and** *ASU ID): **Molly Ott - mcott**
Program email address: **GraduateEducation@asu.edu**	Program Support Staff (Name **and** *ASU ID): **Robin Boyle - rrboyle**
Program website address: http://education.asu.edu/	Admissions Contact (Name **and** *ASU ID): **Kathy O'Malley - kitevis**

* ASU ID (e.g. SHJONES)

3. **Application and iPOS Recommendations:** *List the Faculty and Staff that will input admission/POS recommendations to Gportal* **and** *indicate their approval for Admissions and/or POS:*

Name	ADMSN	POS
Robin Boyle		X
Katherine O'Malley	X	

4. Campus(es) where program will be offered: *

  ☐ Downtown   ☐ Tempe

  ☒ Online (only)   ☐ West

  ☐ Polytechnic

5. **Keywords:** *(List all keywords that could be used to search for this program. Keywords should be specific to the proposed program.)*

    higher education; predictive analytics; advanced analytics; data analysis; institutional research;

6. **Area(s) of Interest:**

    * **To select desired box**, place cursor on the left side of the box, right click mouse, select **Properties**, under **Default Value** select **Checked**, press **OK** and the desired box will be checked

    A. Select one (1) primary area of interest from the list below that applies to this program.

    - ☐ **Architecture & Construction**
    - ☐ **Arts**
    - ☐ **Business**
    - ☐ **Communications & Media**
    - ☒ **Education & Teaching**
    - ☐ **Engineering & Technology**
    - ☐ **Entrepreneurship**
    - ☐ **Health & Wellness**
    - ☐ **Humanities**
    - ☐ **Interdisciplinary Studies**
    - ☐ **Law & Justice**
    - ☐ **Mathematics**
    - ☐ **Psychology**
    - ☐ **STEM**
    - ☐ **Science**
    - ☐ **Social and Behavioral Sciences**
    - ☐ **Sustainability**

    B. Select one (1) secondary area of interest from the list below that applies to this program.

    - ☐ **Architecture & Construction**
    - ☐ **Arts**
    - ☒ **Business**
    - ☐ **Communications & Media**
    - ☐ **Education & Teaching**
    - ☐ **Engineering & Technology**
    - ☐ **Entrepreneurship**
    - ☐ **Health & Wellness**
    - ☐ **Humanities**
    - ☐ **Interdisciplinary Studies**
    - ☐ **Law & Justice**
    - ☐ **Mathematics**
    - ☐ **Psychology**
    - ☐ **STEM**
    - ☐ **Science**
    - ☐ **Social and Behavioral Sciences**
    - ☐ **Sustainability**

Fall 2016	HED 603	Foundation of Data Analytics in Higher Education
Fall 2016	HED 604	Analytics Process and Technology in Higher Education
Spring 2017	HED 605	Data Management and Preparation for Higher Ed Analytics
Spring 2017	HED 606	Advanced Analytic Methods for Higher Education
Fall 2017	HED 607	Visualization and Presentation for Higher Education
Fall 2017	HED 608	Trends in Analytic Methods for Higher Education

APPENDIX III

Support Memos

Mary Lou Fulton Teachers College – Official Submission

-----Original Message-----

From: Connie Pangrazi

Sent: Friday, December 04, 2015 6:11 PM

To: curriculumplanning@asu.edu

Cc: Ann Keith

Subject: Updated Submission Graduate Certificate in Advanced Analytics in Higher Education

Hello,

Attached you will find updated paperwork for a new graduate certificate program for the Teachers College. This certificate was approved in the fall of 2014 under the name: Advanced Analytics in Higher Education.

We requested, on our fall 2015 academic plan (submitted fall 2014), a name change to Data-Informed Decision Making. We would no longer like to move forward with this title and we would like to go back to the original title. Therefore, we have attached an updated proposal for submission and a fall 2016 approval.

Let me know if you have questions.

Thank you.
Connie

Connie Pangrazi
Assistant Dean of Academics
Arizona State University | Mary Lou Fulton Teachers College
480-727-1766 | cpangrazi@asu.edu<mailto:cpangrazi@asu.edu>

School of Public Affairs – Support Memo

From: Karen Mossberger
Sent: Tuesday, December 8, 2015 9:40 AM
To: Ann Keith <Ann.Keith@asu.edu>
Cc: Cynthia Lietz <clietz@asu.edu>; Kathleen Andereck <kandereck@asu.edu>; Jonathan Koppell <koppell@asu.edu>
Subject: FW: Letter of Support Request

To: Sherman Dorn, Director, Division of Educational Leadership and Innovation
        Mary Lou Fulton Teachers College

From: Karen Mossberger, Director
        School of Public Affairs

Re: Proposed graduate certificate in Advanced Analytics in Higher Education

The School of Public Affairs is happy to support the proposed Advanced Analytics in Higher Education certificate planned by the Mary Lou Fulton Teachers College. The proposed certificate does not conflict with the Policy Informatics concentration within the MPP, as the focus in the newly proposed program is on higher education, rather than use for public policy. The proposed certificate will help to brand ASU as a place where students can get rigorous training in predictive analytics, and so we view it as complementary to our efforts.

ASU **W. P. CAREY**
SCHOOL *of* BUSINESS
ARIZONA STATE UNIVERSITY

Graduate Programs

PO Box 874906   (480) 965-3332
Tempe, AZ 85287-4906   Fax: (480) 965-8569
                       website: wpcarey.asu.edu

TO: Sherman Dorn, Ph.D., Division Director for Educational Leadership and Innovation
            Mary Lou Fulton Teachers College at Arizona State University

FROM: Joan F. Brett
            Associate Dean, Graduate Programs
            W.P. Carey School of Business

DATE: December 4, 2015

SUBJECT: Letter of support for proposed Graduate Certificate in Advanced Analytics in Higher
            Education

The Graduate Programs Office at the W.P. Carey School of Business supports the proposed Online
Graduate Certificate in Advanced Analytics in Higher Education. The proposal has been reviewed by the
college and does not see an overlap in degrees or coursework. The target audience includes current
higher education professionals in related sectors (e.g., companies that serve higher education).

Please contact me if you have any questions regarding this letter of support.

Joan F. Brett
Associate Dean
Graduate Programs

Ann Keith

From:	Meredith Toth
Sent:	Wednesday, January 6, 2016 7:58 AM
To:	Sherman Dorn; Ann Keith
Cc:	Rebecca Barber; Molly Ott; Connie Pangrazi
Subject:	FW: Program Approval: Grad Certificate in Advanced Analytics in Higher Education (submitted as Data Informed Decision Making in Postsecondary Education)
Attachments:	8A24B786-114D-4034-8161-B7E42434D352.png

Hi, Ann,

Here is the letter/memo of support from ASU Online for the graduate certificate in Advanced Analytics. This should be sufficient for inclusion in the proposal to Grad Ed and CAPC.

I'm working on the materials ASU Online needs (we were already in process on this but they hadn't sent the official memo of approval until I requested it) and will set up the meetings they require with the appropriate people.

Best,
Meredith
--
Meredith J. Toth
Assistant Dean, Online Learning
Mary Lou Fulton Teachers College
(602) 543-8093
http://education.asu.edu
Arizona State University

From: Casey Evans <Casey.L.Evans@asu.edu>
Date: Wednesday, January 6, 2016 at 7:58 AM
To: Meredith Toth <Meredith.Toth@asu.edu>
Subject: Program Approval: Grad Certificate in Advanced Analytics in Higher Education (submitted as Data Informed Decision Making in Postsecondary Education)

Hello Meredith,

Congratulations!

Your program, the Graduate Certificate in Advanced Analytics in Higher Education (submitted as Data Informed Decision Making in Postsecondary Education), has received approval from Dean Regier. In order to move forward with development and on-boarding, we will need to ensure a plancode is created and submitted to me so that we can secure Provost approval.

Some additional materials that we will need:

Step One: Documents (By January 31st, 2016)
- A condensed major map/course listing for your program (undergraduate and graduate). (Even though MLFTC develops content, this information is good for us to have available).

1

- **Program Fact Sheet:** The Fact Sheet is necessary to ensure that our enrollment and student support coaches have the appropriate information to inform your potential and existing students about programmatic policies and nuances. Please use the attached document as a template.

Please send all of this information to Casey Evans at casey.l.evans@asu.edu.

Step Two: Let's Meet! (By February 1st, 2016)
- Let's schedule a time to meet to discuss the on-boarding process. This on-boarding meeting will be an opportunity for us to get together and discuss your program, and expectations for EdPlus. We want to have the best partnership possible, and look forward to our collaboration. Please let me know a time that works best for you.

Once again, congratulations! We are excited to work with you on your new program.

Please don't hesitate to reach out should you have any questions.

Thank you!

Casey Evans
Project Manager
EdPlus & ASU Online
Arizona State University
Phone: (480) 884-1631
Casey.l.evans@asu.edu

ARIZONA STATE UNIVERSITY

"Education at scale and speed for everyone, everywhere."

2

Ann Keith

From:	Jeremy Helm
Sent:	Thursday, January 14, 2016 12:27 PM
To:	Ann Keith
Subject:	FW: Letter of Support

Please see impact statement from Dr. Askin below.
Jeremy

From: Ronald Askin
Sent: Thursday, January 14, 2016 1:25 PM
To: Jeremy Helm <JEREMY.HELM@asu.edu>
Cc: Ann McKenna <Ann.McKenna@asu.edu>
Subject: RE: Letter of Support

The School of Computing, Informatics, and Decision Systems Engineering (CIDSE) has active programs in analytics and educational informatics. Our graduate concentration in Big Data Systems covers advanced analytics as well as data management and security. The underlying mathematical/computational science and data analysis methods are integral aspects of our programs. In addition CIDSE has a core of faculty working on Educational Informatics and proposals to expand the existing undergraduate Informatics degree to the graduate level have been drafted. Moreover Advanced Analytics is a key part of our on-line Masters of Engineering programs. As such, the School intends on continuing to expand its offerings in the area of advanced analytics and educational informatics to meet the needs of engineering and computer science students. We recognize however that our intended student population is significantly different than that of the proposed Higher Education Analytics proposal. As such, we do not have any concern with the proposed certificate provided this does not inhibit our continued offering and expansion of programs in advanced analytics and data science. Indeed, we would like to think that the proposed courses are complementary to our offerings and would be available for CIDSE students interested in educational analytics.

Ron Askin

- -

Ronald G. Askin, Professor and Director
School of Computing, Informatics, and Decision Systems Engineering
Arizona State University
Tempe, AZ 85287-8809
Ron.askin@asu.edu
480-965-2567

Ann Keith

From:	Jeremy Helm
Sent:	Thursday, January 14, 2016 12:07 PM
To:	Ann Keith
Cc:	Ann McKenna; Ronald Askin
Subject:	RE: Letter of Support

Hi Ann,

I have requested impact statements from the Polytechnic School Director, Dr. Ann McKenna and from the School of Computing, Informatics, and Decision Systems Engineering Director, Dr. Ron Askin (both are copied).

Here is the impact statement from Dr. McKenna:

From: Ann McKenna
Sent: Monday, January 11, 2016 7:21 PM
To: Jeremy Helm <JEREMY.HELM@asu.edu>; Ronald Askin <Ron.Askin@asu.edu>
Cc: James Collofello <JAMES.COLLOFELLO@asu.edu>
Subject: Re: Letter of Support

Hi Jeremy,
The program that would have the most potential for overlap with this certificate program is with the PhD program in Engineering Education Systems and Design (EESD). After review of the proposal and course topics we do not see a problem with overlap in content. The courses for this new certificate program would be nice electives for EESD students so we request that the certificate courses be open to Fulton/Poly graduate students.

Please let me know if you need anything else.
Ann

I believe Dr. Askin is still gathering input from his faculty.

Jeremy Helm
Director, Academic Administration & Student Success
Ira A. Fulton Schools of Engineering
Arizona State University
Tempe, AZ 85287-8109
(480) 965-8931 voice
(480) 965-8095 fax

ASU **College of Liberal Arts & Sciences**
ARIZONA STATE UNIVERSITY

TO: Sherman Dorn, Ph.D., Division Director for Educational Leadership and Innovation
            Mary Lou Fulton Teachers College at Arizona State University

FROM: Kenro Kusumi, Associate Dean of Graduate Programs, College of Liberal Arts and
            Sciences, Arizona State University

DATE: January 14, 2016

SUBJECT: Letter of support for proposed Graduate Certificate in Advanced Analytics in Higher
            Education

The College of Liberal Arts and Sciences has no objection to the proposed Graduate Certificate in
Advanced Analytics in Higher Education. The proposal has been reviewed by the college and does not
see an overlap in degrees or coursework. Should you have any questions, do not hesitate to contact me.

Kenro Kusumi
Associate Dean of Graduate Programs
College of Liberal Arts and Sciences

(NEW GRADUATE INITIATIVES)

PROPOSAL PROCEDURES CHECKLIST

Academic units should adhere to the following procedures when requesting new curricular initiatives (degrees, concentrations or certificates).

☒ **Obtain the required approval from the Office of the Provost to move the initiative forward for internal ASU governance reviews/approvals.**

- Establishment of new curricular initiative requests; degrees, concentrations, or certificates
- Rename requests; existing degrees, concentrations or certificates
- Disestablishment requests; existing degrees, concentrations or certificates

☒ **Submit any new courses that will be required for the new curricular program to the Curriculum ChangeMaker online course approval system for review and approval.**

- Additional information can be found at the Provost's Office Curriculum Development website: Courses link
- For questions regarding proposing new courses, send an email to: courses@asu.edu

☒ **Prepare the applicable proposal template and operational appendix for the proposed initiative.**

- New degree, concentration and certificate templates (contain proposal template and operational appendix) can be found at the Provost's Office Curriculum Development website: Academic Programs link

☒ **Obtain letters or memos of support or collaboration. (if applicable)**

- When resources (faculty or courses) from another academic unit will be utilized
- When other academic units may be impacted by the proposed program request

☒ **Obtain the internal reviews/approvals of the academic unit.**

- Internal faculty governance review committee(s)
- Academic unit head (e.g. Department Chair or School Director)
- Academic unit Dean (will submit approved proposal to the curriculumplanning@asu.edu email account for further ASU internal governance reviews (as applicable, University Graduate Council, CAPC and Senate)

Additional Recommendations - All new graduate programs require specific processes and procedures to maintain a successful degree program. Below are items that Graduate Education strongly recommends that academic units establish after the program is approved for implementation.

☐ **Set-up a Graduate Faculty Roster for new PhD Programs** – This roster will include the faculty eligible to mentor, co-chair or chair dissertations. For more information, please go to http://graduate.asu.edu/graduate_faculty_initiative.

☒ **Establish Satisfactory Academic Progress Policies, Processes and Guidelines** – Check within the proposing academic unit and/or college to see if there are existing academic progress policies and processes in place. If none have been established, please go to http://graduate.asu.edu/faculty_staff/policies and scroll down to the **academic progress review and remediation processes** (for faculty and staff) section to locate the reference tool and samples for establishing these procedures.

☒ **Establish a Graduate Student Handbook for the New Degree Program** – Students need to know the specific requirements and milestones they must meet throughout their degree program. A Graduate Student Handbook provided to students when they are admitted to the degree program and published on the website for the new degree gives students this information. Include in the handbook the unit/college satisfactory academic progress policies, current degree program requirements (outlined in the approved proposal) and provide a link to the Graduate Policies and Procedures website. Please go to http://graduate.asu.edu/faculty_staff/policies to access Graduate Policies and Procedures.