Graduate Faculty Senate

Meeting Minutes: March 2022

March 22, 2022 1:30-3:00 PM

Anita Cowan, Ashley Siebenaler, Gui DeSouza, Keith Greenwood, Christopher Daniggelis, Christine VanPool, Amanda Hoffman, Daman Hall, Angie Zapata, Sue Boren, Miriam Butler, Yuwen Zhang, Corinne Valdivia, Julija Sukys, Lissa Behm-Morawitz, Dana Martin, Wilson Freyermuth, Azlin Mustapha,

1. Call to order
   1:35pm

2. Acceptance of the agenda
   Motion to approve Julia Sukys
   Seconded Corinne Valdivia
   Approved

3. Approval of minutes from February 22, 2022 meeting
   Motion to approve Julija Sukys
   Seconded Amanda Hoffman
   Approved

4. Committee Reports:
   a. Academic Affairs – Prof. Sue Boren, chair

      i. Course Approvals
         Academic Affairs recommended 23 courses for approval (see below) – no discussion or comments
         Senate approved

      ii. Program Approvals – Minor Changes

         a. 1:40-1:46 DNP in Nursing (Dr. Miriam Butler)
            (see proposal below)
            -No questions/discussion

         b. 1:47-1:53 Graduate Certificate in Cyber Security (Dr. Jiang)
            (see proposal below)

            Q- does this require a masters degree.
            A – minimum of a bachelors degree is required
            Q- what are estimate numbers of enrollment based on?
            A – Looked at current enrollment and a percentage of computer science students. Forecasting that other programs could be interested as well.

         c. 1:54-2:00 Graduate Certificate in Gifted Education (Dr. Van Garderen-Anderson)
            (see proposal below)

d. 2:01-2:07 Graduate Certificate in Early Childhood Special Education (Dr. Van Garderen-Anderson)
(see proposal below)

e. 2:08-2:14 Graduate Certificate in Special Education Cross-Categorical (Dr. Van Garderen-Anderson)
(see proposal below)

f. 2:15-2:21 Graduate Certificate in Intervention and Instruction (Dr. Van Garderen- Anderson)
(see proposal below)

**Changing the title to Graduate Certificate in Special Education Intervention and Instruction.

g. 2:22-2:28 Graduate Certificate in Special Education (Dr. Van Garderen- Anderson)
(see proposal below)

All the proposals listed work together with existing programs and is offered online.

Motion to approve all certificates a-g with modification specified with "f".

Motioned to approve with modification - Julija Sukys
Seconded – Amanda Hoffman
Motion passes

b. Awards – Prof. Chris Daniggelis, chair
Award winners announced,
Anderson Teaching assistant-Kanishka Sikligar, Cassandra Th-Jordan Rose
Anderson teaching award – Kanishka Sikligar
Anderson research award – Maryluz Hoyos Ensuncho
Graduate Faculty mentor – Becca Hayes
Distinguished Doctoral Dissertation – Cassandra Boness
Distinguished Master Thesis – Jordan Rose

c. Policy subcommittee – Prof. Julija Sukys, chair
There is a clause that is being amended. Simply making a slight change of the eight to nine hours of an earned credit can present towards a second masters program.

i. Transfer credit for second M.S. (discussion/vote)

b. Transfer credits.
Credit Toward a Second Master's Degreehttp://catalog.missouri.edu/academicdegreerequirements/mastersrequirements/
(1/2 way down the page)
A student who has completed one master's degree at the University of Missouri or elsewhere may, upon recommendation of the advisor and approval by the academic program's director of graduate studies and the Graduate School, present a maximum of eight nine hours of credit earned in the previous program toward a second master's degree.

Approved - unanimous

ii. Dissertation committee – outside member (discussion/feedback)
. Reconsider the requirement for outside members on doctoral committees.
One suggestion is to abolish the requirement at the Grad School level and simply to leave this decision to departments.

**Highlighted text shows the portion of the existing policy at issue. Red text contains the committee's suggestions that we'd like to get feedback on.

Choose a Doctoral Program Committee
Every student must form a faculty committee to oversee the process of dissertation completion.

All members of the doctoral program committee participate actively in the activities of the doctoral student at all the stages of the student's career at MU, except the qualifying examination or process.

The doctoral program committee is composed of a minimum of four members of MU graduate faculty. The committee must include at least three members from the student's academic department or interdisciplinary degree program and one outside member from a different academic department, interdisciplinary degree program or at MU. [In the case of large, amalgamated departments, internal faculty from a distinct field of study may serve as an outside member. Jeni: we would like to include a requirement for justification to be presented to the Grad School in order to get a waiver. Will this make your job a nightmare?] Outside members play an important role on dissertation committees. This role may include ensuring procedural fairness and objectivity, maintaining appropriate standards for scholarly work, offering interdisciplinary perspectives and complementary expertise. At least two of the doctoral committee members, including the student's advisor, must be MU doctoral faculty.
To determine whether a faculty member has graduate or doctoral faculty status, refer to the list of faculty in each academic department or interdisciplinary degree program in the University catalog.

Because departments are combining and merging it is becoming difficult to find outside members for committees. The policy committee is working to find a solution within the department/divisions to help solve.

Committee is asking senate to review the policy, talk with DGS, Colleagues and graduate students to try and come up with some ideas for the policy.

5. Report: Graduate Professional Council – Ms. Amanda Hoffmann, GPC Representative
Survey results are in and being shared on the canvas site.
Sending out a form for anonymous feedback from graduate students regarding workload.
Elections for the new board are being conducted in April.
Wanting to set up a panel with seniors, faculty to discuss on how to apply for graduate school.

6. Report: Liaison to Faculty Council – Prof. Corinne Valdivia
Concerns about transparency, salary reductions concerns. AAU survey being distributed to campuses.
Discussion on conflict of commitment, want more clarification.
Administration review faculty struggling with new assistantship policies.
Years back there was a task force in that looked at graduate education and this was one of the recommendations. It wasn't implemented at the time because is was supposed to be implemented in 2015 and there were a lot of things happening then. There have consistently been conversations with Deans and Associate Deans who oversee graduate education. Before the announcement they did speak with a number of graduate students about this and there is concerns from students that are struggling to make ends meet. The Chancellor was very concerned regarding quarter time assistantship which is what prompted the transition to the policy. Economic and exploitative concerns with the students being paid for quarter time and working more like half time hours.

7. Report: Graduate School – Prof. Jeni Hart, Dean of Graduate School and Vice Provost for Graduate Studies.
   Graduate School Awards reception is Apr 26th at 5:00pm in the Clinton club of Mizzou Arena.
   Eperformance and MyVita questions are coming in and are being sent to the team for responses.

8. Graduate Faculty Senate Elections
   Elections will be conducted at the April meeting.

   Gui DeSouza is stepping down from the Senate as of today March 22, 2022.

9. Resolutions
   none

10. Adjournment
    3:05pm

Course approvals

Code	Title	Status	Initiator	Received
ARTGE_VS 4514	ARTGE_VS 4514: Arts Engagement	Added	lgdck	2/18/2022
ARTGE_VS 4516	ARTGE_VS 4516: Arts Finance	Added	lgdck	3/18/2022
ARTGE_VS 7516	ARTGE_VS 7516: Arts Finance	Added	lgdck	1/18/2022
ASTRON 4450	ASTRON 4450: Introduction to Cosmology	Added	kosztind	3/18/2022
ASTRON 7450	ASTRON 7450: Introduction to Cosmology	Added	kosztind	2/21/2022
CV_ENG 4365	CV_ENG 4365: Design of Structures for Blast and Fire	Added	ortons	2/18/2022
ECE 4830	ECE 4830: Introduction to Digital Signal Processing	Edited	chandlerjo	3/18/2022
FINPLN 4383	FINPLN 4383: Financial Planning: Investment Management	Edited	habrookshirej	3/18/2022
FINPLN 4389	FINPLN 4389: Financial Planning: Capstone	Edited	habrookshirej	3/18/2022
FINPLN 4393	FINPLN 4393: Financial Planning: Estate and Gift Planning	Edited	habrookshirej	3/18/2022
GENETICS 9090	GENETICS 9090: Research in Genetics	Added	sandersrl	##########
MANGMT 4490	MANGMT 4490: Consulting Tools and Strategies	Added	pagettl	3/18/2022
MPP 8560	MPP 8560: Data Design and Analysis I	Added	parrishar	1/13/2022
MRKTNG 4890	MRKTNG 4890: Marketing Supply Chain Analytics	Edited	vt2gm	2/18/2022

MRKTNG 4910	MRKTNG 4910: Data Analytics and Machine Learning for Business	Edited	vt2gm	2/18/2022
MUS_H_LI 7339	MUS_H_LI 7339: Music of the Modern Era	Edited	simsw	3/11/2022
NAT_R 8085	NAT_R 8085: Graduate Problems in Natural Resources	Added	fusinattoj	##########
PTH_AS 8642	PTH_AS 8642: Quantitative Methods in Life Sciences II	Added	middletonk	2/3/2022
STAT 7710	STAT 7710: Introduction to Mathematical Statistics	Edited	riesld	3/11/2022
THEATR 4514	THEATR 4514: Arts Engagement	Added	sylerc	3/18/2022
V_BSCI 8421	V_BSCI 8421: Veterinary Physiology	Edited	cummingske	1/27/2022
V_PBIO 8403	V_PBIO 8403: Histopathology of Joint and Disc Degeneration	Added	bozynskicc	3/16/2022

222: DNP IN NURSING WITH EMPHASIS IN ADULT- GERONTOLOGY CLINICAL NURSE SPECIALIST

In Workflow

1. Form Check (whitneycm@missouri.edu)
2. Initial Prov Rvw (socaridesa@missouri.edu; bearyj@missouri.edu)
3. NURS Assoc Dean (harrisrc@health.missouri.edu)
4. NURS Dean (thompsonsarah@missouri.edu)
5. Workflow Rvw (whitneycm@missouri.edu)
6. AAC-GFS Vote (borens@health.missouri.edu; freyermuthr@missouri.edu; neumans@missouri.edu; martindan@health.missouri.edu; mustaphaa@missouri.edu; desouzag@missouri.edu; wma@missouri.edu)
7. AAC-GFS Chair (borens@health.missouri.edu)
8. GFS Pres (parrishar@health.missouri.edu)
9. Grad Dean Rvw (hartjl@missouri.edu)
10. Provost (socaridesa@umsystem.edu;bearyj@missouri.edu)
11. UM (schaffin@umsystem.edu; zlkhd4@missouri.edu)
12. MDHE/CBHE (schaffin@umsystem.edu; zlkhd4@missouri.edu)
13. SAR (kochra@missouri.edu)
14. OUR_catalog (muregistrarcatalog@missouri.edu)

Approval Path

1. Fri, 25 Feb 2022 18:48:57 GMT
   Carla Whitney (whitneycm): Approved for Form Check
2. Fri, 25 Feb 2022 21:37:09 GMT
   Jacqueline Beary (bearyj): Approved for Initial Prov Rvw
3. Mon, 28 Feb 2022 16:29:08 GMT
   Robin Harris (harrisrc): Approved for NURS Assoc Dean
4. Mon, 28 Feb 2022 18:27:26 GMT
   Sarah Thompson (thompsonsarah): Approved for NURS Dean
5. Mon, 28 Feb 2022 18:39:04 GMT
   Carla Whitney (whitneycm): Approved for Workflow Rvw
6. Thu, 17 Mar 2022 22:24:51 GMT
   4/7 votes cast.
   Yes: 100% No: 0%
   Approved for AAC-GFS Vote
7. Thu, 17 Mar 2022 22:29:53 GMT
   Suzanne Boren (borens): Approved for AAC-GFS Chair

History

1. Dec 11, 2020 by cladmin-rpospisil

Date Submitted: Fri, 25 Feb 2022 17:27:20 GMT

Viewing: DNP in Nursing with Emphasis in Adult-Gerontology Clinical Nurse Specialist

Last approved: Fri, 11 Dec 2020 20:03:21 GMT

Last edit: Fri, 25 Feb 2022 21:45:24 GMT

Changes proposed by: oziasj

Contact Information:

Proposer User ID:

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John

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Ozias

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Department:

School of Nursing

Primary Contact: The Primary Contact should be an individual who was integrally involved in the writing of this proposal, and will be able to answer questions regarding its content. Are you the Primary Contact for this proposal, or are you submitting this proposal on behalf of another individual/group?

I am entering data for the Primary Contact

MU Primary Contact: Use the search below to locate the Primary

Contact. User ID:

butlermd

First Name:

Miriam

Last Name:

Butler

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573/884-5153

Department:

School of Nursing

Collaborating Writers: Are there any other individuals from MU who were integrally involved in the writing of this proposal?

No

Program Characteristics:

Campus:

University of Missouri - Columbia

Type of Program:

Emphasis for Doctorate

Parent degree for emphasis: Select the degree program to which the emphasis is attached.

DNP in Nursing

Emphasis Required or Optional: Is the student required to choose an emphasis area to go with the degree, or can they receive the degree without an emphasis?

Emphasis is Required

Specify program level:

Graduate

Program Title: List the exact name of the program. If a degree, include the abbreviation for the degree (i.e. BA, BS, MS, PhD). If a minor, graduate minor, certificate or graduate certificate, include this first in the program title. If an emphasis, first list the parent degree title (i.e. BA in Undergraduate Studies), followed by "with Emphasis in", followed by the emphasis title.

How it is listed here is what will display on the transcript (and diploma if a degree).

Program Title:

DNP in Nursing with Emphasis in Adult-Gerontology Clinical Nurse Specialist

College(s) or School(s) offering the program: Select the college or school offering the program. If more than one, use the green plus sign to add rows for listing additional colleges, and use the green arrows to list the primary unit at the top.

	College
1	Nursing

Total credits required for graduation/completion:

72

Total Credits Change: For the change in total credits reported above, to what extent would you classify this change?

Minimal

Mode of Program Delivery: Select the option below which best fits the program.

Blended Program – Includes face-to-face courses and online courses. Sometimes called a hybrid program.

Delivery Site(s): Select the option below which best describes the physical locations where the program will be delivered. This would include face-to-face sites or sites for receiving remote delivery. This would not include online delivery.

MU Campus

CIP Code: Use the "Find" link to search the government database for applicable CIP Code.

51.3801 - Registered Nursing/Registered Nurse.

Fit with University Mission and Other Academic Programs:

Duplication within the state:

Market Analysis - Need/Demand:

Market Analysis – Need for Program:

Student Enrollment Projections: Estimate the total student enrollment in the program for the fall semester for the first five years. Year 1 2 3 4 5

Student Enrollment Projections - New to MU: Estimate the total enrollment of students new to MU in the fall semester for the first five years.

Year 1 2 3 4 5

Financial Projections:

Business and Marketing Plan - Recruiting and Retaining Students:

Program Curriculum:

Program Structure

Accelerated Program: Does this change proposal include a new accelerated option within an existing program(s)?

No

Dual Degree: Does this change proposal include a new dual degree option with existing programs?

No

Program Requirements: Describe all requirements for the program. This content will be displayed in the Program Requirements area of the online University Catalog.

Program Requirements:

Degree Requirements

Required Courses		
NURSE 7087	Leadership and Technology Institute	1
NURSE 7010	Biostatistical Foundations for Health Researchers	3
NURSE 7110	Advanced Nursing Roles and Professional Communication	3
NURSE 7120	Advanced Physiology and Pathophysiology	3
NURSE 7130	Advanced Pharmacology and Pharmacotherapeutics	3
NURSE 7140	Advanced Health Assessment and Promotion	3.5
NURSE 7160	Scientific Foundations for Health Sciences	4
NURSE 8089	Transition to APRN Practice	1
NURSE 8100	Principles of Epidemiology	3

NURSE 8170	Public Health, Sociocultural Issues, and Health Policy	3
NURSE 8310	Health Disparities of Rural and Other Underserved Populations	3
NURSE 8400	Adult and Geriatric Primary Care I	3.5-5
NURSE 8410	Adult and Geriatric Primary Care II	3.5-5
NURSE 8540	Advanced Diagnostics and Reasoning I	3.5-5
NURSE 8545	Advanced Diagnostics and Reasoning II	3.5-5
NURSE 8710	Clinical Management of Acute and Critical Care Problems	3.5-5
NURSE 8720	Symptom Management in Acute and Chronic Illness	3-5
NURSE 8910	Translational Evidence-Based Nursing Practice	3
NURSE 8920	Quality, Safety, and Performance Outcomes	3
NURSE 8930	Health Program Design and Management	3
NURSE 9070	DNP Clinical Residency	1-5
NURSE 9080	DNP Residency Project (3 credits required)	1-3
NURSE 9087	Leadership and Transformational Role Institute	2
Electives if needed to complete 72 credits; choose from the following:		
NURSE 8010	Family Dynamics and Intervention	3
NURSE 8820	Health Care Financial Management	4
NURSE 8854	Teaching Strategies in Nursing and Healthcare	3
NURSE 8864	Curriculum Development in Nursing	3
NURSE 8874	Evaluation Strategies in Nursing and Healthcare	3

Additional Faculty: For each level of expertise, provide the number of additional faculty that will be needed to deliver the program. If none, indicate 0.

Accreditation:

Plans to apply: Do you plan to apply for program specific accreditation?

Yes

Name of accrediting agency:

Commission on Collegiate Nursing Education (CCNE)

Timeline and process for achieving accreditation:

Accreditation previously approved.

Catalog Information:

Information provided in this section is used to automatically populate program information in the online university catalog when published each year in June.

For Registrar use only:

Academic Owner:

C05650

Academic Plan code:

NURSPR_DNP

Academic Subplan code:

AGCNS

Reviewer Comments:

Jacqueline Beary (bearyj) (Fri, 25 Feb 2022 21:45:24 GMT): Changed from minimal to significant change - 4 or more changes made to requirements

Key: 222

****

782: GRADUATE CERTIFICATE IN CYBER SECURITY

Vote Required for Approval

View Voting Results (http://catalog.missouri.edu/programadmin/782/)
Votes Cast: 3

Yes 67%
No 33%

In Workflow

1. Form Check (whitneycm@missouri.edu)
2. CIP Code Rvw (eimersm@missouri.edu)
3. ENGR CC Chair (falesr@missouri.edu)
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5. Workflow Rvw (whitneycm@missouri.edu)
6. AAC-GFS Vote (borens@health.missouri.edu; freyermuthr@missouri.edu; neumans@missouri.edu; martindan@health.missouri.edu; mustaphaa@missouri.edu; desouzag@missouri.edu; wma@missouri.edu)
7. AAC-GFS Chair (borens@health.missouri.edu)
8. GFS Pres (parrishar@health.missouri.edu)
9. Grad Dean Rvw (hartjl@missouri.edu)
10. Provost (socaridesa@umsystem.edu;bearyj@missouri.edu)
11. UM (schaffin@umsystem.edu; zlkhd4@missouri.edu)
12. MDHE/CBHE (schaffin@umsystem.edu; zlkhd4@missouri.edu)
13. SAR (kochra@missouri.edu)
14. IR (urbank@missouri.edu)
15. OUR catalog (muregistrarcatalog@missouri.edu)

Approval Path

1. Wed, 12 Jan 2022 20:39:45 GMT
   Carla Whitney (whitneycm): Approved for Form Check
2. Fri, 28 Jan 2022 15:57:17 GMT
   Mardy Eimers (eimersm): Approved for CIP Code Rvw
3. Fri, 11 Feb 2022 18:45:10 GMT
   Roger Fales (falesr): Approved for ENGR CC Chair
4. Fri, 11 Feb 2022 18:48:18 GMT
   Roger Fales (falesr): Approved for ENGR Dean
5. Fri, 11 Feb 2022 19:41:49 GMT
   Carla Whitney (whitneycm): Approved for Workflow Rvw

New Program Proposal

Date Submitted: Wed, 12 Jan 2022 04:49:10 GMT

Viewing: Graduate Certificate in Cyber Security

Last edit: Wed, 12 Jan 2022 04:49:07 GMT

Changes proposed by: falesr

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Mechanical & Aerospace Engr

Primary Contact: The Primary Contact should be an individual who was integrally involved in the writing of this proposal, and will be

able to answer questions regarding its content. Are you the Primary Contact for this proposal, or are you submitting this proposal on behalf of another individual/group?

I am entering data for the Primary Contact

MU Primary Contact: Use the search below to locate the Primary Contact.

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wjiang

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Wei

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573/884-6628

Department:

Electrical Eng & Computer Sci

Collaborating Writers: Are there any other individuals from MU who were integrally involved in the writing of this proposal?

Yes

Contact Information for Collaborating Writer(s): Enter the User ID(s) of the collaborating writer(s). Use the green plus sign to add rows as needed.

User ID	First Name	Last Name	Email	Phone	Department
chadhar	Rohit	Chadha	chadhar@missouri.edu	573/882-4899	Electrical Eng & Computer Sci
calyamp	Anjaneyaprasad	Calyam	calyamp@missouri.e	573/882-9747	Electrical Eng & Computer Sci
raopr	Praveen	Rao	praveen.rao@missouri5.e7d3u/	884-4195	Health Mgmt & Informatics
lindan	Dan	Lin	lindan@missouri.edu		Electrical Eng & Computer Sci
hoquek	Khaza Anuarul	Hoque	hoquek@missouri.edu	573/882-4480	Electrical Eng & Computer Sci
banag	Gergely	Bana	banag@missouri.edu	573/882-2326	Electrical Eng & Computer Sci

Program Characteristics:

Campus:

University of Missouri - Columbia

Type of Program:

Certificate

Specify program level:

Graduate

Program Title: List the exact name of the program. If a degree, include the abbreviation for the degree (i.e. BA, BS, MS, PhD). If a minor, graduate minor, certificate or graduate certificate, include this first in the program title. If an emphasis, first list the parent degree title (i.e. BA in Undergraduate Studies), followed by "with Emphasis in", followed by the emphasis title.

How it is listed here is what will display on the transcript (and diploma if a degree).

Program Title:

Graduate Certificate in Cyber Security

College(s) or School(s) offering the program: Select the college or school offering the program. If more than one, use the green plus sign to add rows for listing additional colleges, and use the green arrows to list the primary unit at the top.

	College
1	Engineering

Unit(s) offering the program: Select the unit offering the program. If more than one, use the green plus sign to add rows for listing additional units, and use the green arrows to list the primary unit at the top. Only units currently offering programs are in the list. See the blue help bubble for instructions if unit is not listed.

	Units (Departments, Divisions, etc.)
1	Electrical Engineering & Computer Science

Eligible students:

Any person, open to non-degree seeking and degree-seeking students (free standing certificate program)

Total credits required for graduation/completion:

15

Mode of Program Delivery: Select the option below which best fits the program.

Blended Program – Includes face-to-face courses and online courses. Sometimes called a hybrid program.

Delivery Site(s): Select the option below which best describes the physical locations where the program will be delivered. This would include face-to-face sites or sites for receiving remote delivery. This would not include online delivery.

MU Campus

CIP Code: Use the "Find" link to search the government database for applicable CIP Code.

11.1003 - Computer and Information Systems Security/Auditing/Information Assurance.

Term Start: Estimate the first term students will enroll.

Spring 2022

Term Graduate: Estimate the first term students will graduate.

Spring 2023

Program Director: Enter the User ID of the program director responsible for the student support services.

Program Director User ID:

wjiang

Program Director Name:

Wei Jiang

Academic Advisor(s): Enter the User ID(s) of the academic advisor(s) responsible for advising students in this program. Use the green plus sign to add rows as needed.

User ID	Name
wjiang	Wei Jiang

Advisory Committee: Provide the information requested for the member(s) of the advisory committee for this program. Committee members may include representation from the professional, business or govenrment sectors which the program is designed to serve. Use the green plus sign to add rows as needed.

Name	Title	Affiliation
Rohit Chadha	Assoc. Prof	MU
Prasad Calyam	Assoc. Prof.	MU
Praveen Rao	Assoc. Prof.	MU

Participating Faculty: Enter the User ID(s) of the faculty member(s) participating in this academic program. Use the green plus sign to add rows as needed.

User ID	Name
wjiang	Wei Jiang
ıdhar	Rohit Chadha
an	Dan Lin
raopr	Praveen Rao
hoquek	Khaza Anuarul Hoque
ıag	Gergely Bana

Additional Student Support Services: Describe any additional advising and support services that will be provided to students in this

program.

All faculty members who are currently responsible for the courses included in the certification program will continue to teach these courses as part of their regular teaching load. An administrative staff in the College of Engineering will assist in managing certificate applications, admissions and completion.

Fit with University Mission and Other Academic Programs:

Alignment:

Alignment with Campus Strategic Plan: Explain how the program aligns with campus goals and priorities as stated in the Campus Strategic Plan (refer to blue help bubble), as well as college and department goals.

MU's main mission is to create solutions that solve the grand challenges facing Missouri and the world. Cybersecurity is a field of national critical need which is further evidenced by the recent cyber-attacks (e.g., Colonial Pipeline and JBS Foods Ransomware attacks and SolarWinds espionage) and the President's executive order for improving national cybersecurity and protection of federal government networks:

https://www.nytimes.com/2021/05/08/us/politics/chttps://www.nytimes.com/2021/05/08/us/politics/cyberattack-colonial- pipeline.htmlyberattack-colonial-pipeline.html

https://www.whitehouse.gov/briefing-room/statements-releases/2021/05/12/fact-sheet-president-signs-executive-order-charting- new-course-to-improve-the-nations-cybersecurity-and-protect-federal-government-networks/

This certificate also well aligns with the MU strategic plan to enhance support for student success (as noted in Section 5-D), and our departmental strategic plan. The program helps with future cyber workforce training cope with evolving cyber-attacks impacting national critical interests and be competitive for a vibrant job market in academia, industry, and government.

In addition, it complements to our department's recent NSA CAE Research designation and the established partnership with Amrita University (a top ranked university in India) and several industries in Missouri (such as Cerner, IBM, Equifax, Veterans United Home Loans) and federal government (such as NSA, DISA). The certificate will help EECS department apply for the NSA CAE Education designation to support expansion of our education footprint on the national level. Lastly, the certificate makes us more competitive for cybersecurity education related federal funding opportunities.

Duplication within the state:

Potential Duplications at MU or within UM: Does a similar program exist at MU or at another UM System school?

Yes

Similar MU/UM Program Name: List the name and campus of the similar program.

S&T: Graduate Certificate in Cybersecurity UMSL: Graduate Certificate in Cybersecurity

Rationale: Describe the areas of duplication, the rationale for proposing a program similar to one at MU/UM, and any potential impact on the related program.

S&T's program mainly targets critical infrastructure protection, and UMSL's program targets business graduates. On the other hand, our program is more comprehensive by focusing on both cybersecurity foundations and practices, and it is more interdisciplinary with faculty participation from multiple colleges at MU. For instance, our faculty has joint appointments in School of Medicine, Trulaske College of Business, the Department of Mathematics, etc. Moreover, our program focuses on Mid-Missouri area professionals and students, and it will be expanded to the national level if successful.

Market Analysis - Need/Demand:

Market Analysis – Need for Program:

Market Demand: Based on national, regional, state, or local market demand, justify the need for graduates of this program. Provide convincing data from sources such as MERIC or Bureau of Labor Statistics.

The demand for cybersecurity workforce is at an all-time high and the trend will likely continue. Cybersecurity will be a safeguard and driving force for our e-commerce and national security.

• According to CyberSeek (https://www.cyberseek.org/), there were an estimated 464,420 active openings for cybersecurity jobs in the US as of June 20, 2021.

• An (ISC)2 (https://www.isc2.org/) report, on November 6, 2019, indicates that it is necessary to increase cybersecurity workforce by 145%. In the US, the shortage of skilled cyber- security professions is 498,480.

According to the recent market research analysis for a Cybersecurity Graduate Certificate Program conducted by the College of Engineering, June 2020,

• For cybersecurity related occupation, the number of jobs at the master's level is expected to grow over the next 8-10 years, with a predicted employment trend of 10.24%, an average rate of growth (total labor market 5.78%).
• The average salary in the nation for graduates of such a master's program is $103,774.

Meeting Missouri's Needs: Explain how the program will help meet Missouri's academic, economic and societal needs.

The program will build upon the designation of MU as the National Center of Academic Excellence in Cyber Defense Research. Growth of this certificate program will further enhance the university's standing among peer research institutions, the ability to recruit high- quality graduate students, and the collaboration with government and industry for our state and nation's economic growth.

Student Enrollment Projections: Estimate the total student enrollment in the program for the fall semester for the first five years.

Year	1	2	3	4	5
Total	15	20	25	40	60

Student Enrollment Projections - New to MU: Estimate the total enrollment of students new to MU in the fall semester for the first five years.

Year	1	2	3	4	5
Total	10	10	20	25	30

Market Analysis – Student Demand for Program:

Student Demand: Describe the evidence of sufficient student demand to support a viable program. The demand must be sufficient to project fiscal and academic viability within five years of the start of the program.

We expect that the certificate program will draw student interests from many departments on campus and professionals from local business and industries because of the booming job market for people with cybersecurity skills.

Financial Projections:

Resources: Describe the resources necessary to launch and support the program, including estimates of instructional costs, student advising, support staff, space, library resources, equipment, etc:

Initially, the certificate is being offered as a hybrid product: some courses are scheduled to be taught in-person while others shall be taught online. We do not need investment from the campus at the beginning. However, as the student population taking the certificate increases, we expect that more faculty may need to be hired, and we also expect to have one support staff dedicated to student advising, program marketing, and student enrollment.

New Revenue: Describe the new revenue to be generated from program enrollment by students NEW TO MU, including any new or additional fees to be collected:

See attached file.

Business and Marketing Plan - Recruiting and Retaining Students:

Marketing Strategy: How will the program be marketed to attract new students to it?

We have launched a college-level cybersecurity website to post weekly events, annual reports, success stories, research activities and scholarships. We will reach out to our industry board members to recruit their employees for this program and show case our research to the campus to attract on campus students. We will advertise the certificate on LinkedIn personal pages, Facebook accounts, and other social media. We will also advertise this program at NSA-CAE forums and NSF SFS meetings.

Projected program growth: Project how the program will grow over time and how marketing will change as the program grows.

We expect that the enrollment will grow 20-30% annually for the first five years. In addition to the marketing strategy discussed above, we will publish an enrollment growth chart and job placement rate on our website to further show the success of our program.

Retaining Students: Describe the plans to retain students through graduation.

We will provide students one-on-one advising and organize student forums to share their experiences. Based on the students' feedback, we will adjust our program accordingly. We will also offer students scholarship opportunities (e.g., NSF SFS for full financial support) to continue their cybersecurity study at MS or PhD level and introduce them many choices of government jobs.

Achieving Enrollment Outcomes: Describe the plans to ensure program enrollment outcomes are achieved.

We will keep tracking the enrollment numbers and trends using annual reports for NSA and IAB. Our marketing tools discussed above can help us increase the enrollment. We expect that the enrollment is not an issue because of employment opportunities are great and the market has many high-paying jobs available as shown in our market analysis.

Exit Strategy: Provide information regarding the steps the department/academic unit will take if the program underperforms expectations. At what point would the academic unit believe the program needs to be put on hiatus or discontinued?

Our advisory committee will evaluate the program annually. Working with NSA and IAB, our program will be evaluated every five years. If discontinued, we will make sure the student already in the program manage to obtain the certificate. The only potential problem is losing cybersecurity faculty members. However, the courses for the certificate are already in the current catalog and offered regularly, and each course can be taught by several faculty members. Thus, losing 2-3 faculty members may not affect this program very much. Moreover, our department and the college are planning to hire additional faculty in cybersecurity strategic area.

Program Goals and Objectives:

Program Goals and Objectives: Briefly describe the goals and objectives of the program.

Cybersecurity skills are necessary for many government branches and private industries. With increasing number of network- connected and smart devices, malicious activities against data se- curity and personal privacy are at all time high. The purpose of this graduate certificate is to prepare students and working professionals to understand the fundamentals and obtain practical skills in cybersecurity to meet the growing demands of highly trained cybersecurity workforce.

Overall Description of Student Learning Objectives: Provide any overall descriptive information regarding the student learning objectives for this program.

Students will learn state-of-the-art cybersecurity tools and techniques, have a comprehensive understanding of both classic and modern cryptographic concepts and their mathematical principles, establish the ability to detect and defend cyber-attacks, and develop strong ability to effectively communicate cybersecurity concepts and solutions and their importance to a broad audience.

Listing of Student Learning Objectives: Include clearly stated student learning objectives for the program, indicating what students will know (concepts, terminology, methods, history, etc) and what students will be able to do when they complete the program. These should be broad enough to encompass all of the knowledge acquired during the course of study yet specific enough, using active verbs, to communicate clearly to students, parents and other stakeholders what students will know and be able to do. Most programs identify 6-10 student learning objectives. Refer to the blue help bubble for examples or additional assistance.

Provide a minimum of six student learning objectives in the table below. Use the green plus sign to add rows as needed.

	Student Learning Objectives
1	Learn state-of-the-art cybersecurity tools and techniques to solve real-world security and privacy problems.
2	Have a comprehensive understanding of both classic and modern cryptographic concepts and their mathematical principles used to secure computer networks and digital identities.
3	Have the ability to detect and defend cyber attacks using data science principles and software- defined architectures.
4	Develop strong ability to effectively communicate cybersecurity concepts and solutions and their importance to a broad audience.
5	Possess knowledge in specialized and prominent cybersecurity fields (depending on the elective courses the students take), such as, cloud computing, digital forensics, secure multiparty computing, formal methods, smart contracts, blockchains, distributed ledgers, etc.
6	Study advanced cryptographic concepts and techniques: secure multiparty computing, formal methods, smart contracts, blockchains, distributed ledgers, etc.

Program Curriculum:

Program Structure

General description: Provide a general description of the structure of the curriculum plan, such as the overall number of credit hours required, general areas of study, planned academic activities, etc. If the program has an online option, explain if instruction is delivered in an asynchronous format, a synchronous format, or both.

This graduate certificate program requires 15 hours of coursework in the cyber security area of study. If the program has both online and in-person courses. The online courses may have instruction delivered in both an asynchronous format or a synchronous format.

Program Requirements: Describe all requirements for the program. This content will be displayed in the Program Requirements area of the online University Catalog.

Program Requirements:

Requirements

The Graduate Certificate in Cyber Security requires a total of 15 credit hours with core and elective courses selected as follows.

Core courses

Two core courses (6 credit hours) are required from below:

CMP_SC 7420	Software Security	3
CMP_SC 7460	Introduction to Cryptography	3
CMP_SC 7550	Cyber Defense	3

Elective courses

Three elective courses (9 credit hours) are required from below:

CMP_SC 7530	Cloud Computing	3
CMP_SC 7910	Digital Forensics	3
CMP_SC 8001	Advanced Topics in Computer Science (Secure Multiparty Computation or Internet of Things Security and Privacy)	3
CMP_SC 8440	Information Security: A Language-Based Approach	3
CMP_SC 8450	Formal Engineering Methods for Software and Security	3
CMP_SC 8460	Cryptographic Protocols and Formal Proofs	3

Additional Faculty: For each level of expertise, provide the number of additional faculty that will be needed to deliver the program. If none, indicate 0.

Level	Number
Tenure Track	0
Non-Tenure Track	0
Post-Doc Fellows	00
Grad Tchng/Research Asst	5
Adjunct	0

Accreditation:

Plans to apply: Do you plan to apply for program specific accreditation?

No

Provide brief explanation:

n/a

Gainful Employment:

Certificate web site:

https://engineering.missouri.edu/ceri-center/cybersecurity/cyber-academics/

Tuition for program: Based on current tuition rates, calculate the total tuition for completing this program within normal time.

$6219

Associated fees: Based on current fee rates, calculate the total fees for completing this program within normal time.

$3447

Books and supplies: Based on current costs, calculate the total typical costs for books and supplies for completing this program within normal time.

$1000

Related occupational titles and codes: As part of the federal disclosure, MU is required to report prospective occupations for certificate holders. Titles can be found in the US Department of Labor's database, O*Net Online at http://www.onetonline.org. **Click Find Occupations. Type a keyword into the search box. Click go. Scan the list for feasible titles. Click on a title to review its summary. If it matches the certificate, copy the job title, occupational code, and URL into the table below.**

Provide at least 10 occupations. Use the green plus sign to add rows as needed.

Job Title	Occupational Code	URL for Summary Page
Information Security Analysts	15-1212.00	https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurity
Information Technology Project Managers	15-1299.09	https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurity
Cyber Security Manager	xx	https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurity
Cyber Security Administrator	xxx	https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurityatch/1/15-1299.09?s=Cybersecurity
Software Developer	xx	https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurity
Network Engineer	xxx	https://www.onetonline.org/find/match/1/15https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurity-1299.09?s=Cybersecurity
Systems Engineer	xx	https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurity
Network Architect	xxx	https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurityhttps://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurity
Vulnerability Analyst	xx	https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurity
Penetration Tester	15-1299.04	https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurity
Cyber Security Technician	x	https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurity
Incident Analyst	x	https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurity
Incident Responder	x	https://www.onetonline.org/find/match/1/15-1299.09?s=Cybersecurity

Catalog Information:

Information provided in this section is used to automatically populate program information in the online university catalog when published each year in June.

Program Description: In one short but thorough paragraph, describe the program. This official description will be included in the online university catalog and other initiatives supporting student success. The description should include the following three elements: 1) general description of the academic subject area, explaining the area, how it is relevant today, and interest areas that would draw a person to the program; 2) highlights of the program, including descriptions of core and advanced areas of study, special activities within the program such as internships, hands-on learning, research, field operations, study abroad, mentoring, shadowing, etc; 3) careers and opportunities associated with the program, discussing typical professions and work settings, additional educational opportunities, and top prospects in employment.

Cybersecurity skills are necessary for many government branches and private industries. With increasing number of network- connected and smart devices, malicious activities against data security and personal privacy are at all-time high. The purpose of this graduate certificate is to prepare students and working professionals to understand the fundamentals and obtain practical skills in cybersecurity to meet the growing demands of highly trained cybersecurity workforce.

At the conclusion of this graduate certificate, students will learn state-of-the-art cybersecurity tools and techniques, have a comprehensive understanding of both classic and modern cryptographic concepts and their mathematical principles, establish the ability to detect and defend cyber-attacks, and develop strong ability to effectively communicate cybersecurity concepts and solutions and their importance to a broad audience.

Relevant Documentation:

If you have any additional documentation supporting your proposal, attach those items here. Once files are selected, they will be listed in the Files To Be Uploaded box. Once the proposal is saved, they will be listed in the Uploaded Files box.

Market Research Analysis for a Cybersecurity Graduate Certificate Program June 2020.docx security-cert.pdf

New Revenue.docx 10 occupations.d ocx

Key: 782

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799: GRADUATE CERTIFICATE IN GIFTED EDUCATION

In Workflow

1. Form Check (whitneycm@missouri.edu)
2. SPC_ED Chair (vangarderend@missouri.edu)
3. CIP Code Rvw (eimersm@missouri.edu)
4. EDUC CC 2 (adkinsde@missouri.edu)
5. EDUC Dean (fellabaumje@missouri.edu; nicholssl@missouri.edu)
6. Workflow Rvw (whitneycm@missouri.edu)
7. AAC-GFS Vote (borens@health.missouri.edu; freyermuthr@missouri.edu; neumans@missouri.edu; martindan@health.missouri.edu; mustaphaa@missouri.edu; desouzag@missouri.edu; wma@missouri.edu)
8. AAC-GFS Chair (borens@health.missouri.edu)
9. GFS Pres (parrishar@health.missouri.edu)
10. Grad Dean Rvw (hartjl@missouri.edu)
11. Provost (socaridesa@umsystem.edu;bearyj@missouri.edu)
12. UM (schaffin@umsystem.edu; zlkhd4@missouri.edu)
13. MDHE/CBHE (schaffin@umsystem.edu; zlkhd4@missouri.edu)
14. SAR (kochra@missouri.edu)
15. IR (urbank@missouri.edu)
16. OUR catalog (muregistrarcatalog@missouri.edu)

Approval Path

1. Fri, 15 Oct 2021 18:43:56 GMT
   Carla Whitney (whitneycm): Approved for Form Check
2. Fri, 15 Oct 2021 19:19:27 GMT
   Delinda Van Garderen-Anderson (vangarderend): Approved for SPC_ED Chair
3. Thu, 28 Oct 2021 15:00:36 GMT
   Mardy Eimers (eimersm): Approved for CIP Code Rvw
4. Thu, 02 Dec 2021 20:56:24 GMT
   Denice Adkins (adkinsde): Rollback to Initiator
5. Fri, 03 Dec 2021 16:50:43 GMT
   Carla Whitney (whitneycm): Approved for Form Check
6. Fri, 03 Dec 2021 16:53:24 GMT
   Delinda Van Garderen-Anderson (vangarderend): Approved for SPC_ED Chair
7. Tue, 07 Dec 2021 22:45:02 GMT
   Mardy Eimers (eimersm): Approved for CIP Code Rvw
8. Tue, 18 Jan 2022 21:44:32 GMT
   Denice Adkins (adkinsde): Approved for EDUC CC 2
9. Tue, 18 Jan 2022 23:07:46 GMT

Jennifer Fellabaum-Toston (fellabaumje): Approved for EDUC Dean

10. Wed, 19 Jan 2022 14:17:45 GMT
    Carla Whitney (whitneycm): Approved for Workflow Rvw
11. Thu, 17 Mar 2022 22:25:31 GMT
    4/7 votes cast.
    Yes: 100% No: 0%
    Approved for AAC-GFS Vote
12. Thu, 17 Mar 2022 22:30:01 GMT
    Suzanne Boren (borens): Approved for AAC-GFS Chair

New Program Proposal

Date Submitted: Fri, 03 Dec 2021 16:04:37 GMT

Viewing: Graduate Certificate in Gifted Education

Last edit: Fri, 03 Dec 2021 16:04:35 GMT

Changes proposed by: colleyf

Contact Information:

Proposer User ID:
colleyf

First Name:
Frances

Last Name:
Colley

E-mail:
colleyf@missouri.edu

Phone:
573/882-2659

Department:
Learning Teaching & Curriculum

Primary Contact: The Primary Contact should be an individual who was integrally involved in the writing of this proposal, and will be able to answer questions regarding its content. Are you the Primary Contact for this proposal, or are you submitting this proposal on behalf of another individual/group?

I am entering data for the Primary Contact

MU Primary Contact: Use the search below to locate the Primary Contact.

User ID:
vangarderend

First Name:
Delinda

Last Name:
Van Garderen-Anderson

Email:
vangarderend@missouri.edu

Phone:
573/884-7075

Department:
Special Education

Collaborating Writers: Are there any other individuals from MU who were integrally involved in the writing of this proposal?

No

Program Characteristics:

Campus:
University of Missouri - Columbia

Type of Program:
Certificate

Specify program level:
Graduate

Program Title: List the exact name of the program. If a degree, include the abbreviation for the degree (i.e. BA, BS, MS, PhD). If a minor, graduate minor, certificate or graduate certificate, include this first in the program title. If an emphasis, first list the parent degree title (i.e. BA in Undergraduate Studies), followed by "with Emphasis in", followed by the emphasis title.

How it is listed here is what will display on the transcript (and diploma if a degree).

Program Title:
Graduate Certificate in Gifted Education

College(s) or School(s) offering the program: Select the college or school offering the program. If more than one, use the green plus sign to add rows for listing additional colleges, and use the green arrows to list the primary unit at the top.

	College
1	Education & Human Development

Unit(s) offering the program: Select the unit offering the program. If more than one, use the green plus sign to add rows for listing additional units, and use the green arrows to list the primary unit at the top. Only units currently offering programs are in the list. See the blue help bubble for instructions if unit is not listed.

	Units (Departments, Divisions, etc.)
1	Special Education

Eligible students:
Any person, open to non-degree seeking and degree-seeking students (free standing certificate program)

Total credits required for graduation/completion:
12

Mode of Program Delivery: Select the option below which best fits the program.
E-Learning Program – 100% of the program is online. May have proctored exams for courses.

CIP Code: Use the "Find" link to search the government database for applicable CIP Code.
13.1001 - Special Education and Teaching, General.

Term Start: Estimate the first term students will enroll.
Fall 2022

Term Graduate: Estimate the first term students will graduate.
Fall 2022

Program Director: Enter the User ID of the program director responsible for the student support services.

Program Director User ID:
gerardyn

Program Director Name:
Nancy Gerardy

Academic Advisor(s): Enter the User ID(s) of the academic advisor(s) responsible for advising students in this program. Use the green plus sign to add rows as needed.

User ID	Name
gerardyn	Nancy Gerardy

Advisory Committee: Provide the information requested for the member(s) of the advisory committee for this program. Committee members may include representation from the professional, business or govenrment sectors which the program is designed to serve. Use the green plus sign to add rows as needed.

Name	Title	Affiliation
Delinda Van Garderen	Professor	Special Education
Chad Rose	Associate Professor	Special Education

Participating Faculty: Enter the User ID(s) of the faculty member(s) participating in this academic program. Use the green plus sign to add rows as needed.

User ID	Name
gerardyn	Nancy Gerardy

Additional Student Support Services: Describe any additional advising and support services that will be provided to students in this program.

Access to IDE, Campus Writing Program, and Office of Disabilities, as well as the Special Education Director of Graduate Studies and departmental Office of Graduate Studies.

Fit with University Mission and Other Academic Programs:

Alignment:

Alignment with Campus Strategic Plan: Explain how the program aligns with campus goals and priorities as stated in the Campus Strategic Plan (refer to blue help bubble), as well as college and department goals.

The proposed certificate, Gifted Education (GE), is aligned with Campus Strategic Plan to increase student success. GE will increase the number of graduate student options, by offering a new competitive option for graduate students seeking specialized instruction to provide evidence-based services to individuals in gifted education.

The certificate may be completed as a stand alone, thereby increasing student enrollment for working educators who are not interested in completing an entire graduate degree, but who are seeking further education to be able to support the growing number of gifted students being served in schools, with diverse and complex needs.

It is important to note, that since the courses proposed in the GE program are already developed and part of an established graduate degree, the certificate has the potential to entice students to extend beyond the certificate, and commit to the complete degree program instead once participating. This provides opportunity to further extend the relationship with student engagement for those who may have otherwise been hesitant to attempt to enroll in a graduate program.

The certificate presents an add on option to students who are seeking graduate degrees in other areas of study, who understand the need for specialized instruction in working effectively with students in gifted education. Potential graduate students to benefit from this program are degree seeking general educators, special educators, early childhood special educators, speech-language pathologists, occupational therapists, school psychologists, counselors, and other school-based service providers.

Additionally, because the certificate courses are entirely online, it allows opportunity for distance learners to participate.

There is a significant increase in the need of students with gifted needs being served in schools, and a shortage of educators prepared to meet student needs.

Additionally, in clinical based related service programs, the scope of work that must be covered for certification allows very little time to dedicate to specifically to learning about evidence based practices to support children with gifted needs.

Duplication within the state:

Potential Duplications at MU or within UM: Does a similar program exist at MU or at another UM System school?

No

Market Analysis - Need/Demand:

Market Analysis – Need for Program:

Market Demand: Based on national, regional, state, or local market demand, justify the need for graduates of this program. Provide convincing data from sources such as MERIC or Bureau of Labor Statistics.

There are only 42 national online special education certificates in the country; and there are only 2 online special education certificates in Missouri. One is in the UM system; and one is not. (At UMSL, the only certificate they offer is for Autism; and that one is a hybrid, not completely online.) The market is being driven for a need for rigorous, quality online programs for Special Education teachers. There was a 16% growth in 2019 in online programs for Special Education with a decline in on-campus programs by -18%.

The field of special education has traditionally had the highest rates of teacher mobility and attrition

(Billingsley, 2004a, 2004b; Boe, 2014; Boe et al., 2008). Shortages were so widespread at one point that 98% of school districts in the U. S. reported shortages of qualified special education teachers (McLesky & Billingsley, 2008). In 2017–18, 46 states reported special education teacher shortages (U.S. Department of Education Office of Postsecondary Education, 2017; Education Commission of the States, 2021).

Sadly, such shortages often result in positions staffed with uncertified teachers. For example, a 2019 press release from the American Association of Colleges for Teacher Education (AACTE) reports that 90% of high-poverty schools struggle to find qualified special education teachers (Thurman, 2019). Despite mandates for all teachers to be highly qualified in the content they teach, including strong discipline content knowledge in mathematics, too many students receive special education services from teachers who are not highly qualified (Kennedy & Ihle, 2012).

Meeting Missouri's Needs: Explain how the program will help meet Missouri's academic, economic and societal needs.

Annually, the U.S. Department of Education, Office of Postsecondary Education (2017) identifies areas of teacher shortages by state. In a news release, April 16, 2021, the Missouri Department of Elementary and Secondary Education (DESE) highlighted a significant need to address teacher shortage in Missouri. Of note, "In the 2019-2020 school year, there were 6,200 open teaching positions in Missouri. … Educator preparation programs at institutions of higher education, with a decline of over 25 percent in teacher candidate enrollment over the past six years, are not producing enough new teachers to fill our classrooms."

Additionally, the Individuals with Disabilities Education Act (IDEA, 2004) requires students with disabilities, including students with learning disabilities to have access to the general education curriculum to the fullest extent possible. As such 64% of students with disabilities spend at least 80% of their day in the general education classroom (U.S Department of Education, 2020). General Education teachers are expected to teach special education students in their classrooms.

There is a need for more specialized and highly trained general educators, special educators & related service providers.

Student Enrollment Projections: Estimate the total student enrollment in the program for the fall semester for the first five years.

Year	1	2	3	4	5
Total	10	10	10	10	10

Student Enrollment Projections - New to MU: Estimate the total enrollment of students new to MU in the fall semester for the first five years.

Year	1	2	3	4	5
Total	8	8	8	8	8

Market Analysis – Student Demand for Program:

Student Demand: Describe the evidence of sufficient student demand to support a viable program. The demand must be sufficient to project fiscal and academic viability within five years of the start of the program.

There are only 42 national online certificates in the country; and there are only 2 located in Missouri. The market is being driven for a need for rigorous, quality online programs for Special Education teachers. There was a 16% growth in 2019 in online programs for Special Education with a decline in on-campus programs by -18%.

Financial Projections:

Resources: Describe the resources necessary to launch and support the program, including estimates of instructional costs, student advising, support staff, space, library resources, equipment, etc:

No increased resource costs: instructor for the courses and advisor of the program already currently teaches and advises for the masters program in Gifted Education.

New Revenue: Describe the new revenue to be generated from program enrollment by students NEW TO MU, including any new or additional fees to be collected:

All revenue from certificate students will be new revenue.

Business and Marketing Plan - Recruiting and Retaining Students:

Marketing Strategy: How will the program be marketed to attract new students to it?

Being this is an online program, we will be partnered with Missouri Online for advertising and recruitment. With that partnership they are able to support us in a variety of ways. We will work with our dedicated program coordinator, who will serve as the primary point person to assist in logistical and coordination efforts for the program, from ideation to implementation and throughout the program lifecycle. Their marketing division will support us with brand awareness and program specific marketing to our student demographic. We will advertise through the department website; and we will distribute information to state-wide teachers (i.e. general educators, special educators, and related service providers) through Missouri DESE. We will distribute information through faculty relationships with other Missouri Education agencies (i.e. MOCEC and MOCASE.) We will advertise through select national educational conferences. We will utilize targeted advertising through social media.

Projected program growth: Project how the program will grow over time and how marketing will change as the program grows.

Based on the experiences for these Missouri universities and the special education certificates they launched, they had a 100% degree growth. We anticipate the same in our more specific special education certificate programs, such as Gifted Education. As the program growth and word of mouth testimonials draw in additional students, we will reduce our marketing budget via venues such as conferences.

Retaining Students: Describe the plans to retain students through graduation.

New students are provided with orientation information and personalized attention from the advisor. Students are also encouraged to use university resources such as IDE, Office of Disabilities, et al.

Achieving Enrollment Outcomes: Describe the plans to ensure program enrollment outcomes are achieved.

In addition to the marketing strategy listed above, the certificate program, unlike our masters program, does not require a GRE, which with this barrier removed will encourage more students to apply. Additionally, Missouri Online's Student Lifecycle support team will aid us in guiding our potential students to support on enrollment, financial aid & billing questions as they begin their path to becoming an enrolled student.

Exit Strategy: Provide information regarding the steps the department/academic unit will take if the program underperforms expectations. At what point would the academic unit believe the program needs to be put on hiatus or discontinued?

Since the courses for this proposed program are already running for a specific Masters program, the certificate will only be closed if the courses are not filling and able to run.

Program Goals and Objectives:

Program Goals and Objectives: Briefly describe the goals and objectives of the program.

The certificate provides advanced and specialized study in special education. Course offerings and program content are organized so that participants develop a perspective about special education in their specialized area of study within a variety of contexts (e.g., individual, group, historical, and cultural) and across a range of educational environments (e.g., school, community, family). Specific emphasis is placed on empirically validated best practices for assessment, teaching and learning.

Overall Description of Student Learning Objectives: Provide any overall descriptive information regarding the student learning objectives for this program.

The Gifted Education Certificate will prepare highly qualified educators (general educators and special educators) and related service providers to provide evidence-based practices and supports to gifted children and their families. Scholars completing the certificate program will be able to deliver EBPs that are effective across developmental domains, can ameliorate negative effects, and improve long-term outcomes of student achievement.

Listing of Student Learning Objectives: Include clearly stated student learning objectives for the program, indicating what students will know (concepts, terminology, methods, history, etc) and what students will be able to do when they complete the program. These should be broad enough to encompass all of the knowledge acquired during the course of study yet specific enough, using active verbs, to communicate clearly to students, parents and other stakeholders what students will know and be able to do. Most programs identify 6-10 student learning objectives. Refer to the blue help bubble for examples or additional assistance.

Provide a minimum of six student learning objectives in the table below. Use the green plus sign to add rows as needed.

	Student Learning Objectives
1	An understanding of the historical, legal, and scientific foundations that influence current practices, trends, and issues in special education
2	Research and writing skills that enable them to propose, review and evaluate research in the professional literature, and translate research into practices

3	Assessment and evaluation skills for designing, implementing, and evaluating instruction and
4	An understanding of the interactive context of families, community, schools, and society and their impact on students with exceptionalities
	intervention programs for students who display learning and/or behavioral difficulties or other exceptionalities
5	Collaboration and leadership skills that promote active participation in the professional community
	Advanced knowledge across the discipline and within area(s) of specialization

Program Curriculum:

Program Structure

General description: Provide a general description of the structure of the curriculum plan, such as the overall number of credit hours required, general areas of study, planned academic activities, etc. If the program has an online option, explain if instruction is delivered in an asynchronous format, a synchronous format, or both.

The program structure is a 12 hours (4 course) plan of study using coursework that is delivered 100% E-Learning, taught asynchronous.

Program Requirements: Describe all requirements for the program. This content will be displayed in the Program Requirements area of the online University Catalog.

Program Requirements:

Requirements

Students complete a set 12 hours (4 course) program of study. Courses can be taken in any order. Students eligible for the certificate program must hold a bachelor's degree in the field of education, special education, or related services. Eligible students may or may not be concurrently enrolled in a graduate program.

Required Courses (12 hours total)

SPC_ED 8406	Differentiating Instruction: Reaching Gifted, Typical and Struggling Learners	3
SPC_ED 8391	Curriculum Methods for Gifted and Talented Students	3
SPC_ED 8380	Nature and Needs of Gifted and Talented Students	3
SPC_ED 8405	Assessment and Evaluation in Gifted Education	3

Additional Faculty: For each level of expertise, provide the number of additional faculty that will be needed to deliver the program. If none, indicate 0.

Level	Number
Tenure Track	0
Non-Tenure Track	0
Post-Doc Fellows	0
Grad Tchng/Research Asst	0
Adjunct	0

Accreditation:

Plans to apply: Do you plan to apply for program specific accreditation?

No

Provide brief explanation:

This program does not provide initial or secondary certification in the state of Missouri

Gainful Employment:

Certificate web site:

to be housed on Missouri Online and CEHD websites

Tuition for program: Based on current tuition rates, calculate the total tuition for completing this program within normal time.

$4975.20

Associated fees: Based on current fee rates, calculate the total fees for completing this program within normal time.

$862.80

Books and supplies: Based on current costs, calculate the total typical costs for books and supplies for completing this program within normal time.

$800

Related occupational titles and codes: As part of the federal disclosure, MU is required to report prospective occupations for certificate holders. Titles can be found in the US Department of Labor's database, O*Net Online at http://www.onetonline.org. **Click Find Occupations. Type a keyword into the search box. Click go. Scan the list for feasible titles. Click on a title to review its summary. If it matches the certificate, copy the job title, occupational code, and URL into the table below.**

Provide at least 10 occupations. Use the green plus sign to add rows as needed.

Job Title	Occupational Code	URL for Summary Page
Elementary School Teachers	25-2021.00	https://www.onetonline.org/link/summary/25-2021.00
Middle School Teachers	25-2022.00	https://www.onetonline.org/link/summary/25-2022.00
Secondary School Teachers	25-2031.00	https://www.onetonline.org/link/summary/25-2031.00
Special Education Middle School Teachers	25-2057.00	https://www.onetonline.org/link/summary/25-2057.00
Special Education Elementary School Teachers	25-2056.00	https://www.onetonline.org/link/summary/25-2056.00
Special Education Secondary School Teachers	25-2058.00	25-2058.00 https://www.onetonline.org/link/summary/25-2058.00
Special Education Preschool Teacher	25-2051.00	https://www.onetonline.org/link/summary/25-2051.00
Educational, Guidance, and Career Counselors and Advisors	21-1012.00	https://www.onetonline.org/link/summary/21-1012.00
Special Education Teachers, All Other	25-2059.00	https://www.onetonline.org/link/summary/25-2059.00
School Psychologists	19-3034.00	https://www.onetonline.org/link/summary/19-3034.00

Catalog Information:

Information provided in this section is used to automatically populate program information in the online university catalog when published each year in June.

Program Description: In one short but thorough paragraph, describe the program. This official description will be included in the online university catalog and other initiatives supporting student success. The description should include the following three elements: 1) general description of the academic subject area, explaining the area, how it is relevant today, and interest areas that would draw a person to the program; 2) highlights of the program, including descriptions of core and advanced areas of study, special activities within the program such as internships, hands-on learning, research, field operations, study abroad, mentoring, shadowing, etc; 3) careers and opportunities associated with the program, discussing typical professions and work settings, additional educational opportunities, and top prospects in employment.

The Gifted Education Certificate is a graduate level program designed to provide candidates with advanced preparation in gifted education methodology and practices. Candidates become equipped with the knowledge and skills necessary to work with children and youth in the field of gifted education.

Reviewer Comments:

Carla Whitney (whitneycm) (Fri, 15 Oct 2021 18:43:39 GMT): Put course requirements in course list.
Denice Adkins (adkinsde) (Thu, 02 Dec 2021 20:56:24 GMT): Rollback: Rolling back for amendments to program certificate.

Key: 799

****

800: GRADUATE CERTIFICATE IN EARLY CHILDHOOD SPECIAL EDUCATION

In Workflow

1. Form Check (whitneycm@missouri.edu)
2. SPC_ED Chair (vangarderend@missouri.edu)
3. CIP Code Rvw (eimersm@missouri.edu)
4. EDUC CC 2 (adkinsde@missouri.edu)
5. EDUC Dean (fellabaumje@missouri.edu; nicholssl@missouri.edu)
6. Workflow Rvw (whitneycm@missouri.edu)
7. AAC-GFS Vote (borens@health.missouri.edu; freyermuthr@missouri.edu; neumans@missouri.edu; martindan@health.missouri.edu; mustaphaa@missouri.edu; desouzag@missouri.edu; wma@missouri.edu)
8. AAC-GFS Chair (borens@health.missouri.edu)
9. GFS Pres (parrishar@health.missouri.edu)
10. Grad Dean Rvw (hartjl@missouri.edu)
11. Provost (socaridesa@umsystem.edu;bearyj@missouri.edu)
12. UM (schaffin@umsystem.edu; zlkhd4@missouri.edu)
13. MDHE/CBHE (schaffin@umsystem.edu; zlkhd4@missouri.edu)
14. SAR (kochra@missouri.edu)
15. IR (urbank@missouri.edu)
16. OUR catalog (muregistrarcatalog@missouri.edu)

Approval Path

1. Mon, 18 Oct 2021 21:24:18 GMT
   Carla Whitney (whitneycm): Approved for Form Check
2. Mon, 18 Oct 2021 22:08:16 GMT
   Delinda Van Garderen-Anderson (vangarderend): Approved for SPC_ED Chair
3. Thu, 28 Oct 2021 15:00:59 GMT
   Mardy Eimers (eimersm): Approved for CIP Code Rvw
4. Thu, 02 Dec 2021 20:57:13 GMT
   Denice Adkins (adkinsde): Rollback to Initiator
5. Fri, 03 Dec 2021 16:50:52 GMT
   Carla Whitney (whitneycm): Approved for Form Check
6. Fri, 03 Dec 2021 16:53:26 GMT
   Delinda Van Garderen-Anderson (vangarderend): Approved for SPC_ED Chair
7. Tue, 07 Dec 2021 22:45:37 GMT
   Mardy Eimers (eimersm): Approved for CIP Code Rvw
8. Tue, 18 Jan 2022 21:44:37 GMT
   Denice Adkins (adkinsde): Approved for EDUC CC 2
9. Tue, 18 Jan 2022 23:08:30 GMT
   Jennifer Fellabaum-Toston (fellabaumje): Approved for EDUC Dean
10. Wed, 19 Jan 2022 14:18:10 GMT
    Carla Whitney (whitneycm): Approved for Workflow Rvw
11. Thu, 17 Mar 2022 22:25:53 GMT
    4/7 votes cast.
    Yes: 100% No: 0%
    Approved for AAC-GFS Vote
12. Thu, 17 Mar 2022 22:30:05 GMT
    Suzanne Boren (borens): Approved for AAC-GFS Chair

New Program Proposal

Date Submitted: Fri, 03 Dec 2021 16:00:04 GMT

Viewing: Graduate Certificate in Early Childhood Special Education

Last edit: Fri, 03 Dec 2021 16:00:02 GMT

Changes proposed by: colleyf

Contact Information:

Proposer User ID:
colleyf

First Name:
Frances

Last Name:
Colley

E-mail:
colleyf@missouri.edu

Phone:
573/882-2659

Department:
Learning Teaching & Curriculum

Primary Contact: The Primary Contact should be an individual who was integrally involved in the writing of this proposal, and will be able to answer questions regarding its content. Are you the Primary Contact for this proposal, or are you submitting this proposal on behalf of another individual/group?
I am entering data for the Primary Contact

MU Primary Contact: Use the search below to locate the Primary Contact.

User ID:
vangarderend

First Name:
Delinda

Last Name:
Van Garderen-Anderson

Email:
vangarderend@missouri.edu

Phone:
573/884-7075

Department:
Special Education

Collaborating Writers: Are there any other individuals from MU who were integrally involved in the writing of this proposal?
No

Program Characteristics:

Campus:
University of Missouri - Columbia

Type of Program:
Certificate

Specify program level:
Graduate

Program Title: List the exact name of the program. If a degree, include the abbreviation for the degree (i.e. BA, BS, MS, PhD). If a minor, graduate minor, certificate or graduate certificate, include this first in the program title. If an emphasis, first list the parent degree title (i.e. BA in Undergraduate Studies), followed by "with Emphasis in", followed by the emphasis title.

How it is listed here is what will display on the transcript (and diploma if a degree).

Program Title:
Graduate Certificate in Early Childhood Special Education

College(s) or School(s) offering the program: Select the college or school offering the program. If more than one, use the green plus sign to add rows for listing additional colleges, and use the green arrows to list the primary unit at the top.

	College
1	Education & Human Development

Unit(s) offering the program: Select the unit offering the program. If more than one, use the green plus sign to add rows for listing additional units, and use the green arrows to list the primary unit at the top. Only units currently offering programs are in the list. See the blue help bubble for instructions if unit is not listed.

	Units (Departments, Divisions, etc.)
1	Special Education

Eligible students:

Any person, open to non-degree seeking and degree-seeking students (free standing certificate program)

Total credits required for graduation/completion:

12

Mode of Program Delivery: Select the option below which best fits the program.

E-Learning Program – 100% of the program is online. May have proctored exams for courses.

CIP Code: Use the "Find" link to search the government database for applicable CIP Code.

13.1001 - Special Education and Teaching, General.

Term Start: Estimate the first term students will enroll.

Fall 2022

Term Graduate: Estimate the first term students will graduate.

Fall 2022

Program Director: Enter the User ID of the program director responsible for the student support services.

Program Director User ID:

mccathrenr

Program Director Name:

Rebecca McCathren

Academic Advisor(s): Enter the User ID(s) of the academic advisor(s) responsible for advising students in this program. Use the green plus sign to add rows as needed.

User ID	Name
mccathrenr	Rebecca McCathren

Advisory Committee: Provide the information requested for the member(s) of the advisory committee for this program. Committee members may include representation from the professional, business or govenrment sectors which the program is designed to serve. Use the green plus sign to add rows as needed.

Name	Title	Affiliation
Delinda Van Garderen	Professor	Special Education
Chad Rose	Associate Professor	Special Education

Participating Faculty: Enter the User ID(s) of the faculty member(s) participating in this academic program. Use the green plus sign to add rows as needed.

User ID	Name
mccathrenr	Rebecca McCathren

Additional Student Support Services: Describe any additional advising and support services that will be provided to students in this program.

Access to IDE, Campus Writing Program, and Office of Disabilities, as well as the Special Education Director of Graduate Studies and departmental Office of Graduate Studies.

Fit with University Mission and Other Academic Programs:

Alignment:

Alignment with Campus Strategic Plan: Explain how the program aligns with campus goals and priorities as stated in the Campus Strategic Plan (refer to blue help bubble), as well as college and department goals.

The proposed certificate, Early Childhood Special Education (ECSE), is aligned with Campus Strategic Plan to increase student success. ECSE will increase the number of graduate student options, by offering a new competitive option for graduate students seeking specialized instruction to provide evidence-based services to individuals working with special education students.

The certificate may be completed as a stand alone, thereby increasing student enrollment for working educators who are not interested in completing an entire graduate degree, but who are seeking further education to be able to support the growing number of special education students being served in schools, with diverse and complex needs.

It is important to note, that since the courses proposed in the ECSE program are already developed and part of an established graduate degree, the certificate has the potential to entice students to extend beyond the certificate, and commit to the complete degree program instead once participating. This provides opportunity to further extend the relationship with student engagement for those who may have otherwise been hesitant to attempt to enroll in a graduate program.

The certificate presents an add on option to students who are seeking graduate degrees in other areas of study, who understand the need for specialized instruction in working effectively with special education students. Potential graduate students to benefit from this program are degree seeking general educators, special educators, early childhood special educators, speech-language pathologists, occupational therapists, school psychologists, counselors, and other school-based service providers.

Additionally, because the certificate courses are entirely online, it allows opportunity for distance learners to participate.

There is a significant increase in the need of special education students being served in schools, and a shortage of educators prepared to meet student needs.

Additionally, in clinical based related service programs, the scope of work that must be covered for certification allows very little time to dedicate to specifically to learning about evidence based practices to support special education students.

Duplication within the state:

Potential Duplications at MU or within UM: Does a similar program exist at MU or at another UM System school?

No

Market Analysis - Need/Demand:

Market Analysis – Need for Program:

Market Demand: Based on national, regional, state, or local market demand, justify the need for graduates of this program. Provide convincing data from sources such as MERIC or Bureau of Labor Statistics.

There are only 42 national online special education certificates in the country; and there are only 2 online special education certificates in Missouri. One is in the UM system; and one is not. The market is being driven for a need for rigorous, quality online programs for Special Education teachers. There was a 16% growth in 2019 in online programs for Special Education with a decline in on-campus programs by -18%.

The field of special education has traditionally had the highest rates of teacher mobility and attrition (Billingsley, 2004a, 2004b; Boe, 2014; Boe et al., 2008). Shortages were so widespread at one point that 98% of school districts in the U. S. reported shortages of qualified special education teachers (McLesky & Billingsley, 2008). In 2017–18, 46 states reported special education teacher shortages (U.S. Department of Education Office of Postsecondary Education, 2017; Education Commission of the States, 2021).

Sadly, such shortages often result in positions staffed with uncertified teachers. For example, a 2019 press release from the American Association of Colleges for Teacher Education (AACTE) reports that 90% of high-poverty schools struggle to find qualified special education teachers (Thurman, 2019). Despite mandates for all teachers to be highly qualified in the content they teach, including strong discipline content knowledge in mathematics, too many students receive special education services from teachers

who are not highly qualified (Kennedy & Ihle, 2012).

Meeting Missouri's Needs: Explain how the program will help meet Missouri's academic, economic and societal needs.

Annually, the U.S. Department of Education, Office of Postsecondary Education (2017) identifies areas of teacher shortages by state. In a news release, April 16, 2021, the Missouri Department of Elementary and Secondary Education (DESE) highlighted a significant need to address teacher shortage in Missouri. Of note, "In the 2019-2020 school year, there were 6,200 open teaching positions in Missouri. … Educator preparation programs at institutions of higher education, with a decline of over 25 percent in teacher candidate enrollment over the past six years, are not producing enough new teachers to fill our classrooms."

Additionally, the Individuals with Disabilities Education Act (IDEA, 2004) requires students with disabilities, including students with learning disabilities to have access to the general education curriculum to the fullest extent possible. As such 64% of students with disabilities spend at least 80% of their day in the general education classroom (U.S Department of Education, 2020). General Education teachers are expected to teach special education students in their classrooms.

There is a need for more specialized and highly trained general educators, special educators & related service providers.

Student Enrollment Projections: Estimate the total student enrollment in the program for the fall semester for the first five years.

Year	1	2	3	4	5
Total	10	10	10	10	10

Student Enrollment Projections - New to MU: Estimate the total enrollment of students new to MU in the fall semester for the first five years.

Year	1	2	3	4	5
Total	8	8	8	8	8

Market Analysis – Student Demand for Program:

Student Demand: Describe the evidence of sufficient student demand to support a viable program. The demand must be sufficient to project fiscal and academic viability within five years of the start of the program.

There are only 42 national online certificates in the country; and there are only 2 located in Missouri. The market is being driven for a need for rigorous, quality online programs for Special Education teachers. There was a 16% growth in 2019 in online programs for Special Education with a decline in on-campus programs by -18%.

Financial Projections:

Resources: Describe the resources necessary to launch and support the program, including estimates of instructional costs, student advising, support staff, space, library resources, equipment, etc:

No increased resource costs: instructor for the courses and advisor of the program already currently teaches and advises for the masters program in Early Childhood Special Education.

New Revenue: Describe the new revenue to be generated from program enrollment by students NEW TO MU, including any new or additional fees to be collected:

All revenue from certificate students will be new revenue.

Business and Marketing Plan - Recruiting and Retaining Students:

Marketing Strategy: How will the program be marketed to attract new students to it?

Being this is an online program, we will be partnered with Missouri Online for advertising and recruitment. With that partnership they are able to support us in a variety of ways. We will work with our dedicated program coordinator, who will serve as the primary point person to assist in logistical and coordination efforts for the program, from ideation to implementation and throughout the program lifecycle. Their marketing division will support us with brand awareness and program specific marketing to our student demographic. We will advertise through the department website; and we will distribute information to state-wide teachers (i.e. general educators, special educators, and related service providers) through Missouri DESE. We will distribute information faculty relationships with other Missouri Education agencies (i.e. MOCEC and MOCASE.) We will advertise through select national educational conferences. We will utilize targeted advertising through social media.

Projected program growth: Project how the program will grow over time and how marketing will change as the program grows.

As the program growth and word of mouth testimonials draw in additional students, we will reduce our marketing budget via venues such as conferences.

Retaining Students: Describe the plans to retain students through graduation.

New students are provided with orientation information and personalized attention from the advisor. Students are also encouraged to use university resources such as IDE, Office of Disabilities, et al.

Achieving Enrollment Outcomes: Describe the plans to ensure program enrollment outcomes are achieved.

In addition to the marketing strategy listed above, the certificate program, unlike our masters program, does not require a GRE, which with this barrier removed will encourage more students to apply. Additionally, Missouri Online's Student Lifecycle support team will aid us in guiding our potential students to support on enrollment, financial aid & billing questions as they begin their path to becoming an enrolled student.

Exit Strategy: Provide information regarding the steps the department/academic unit will take if the program underperforms expectations. At what point would the academic unit believe the program needs to be put on hiatus or discontinued?

Since the courses for this proposed program are already running for a specific Masters program, the certificate will only be closed if the courses are not filling and able to run.

Program Goals and Objectives:

Program Goals and Objectives: Briefly describe the goals and objectives of the program.

The certificate provides advanced and specialized study in special education. Course offerings and program content are organized so that participants develop a perspective about special education in their specialized area of study within a variety of contexts (e.g., individual, group, historical, and cultural) and across a range of educational environments (e.g., school, community, family). Specific emphasis is placed on empirically validated best practices for assessment, teaching and learning.

Overall Description of Student Learning Objectives: Provide any overall descriptive information regarding the student learning objectives for this program.

The Early Childhood Special Education Certificate will prepare highly qualified educators (general educators and special educators) and related service providers to provide evidence-based practices and supports to special education students and their families.

Scholars completing the certificate program will be able to deliver EBPs that are effective across developmental domains, can ameliorate negative effects, and improve long-term outcomes of student achievement.

Listing of Student Learning Objectives: Include clearly stated student learning objectives for the program, indicating what students will know (concepts, terminology, methods, history, etc) and what students will be able to do when they complete the program. These should be broad enough to encompass all of the knowledge acquired during the course of study yet specific enough, using active verbs, to communicate clearly to students, parents and other stakeholders what students will know and be able to do. Most programs identify 6-10 student learning objectives. Refer to the blue help bubble for examples or additional assistance.

Provide a minimum of six student learning objectives in the table below. Use the green plus sign to add rows as needed.

	Student Learning Objectives
1	An understanding of the historical, legal, and scientific foundations that influence current practices, trends, and issues in special education
2	Research and writing skills that enable them to propose, review and evaluate research in the professional literature, and translate research into practices
3	Assessment and evaluation skills for designing, implementing, and evaluating instruction and
4	An understanding of the interactive context of families, community, schools, and society and their impact on students with exceptionalities
	intervention programs for students who display learning and/or behavioral difficulties or other exceptionalities
5	Collaboration and leadership skills that promote active participation in the professional community
	Advanced knowledge across the discipline and within area(s) of specialization

Program Curriculum:

Program Structure

General description: Provide a general description of the structure of the curriculum plan, such as the overall number of credit hours required, general areas of study, planned academic activities, etc. If the program has an online option, explain if instruction is delivered in an asynchronous format, a synchronous format, or both.

The program structure is a 12 hours (4 course) plan of study using coursework that is delivered 100% E-Learning, taught asynchronous.

Program Requirements: Describe all requirements for the program. This content will be displayed in the Program Requirements area of the online University Catalog.

Program Requirements:

Requirements

Students complete a set 12 hours (4 course) program of study. Courses can be taken in any order. Students eligible for the certificate program must hold a bachelor's degree in the field of education, special education, or related services. Eligible students may or may not be concurrently enrolled in a graduate program.

Required Courses (12 Hours)

SPC_ED 8485	Introduction and Methods of Early Intervention	3
SPC_ED 8495	Introduction and Methods of Early Childhood Special Education	2-3
SPC_ED 8490	Assessment in Early Childhood Special Education	3
SPC_ED 8605	Young Children with Autism	3

Additional Faculty: For each level of expertise, provide the number of additional faculty that will be needed to deliver the program. If none, indicate 0.

Level	Number
Tenure Track	0
Non-Tenure Track	0
Post-Doc Fellows	0
Grad Tchng/Research Asst	0
Adjunct	0

Accreditation:

Plans to apply: Do you plan to apply for program specific accreditation?

No

Provide brief explanation:

This program does not provide initial or secondary certification in the state of Missouri

Gainful Employment:

Certificate web site:

to be housed on Missouri Online and CEHD websites

Tuition for program: Based on current tuition rates, calculate the total tuition for completing this program within normal time.

$4975.20

Associated fees: Based on current fee rates, calculate the total fees for completing this program within normal time.

$862.8

Books and supplies: Based on current costs, calculate the total typical costs for books and supplies for completing this program within normal time.

$800

Related occupational titles and codes: As part of the federal disclosure, MU is required to report prospective occupations for certificate holders. Titles can be found in the US Department of Labor's database, O*Net Online at http://www.onetonline.org. **Click Find Occupations. Type a keyword into the search box. Click go. Scan the list for feasible titles. Click on a title to review its summary. If it matches the certificate, copy the job title, occupational code, and URL into the table below.**

Provide at least 10 occupations. Use the green plus sign to add rows as needed.

Job Title	Occupational Code	URL for Summary Page
Elementary School Teachers	25-2021.00	https://www.onetonline.org/link/summary/25-2021.00

Special Education Elementary Teachers	25-2056.00	https://www.onetonline.org/link/summary/25-2056.00
Special Education Preschool Teacher	25-2051.00	https://www.onetonline.org/link/summary/25-2051.00
Special Education Middle School Teachers	25-2057.00	https://www.onetonline.org/link/summary/25-2057.00
School Psychologists	19-3034.00	https://www.onetonline.org/link/summary/19-3034.00
Teaching Assistants, Preschool, Elementary, Middle & Secondary School, Except Special Education	25-9042.00	https://www.onetonline.org/link/summary/25-9042.00
Kindergarten Teachers, Except Special Education	25-2012.00	https://www.onetonline.org/link/summary/25-2012.00
Education & Childcare Administrators, Preschool & Daycare	11-9031.00	https://www.onetonline.org/link/summary/11-9031.00
Preschool Teachers, Except Special Education	25-2011.00	https://www.onetonline.org/link/summary/25-2011.00
Special Education Kindergarten Teacher	25-2055.00	https://www.onetonline.org/link/summary/25-2055.00

Catalog Information:

Information provided in this section is used to automatically populate program information in the online university catalog when published each year in June.

Program Description: In one short but thorough paragraph, describe the program. This official description will be included in the online university catalog and other initiatives supporting student success. The description should include the following three elements: 1) general description of the academic subject area, explaining the area, how it is relevant today, and interest areas that would draw a person to the program; 2) highlights of the program, including descriptions of core and advanced areas of study, special activities within the program such as internships, hands-on learning, research, field operations, study abroad, mentoring, shadowing, etc; 3) careers and opportunities associated with the program, discussing typical professions and work settings, additional educational opportunities, and top prospects in employment.

This certificate program provides students with the necessary experiences and information to work with young children, both typically developing and those with disabilities, and their families in a variety of settings, including both home and school. The program also focuses on working effectively with families and children from a variety of cultures and how to provide intervention in a culturally consistent manner.

Reviewer Comments:

Carla Whitney (whitneycm) (Mon, 18 Oct 2021 21:24:10 GMT): Put requirements in course list.
Denice Adkins (adkinsde) (Thu, 02 Dec 2021 20:57:14 GMT): Rollback: Rolling back for amendments to certificate program.

Key: 800

****

801: GRADUATE CERTIFICATE IN SPECIAL EDUCATION CROSS- CATEGORICAL

In Workflow

1. Form Check (whitneycm@missouri.edu)
2. SPC_ED Chair (vangarderend@missouri.edu)
3. CIP Code Rvw (eimersm@missouri.edu)
4. EDUC CC 2 (adkinsde@missouri.edu)
5. EDUC Dean (fellabaumje@missouri.edu; nicholssl@missouri.edu)
6. Workflow Rvw (whitneycm@missouri.edu)
7. AAC-GFS Vote (borens@health.missouri.edu; freyermuthr@missouri.edu; neumans@missouri.edu; martindan@health.missouri.edu; mustaphaa@missouri.edu; desouzag@missouri.edu; wma@missouri.edu)
8. AAC-GFS Chair (borens@health.missouri.edu)
9. GFS Pres (parrishar@health.missouri.edu)
10. Grad Dean Rvw (hartjl@missouri.edu)
11. Provost (socaridesa@umsystem.edu;bearyj@missouri.edu)
12. UM (schaffin@umsystem.edu; zlkhd4@missouri.edu)
13. MDHE/CBHE (schaffin@umsystem.edu; zlkhd4@missouri.edu)
14. SAR (kochra@missouri.edu)
15. IR (urbank@missouri.edu)
16. OUR catalog (muregistrarcatalog@missouri.edu)

Approval Path

1. Mon, 18 Oct 2021 21:28:40 GMT
   Carla Whitney (whitneycm): Approved for Form Check
2. Mon, 18 Oct 2021 22:08:12 GMT
   Delinda Van Garderen-Anderson (vangarderend): Approved for SPC_ED Chair
3. Thu, 28 Oct 2021 15:01:14 GMT
   Mardy Eimers (eimersm): Approved for CIP Code Rvw
4. Fri, 03 Dec 2021 21:50:12 GMT
   Denice Adkins (adkinsde): Rollback to Initiator
5. Fri, 03 Dec 2021 22:06:28 GMT
   Carla Whitney (whitneycm): Approved for Form Check
6. Fri, 03 Dec 2021 22:08:35 GMT
   Delinda Van Garderen-Anderson (vangarderend): Rollback to Form Check for SPC_ED Chair
7. Mon, 06 Dec 2021 15:06:14 GMT
   Carla Whitney (whitneycm): Rollback to Initiator

8. Mon, 06 Dec 2021 22:18:02 GMT
   Carla Whitney (whitneycm): Approved for Form Check
9. Mon, 06 Dec 2021 22:52:08 GMT
   Delinda Van Garderen-Anderson (vangarderend): Approved for SPC_ED Chair
10. Tue, 07 Dec 2021 22:46:05 GMT
    Mardy Eimers (eimersm): Approved for CIP Code Rvw
11. Tue, 18 Jan 2022 21:44:41 GMT
    Denice Adkins (adkinsde): Approved for EDUC CC 2
12. Tue, 18 Jan 2022 23:09:14 GMT
    Jennifer Fellabaum-Toston (fellabaumje): Approved for EDUC Dean
13. Wed, 19 Jan 2022 14:18:20 GMT
    Carla Whitney (whitneycm): Approved for Workflow Rvw
14. Thu, 17 Mar 2022 22:26:10 GMT
    4/7 votes cast.
    Yes: 100% No: 0%
    Approved for AAC-GFS Vote
15. Thu, 17 Mar 2022 22:30:08 GMT
    Suzanne Boren (borens): Approved for AAC-GFS Chair

New Program Proposal

Date Submitted: Mon, 06 Dec 2021 17:09:54 GMT

Viewing: Graduate Certificate in Special Education Cross-Categorical

Last edit: Mon, 06 Dec 2021 17:09:50 GMT

Changes proposed by: colleyf

Contact Information:

Proposer User ID:
colleyf

First Name:
Frances

Last Name:
Colley

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573/882-2659

Department:
Learning Teaching & Curriculum

Primary Contact: The Primary Contact should be an individual who was integrally involved in the writing of this proposal, and will be able to answer questions regarding its content. Are you the Primary Contact for this proposal, or are you submitting this proposal on behalf of another individual/group?
I am entering data for the Primary Contact

MU Primary Contact: Use the search below to locate the Primary Contact.

User ID:
vangarderend

First Name:
Delinda

Last Name:
Van Garderen-Anderson

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Phone:
573/884-7075

Department:

Special Education

Collaborating Writers: Are there any other individuals from MU who were integrally involved in the writing of this proposal?
No

Program Characteristics:

Campus:
University of Missouri - Columbia

Type of Program:
Certificate

Specify program level:
Graduate

Program Title: List the exact name of the program. If a degree, include the abbreviation for the degree (i.e. BA, BS, MS, PhD). If a minor, graduate minor, certificate or graduate certificate, include this first in the program title. If an emphasis, first list the parent degree title (i.e. BA in Undergraduate Studies), followed by "with Emphasis in", followed by the emphasis title.

How it is listed here is what will display on the transcript (and diploma if a degree).

Program Title:
Graduate Certificate in Special Education Cross-Categorical

College(s) or School(s) offering the program: Select the college or school offering the program. If more than one, use the green plus sign to add rows for listing additional colleges, and use the green arrows to list the primary unit at the top.

	College
1	Education & Human Development

Unit(s) offering the program: Select the unit offering the program. If more than one, use the green plus sign to add rows for listing additional units, and use the green arrows to list the primary unit at the top. Only units currently offering programs are in the list. See the blue help bubble for instructions if unit is not listed.

	Units (Departments, Divisions, etc.)
1	Special Education

Eligible students:
Any person, open to non-degree seeking and degree-seeking students (free standing certificate program)

Total credits required for graduation/completion:
12

Mode of Program Delivery: Select the option below which best fits the program.
E-Learning Program – 100% of the program is online. May have proctored exams for courses.

CIP Code: Use the "Find" link to search the government database for applicable CIP Code.
13.1001 - Special Education and Teaching, General.

Term Start: Estimate the first term students will enroll.
Fall 2022

Term Graduate: Estimate the first term students will graduate.
Fall 2022

Program Director: Enter the User ID of the program director responsible for the student support services.

Program Director User ID:
stormontm

Program Director Name:
Melissa Stormont

Academic Advisor(s): Enter the User ID(s) of the academic advisor(s) responsible for advising students in this program. Use the green plus sign to add rows as needed.

User ID	Name

stormontm	Melissa Stormont

Advisory Committee: Provide the information requested for the member(s) of the advisory committee for this program. Committee members may include representation from the professional, business or govenrment sectors which the program is designed to serve. Use the green plus sign to add rows as needed.

Name	Title	Affiliation
Delinda Van Garderen	Professor	Special Education
Chad Rose	Associate Professor	Special Education

Participating Faculty: Enter the User ID(s) of the faculty member(s) participating in this academic program. Use the green plus sign to add rows as needed.

User ID	Name
stormontm	Melissa Stormont

Additional Student Support Services: Describe any additional advising and support services that will be provided to students in this program.

Access to IDE, Campus Writing Program, and Office of Disabilities, as well as the Special Education Director of Graduate Studies and departmental Office of Graduate Studies.

Fit with University Mission and Other Academic Programs:

Alignment:

Alignment with Campus Strategic Plan: Explain how the program aligns with campus goals and priorities as stated in the Campus Strategic Plan (refer to blue help bubble), as well as college and department goals.

The proposed certificate, Special Education Cross-Categorical (CC), is aligned with Campus Strategic Plan to increase student success. CC will increase the number of graduate student options, by offering a new competitive option for graduate students seeking specialized instruction to provide evidence-based services to individuals working with special education students.

The certificate may be completed as a stand alone, thereby increasing student enrollment for working educators who are not interested in completing an entire graduate degree, but who are seeking further education to be able to support the growing number of special education students being served in schools, with diverse and complex needs.

It is important to note, that since the courses proposed in the CC program are already developed and part of an established graduate degree, the certificate has the potential to entice students to extend beyond the certificate, and commit to the complete degree program instead once participating. This provides opportunity to further extend the relationship with student engagement for those who may have otherwise been hesitant to attempt to enroll in a graduate program.

The certificate presents an add on option to students who are seeking graduate degrees in other areas of study, who understand the need for specialized instruction in working effectively with special education students. Potential graduate students to benefit from this program are degree seeking general educators, special educators, early childhood special educators, speech-language pathologists, occupational therapists, school psychologists, counselors, and other school-based service providers.

Additionally, because the certificate courses are entirely online, it allows opportunity for distance learners to participate.

There is a significant increase in the need of special education students being served in schools, and a shortage of educators prepared to meet student needs.

Additionally, in clinical based related service programs, the scope of work that must be covered for certification allows very little time to dedicate to specifically to learning about evidence based practices to support special education students.

Duplication within the state:

Potential Duplications at MU or within UM: Does a similar program exist at MU or at another UM System school?

No

Market Analysis - Need/Demand:

Market Analysis – Need for Program:

Market Demand: Based on national, regional, state, or local market demand, justify the need for graduates of this program. Provide convincing data from sources such as MERIC or Bureau of Labor Statistics.

There are only 42 national online special education certificates in the country; and there are only 2 online special education certificates in Missouri. One is in the UM system; and one is not. (At UMSL, the only certificate they offer is for Autism; and that one is a hybrid, not completely online.) The market is being driven for a need for rigorous, quality online programs for Special Education teachers. There was a 16% growth in 2019 in online programs for Special Education with a decline in on-campus programs by -18%.

The field of special education has traditionally had the highest rates of teacher mobility and attrition (Billingsley, 2004a, 2004b; Boe, 2014; Boe et al., 2008). Shortages were so widespread at one point that 98% of school districts in the U. S. reported shortages of qualified special education teachers (McLesky & Billingsley, 2008). In 2017–18, 46 states reported special education teacher shortages (U.S. Department of Education Office of Postsecondary Education, 2017; Education Commission of the States, 2021).

Sadly, such shortages often result in positions staffed with uncertified teachers. For example, a 2019 press release from the American Association of Colleges for Teacher Education (AACTE) reports that 90% of high-poverty schools struggle to find qualified special education teachers (Thurman, 2019). Despite mandates for all teachers to be highly qualified in the content they teach, including strong discipline content knowledge in mathematics, too many students receive special education services from teachers who are not highly qualified (Kennedy & Ihle, 2012).

Meeting Missouri's Needs: Explain how the program will help meet Missouri's academic, economic and societal needs.

Annually, the U.S. Department of Education, Office of Postsecondary Education (2017) identifies areas of teacher shortages by state. In a news release, April 16, 2021, the Missouri Department of Elementary and Secondary Education (DESE) highlighted a significant need to address teacher shortage in Missouri. Of note, "In the 2019-2020 school year, there were 6,200 open teaching positions in Missouri. … Educator preparation programs at institutions of higher education, with a decline of over 25 percent in teacher candidate enrollment over the past six years, are not producing enough new teachers to fill our classrooms."

Additionally, the Individuals with Disabilities Education Act (IDEA, 2004) requires students with disabilities, including students with learning disabilities to have access to the general education curriculum to the fullest extent possible. As such 64% of students with disabilities spend at least 80% of their day in the general education classroom (U.S Department of Education, 2020). General Education teachers are expected to teach special education students in their classrooms.

There is a need for more specialized and highly trained general educators, special educators & related service providers.

Student Enrollment Projections: Estimate the total student enrollment in the program for the fall semester for the first five years.

Year	1	2	3	4	5
Total	10	10	10	10	10

Student Enrollment Projections - New to MU: Estimate the total enrollment of students new to MU in the fall semester for the first five years.

Year	1	2	3	4	5
Total	8	8	8	8	8

Market Analysis – Student Demand for Program:

Student Demand: Describe the evidence of sufficient student demand to support a viable program. The demand must be sufficient to project fiscal and academic viability within five years of the start of the program.

There are only 42 national online special education certificates in the country; and of these, there are only 2 located in Missouri. The market is being driven for a need for rigorous, quality online programs for Special Education teachers. There was a 16% growth in 2019 in online programs for Special Education with a decline in on-campus programs by -18%.

Financial Projections:

Resources: Describe the resources necessary to launch and support the program, including estimates of instructional costs, student advising, support staff, space, library resources, equipment, etc:

No increased resource costs: instructor for the courses and advisor of the program already currently teaches and advises for the masters program in Special Education Cross-Categorical.

New Revenue: Describe the new revenue to be generated from program enrollment by students NEW TO MU, including any new or additional fees to be collected:

All revenue from certificate students will be new revenue.

Business and Marketing Plan - Recruiting and Retaining Students:

Marketing Strategy: How will the program be marketed to attract new students to it?

Being this is an online program, we will be partnered with Missouri Online for advertising and recruitment. With that partnership they are able to support us in a variety of ways. We will work with our dedicated program coordinator, who will serve as the primary point person to assist in logistical and coordination efforts for the program, from ideation to implementation and throughout the program lifecycle. Their marketing division will support us with brand awareness and program specific marketing to our student demographic. We will advertise through the department website; and we will distribute information to state-wide teachers (i.e. general educators, special educators, and related service providers) through Missouri DESE. We will distribute information through faculty relationships with other Missouri Education agencies (i.e. MOCEC and MOCASE.) We will advertise through select national educational conferences. We will utilize targeted advertising through social media.

Projected program growth: Project how the program will grow over time and how marketing will change as the program grows.

Based on the experiences for these Missouri universities and the special education certificates they launched, they had a 100% degree growth. We anticipate the same in our more specific special education certificate programs, such as Special Education Cross- Categorical. As the program growth and word of mouth testimonials draw in additional students, we will reduce our marketing budget via venues such as conferences.

Retaining Students: Describe the plans to retain students through graduation.

New students are provided with orientation information and personalized attention from the advisor. Students are also encouraged to use university resources such as IDE, Office of Disabilities, et al.

Achieving Enrollment Outcomes: Describe the plans to ensure program enrollment outcomes are achieved.

In addition to the marketing strategy listed above, the certificate program, unlike our masters program, does not require a GRE, which with this barrier removed will encourage more students to apply. Additionally, Missouri Online's Student Lifecycle support team will aid us in guiding our potential students to support on enrollment, financial aid & billing questions as they begin their path to becoming an enrolled student.

Exit Strategy: Provide information regarding the steps the department/academic unit will take if the program underperforms expectations. At what point would the academic unit believe the program needs to be put on hiatus or discontinued?

Since the courses for this proposed program are already running for a specific Masters program, the certificate will only be closed if the courses are not filling and able to run.

Program Goals and Objectives:

Program Goals and Objectives: Briefly describe the goals and objectives of the program.

The certificate provides advanced and specialized study in special education. Course offerings and program content are organized so that participants develop a perspective about special education in their specialized area of study within a variety of contexts (e.g., individual, group, historical, and cultural) and across a range of educational environments (e.g., school, community, family). Specific emphasis is placed on empirically validated best practices for assessment, teaching and learning.

Overall Description of Student Learning Objectives: Provide any overall descriptive information regarding the student learning objectives for this program.

The Special Education Cross-Categorical Certificate will prepare highly qualified educators (general educators and special educators) and related service providers to provide evidence-based practices and supports to children with high incidence disabilities such as speech-language disorders and learning disabilities. Scholars completing the certificate program will be able to deliver EBPs that are effective across developmental domains, can ameliorate negative effects, and improve long-term outcomes of student achievement.

Listing of Student Learning Objectives: Include clearly stated student learning objectives for the program, indicating what students

will know (concepts, terminology, methods, history, etc) and what students will be able to do when they complete the program. These should be broad enough to encompass all of the knowledge acquired during the course of study yet specific enough, using active verbs, to communicate clearly to students, parents and other stakeholders what students will know and be able to do. Most programs identify 6-10 student learning objectives. Refer to the blue help bubble for examples or additional assistance.

Provide a minimum of six student learning objectives in the table below. Use the green plus sign to add rows as needed.

	Student Learning Objectives
1	An understanding of the historical, legal, and scientific foundations that influence current practices, trends, and issues in special education
2	Research and writing skills that enable them to propose, review and evaluate research in the professional literature, and translate research into practices
3	Assessment and evaluation skills for designing, implementing, and evaluating instruction and
4	An understanding of the interactive context of families, community, schools, and society and their impact on students with exceptionalities
	intervention programs for students who display learning and/or behavioral difficulties or other exceptionalities
5	Collaboration and leadership skills that promote active participation in the professional community
	Advanced knowledge across the discipline and within area(s) of specialization

Program Curriculum:

Program Structure

General description: Provide a general description of the structure of the curriculum plan, such as the overall number of credit hours required, general areas of study, planned academic activities, etc. If the program has an online option, explain if instruction is delivered in an asynchronous format, a synchronous format, or both.

The program structure is a 12 hours (4 course) plan of study using coursework that is delivered 100% E-Learning, taught asynchronous.

Program Requirements: Describe all requirements for the program. This content will be displayed in the Program Requirements area of the online University Catalog.

Program Requirements:

Requirements

This program is recommended for students without an undergraduate education/special education degree.

Students complete a set 12 hours (4 course) program of study. Courses can be taken in any order. Students eligible for the certificate program must hold a bachelor's degree in the field of education, special education, or related services. Eligible students may or may not be concurrently enrolled in a graduate program.

Required Courses (12 Hours)

SPC_ED 7300	Introduction to Special Education	3
SPC_ED 7310	Behavioral and Classroom Management	3
SPC_ED 7370	Literacy in Special Education	3
SPC_ED 8330	Advanced Teaching Mathematics in Special Education	3

Additional Faculty: For each level of expertise, provide the number of additional faculty that will be needed to deliver the program. If none, indicate 0.

Level	Number
Tenure Track	0
Non-Tenure Track	0
Post-Doc Fellows	0
Grad Tchng/Research Asst	0
Adjunct	0

Accreditation:

Plans to apply: Do you plan to apply for program specific accreditation?

No

Provide brief explanation:

This program does not provide initial or secondary certification in the state of Missouri

Gainful Employment:

Certificate web site:

to be housed on Missouri Online and CEHD websites

Tuition for program: Based on current tuition rates, calculate the total tuition for completing this program within normal time.

$4975.2

Associated fees: Based on current fee rates, calculate the total fees for completing this program within normal time.

$862.80

Books and supplies: Based on current costs, calculate the total typical costs for books and supplies for completing this program within normal time.

$800

Related occupational titles and codes: As part of the federal disclosure, MU is required to report prospective occupations for certificate holders. Titles can be found in the US Department of Labor's database, O*Net Online at http://www.onetonline.org. **Click Find Occupations. Type a keyword into the search box. Click go. Scan the list for feasible titles. Click on a title to review its summary. If it matches the certificate, copy the job title, occupational code, and URL into the table below.**

Provide at least 10 occupations. Use the green plus sign to add rows as needed.

Job Title	Occupational Code	URL for Summary Page
Elementary School Teachers	25-2021.00	https://www.onetonline.org/link/summary/25-2021.00
Middle School Teachers	25-2022.00	https://www.onetonline.org/link/summary/25-2022.00
Secondary School Teachers	25-2031.00	https://www.onetonline.org/link/summary/25-2031.00
Special Education Middle School Teachers	25-2057.00	https://www.onetonline.org/link/summary/25-2057.00
Special Education Elementary Teachers	25-2056.00	https://www.onetonline.org/link/summary/25-2056.00
Special Education Secondary Teachers	25-2058.00	https://www.onetonline.org/link/summary/25-2058.00
Speech Language Pathologist	29-1127.00	https://www.onetonline.org/link/summary/29-1127.00
School Psychologists	19-3034.00	https://www.onetonline.org/link/summary/19-3034.00

Special Education Kindergarten Teachers	25-2055.00	https://www.onetonline.org/link/summary/25-2055.00
Special Education Teacher, All Other	25-2059.00	https://www.onetonline.org/link/summary/25-2059.00

Catalog Information:

Information provided in this section is used to automatically populate program information in the online university catalog when published each year in June.

Program Description: In one short but thorough paragraph, describe the program. This official description will be included in the online university catalog and other initiatives supporting student success. The description should include the following three elements: 1) general description of the academic subject area, explaining the area, how it is relevant today, and interest areas that would draw a person to the program; 2) highlights of the program, including descriptions of core and advanced areas of study, special activities within the program such as internships, hands-on learning, research, field operations, study abroad, mentoring, shadowing, etc; 3) careers and opportunities associated with the program, discussing typical professions and work settings, additional educational opportunities, and top prospects in employment.

This certificate prepares personnel to effectively implement evidenced-based practices for students with mild disabilities (i.e., learning disabilities, emotional/behavior disorders, intellectual disabilities). It enables educators to integrate all areas of curriculum to effectively assess and develop social competence benchmarks for students with special needs.

Reviewer Comments:

Carla Whitney (whitneycm) (Mon, 18 Oct 2021 21:28:34 GMT): Put requirements in course list.
Denice Adkins (adkinsde) (Fri, 03 Dec 2021 21:50:12 GMT): Rollback: Rollback for edits to program proposal.
Delinda Van Garderen-Anderson (vangarderend) (Fri, 03 Dec 2021 22:08:35 GMT): Rollback: edit needed
Carla Whitney (whitneycm) (Mon, 06 Dec 2021 15:06:14 GMT): Rollback: Was rolled back to me and should of been back to Fran for editing.

Key: 801

802: GRADUATE CERTIFICATE IN INTERVENTION AND INSTRUCTION

In Workflow

1. Form Check (whitneycm@missouri.edu)
2. SPC_ED Chair (vangarderend@missouri.edu)
3. CIP Code Rvw (eimersm@missouri.edu)
4. EDUC CC 2 (adkinsde@missouri.edu)
5. EDUC Dean (fellabaumje@missouri.edu; nicholssl@missouri.edu)
6. Workflow Rvw (whitneycm@missouri.edu)
7. AAC-GFS Vote (borens@health.missouri.edu; freyermuthr@missouri.edu; neumans@missouri.edu; martindan@health.missouri.edu; mustaphaa@missouri.edu; desouzag@missouri.edu; wma@missouri.edu)
8. AAC-GFS Chair (borens@health.missouri.edu)
9. GFS Pres (parrishar@health.missouri.edu)
10. Grad Dean Rvw (hartjl@missouri.edu)
11. Provost (socaridesa@umsystem.edu;bearyj@missouri.edu)
12. UM (schaffin@umsystem.edu; zlkhd4@missouri.edu)
13. MDHE/CBHE (schaffin@umsystem.edu; zlkhd4@missouri.edu)
14. SAR (kochra@missouri.edu)
15. IR (urbank@missouri.edu)
16. OUR catalog (muregistrarcatalog@missouri.edu)

Approval Path

1. Mon, 18 Oct 2021 21:31:59 GMT
   Carla Whitney (whitneycm): Approved for Form Check
2. Mon, 18 Oct 2021 22:08:07 GMT
   Delinda Van Garderen-Anderson (vangarderend): Approved for SPC_ED Chair
3. Thu, 28 Oct 2021 15:01:30 GMT
   Mardy Eimers (eimersm): Approved for CIP Code Rvw
4. Thu, 02 Dec 2021 20:57:54 GMT

Denice Adkins (adkinsde): Rollback to Initiator

5. Fri, 03 Dec 2021 15:56:48 GMT
   Carla Whitney (whitneycm): Approved for Form Check
6. Fri, 03 Dec 2021 16:21:32 GMT
   Delinda Van Garderen-Anderson (vangarderend): Approved for SPC_ED Chair
7. Tue, 07 Dec 2021 22:46:36 GMT
   Mardy Eimers (eimersm): Approved for CIP Code Rvw
8. Tue, 18 Jan 2022 21:44:49 GMT
   Denice Adkins (adkinsde): Approved for EDUC CC 2
9. Tue, 18 Jan 2022 23:10:04 GMT
   Jennifer Fellabaum-Toston (fellabaumje): Approved for EDUC Dean
10. Wed, 19 Jan 2022 14:18:27 GMT
    Carla Whitney (whitneycm): Approved for Workflow Rvw
11. Thu, 17 Mar 2022 22:26:37 GMT
    4/7 votes cast.
    Yes: 100% No: 0%
    Approved for AAC-GFS Vote
12. Thu, 17 Mar 2022 22:30:14 GMT
    Suzanne Boren (borens): Approved for AAC-GFS Chair

New Program Proposal

Date Submitted: Fri, 03 Dec 2021 15:53:47 GMT

Viewing: Graduate Certificate in Intervention and Instruction

Last edit: Fri, 03 Dec 2021 15:53:45 GMT

Changes proposed by: colleyf

Contact Information:

Proposer User ID:
colleyf

First Name:
Frances

Last Name:
Colley

E-mail:
colleyf@missouri.edu

Phone:
573/882-2659

Department:
Learning Teaching & Curriculum

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I am entering data for the Primary Contact

MU Primary Contact: Use the search below to locate the Primary Contact.

User ID:
vangarderend

First Name:
Delinda

Last Name:
Van Garderen-Anderson

Email:
vangarderend@missouri.edu

Phone:
573/884-7075

Department:
Special Education

Collaborating Writers: Are there any other individuals from MU who were integrally involved in the writing of this proposal?
No

Program Characteristics:

Campus:
University of Missouri - Columbia

Type of Program:
Certificate

Specify program level:
Graduate

Program Title: List the exact name of the program. If a degree, include the abbreviation for the degree (i.e. BA, BS, MS, PhD). If a minor, graduate minor, certificate or graduate certificate, include this first in the program title. If an emphasis, first list the parent degree title (i.e. BA in Undergraduate Studies), followed by "with Emphasis in", followed by the emphasis title.

How it is listed here is what will display on the transcript (and diploma if a degree).

Program Title:
Graduate Certificate in Intervention and Instruction

College(s) or School(s) offering the program: Select the college or school offering the program. If more than one, use the green plus sign to add rows for listing additional colleges, and use the green arrows to list the primary unit at the top.

	College
1	Education & Human Development

Unit(s) offering the program: Select the unit offering the program. If more than one, use the green plus sign to add rows for listing additional units, and use the green arrows to list the primary unit at the top. Only units currently offering programs are in the list. See the blue help bubble for instructions if unit is not listed.

	Units (Departments, Divisions, etc.)
1	Special Education

Eligible students:
Any person, open to non-degree seeking and degree-seeking students (free standing certificate program)

Total credits required for graduation/completion:
12

Mode of Program Delivery: Select the option below which best fits the program.
E-Learning Program – 100% of the program is online. May have proctored exams for courses.

CIP Code: Use the "Find" link to search the government database for applicable CIP Code.
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Fall 2022

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Program Director User ID:
stormontm

Program Director Name:
Melissa Stormont

Academic Advisor(s): Enter the User ID(s) of the academic advisor(s) responsible for advising students in this program. Use the green plus sign to add rows as needed.

User ID	Name

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Name	Title	Affiliation
Delinda Van Garderen	Professor	Special Education
Chad Rose	Associate Professor	Special Education

Participating Faculty: Enter the User ID(s) of the faculty member(s) participating in this academic program. Use the green plus sign to add rows as needed.

User ID	Name
stormontm	Melissa Stormont

Additional Student Support Services: Describe any additional advising and support services that will be provided to students in this program.

Access to IDE, Campus Writing Program, and Office of Disabilities, as well as the Special Education Director of Graduate Studies and departmental Office of Graduate Studies.

Fit with University Mission and Other Academic Programs:

Alignment:

Alignment with Campus Strategic Plan: Explain how the program aligns with campus goals and priorities as stated in the Campus Strategic Plan (refer to blue help bubble), as well as college and department goals.

The proposed certificate, Intervention and Instruction (II), is aligned with Campus Strategic Plan to increase student success. II will increase the number of graduate student options, by offering a new competitive option for graduate students seeking specialized instruction to provide evidence-based services to individuals working with special education students.

The certificate may be completed as a stand alone, thereby increasing student enrollment for working educators who are not interested in completing an entire graduate degree, but who are seeking further education to be able to support the growing number of special education students being served in schools, with diverse and complex needs.

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Year	1	2	3	4	5
Total	10	10	10	10	10

Student Enrollment Projections - New to MU: Estimate the total enrollment of students new to MU in the fall semester for the first five years.

Year	1	2	3	4	5
Total	8	8	8	8	8

Market Analysis – Student Demand for Program:

Student Demand: Describe the evidence of sufficient student demand to support a viable program. The demand must be sufficient to project fiscal and academic viability within five years of the start of the program.

There are only 42 national online certificates in the country; and there are only 2 located in Missouri. The market is being driven for a need for rigorous, quality online programs for Special Education teachers. There was a 16% growth in 2019 in online programs for Special Education with a decline in on-campus programs by -18%.

Financial Projections:

Resources: Describe the resources necessary to launch and support the program, including estimates of instructional costs, student advising, support staff, space, library resources, equipment, etc:

No increased resource costs: instructor for the courses and advisor of the program already currently teaches

and advises for the masters program in Special Education.

New Revenue: Describe the new revenue to be generated from program enrollment by students NEW TO MU, including any new or additional fees to be collected:

All revenue from certificate students will be new revenue.

Business and Marketing Plan - Recruiting and Retaining Students:

Marketing Strategy: How will the program be marketed to attract new students to it?

Being this is an online program, we will be partnered with Missouri Online for advertising and recruitment. With that partnership they are able to support us in a variety of ways. We will work with our dedicated program coordinator, who will serve as the primary point person to assist in logistical and coordination efforts for the program, from ideation to implementation and throughout the program lifecycle. Their marketing division will support us with brand awareness and program specific marketing to our student demographic. We will advertise through the department website; and we will distribute information to state-wide teachers (i.e. general educators, special educators, and related service providers) through Missouri DESE. We will distribute information faculty relationships with other Missouri Education agencies (i.e. MOCEC and MOCASE.) We will advertise through select national educational conferences. We will utilize targeted advertising through social media.

Projected program growth: Project how the program will grow over time and how marketing will change as the program grows.

Based on the experiences for these Missouri universities and the special education certificates they launched, they had a 100% degree growth. We anticipate the same in our more specific special education certificate programs, such as Intervention and Instruction. As the program growth and word of mouth testimonials draw in additional students, we will reduce our marketing budget via venues such as conferences.

Retaining Students: Describe the plans to retain students through graduation.

New students are provided with orientation information and personalized attention from the advisor. Students are also encouraged to use university resources such as IDE, Office of Disabilities, et al.

Achieving Enrollment Outcomes: Describe the plans to ensure program enrollment outcomes are achieved.

In addition to the marketing strategy listed above, the certificate program, unlike our masters program, does not require a GRE, which with this barrier removed will encourage more students to apply. Additionally, Missouri Online's Student Lifecycle support team will aid us in guiding our potential students to support on enrollment, financial aid & billing questions as they begin their path to becoming an enrolled student.

Exit Strategy: Provide information regarding the steps the department/academic unit will take if the program underperforms expectations. At what point would the academic unit believe the program needs to be put on hiatus or discontinued?

Since the courses for this proposed program are already running for a specific Masters program, the certificate will only be closed if the courses are not filling and able to run.

Program Goals and Objectives:

Program Goals and Objectives: Briefly describe the goals and objectives of the program.

The certificate provides advanced and specialized study in special education. Course offerings and program content are organized so that participants develop a perspective about special education in their specialized area of study within a variety of contexts (e.g., individual, group, historical, and cultural) and across a range of educational environments (e.g., school, community, family). Specific emphasis is placed on empirically validated best practices for assessment, teaching and learning.

Overall Description of Student Learning Objectives: Provide any overall descriptive information regarding the student learning objectives for this program.

The Intervention and Instruction Certificate will prepare highly qualified educators (general educators and special educators) and related service providers to provide evidence-based practices and supports to children with special needs and their families. Scholars completing the certificate program will be able to deliver EBPs that are effective across developmental domains, can ameliorate negative effects, and improve long-term outcomes of student achievement.

Listing of Student Learning Objectives: Include clearly stated student learning objectives for the program, indicating what students will know (concepts, terminology, methods, history, etc) and what students will be able to do when they complete the program. These should be broad enough to encompass all of the knowledge acquired during the course of study yet specific enough, using active verbs, to communicate clearly to students, parents and other stakeholders what students will know and be able to do. Most programs

identify 6-10 student learning objectives. Refer to the blue help bubble for examples or additional assistance.

Provide a minimum of six student learning objectives in the table below. Use the green plus sign to add rows as needed.

	Student Learning Objectives
1	An understanding of the historical, legal, and scientific foundations that influence current practices, trends, and issues in special education
2	Research and writing skills that enable them to propose, review and evaluate research in the professional literature, and translate research into practices
3	Assessment and evaluation skills for designing, implementing, and evaluating instruction and
4	An understanding of the interactive context of families, community, schools, and society and their impact on students with exceptionalities
	intervention programs for students who display learning and/or behavioral difficulties or other exceptionalities
5	Collaboration and leadership skills that promote active participation in the professional community
	Advanced knowledge across the discipline and within area(s) of specialization

Program Curriculum:

Program Structure

General description: Provide a general description of the structure of the curriculum plan, such as the overall number of credit hours required, general areas of study, planned academic activities, etc. If the program has an online option, explain if instruction is delivered in an asynchronous format, a synchronous format, or both.

The program structure is a 12 hours (4 course) plan of study using coursework that is delivered 100% E-Learning, taught asynchronous.

Program Requirements: Describe all requirements for the program. This content will be displayed in the Program Requirements area of the online University Catalog.

Program Requirements:

Requirements

Students complete a set 12 hours (4 course) program of study. Courses can be taken in any order. Students eligible for the certificate program must hold a bachelor's degree in the field of education, special education, or related services. Eligible students may or may not be concurrently enrolled in a graduate program.

Required Courses (12 Hours Total)

SPC_ED 7320	Assessment and Evaluation in Special Education	3
SPC_ED 7370	Literacy in Special Education	3
SPC_ED 7380	Methods in Cross-Categorical Special Education	4
SPC_ED 8330	Advanced Teaching Mathematics in Special Education	3

Additional Faculty: For each level of expertise, provide the number of additional faculty that will be needed to deliver the program. If none, indicate 0.

Level	Number
Tenure Track	0
Non-Tenure Track	0
Post-Doc Fellows	0
Grad Tchng/Research Asst	0
Adjunct	0

Accreditation:

Plans to apply: Do you plan to apply for program specific accreditation?

No

Provide brief explanation:

This program does not provide initial or secondary certification in the state of Missouri

Gainful Employment:

Certificate web site:
to be housed on Missouri Online and CEHD websites

Tuition for program: Based on current tuition rates, calculate the total tuition for completing this program within normal time.
$4975.20

Associated fees: Based on current fee rates, calculate the total fees for completing this program within normal time.
$862.80

Books and supplies: Based on current costs, calculate the total typical costs for books and supplies for completing this program within normal time.
$800

Related occupational titles and codes: As part of the federal disclosure, MU is required to report prospective occupations for certificate holders. Titles can be found in the US Department of Labor's database, O*Net Online at http://www.onetonline.org. **Click Find Occupations. Type a keyword into the search box. Click go. Scan the list for feasible titles. Click on a title to review its summary. If it matches the certificate, copy the job title, occupational code, and URL into the table below.**

Provide at least 10 occupations. Use the green plus sign to add rows as needed.

Job Title	Occupational Code	URL for Summary Page
Elementary School Teachers	25-2021.00	https://www.onetonline.org/link/summary/25-2021.00
Middle School Teachers	25-2022.00	https://www.onetonline.org/link/summary/25-2022.00
Secondary School Teachers	25-2031.00	https://www.onetonline.org/link/summary/25-2031.00
Special Education Middle School Teachers	25-2057.00	https://www.onetonline.org/link/summary/25-2057.00
Special Education Elementary Teachers	25-2056.00	https://www.onetonline.org/link/summary/25-2056.00
Special Education Preschool Teacher	25-2051.00	https://www.onetonline.org/link/summary/25-2051.00
School Psychologists	19-3034.00	https://www.onetonline.org/link/summary/19-3034.00
Special Education Secondary Teachers	25-2058.00	https://www.onetonline.org/link/summary/25-2058.00
Special Education Teacher, All Other	25-2059.00	https://www.onetonline.org/link/summary/25-2059.00
Special Education Kindergarten Teacher	25-2055.00	https://www.onetonline.org/link/summary/25-2055.00

Catalog Information:

Information provided in this section is used to automatically populate program information in the online university catalog when published each year in June.

Program Description: In one short but thorough paragraph, describe the program. This official description will be included in the online university catalog and other initiatives supporting student success. The description should include the following three elements: 1) general description of the academic subject area, explaining the area, how it is relevant today, and interest areas that would draw a person to the program; 2) highlights of the program, including descriptions of core and advanced areas of study, special activities within the program such as internships, hands-on learning, research, field operations, study abroad, mentoring, shadowing, etc; 3) careers and opportunities associated with the program, discussing typical professions and work settings, additional educational opportunities, and top prospects in employment.

This certificate prepares personnel to effectively implement evidenced-based practices for students with special needs. It enables educators to integrate all areas of curriculum to effectively assess and develop social competence benchmarks for students with special needs.

Reviewer Comments:

Carla Whitney (whitneycm) (Mon, 18 Oct 2021 21:31:54 GMT): Put requirements in course list.
Denice Adkins (adkinsde) (Thu, 02 Dec 2021 20:57:54 GMT): Rollback: Rolling back for amendments to certificate program.

Key: 802

805: GRADUATE CERTIFICATE IN SPECIAL EDUCATION

Vote Required for Approval

View Voting Results (http://catalog.missouri.edu/programadmin/805/)
Votes Cast: 3

Yes 100%
No 0%

In Workflow

1. Form Check (whitneycm@missouri.edu)
2. SPC_ED Chair (vangarderend@missouri.edu)
3. CIP Code Rvw (eimersm@missouri.edu)
4. EDUC CC 2 (adkinsde@missouri.edu)
5. EDUC Dean (fellabaumje@missouri.edu; nicholssl@missouri.edu)
6. Workflow Rvw (whitneycm@missouri.edu)
7. AAC-GFS Vote (borens@health.missouri.edu; freyermuthr@missouri.edu; neumans@missouri.edu; martindan@health.missouri.edu; mustaphaa@missouri.edu; desouzag@missouri.edu; wma@missouri.edu)
8. AAC-GFS Chair (borens@health.missouri.edu)
9. GFS Pres (parrishar@health.missouri.edu)
10. Grad Dean Rvw (hartjl@missouri.edu)
11. Provost (socaridesa@umsystem.edu;bearyj@missouri.edu)
12. UM (schaffin@umsystem.edu; zlkhd4@missouri.edu)
13. MDHE/CBHE (schaffin@umsystem.edu; zlkhd4@missouri.edu)
14. SAR (kochra@missouri.edu)
15. IR (urbank@missouri.edu)
16. OUR catalog (muregistrarcatalog@missouri.edu)

Approval Path

1. Tue, 02 Nov 2021 21:01:39 GMT
   Carla Whitney (whitneycm): Approved for Form Check
2. Wed, 03 Nov 2021 14:19:35 GMT
   Delinda Van Garderen-Anderson (vangarderend): Approved for SPC_ED Chair
3. Fri, 12 Nov 2021 15:03:01 GMT
   Mardy Eimers (eimersm): Approved for CIP Code Rvw
4. Thu, 02 Dec 2021 20:57:26 GMT
   Denice Adkins (adkinsde): Rollback to Initiator
5. Fri, 03 Dec 2021 16:51:13 GMT
   Carla Whitney (whitneycm): Approved for Form Check
6. Fri, 03 Dec 2021 16:53:29 GMT
   Delinda Van Garderen-Anderson (vangarderend): Approved for SPC_ED Chair
7. Tue, 07 Dec 2021 22:47:13 GMT
   Mardy Eimers (eimersm): Approved for CIP Code Rvw
8. Tue, 18 Jan 2022 21:44:54 GMT
   Denice Adkins (adkinsde): Approved for EDUC CC 2
9. Tue, 18 Jan 2022 23:10:44 GMT
   Jennifer Fellabaum-Toston (fellabaumje): Approved for EDUC Dean
10. Wed, 19 Jan 2022 14:18:34 GMT
    Carla Whitney (whitneycm): Approved for Workflow Rvw

New Program Proposal

Date Submitted: Fri, 03 Dec 2021 15:58:53 GMT

Viewing: Graduate Certificate in Special Education

Last edit: Fri, 03 Dec 2021 15:58:50 GMT

Changes proposed by: colleyf

Contact Information:

Proposer User ID:
colleyf

First Name:
Frances
Last Name:
Colley
E-mail:
colleyf@missouri.edu

Phone:
573/882-2659
Department:
Learning Teaching & Curriculum

Primary Contact: The Primary Contact should be an individual who was integrally involved in the writing of this proposal, and will be able to answer questions regarding its content. Are you the Primary Contact for this proposal, or are you submitting this proposal on behalf of another individual/group?

I am entering data for the Primary Contact

MU Primary Contact: Use the search below to locate the Primary Contact.

User ID:
vangarderend

First Name:
Delinda
Last Name:
Van Garderen-Anderson
Email:
vangarderend@missouri.edu

Phone:
573/884-7075
Department:
Special Education

Collaborating Writers: Are there any other individuals from MU who were integrally involved in the writing of this proposal?

No

Program Characteristics:

Campus:
University of Missouri - Columbia

Type of Program:
Certificate

Specify program level:
Graduate

Program Title: List the exact name of the program. If a degree, include the abbreviation for the degree (i.e. BA, BS, MS, PhD). If a minor, graduate minor, certificate or graduate certificate, include this first in the program title. If an emphasis, first list the parent degree title (i.e. BA in Undergraduate Studies), followed by "with Emphasis in", followed by the emphasis title.

How it is listed here is what will display on the transcript (and diploma if a degree).

Program Title:
Graduate Certificate in Special Education

College(s) or School(s) offering the program: Select the college or school offering the program. If more than one, use the green plus sign to add rows for listing additional colleges, and use the green arrows to list the primary unit at the top.

	College
1	Education & Human Development

Unit(s) offering the program: Select the unit offering the program. If more than one, use the green plus sign to add rows for listing

additional units, and use the green arrows to list the primary unit at the top. Only units currently offering programs are in the list. See the blue help bubble for instructions if unit is not listed.

	Units (Departments, Divisions, etc.)
1	Special Education

Eligible students:
Any person, open to non-degree seeking and degree-seeking students (free standing certificate program)

Total credits required for graduation/completion:
12

Mode of Program Delivery: Select the option below which best fits the program.
E-Learning Program – 100% of the program is online. May have proctored exams for courses.

CIP Code: Use the "Find" link to search the government database for applicable CIP Code.
13.1001 - Special Education and Teaching, General.

Term Start: Estimate the first term students will enroll.
Fall 2022

Term Graduate: Estimate the first term students will graduate.
Fall 2022

Program Director: Enter the User ID of the program director responsible for the student support services.

Program Director User ID:
rosech

Program Director Name:
Chad Rose

Academic Advisor(s): Enter the User ID(s) of the academic advisor(s) responsible for advising students in this program. Use the green plus sign to add rows as needed.

User ID	Name
rosech	Chad Rose

Advisory Committee: Provide the information requested for the member(s) of the advisory committee for this program. Committee members may include representation from the professional, business or govenrment sectors which the program is designed to serve. Use the green plus sign to add rows as needed.

Name	Title	Affiliation
Delinda Van Garderen	Professor	Special Education

Participating Faculty: Enter the User ID(s) of the faculty member(s) participating in this academic program. Use the green plus sign to add rows as needed.

User ID	Name
rosech	Chad Rose

Additional Student Support Services: Describe any additional advising and support services that will be provided to students in this program.

Access to IDE, Campus Writing Program, and Office of Disabilities, as well as the Special Education Director of Graduate Studies and departmental Office of Graduate Studies.Fit with University Mission and Other Academic Programs:

Alignment:

Alignment with Campus Strategic Plan: Explain how the program aligns with campus goals and priorities as stated in the Campus Strategic Plan (refer to blue help bubble), as well as college and department goals.

The proposed certificate, Special Education (SE), is aligned with Campus Strategic Plan to increase student success. SE will increase the number of graduate student options, by offering a new competitive option for graduate students seeking specialized instruction to provide evidence-based services to individuals working with special education students.

The certificate may be completed as a stand alone, thereby increasing student enrollment for working

educators who are not interested in completing an entire graduate degree, but who are seeking further education to be able to support the growing number of special education students being served in schools, with diverse and complex needs.

It is important to note, that since the courses proposed in the SE program are already developed and part of an established graduate degree, the certificate has the potential to entice students to extend beyond the certificate, and commit to the complete degree program instead once participating. This provides opportunity to further extend the relationship with student engagement for those who may have otherwise been hesitant to attempt to enroll in a graduate program.

The certificate presents an add on option to students who are seeking graduate degrees in other areas of study, who understand the need for specialized instruction in working effectively with special education students. Potential graduate students to benefit from this program are degree seeking general educators, special educators, early childhood special educators, speech-language pathologists, occupational therapists, school psychologists, counselors, and other school-based service providers.

Additionally, because the certificate courses are entirely online, it allows opportunity for distance learners to participate.

There is a significant increase in the need of special education students being served in schools, and a shortage of educators prepared to meet student needs.

Additionally, in clinical based related service programs, the scope of work that must be covered for certification allows very little time to dedicate to specifically to learning about evidence based practices to support special education students.

Duplication within the state:

Potential Duplications at MU or within UM: Does a similar program exist at MU or at another UM System school?

No

Market Analysis - Need/Demand:

Market Analysis – Need for Program:

Market Demand: Based on national, regional, state, or local market demand, justify the need for graduates of this program. Provide convincing data from sources such as MERIC or Bureau of Labor Statistics.

There are only 42 national online special education certificates in the country; and there are only 2 online special education certificates in Missouri. One is in the UM system; and one is not. (At UMSL, the only certificate they offer is for Autism; and that one is a hybrid, not completely online.) The market is being driven for a need for rigorous, quality online programs for Special Education teachers. There was a 16% growth in 2019 in online programs for Special Education with a decline in on-campus programs by -18%.

The field of special education has traditionally had the highest rates of teacher mobility and attrition (Billingsley, 2004a, 2004b; Boe, 2014; Boe et al., 2008). Shortages were so widespread at one point that 98% of school districts in the U. S. reported shortages of qualified special education teachers (McLesky & Billingsley, 2008). In 2017–18, 46 states reported special education teacher shortages (U.S. Department of Education Office of Postsecondary Education, 2017; Education Commission of the States, 2021).

Sadly, such shortages often result in positions staffed with uncertified teachers. For example, a 2019 press release from the American Association of Colleges for Teacher Education (AACTE) reports that 90% of high-poverty schools struggle to find qualified special education teachers (Thurman, 2019). Despite mandates for all teachers to be highly qualified in the content they teach, including strong discipline content knowledge in mathematics, too many students receive special education services from teachers who are not highly qualified (Kennedy & Ihle, 2012).

Meeting Missouri's Needs: Explain how the program will help meet Missouri's academic, economic and societal needs.

Annually, the U.S. Department of Education, Office of Postsecondary Education (2017) identifies areas of teacher shortages by state. In a news release, April 16, 2021, the Missouri Department of Elementary and Secondary Education (DESE) highlighted a significant need to address teacher shortage in Missouri. Of note, "In the 2019-2020 school year, there were 6,200 open teaching positions in Missouri. … Educator preparation programs at institutions of higher education, with a decline of over 25 percent in teacher candidate enrollment over the past six years, are not producing enough new teachers to fill our classrooms."

Additionally, the Individuals with Disabilities Education Act (IDEA, 2004) requires students with disabilities, including students with learning disabilities to have access to the general education curriculum to the fullest extent possible. As such 64% of students with disabilities spend at least 80% of their day in the general education classroom (U.S Department of Education, 2020). General Education teachers are expected to teach special education students in their classrooms.

There is a need for more specialized and highly trained general educators, special educators & related service providers.

Student Enrollment Projections: Estimate the total student enrollment in the program for the fall semester for the first five years.

Year	1	2	3	4	5
Total	10	10	10	10	10

Student Enrollment Projections - New to MU: Estimate the total enrollment of students new to MU in the fall semester for the first five years.

Year	1	2	3	4	5
Total	8	8	8	8	8

Market Analysis – Student Demand for Program:

Student Demand: Describe the evidence of sufficient student demand to support a viable program. The demand must be sufficient to project fiscal and academic viability within five years of the start of the program.

There are only 42 national online certificates in the country; and there are only 2 located in Missouri. The market is being driven for a need for rigorous, quality online programs for Special Education teachers. There was a 16% growth in 2019 in online programs for Special Education with a decline in on-campus programs by -18%

Financial Projections:

Resources: Describe the resources necessary to launch and support the program, including estimates of instructional costs, student advising, support staff, space, library resources, equipment, etc:

No increased resource costs: instructor for the courses and advisor of the program already currently teaches and advises for the masters program in Special Education.

New Revenue: Describe the new revenue to be generated from program enrollment by students NEW TO MU, including any new or additional fees to be collected:

All revenue from certificate students will be new revenue.

Business and Marketing Plan - Recruiting and Retaining Students:

Marketing Strategy: How will the program be marketed to attract new students to it?

Being this is an online program, we will be partnered with Missouri Online for advertising and recruitment. With that partnership they are able to support us in a variety of ways. We will work with our dedicated program coordinator, who will serve as the primary point person to assist in logistical and coordination efforts for the program, from ideation to implementation and throughout the program lifecycle. Their marketing division will support us with brand awareness and program specific marketing to our student demographic. We will advertise through the department website; and we will distribute information to state-wide teachers (i.e. general educators, special educators, and related service providers) through Missouri DESE. We will distribute information faculty relationships with other Missouri Education agencies (i.e. MOCEC and MOCASE.) We will advertise through select national educational conferences. We will utilize targeted advertising through social media.

Projected program growth: Project how the program will grow over time and how marketing will change as the program grows.

Based on the experiences for these Missouri universities and the special education certificates they launched, they had a 100% degree growth. We anticipate the same in our more specific special education certificate programs. As the program growth and word of mouth testimonials draw in additional students, we will reduce our marketing budget via venues such as conferences.

Retaining Students: Describe the plans to retain students through graduation.

New students are provided with orientation information and personalized attention from the advisor. Students are also encouraged to use university resources such as IDE, Office of Disabilities, et al.

Achieving Enrollment Outcomes: Describe the plans to ensure program enrollment outcomes are achieved.

In addition to the marketing strategy listed above, the certificate program, unlike our masters program, does not require a GRE, which with this barrier removed will encourage more students to apply. Additionally, Missouri Online's Student Lifecycle support team will aid us in guiding our potential students to support on enrollment, financial aid & billing questions as they begin their path to becoming an enrolled student.

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Since the courses for this proposed program are already running for a specific Masters program, the certificate will only be closed if the courses are not filling and able to run.

Program Goals and Objectives:

Program Goals and Objectives: Briefly describe the goals and objectives of the program.

The certificate provides advanced and specialized study in special education. Course offerings and program content are organized so that participants develop a perspective about special education in their specialized area of study within a variety of contexts (e.g., individual, group, historical, and cultural) and across a range of educational environments (e.g., school, community, family). Specific emphasis is placed on empirically validated best practices for assessment, teaching and learning.

Overall Description of Student Learning Objectives: Provide any overall descriptive information regarding the student learning objectives for this program.

The Special Education Certificate will prepare highly qualified educators (general educators and special educators) and related service providers to provide evidence-based practices and supports to children with special needs and their families. Scholars completing the certificate program will be able to deliver EBPs that are effective across developmental domains, can ameliorate negative effects, and improve long-term outcomes of student achievement.

Listing of Student Learning Objectives: Include clearly stated student learning objectives for the program, indicating what students will know (concepts, terminology, methods, history, etc) and what students will be able to do when they complete the program. These should be broad enough to encompass all of the knowledge acquired during the course of study yet specific enough, using active verbs, to communicate clearly to students, parents and other stakeholders what students will know and be able to do. Most programs identify 6-10 student learning objectives. Refer to the blue help bubble for examples or additional assistance.

Provide a minimum of six student learning objectives in the table below. Use the green plus sign to add rows as needed.

	Student Learning Objectives
1	An understanding of the historical, legal, and scientific foundations that influence current practices, trends, and issues in special education
2	Research and writing skills that enable them to propose, review and evaluate research in the professional literature, and translate research into practices
3	Assessment and evaluation skills for designing, implementing, and evaluating instruction and
4	An understanding of the interactive context of families, community, schools, and society and their impact on students with exceptionalities
	intervention programs for students who display learning and/or behavioral difficulties or other exceptionalities
5	Collaboration and leadership skills that promote active participation in the professional community
	Advanced knowledge across the discipline and within area(s) of specialization

Program Curriculum:

Program Structure

General description: Provide a general description of the structure of the curriculum plan, such as the overall number of credit hours required, general areas of study, planned academic activities, etc. If the program has an online option, explain if instruction is delivered in an asynchronous format, a synchronous format, or both.

The program structure is a 12 hours (4 course) plan of study using coursework that is delivered 100% E-Learning, taught asynchronous.

Program Requirements: Describe all requirements for the program. This content will be displayed in the Program Requirements area of the online University Catalog.

Program Requirements:

Requirements

Students complete a set 12 hours (4 course) program of study. Courses can be taken in any order. Students eligible for the certificate program must hold a bachelor's degree in the field of education, special education, or related services. Eligible students may or may not be concurrently enrolled in a graduate program.

Required 12 hours: students may choose any four courses from the lists of electives listed below.

NOTE: if student has not taken SPC_ED 7300 Introduction to Special Education as part of their undergraduate program, they will need to take this as first elective.

ELECTIVES:

Gifted		
SPC_ED 8406	Differentiating Instruction: Reaching Gifted, Typical and Struggling Learners	3
SPC_ED 8391	Curriculum Methods for Gifted and Talented Students	3
SPC_ED 8380	Nature and Needs of Gifted and Talented Students	3
SPC_ED 8405	Assessment and Evaluation in Gifted Education	3
Autism		
SPC_ED 8601	Introduction to Autism	3
SPC_ED 8602	Methods of Instruction for Students with Autism	3
SPC_ED 8603	Social Competency for Students with Autism	3
SPC_ED 8604	High Functioning Students with Autism	3
SPC_ED 8605	Young Children with Autism	3
SPC_ED 8606	Assessment in Autism, Special Education	3
Early Childhood		
SPC_ED 8485	Introduction and Methods of Early Intervention	3
SPC_ED 8495	Introduction and Methods of Early Childhood Special Education	2-3
SPC_ED 8490	Assessment in Early Childhood Special Education	3
SPC_ED 8605	Young Children with Autism	3
Behavior Management in Education Settings		
SPC_ED 7310	Behavioral and Classroom Management	3
SPC_ED 8440	Advanced Behavior Management: Applied Behavior Analysis	3
SPC_ED 7320	Assessment and Evaluation in Special Education	3
SPC_ED 8XXX Advanved Behavior Analysis for Instruction		
Intervention and Instruction		
SPC_ED 7320	Assessment and Evaluation in Special Education	3
SPC_ED 7370	Literacy in Special Education	3
SPC_ED 7380	Methods in Cross-Categorical Special Education	4
SPC_ED 8330	Advanced Teaching Mathematics in Special Education	3
Other		
SPC_ED 7330	Collaboration and Consultation in Special Education	3
SPC_ED 7390	Transition in Special Education	3
SPC_ED 7375	Cross Categorical Special Education	3

Additional Information on New Course(s): For any new course(s) being planned but not yet proposed in CIM Courses, provide the information requested in the table below. Use the green plus sign to add rows as needed.

Curriculum Designator	Level of course	Title	Expected Enrollment	Mode of delivery	Prerequisites
SPC_ED - Special Education	8XXX	Advanced Behavior Analysis for Instruction	20	Online	

Additional Faculty: For each level of expertise, provide the number of additional faculty that will be needed to deliver the program. If none, indicate 0.

Level	Number
Tenure Track	0
Non-Tenure Track	0
Post-Doc Fellows	0
Grad Tchng/Research Asst	0

Adjunct 0

Accreditation:

Plans to apply: Do you plan to apply for program specific accreditation?
No

Provide brief explanation:
This program does not provide initial or secondary certification in the state of Missouri.

Gainful Employment:

Certificate web site:
to be housed on Missouri Online and CEHD websites

Tuition for program: Based on current tuition rates, calculate the total tuition for completing this program within normal time.
$4975.2

Associated fees: Based on current fee rates, calculate the total fees for completing this program within normal time.
$862.8

Books and supplies: Based on current costs, calculate the total typical costs for books and supplies for completing this program within normal time.
$800

Related occupational titles and codes: As part of the federal disclosure, MU is required to report prospective occupations for certificate holders. Titles can be found in the US Department of Labor's database, O*Net Online at http://www.onetonline.org. **Click Find Occupations. Type a keyword into the search box. Click go. Scan the list for feasible titles. Click on a title to review its summary. If it matches the certificate, copy the job title, occupational code, and URL into the table below.**

Provide at least 10 occupations. Use the green plus sign to add rows as needed.

Job Title	Occupational Code	URL for Summary Page
Elementary School Teachers	25-2021.00	https://www.onetonline.org/link/summary/25-2021.00
Middle School Teachers	25-2022.00	https://www.onetonline.org/link/summary/25-2022.00
Secondary School Teachers	25-2031.00	https://www.onetonline.org/link/summary/25-2031.00
Special Education Middle School Teachers	25-2057.00	https://www.onetonline.org/link/summary/25-2057.00
Special Education Elementary Teachers	25-2056.00	https://www.onetonline.org/link/summary/25-2056.00
Special Education Secondary Teachers	25-2058.00	https://www.onetonline.org/link/summary/25-2058.00
Special Education Preschool Teacher	25-2051.00	https://www.onetonline.org/link/summary/25-2051.00
School Psychologists	19-3034.00	https://www.onetonline.org/link/summary/19-3034.00
Special Education Teacher, All Others	25-2059.00	https://www.onetonline.org/link/summary/25-2059.00
Special Education Kindergarten Teachers	25-2055.00	https://www.onetonline.org/link/summary/25-2055.00

Catalog Information:

Information provided in this section is used to automatically populate program information in the online university catalog when published each year in June.

Program Description: In one short but thorough paragraph, describe the program. This official description will be included in the online university catalog and other initiatives supporting student success. The description should include the following three elements: 1) general description of the academic subject area, explaining the area, how it is relevant today, and interest areas that would draw a person to the program; 2) highlights of the program, including descriptions of core and advanced areas of study, special activities within the program such as

internships, hands-on learning, research, field operations, study abroad, mentoring, shadowing, etc; 3) careers and opportunities associated with the program, discussing typical professions and work settings, additional educational opportunities, and top prospects in employment.

This certificate prepares personnel working in education settings to develop expertise for working with students with special needs. It enables educators to develop expertise in learner characteristics (e.g., gifted, autism, early childhood) and/or instructional practices in teaching and learning (e.g., behavior management, intervention & instruction, collaboration & consultation, assessment, mathematics, reading).

Reviewer Comments:

Carla Whitney (whitneycm) (Tue, 02 Nov 2021 21:01:35 GMT): Put courses in class list.
Denice Adkins (adkinsde) (Thu, 02 Dec 2021 20:57:26 GMT): Rollback: Rolling back for amendments to

certificate program. Key: 805