Fill out this form to change an existing certificate. This form should be used for both undergraduate certificates and graduate certificates.

Once approved at the college level, your college will send the proposal to the appropriate Senate academic council (HCCC and/or GC) for review and approval. Once approved at the academic council level, the academic council will send your proposal to the Senate Council office for additional review and then a 10-day posting online, during which senators review on their own and have an option to register an objection if they so desire. If no objection is raised to the Senate Council Office within ten days of the posting the proposal, then the graduate certificate change is approved. The Senate Council Office will report approvals to the Provost, Registrar and other appropriate entities, including the contact person.

For each change, you MUST enter the current language/requirement as well as the proposed change.

		SUMI	ИARY	OF CHANG	GES				
		Cho	eck all	that apply.					
⊠ c	ourses 🔀 Certifica	ate Name To	tal rec	quired cred	lit hou	ırs 🔲 C	Certificate review		
	Criteria for adr	missions/progression	n/tern	nination	Ot	:her			
		· -							
1. Ger	neral Information								
1a	Change is for:	UNDERGRADUA	TE CE	RTIFICATE		OR 🔀	GRADUATE CERTIFICATE		
						·			
1b	Date of contact with Ir	nstitutional Effectiven	ess (IE))1: 12/07	7/2018	3			
	Appended to the end of this form is a PDF of the reply from Institutional Effectiveness.								
1c	College ² : COE			partment ² : ME					
1d	CIP code: 14.3601								
		I C 14-					Online Lean Graduate		
1e	Current certificate name: Lean Graduate Certificate			Proposed certificate name: Onthe Lean Gradua Certificate					
		,					T con a great to the control of the		
1f	Today's Date: 11-28	3-2018							
1g	Requested effective da	ter following approval. OR Specific Date ³ : Fall 2019							
	T _								
1h	Contact person name: M Abbot Maginnis			Phone / Email: 859-257-49			943 / amaginnis@uky.edu		
2. Ov	erview of Changes								
		for the change(s), inc	luding	(as approp	riate)	input from a	n advisory board,		
2a	Describe the rationale for the change(s), including (as appropriate) input from an advisory board, professional body, etc. (450 word limit)								
							healthcare, food service,		
		· · · · · · · · · · · · · · · · · · ·			_	•	mpanies require some lean re are many lean training		

¹ You can reach Institutional Effectiveness by phone or email (257-1962 or OSPIE@l.uky.edu).

² It is not possible to change the home academic unit of a certificate via this form. To change the home unit, visit https://www.uky.edu/universitysenate/forms and look for the heading, "Forms Related to Academic Organizational Structure."

programs in the US, but UK's non-academic certificate program is one of only a handful which are true benchmarks of the Toyota Production System (the original developer of "lean"), trains over 300 participants/year, and enjoys a global reputation for excellence. The current academic residential Lean Graduate Certificate courses offers essentially the same content as our non-academic professional certificate courses but in a semester long format and tailored to meet student needs (visit www.lean.yky.edu). This proposed online certificate program will be built upon the existing courses which have been taught multiple times in a residential setting. It is intended to support the increasing demand for lean education as well as the COE and MFS goals of increasing UK's online presence with high-quality courses. The current residential Lean Graduate Certificate program enrolls approximately 200 students/year in its courses and operates near capacity. Although the majority of the students taking these courses are upper level undergraduates and therefore not eligible for the graduate certificate, approximately 30% are graduate students, many of whom are enrolled in the MFS and ME degree programs. In spite of little or no marketing, the current residential graduate certificate program has directly enrolled about 15 students in the last four years, of which 5 have received their certificate and each year multiple inquiries from outside UK are made requesting an online option. Will the requested changes result in the use of courses from another unit? Yes No \times 3a. If "Yes," describe generally the courses and how they will used. If "Yes," two pieces of supporting documentation are required. Check to confirm that appended to the end of this form is a letter of support from the other units' chair/director⁴ from which individual courses will be used. Check to confirm that appended to the end of this form is verification that the chair/director of the other unit has consent from the faculty members of the unit. This typically takes the form of meeting minutes. 3. Non-Course Related Changes No 🖂 Will the certificate's admissions and/or application procedures change? Yes If "Yes," describe below. (150 word limit) Proposed: Current: 4. Course-Related Changes Will the required courses for the certificate change? (If "Yes," indicate and note the Yes 🖂 No 🗌 4a changes in the area below. If "No," indicate and proceed to 4b.) If "Yes," note the specific changes in the grid below. Current Proposed Prefix Prefix & Credit Credit Title & Title Course Status⁵ Nmbr Hrs Hrs Nmbr MFS 1-week Student Certification Introduction to Applied MFS 3 3 New Lean Operations 780 502 + Project Select one.... Select one.... Select one....

⁴ A dean may submit a letter only when there is no educational unit below the college level, i.e. there is no department/school.

⁵ Use the drop-down list to indicate if the course is a new course ("new"), an existing course that will change ("change"), or if the course is an existing course that will not change ("no change").

									Salaa	t one	
									Selec	one	
4b	Provide the Bulletin language about required courses.										
	lin m of Sy pr of Ti el: sta	ne found ixture of basic learystems Products are activities me lean simination andardize	to be effective across mar presentations, activities a an tools and the developm rogram using Toyota as the ad develop a lean operation is designed to follow the leasy system. Common lean control, Material and Information and work and conduct 8-Sto	ny industrict industrict sent of the benchmark on sent on the concepts on flower problem.	astries, but ected outs a lean systhmark. Fronment of develop applied in the color of the color	sinesses, side assignstem as ta Working within a oment req include; 5 d kanban ing on the	oving productivity, and in and organizations. This comments to teach and demonstrated by the University of in teams, students will prosimulated factory environ uired to ultimately create a S, Visual management, W systems, etc. Students will be production system they coniversity of Kentucky Students will be production system they coniversity of Kentucky Students	nstrate Kentu oduce ment a susta aste i ill also create	employe the apucky Letheir or through ainable dentification Studential	es a pplication can wn a series Just-in-cation and cents	
4b			ective courses for the cert the area below. If "No," i		_			Yes		No 🗌	
	If "Yes," note the specific changes in the grid below.										
	Prefix & Nmbr		Title		Prefix & Nmbr	Credit Hrs	Title			Course Status ⁶	
MFS 780		3	Ishikawa's Quality Tools	5	MFS 581	3	Quality Control		New	New	
									Selec	t one	
								Select or		t one	
									Selec	t one	
									Selec	t one	
									Selec	t one	
4c	Pr	ovide the	e Bulletin language about	electi	ve course	!S.					
		~									
5. Other Changes Are there applied by changes to the certificate? If "Ves." note below (150 word limit). Ves. No. 1											
Ja	Are there any other changes to the certificate? If "Yes," note below. (150 word limit) Yes No SUMMARY OF CHANGES: To make the certificate 100% online will require the 1-week student certification										
	course to be offered in a new format. It has typically been a non-credt course which provides the basis for a										
	M	FS 780 p	roject course. It has rece	ntly be	en given	academi	c status as EGR 390 for 3 c	redit	hours.		
6 An	nroi	rals / Povi	ows.								
6. Approvals/Reviews Information below does not supersede the requirement for individual letters of support from educational unit											
administrators and verification of faculty support (typically takes the form of meeting minutes). Reviewing Group Name Date Approved Contact Person Name/Phone/Email											
6a											

⁶ Use the drop-down list to indicate if the course is a new course ("new"), an existing course that will change ("change"), or if the course is an existing course that will not change ("no change").

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6b	(Colla	aborating and/or Affected Units)		
			/ /	
			/ /	
			/ /	
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			/ /	
	/Cons	ste Acadomia Councill	Data Annuavad	Contact Dorson Name
6c	(Sena	ate Academic Council)	Date Approved	Contact Person Name
		Health Care Colleges Council (if applicable)		
		Graduate Council		

Brothers, Sheila

From: Nikou, Roshan

Sent: Monday, February 11, 2019 2:47 PM

To: Bird-Pollan, Jennifer; Brothers, Sheila; Congleton, Nathan; Ett-Mims, Joanie; Jackson,

Brian; Nikou, Roshan; Price, Cleophus

Cc: Harmon, Camille; Alcalde, M. Cristina; Mains, Mark; Beck, Matthew; Maginnis, Michael;

Wang, Yitin; john.silva@uky.edu

Subject: Transmittals

Attachments: GC in Diversity and Inclusion.pdf; Positive Youth Development Certificate1.pdf;

Advanced Materials Characterization final.pdf; GC in Lean System.pdf; Blasting

Graduate Certificate final.pdf; GC in Structural Engineering.pdf

TO: Jennifer Bird-Pollan, Chair and Sheila Brothers, Coordinator

FROM: Brian Jackson, Chair and Roshan Nikou, Coordinator Graduate Council

The Graduate Council approved the following Certificate and Course Proposals and is now forwarding them to the Senate Council to approve.

Programs/Certificates:

GC in Diversity and Inclusion (related course A&S 600)

GC in Positive Youth Development (PYD)

GC in Advanced Materials Characterization

GC in Explosive and Blasting (related courses MNG 625 and 621)

GC in Structural Engineering

Program/Certificate Changes:

GC in Lean System (related courses MFS 502 and 581)

New Courses:

A&S - 600 - Perspectives on Diversity and Inclusion

EPI - 717 - Introduction to Causal Inference

MNG - 625 - Identification, Mitigation, and Control of the Environmental

MFS - 502 - Introduction to Applied Lean Operations

MFS - 581 - Quality Control

STA - 674 - Regression Analysis and Design of Experiments

STA 678 Statistical Computational Theory and Data Visualization: R and SAS

From: Renfro, Michael
To: Brandenburg, Barbara
Cc: Maginnis, Michael
Subject: RE: Award Notification

Date: Wednesday, January 2, 2019 9:45:44 AM

Attachments: 121818 Certificate Change Final - GRAD LEAN.docx

121818 MFS 502 Syllabus.doc 121818 MFS 581 Quality Control.docx

BJ,

The changes to the Graduate Lean Certificate were approved by an email vote of the ME faculty. I have attached the certificate change form and two new courses that were also approved as part of the certificate. Can you let me know if you need any additional items at this time?

Mike

From: Brandenburg, Barbara

Sent: Friday, December 07, 2018 11:17 AM **To:** Renfro, Michael <michael.renfro@uky.edu> **Cc:** Maginnis, Michael <amaginnis@uky.edu>

Subject: RE: Award Notification

Dr. Renfro,

That date is the date it needs to leave the College. Dr. Anderson and I just went and talked to the Dean regarding the deadlines. It has been decided that I will need these in my office on January 2 by 9:00 am so I am able to send them to the Graduate Education Team later that date. This should be a more realistic deadline. I will need to have the certificate packet along with any courses in Curriculog approved by January 2.

Thanks,

BJ

BJ Brandenburg College of Engineering Director of Student Records 355-S F. Paul Anderson Tower University of Kentucky Lexington, KY 40506-0046

Tel: (859) 257-7978 Fax: (859) 257-5727



University of Kentucky

College of Engineering Office of the Dean 351 Ralph G. Anderson Bldg. Lexington, KY 40506-0503 P: 859-257-1687 F: 859-257-5727 www.engr.uky.edu

January 18, 2019

To Whom It May Concern:

This letter is to confirm that the faculty of the College of Engineering has reviewed and approved the attached proposal for an Online Lean Graduate Certificate in Engineering. The faculty reviewed the proposal documents via email and there were no concerns raised.

If you have any questions, please contact me.

Sincerely,

Kimberly Anderson, Ph.D.

Amery C

Associate Dean for Administration and

Academic Affairs





University of Kentucky College of Engineering

Office of the Dean
377 Ralph G. Anderson Building
Lexington, KY 40506-0503
P: 859-257-4582
F: 859-257-5757
www.engr.uky.edu

January 16, 2019

Re: Letter of support for proposed online graduate certificate in Lean Systems

To Whom It May Concern:

The College of Engineering has reviewed the proposal for the online graduate certificate inLean Systems. This review included the educational aspects and administrative feasibility of the proposed structure. I confirm that the proposal is administratively feasible and it has the support of our college.

Sincerely,

John Balk, PhD, PE Associate Dean for Research and Graduate Studies

College of Engineering

John Balk



From: Maginnis, Michael
To: Brandenburg, Barbara
Cc: Renfro, Michael

Subject: FW: Substantive Change Decision **Date:** Wednesday, January 23, 2019 11:05:48 AM

Here it is BJ.

ΑM

Dr. M. Abbot Maginnis
University of Kentucky
Lean Systems Program Academic Coordinator
Institue of Research for Technology Development (IR4TD)
Director of Lean Graduate Certificate Program
Adj. Assist. Prof., Dept. of Mechanical Engineering

From: noreply@qualtrics-survey.com <noreply@qualtrics-survey.com>

Sent: Friday, December 7, 2018 1:52 PM **To:** Maginnis, Michael <amaginnis@uky.edu> **Subject:** Substantive Change Decision

Dear Michael Abbot Maginnis,

Thank you for your email regarding the proposed program change(s) to Lean Graduate Certificate, Graduate Certificate (14.3601).

My email will serve 2 purposes: 1.) Next steps for SACSCOC, and 2.) Verification and notification that you have contacted OSPIE—a Senate requirement for proposal approval.

- 1. Next steps for SACSCOC: None required
- 2. **Verification that OSPIE has reviewed the proposal:** Based on the proposal documentation presented and Substantive Change Checklist, the proposed program changes (refer to list below) are not substantive changes as defined by the University or SACSCOC, the university's regional accreditor. Therefore, no additional information is required by the Office of Strategic Planning & Institutional Effectiveness at this time. The proposed program change(s) may move forward in accordance with college and university-level approval processes.

Description of Proposed Change(s):

· Formalizing independent study courses and updating others for online.

Should you have questions or concerns about UK's substantive change policy and its procedures, please do not hesitate contacting our office.

Office of Strategic Planning & Institutional Effectiveness University of Kentucky

Visit the Institutional Effectiveness Website: https://proxy.qualtrics.com/proxy/? url=http%3A%2F%2Fwww.uky.edu%2Fie&token=w%2BXHkAS0tASxS4xDceQ8e0MxnHdJ2Eu4smnkDcYodCE%3D