Brothers, Sheila

From:	Cramer, Aaron
Sent:	Friday, April 19, 2019 7:48 PM
То:	Bird-Pollan, Jennifer; Brothers, Sheila; Ett-Mims, Joanie
Cc:	Silva Castro, Jhon
Subject:	NEW GC: Explosives and Blasting
Attachments:	Blasting Graduate Certificate final version 4_4_17_2019.pdf

Proposed New Graduate Certificate: Explosives and Blasting

This is a recommendation that the University Senate approve the establishment of a new Graduate Certificate: Explosives and Blasting, in the Department of Mining Engineering within the College of Engineering.

Rationale: The proposed nine-hour certificate program is for industry professionals seeking to advance their careers. The program consists of coursework in advanced blast design and technology, instrumentation for blasting and blast mitigation, and environmental aspects of blasting and federal and state regulations. There are very few national offerings in this area, but the need for more qualified engineers (primarily mining and civil engineers) with explosives and blasting knowledge is growing as a result of mining and needed renovation and enhancement of current infrastructure. Initial enrollment of 10 students growing to 25 students is anticipated.

Aaron

Aaron M. Cramer Associate Professor, Electrical and Computer Engineering Director of Graduate Studies, Electrical Engineering Chair, Senate's Academic Programs Committee University of Kentucky 859-257-9113 aaron.cramer@uky.edu

NEW GRADUATE CERTIFICATE

Certificate Description. A graduate certificate shall have a clear and focused academic topic or competency as its subject, meet a clearly defined educational need of a constituency group, such as required continuing-education or accreditation for a particular profession, respond to a specific state mandate or provide a basic competency in an emerging (preferably interdisciplinary) topic. Certificates are minimally nine graduate credit hours but typically no more than 15.

Approval process. Once approved at the college level, your college will send the proposal to the appropriate Senate academic council (possibly HCCC and/or UC) 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 via a committee and then to the SC and University Senate. (The contact person listed on the form will be informed when the proposal has been sent to committee and other times as appropriate.) The last step in the process is Senate approval; upon Senate approval, students can enroll in the new certificate.

By default, graduate certificates shall be approved for a period of six (6) years. Re-approvals are also for six years.

1. GEN	1. GENERAL INFORMATION						
1a	Home college: <i>Engineering</i>						
1b	Home educational unit (department, school, college ¹): <i>Mining Engineering Department</i>						
1c	Office of Strategic Planning and Institutional Effectiveness (OSPIE) (Please contact OSPIE (<u>OSPIE@L.uky.edu</u>) for help with questions in this section.)						
	Date of contact with OSPIE: January 22, 2019						
	Appended to the end of this form is a PDF of the reply from OSPIE.						
	X Appended to the end of this form is a letter(s) of administrative feasibility from						
	CIP Code (confirmed by OSPIE): 14 2101						
1d	Proposed certificate name: Graduate Certificate in Explosives and Blasting						
1e	Requested effective date: Image: Fall semester following approval. OR Image: Specific Date ² : Fall 20						
1f	Contact person name: Jhon SilvaEmail: jhon.silva@uky.eduPhone: 8592571173						
2. OVE	RVIEW						
2a	Provide a brief description of the proposed new graduate certificate. (300 word limit)						
	The Department of Mining Engineering at the University of Kentucky will offer an explosives and blasting						
	accessing online lectures and through directed self-study. The certificate consists of three core courses [9 tota]						
	credit hours]:						
	Advanced Blast Design and Technology [Online]						
	• Instrumentation for Blasting and Blast Mitigation [Online with a 2 day in-person lab]						
	Environmental Aspects of Blasting/Federal and State Regulations [Online]						

¹ Only cross-disciplinary graduate certificates may be homed at the college level.

² Certificates are typically made effective for the semester following approval. No program will be made effective unless all approvals, up through and including University Senate approval, are received.

	The Instrumentation class includes a required laboratory component comprising a one- to two-day session here the University of Kentucky Explosive Research Team Lab (UKERT lab).	d at					
2b	This proposed graduate certificate (check all that apply):						
	Has a clear and focused academic competency as its subject.						
	Meets a clearly defined educational need of a constituency group (e.g. continuing education or licensing)						
	Responds to a specific state mandate.						
	Provides a basic competency in an emerging, preferably interdisciplinary, topic.						
2c	Affiliation. Is the graduate certificate affiliated with a degree program? (related to 3c) Yes 🗌 No 🔀						
	If "yes," include a brief statement of how it will complement the program. If "no," incorporate a statement a	s to					
	how it will provide an opportunity for a student to gain knowledge or skills not already available at UK. (300 word limit)						
	This program will target mining and civil engineers; however, other engineering or related professionals may have the need to increase their knowledge in explosives and blasting. There is a definite need for industry professionals with expertise in blasting to participate in mining or civil projects or to serve as third party intermediator in the complex relationships between communities and operating mines, specifically in urban centers.						
2d	Duplication. Are there similar regional or national offerings? Yes 🔀 No 🗌						
	If "Yes," explain how the proposed certificate will or will not compete with similar regional or national offerin	ngs.					
	Missouri S&T offers a master degree in explosives technology. This is the only national program offering such program.	ı					
2e	Rationale and Demand. State the rationale for the new graduate certificate and explain the need for it (e.g. market demand, student requests, state mandate, interdisciplinary topic). (400 word limit)						
	The most up to date statistics (2015) indicate that slightly less than 4.5 billion pounds of explosives were used	in					
	the U.S. for mining and rock blasting for road and infrastructure construction. It is expected that this amount	will					
	increase as a result of needed renovation and enhancement of current infrastructure. This need will require m	ore					
	qualified engineers (mining and civil professionals) with explosives and blasting knowledge both now and well	l					
	into the future.						
21	Target student population. Check the box(es) that apply to the target student population.						
	Currently enrolled graduate students.						
	N Post-baccalaureate students.						
2g	Describe the demographics of the intended audience. (150 word limit)						
	Mining and civil engineers; however, other engineering or related professionals may have the need to increas their knowledge in explosives and blasting. Because of the potential misuse of the explosives knowledge acqui through the online certificate program, each applicant must submit to a background check and hold a relevan engineering or related degree prior to enrolling in the program.	e red ţ					

	Projected enrollmen				1151		
		Year 1Year 2Yea		Year	ar 3		
			(Yr. 1 continu	uing + new	(Yrs. 1	1 and 2 c	ontinuing +
			entering)		new e	entering)	
	Number of Students	10	15		25		
2i	Distance learning (DI via DL?	L). Initially, will any port	ion of the graduate ce	ertificate be offe	ered	Yes 🔀	No 🗌
	If "Yes," please indica	ate below the percentag	ge of the certificate th	at will be offere	ed via DL.	•	
	1% - 24% 🗌	25% - 49% 🗌	50% - 74% 🗌	75 - 99% 🛛	\triangleleft	100%	
	If "Yes," describe the	DL course(s) in detail, in	ncluding the number of	of required DL o	ourses. ((300 word	d limit)
	to-day blasting applie elaborate lab reports MNG 625 - Environn	cations and instrumenta and one in-person day	tion used for research at the campus of the U	. Students will h Iniversity of Ken	have acce ntucky to	ess to ma use the e	terial to equipment.
3. AD	effects of blasting for students the federal a Students without an e MNG 331 – Explosive	ental Aspects of Blastin mining including groun and state regulations reg equivalent course in the es and Blasting as a pre	ng/Federal and State K and vibrations, fly rock carding blasting for mi theory of explosives in requisite/co-requisite	Regulations - Th events. The cou ining and civil p the Bachelor's 2.	is course rse also projects. degree v	e will cov will intro will be re	er non-desire duce the quired to take
3. AC 3a	effects of blasting for students the federal a Students without an e MNG 331 – Explosive OMINISTRATION AND RE Administration. Desc admissions,student ad	ential Aspects of Blastin mining including groun and state regulations reg equivalent course in the es and Blasting as a pre SOURCES ribe how the proposed dvising, retention, etc. (ng/Federal and State K and vibrations, fly rock warding blasting for mi theory of explosives in p-requisite/co-requisite graduate certificate w (150 word limit)	Regulations - Th events. The cou ining and civil p the Bachelor's ?.	is course rse also projects. degree n ered, incl	e will cov will intro will be re luding	er non-desire duce the quired to take
3. AC 3a	effects of blasting for students the federal a Students without an e MNG 331 – Explosive Administration. Desc admissions,student a The certificate director, The certificate director will conduct background will keep applicants to b certificate director to gu will provide academic a advising with the certific	spects of Blastin mining including groun and state regulations reg equivalent course in the es and Blasting as a pre SOURCES wibe how the proposed dvising, retention, etc. (with advice from the Chai will review applications will d checks for the applicants be admitted. Please see atta warantee the students achies dvising to keep the retention cate director and must be a	ng/Federal and State K and vibrations, fly rock warding blasting for mu- theory of explosives in -requisite/co-requisite graduate certificate w (150 word limit) ir of Mining Engineering ith the support of the con achment. Admitted stud eve their expected educa- ion in the program. GPA. a 3.0 or greater.	Regulations - The events. The cou ining and civil p the Bachelor's the Bachelor's responding UK uestions 18 to 24, lents will receive tional outcomes. s will be monitore	is course rse also projects. degree w ered, incl the propo office or c or the lad individua. If needea ed as part	e will cov will intro will be re will be re luding osed certij ertified th ck of prov lized advi. l the certij t of the ind	er non-desire duce the quired to take ficate program. ird-party who e citizenship sing from the ficate director lividualized
3. AD 3a 3b	effects of blasting for students the federal a Students without an e MNG 331 – Explosive Administration. Desc admissions,student a The certificate director, The certificate director will conduct background will keep applicants to b certificate director to gu will provide academic a advising with the certific Faculty of Record and Cer director), and Dr. Josh Calna practical and theoretical expo Subsequent certificate direct members of the graduate cert members based on their qual reauest to the Chair of Minin	mining including groun and state regulations reg equivalent course in the es and Blasting as a pre SOURCES wibe how the proposed dvising, retention, etc. (with advice from the Chai will review applications wi d checks for the applicants be admitted. Please see atta arantee the students achie dvising to keep the retention cate director and must be a rtificate Director . (related to a an. The faculty of record will esta erience in blasting for mining and ors will be selected by the chair of tificate's faculty of record must be ifications and experience with Bla ge Engineering.	ng/Federal and State K and vibrations, fly rock ararding blasting for ma theory of explosives in -requisite/co-requisite graduate certificate w (150 word limit) ir of Mining Engineering ith the support of the con a A positive answer in quant achment. Admitted stud eve their expected educa- ton in the program. GPA- a 3.0 or greater. (20) The initial faculty of recor- tiblish policies for adding and r d have produced publications of the Department of Mining En- e members of the Graduate Fa- fasting. If a faculty member no	Regulations - Th events. The cou ining and civil p the Bachelor's the Bachelor's c. will be administer responding UK of uestions 18 to 24, lents will receive tional outcomes. s will be monitor d will be Dr. Tom No removing members as and/or research relatu- ngineering in consulta culty. The Chair of M o longer wants to serv	is course rse also projects. degree v ered, incl ethe propo office or c or the lac individua. If needed ed as part vak, Dr. Jho appropriate ed to the top ation with th Mining Engine ve as a facult	e will cov will intro will be re will be re luding osed certij ertified th ck of prov lized advis the certif t of the ind ics covered e faculty of r neering will ty of record,	er non-desire duce the quired to take quired to take ficate program. ird-party who e citizenship sing from the ficate director lividualized initial certificate demonstrate in the program. record. At least three appoint new they will make the

	If "Yes," list the name of the affiliated degree program below. If "No," describe below the	e process	for identifying			
	the faculty of record and the certificate director, including selection criteria, term of service, and method for					
	adding and removing members. (150 word limit)					
	Dr. Tom Novak as chair of the mining department will be involved in the certificate program. He will provide					
	advice and guidance to the certificate director. The certificate director will be Dr. Jhon Silva. Dr. Silva's expertise					
	in blasting is fundamental for the academic organization of the online certificate. The three core courses					
	included in the certificate are classes previously taught by Dr. Silva in the Mining Department, Dr. Josh Calnan					
	who has extensive teaching experience in blasting will also be involved in teaching courses. Members of the					
	online program should demonstrate practical and theoretical experience in blasting for mining, have produced					
	nublications and/or research related to the tonics covered in the program	ining, na				
	publications and/or research related to the topics covered in the program.					
30	Course utilization. Will this graduate certificate include courses from another unit(s)?	Yes	No			
	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	e other un	its'			
	chair/director ³ from which individual courses will be used. The letter must include demo	nstration of	of true			
	collaboration between multiple units ⁴ and impact on the course's use on the home education	ational un	it.			
	Check to confirm that appended to the end of this form is verification that the chair/d	director of	the other			
	unit has consent from the faculty members of the unit. This typically takes the form of m	eeting mi	nutes.			
	Financial Pasources What are the (non-course) resource implications for the proposed of	raduato c	ortificato			
3d	including any projected budget needs? (300 word limit)	si auuate c	ertificate,			
	It is estimated that the modification of existing course material and the development of ne	w materia	l will require			
	one faculty member, one staff member, and one graduate student. Also, a budget for supplies required for					
	material development will be needed. The proposed certificate director Dr. Silva, was awa	arded with	n funds as part			
	of the Provost initiative to increase offereings via UK online.					
	Other Persources Will the proposed certificate utilize resources (e.g. departmentally					
3e	controlled equipment or lab space) from additional units/programs?	Yes 🗌	No 🖂			
	If "Yes." identify the other resources that will be shared. (150 word limit)		<u> </u>			
	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	e appropri	ate			
	chair/director ⁴ of the unit whose "other resources" will be used.					
	\Box Check to confirm that appended to the end of this form is verification that the chair/	diractor of	the other			
	unit has consent from the faculty members of the unit. This typically takes the form of m	eeting mi	nutes			
	and has consent from the facalty memoers of the unit. This typically takes the form of th					
4. IMP	ACT					
4a	Other related programs. Are there any related UK programs and certificates?	Yes	No 🖂			
	If "Yes," describe how the new certificate will complement these existing UK offerings. (2	 250 word I	imit)			
	,		-1			

³ A dean may submit a letter only when there is no educational unit below the college level, i.e. there is no department/school.

⁴ Show evidence of detailed collaborative consultation with such units early in the process.

NEW GRADUATE CERTIFICATE

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 each potentially-affected academic unit administrators.

Check to confirm that appended to the end of this form is verification that the chair/director has input from the faculty members of the unit. This typically takes the form of meeting minutes.

5. ADMISSIONS CRITERIA AND CURRICULUM STRUCTURE

5a Admissions criteria. List the admissions criteria for the proposed graduate certificate. (150 word limit) Applicants for admission to the proposed graduate certificate must hold, at least, a Bachelor's Degree in Mining or Civil Engineering or other related degree prior to enrolling in the program. Applicants without an equivalent course in the theory of explosives in their coursework will be required to take MNG 331 – Explosives and Blasting as a pre-requisite/co-requisite depending on which certificate courses are offered for the semester to which they seek to enroll. Applicants must submit to and pass a background check prior to being admitted into the program because of the potential misuse of the explosives knowledge. The certificate director will make final decisions regarding whether prior coursework and related degree counts towards meeting admissions requirements.

5b	Core courses. List the required core courses below.		
Prefix & Number	Course Title	Credit Hrs	Course Status ⁵
MNG 625	Identification, Mitigation, and Control of the Environmental Aspects of Blasting	3	New
MNG 531	Advanced blast design and technology/detonation theory and applications in mining engineering	3	Change
MNG 621	Instrumentation for blasting and blast mitigation	3	Change
			Select one
			Select one
	Total Credit Hours of Core Courses:		·

5c	ective courses. List the electives below.				
Prefix & Numbe	Course Title	Credit Hrs	Course Status ⁶		
			Select one		
			Select one		
			Select one		
			Select one		
			Select one		

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").

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").

			Select one		
		I			
5d	Are there any other requirements for the graduate certificate? If " (150 word limit)	Yes," note below.	Yes 🔀	No	
	MNG 621 will have a laboratory component that requires students to attend a two-day face-to-face session conducted at the University of Kentucky Explosive Research Team Lab (UKERT lab). The in-person meeting c be scheduled in synchrony with the online course or be completed the semester after MNG 621 is taken. The student will receive an incomplete until this requirement is fulfilled. In either situation, this face-to-face laboratory session must be completed for successful completion of the certificate. Students must earn a GPA o 3.0 or greater for all courses taken in pursuit of the certificate.				
5e	Is there any other narrative about the graduate certificate that sho the Bulletin? If "Yes," please note below. (300 word limit)	uld be included in	Yes	No 🔀	
6. AS	SESSMENT				
	Student learning outcomes. Please provide the student learning out	itcomes for the grad	uate certifi	cate. List the	
6a	knowledge, competencies, and skills (learning outcomes) students	will be able to do up	on complet	ion. (Use	
	action verbs, not simply "understand.") (250 word limit)				
	Students will be able to use explosives for mining or civil engineerin	ng applications. Stud	ents will un	derstand the	
	different detonation theories and its practical implementation in the	field to optimize the	required en	ergy to break	
	the rock. Students will acquire skills to measure and control second blast and vibrations through the use and study of monitoring equipm	ary effects of the use	of explosive tices for su	es such as air-	
	propose.	ieni una design prac	lices for su		
	Student learning outcome (SLO) assessment. How and when will st	tudent learning outc	omes be as	sessed? Please	
	map proposed measures to the SLOs they are intended to assess. D	o not use grades or	indirect me	asures (e.g.	
6b	focus groups, surveys) as the sole method. Measures likely include	artifacts such as cou	rse-embed	ded	
	assessment (e.g., portfolios, research papers or oral presentations)	; and course-embed	ded test ite	ms (embedded	
	test questions, licensure/certification testing, nationally or state-no	ormed exams). (300 v	vord limit)		
	Courses will be structured around learning modules in Canvas to m	eet student learning	outcomes [,	SLOs]. At the	
	end of each learning module, students will be required to pass an or	line quiz related to t	he topic un	der study.	
	Some courses will require students to compose essays, research pap	ers or create blast de	esigns that	include	
	assessment of environmental impact as part of their assignments to a	meet SLOs. Students	will upload	assignments	
	assignments will be selected as artifacts to assess the SLOs. The stu	dents should complete	te a success	us key fully blast	
	design including the assessment of its environmental effects.	ienis snouia compiei	e a success	fully blast	
	Certificate outcome assessment ⁷ . Describe evaluation procedures	for the proposed gra	duate certi	ficate. Include	
6c	how the faculty of record will determine whether the program is a	success or a failure.	List the ben	chmarks, the	
	assessment tools, and the plan of action if the program does not m	eet its objectives. (2	50 word lim	nit)	
	1				

⁷ This is a plan of how the certificate will be assessed, which is different from assessing student learning outcomes.

An evaluation survey will be distribute at the end of each module for the students to review and comment the relevance and quality of the topics covered in each module. The evaluation survey will include topics such as recruitment, enrollment, retention, student performance and students satisfaction.

7.01				
7.01	HERINFORMATION			
/a	Is there any other inform	ation about the gradi	uate certificate to add? (1	50 word limit)
	This certificate fills a nee	a within Mining Engi	ineering, specifically the b	asting and explosives community to
	impact involved in the us	gineers who are capat	vorking as an intermediary	between community leaders mine
	operators and other stake	sholders This certific	rate will be the second nati	onally offered program, which extends
	UK's existing reputation	as a leader in mining	engineering. This certific:	ate benefits our students' ability to
	maintain their competitiv	e advantage and incre	ease their earnings and sup	ports the University's mission to
	strengthen the quality and	d distinctiveness of ou	ir graduate programs to tra	nsform our students into accomplished
	scholars and professional	s who contribute to th	e Commonwealth, the nat	ion, and the world.
8. AP	PROVALS/REVIEWS			
	Information below does no	t supersede the requ	irement for individual lett	ers of support from educational unit
	administrators and	vorification of faculty	u cupport (typically takes th	a form of mosting minutes)
			support (typically takes th	le form of meeting minutes).
	Reviewing Group	Date	ontact Person Name/Pho	ne/Email
	Name	Approved		-, -
	(Within College) In addit	ion to the information	n below, attach documento	ition of department and college approval.
8a	This typically takes the fo	orm of meeting minut	es but may also be an ema	il from the unit head reporting
	department- and college	-level votes.		
			/ /	
			/ /	
			/ /	
8b	(Collaborating and/or Af	fected Units)		
			/ /	
			/ /	
			/ /	
			/ /	
			/ /	
			/ /	
			/ /	
			/ /	
8c	(Senate Academic Counc	il)	Date Approved	Contact Person Name
	Health Care College	s Council (if applicable	e)	
	Graduate Council	, . FF	·	

From:	Pearson, RaeAnne
To:	Brandenburg, Barbara
Cc:	Weber, Annie
Subject:	Notification of intent for Graduate Certificate in Explosives and Blasting, GCERT1, Post-baccalaureate Certificate (14.2101)
Date:	Tuesday, January 22, 2019 10:09:19 AM

Dear Barbara Brandenburg,

Thank you for submitting a Notification of intent for **Graduate Certificate in Explosives and Blasting, GCERT1, Post-baccalaureate Certificate (14.2101)**.

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 documentation presented the proposed program does not constitute a substantive change 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.

IMPORTANT: Certificates (undergraduate and graduate) will be added to the CPE Inventory once they have been approved by the University Senate. For degree programs, an NOI will be submitted by the Office of Strategic Planning and Institutional Effectiveness to CPE and you will need to work closely with our office to ensure that your proposal meets all external CPE requirements and deadlines.

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

Office of Strategic Planning & Institutional Effectiveness University of Kentucky <u>Visit the Office of Strategic Planning and Institutional Effectiveness Website</u> Barbara,

The faculty approved the on-line Certificate in Explosives and Blasting on 12/18/2018.

Tom Novak

Thomas Novak, Ph.D., P.E. Professor and Department Chair Alliance Coal Academic Chair Department of Mining Engineering University of Kentucky 230 Mining & Mineral Resources Bldg 504 Rose Street Lexington, KY 40506-0107 Phone: 859-257-3818 Fax: 859-323-1962 E-mail: Thomas.Novak@uky.edu

From: Brandenburg, Barbara Sent: Monday, January 28, 2019 2:28 PM To: Silva Castro, Jhon; Novak, Thomas Subject: Explosives and Blasting

Hi Drs. Silva and Novak,

I was getting the packet ready for the certificate to be sent out and realized I don't have an email where the faculty approved the certificate.

Dr. Novak, if you could send me an email with the date the faculty approved it, that would be great. Once I get the approval, it will leave the college.

Thanks,

ΒJ

BJ Brandenburg College of Engineering Director of Student Records 355-S F. Paul Anderson Tower



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 28, 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 the graduate certificate in Explosives and Blasting. The faculty reviewed the proposal documents via email and there were no concerns raised.

If you have any questions, please contact me.

Sincerely,

KinlyW C

Kimberly Anderson, Ph.D. Associate Dean for Administration and Academic Affairs



U.S. Department of Justice Bureau of Alcohol, Tobacco, Firearms and Explosives

Employee Possessor Questionnaire

Who needs to complete this form? This questionnaire MUST be complete	ed by EACH employee possessor For ATF Use Only		
of a Federal explosives licensee or permittee or applicant, unless otherwise	provided. (See reverse for RDS KEY:	$\Box \Box$	
Employee possessor.)	formation and Certification		
Print the Requested Information in Block Letters.	Explosives Applicant Business or Operations Name		
1. Last Name	14. Name and address of explosives business or operations at which you are an employee possessor.		
2. First Name	15. Your position in the explosives business or operations.		
 3. Middle Name 4. Name Suffix, if any (e.g., sr., Jr., III) 	16. Federal explosives license/permit number for explosives business/ operations.		
5. Other Names Used - Including Maiden Name	17a. List All Countries of Citizenship?		
6. Social Security Number (Voluntary, will help prevent misidentification)	If you indicated above you are a United States citizen, skip to question 18	3.	
7. Place of Birth (City and State - or - City and Foreign Country)	17b. What is your U.Sissued alien number or admission number?		
8. Date of Birth (<i>Month/Day/Year</i>)	The following questions must be answered with a "YES" or "NO". (See the "Note" at the bottom of the page.)	Yes or No	
9. Race/Ethnicity (Check one or more baxes)	18. Are you a fugitive from justice?		
American Indian or Image: Consolid of Mole Concept Alaskan Native Image: Native Hawaiian or Other Asian Pacific Islander	 19. Are you an unlawful user of, or addicted to, marijuana or any depressant, stimulant, or narcotic drug, or any other controlled substance? 20. Have you ever been convicted in any court of a felony, 		
Black or African American 10. Sex (Check one box) Male Female	imprisoned you for more than one year, even if you received a shorter sentence, including probation? (See Definition 1, Exception 1.)		
 Home Telephone Number (Include area code) Work Telephone Number (Include area code and extension) 	21. Are you under indictment or information in any court for a felony , or any crime, for which the judge could imprison you for more than one year? (An information is a formal accusation of a crime by a prosecutor. See Definition 1.)		
	22. Have you ever been adjudicated mentally defective (which		
Home Address 13a. Street Address	 includes having been adjudicated incompetent to manage your own affairs) or have you ever been committed to a 		
	23. Have you ever been discharged from the Armed Forces under dishonorable conditions?		
13b. Apt. Number 13c. City	24. Have you ever renounced your United States citizenship?		
13d. State - or - Province, Foreign Country	25. Are you an alien in the United States? If "YES," attach an explanatory statement showing that you are a lawful permanent resident. (See Definition 3, Exception 2.)		
13e. Zip Code / Postal Code	(Generally, if you are an alien [except for a lawful permanent resident alien], you cannot possess explosive materials.)		
Under the penalties imposed by Federal law, I,	, certify under the penalty of perjury that the answe	ers on	
Your Signature	Date		
*Note: A copy of this form may be used for your renewal submission. See form are true, accurate and complete.	instruction #2 and #3. I certify, under penalties of perjury, that my answe	ers on	
Your Signature (For second submission)	Date		

Instructions

- Who must fill out and complete this form? EACH employee possessor, as defined below, MUST personally complete this questionnaire form and certify that the answers are true, correct, and complete. This form is not required to be completed by Employee Possessors whose sole responsibility is transporting explosives in commerce.
- 2. To whom do I submit this form? You must complete and submit this form to your employer (applicant for license/permit). The employer will submit this form, along with the application, to ATF. If this form is being submitted AFTER a license or permit has been issued in order to ADD you as an employee possessor, then the form must be accompanied by a signed letter from the licensee or permittee requesting that you be added as an employee possessor. If this form is being submitted form is being submitted for at least a second time, in relation to the same license/permit renewal, the employee possessor may follow instructions 3 below and the form should be sent to: ATF, Federal Explosives Licensing Center, 244 Needy Road, Martinsburg, WV 25405.
- 3. Resubmission of form upon 3-year renewal of license/permit. The person completing the form may choose to resubmit a photocopy of their original ATF Form 5400.28 provided the information has not changed. You must certify that all the answers are still true, accurate and complete by signing and dating the form.
- 4. Why is this form required? 18 U.S.C., Chapter 40, was amended by the Safe Explosives Act of 2002 (the Act). The Act made it unlawful for certain persons to ship, transport, receive, or possess explosive materials. The Act also made it unlawful to distribute explosive materials to certain persons. Information you provide on this form will allow ATF to determine whether you, an employee possessor in the explosives business or operations, are prohibited from shipping, transporting, receiving, or possessing explosive materials. 18 U.S.C. § 842(d), (i).
- 5. Should documentation be attached to clarify a response to a question or item? Providing additional documentation to clarify a response to a specific question or item on the front of this form could help prevent a delay in processing your Employer Possessor Questionnaire. Please ensure that your name is on any attached documents(s). In addition, if your employer is renewing a Federal explosives license or permit, ensure that the employer's current license or permit number is on any attached documents.
- 6. How do I obtain additional forms? The form can be downloaded from ATF's website in Adobe PDF format at www.atf.gov/forms/index.htm. The form can be ordered using ATF's Online Distribution Center Order Form at www.atf.gov/dcof/index.htm. The form can also be ordered by calling ATF's Distribution Center at (301) 583-4696.
- 7. What do I do if I am prohibited from possessing explosives as indicated above? If you are prohibited from possessing explosives, you may request relief from your Federal explosives disability by filing an ATF Form 5400.29, Application for Restoration of Explosives Privileges. This form can be downloaded from ATF's website at www.atf.gov/forms/index.htm or may be obtained by calling (202) 648-7110. Please be advised that you cannot possess explosives until such time that relief from Federal explosive disabilities may be granted. For example, if you are a nonimmigrant alien, you should answer "yes" to question 25, and you are prohibited from possess explosives. You may file a relief application, but you cannot possess explosives until such time that ATF may grant you relief.
- Need assistance in completing the form? Please review information online concerning this form at www.atf.gov, contact the National Licensing Center at (404) 417-2750, or contact your local ATF office.

ATF Form 5400.28 is used to determine the eligibility of the employee possessor to possess explosives materials. Under Federal explosives laws it is unlawful for certain prohibited persons to possess explosives. See 18 U.S.C. § 842(d) and (i). 18 U.S.C. § 845 (a)(1) provides that these prohibitions do not apply to any "aspects of transportation of explosive materials via railroad, water, highway, or air that pertain to safety, including security, and are regulated by the United States Department of Transportation or the Department of Homeland Security." The Department of Transportation and the Transportation Security Administration have exercised their regulatory authority concerning employee qualifications to transport explosive materials. Accordingly, ATF does not have to determine the eligibility to possess explosives of Employee Possessors who fall within this exception.

- 1. Under Indictment or Information or Convicted in Any Court. An indictment, information, or conviction in any Federal, State, or local court.
- 2. Employee Ppossessor. An employee possessor is an individual who has actual or constructive possession of explosive materials during the course of his employment. Actual possession exists when a person is in immediate possession or control of explosive materials (e.g., an employee who physically handles explosive materials as part of the production process; or an employee, such as a blaster, who actually uses explosive materials). Constructive possession exists when an employee lacks direct physical control over explosive materials, but exercises dominion and control over the explosive materials, either directly or indirectly through others (e.g., an employee at a construction site who keeps keys for magazines in which explosive materials are stored, or who directs the use of explosive materials by other employees; or an employee transporting explosive materials from a licensee to a purchaser).
- ^{3.} Alien. An alien in the United States means any person who is not a citizen or national of the United States.

Exceptions

- A person who has been convicted of a felony, or any other crime, for which the judge could have imprisoned the person for more than one year, is not prohibited from shipping, transporting, possessing, or receiving explosives if: (1) the conviction was properly invalidated by a court on the basis that the conviction was unconstitutional; (2) in the case of a Federal conviction, the person received a Presidential pardon; or (3) ATF granted relief from Federal explosives disabilities under 18 U.S.C. § 845(b), 27 CFR 555.142.
- Purposes of this form, aliens can be employee possessors if they are lawful permanent residents. 18 U.S.C. § 842(d)(7); (i)(5).

Privacy Act Information

The following information is provided pursuant to Section 3 of the Privacy Act of 1974, 5 U.S.C. § 552a(e)(3):

- Authority. Solicitation of this information is made pursuant to 18 U.S.C. §§ 842, 843. Disclosure of this information by the employee possessor is mandatory if the employee possessor wishes to possess explosives.
- Purpose. To determine the eligibility of the employee possessor to possess explosive materials.
- 3. Routine Uses. The information will be used by ATF to make determinations set forth in paragraph 2. In addition, information may be disclosed to other Federal, State, foreign, and local law enforcement and regulatory agency personnel to verify information on the employee possessor questionnaire and to aid in the performance of their duties with respect to the regulation of explosives unless such disclosure is prohibited by law. Finally, the information may be disclosed to members of the public in order to verify the information on the questionnaire when such disclosure is not prohibited by law.
- Effects of not supplying the requested information. Failure to supply complete information will delay processing and may cause denial of the application.
- 5. Disclosure of social security number. Disclosure of the individual's social security number is voluntary. Under 18 U.S.C. §§ 842(f), 843, and Executive Order 9397, November 22, 1943, ATF has the authority to solicit an individual's social security number. The number may be used to verify the individual's identity.

Paperwork Reduction Act Notice

This request is in accordance with the Paperwork Reduction Act of 1995. The purpose of this information collection is to determine the eligibility of the employee possessor to engage in certain operations. The information requested is required to obtain or retain a benefit and is mandatory by statute 18 U.S.C. 843.

The estimated average burden associated with this collection is 20 minutes per respondent, depending on individual circumstances. Comments concerning the accuracy of this burden estimate and suggestions for reducing this burden should be addressed to Reports Management Officer, Document Services Branch, Bureau of Alcohol, Tobacco, Firearms and Explosives, Washington, DC 20226.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.



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

April 10, 2019

1

Re: Letter of support for proposed online graduate certificate in Explosives and Blasting

To Whom It May Concern:

The College of Engineering has reviewed the proposal for the online graduate certificate in Explosives and Blasting. 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,

RG Buckil

Rudy Buchheit Dean, College of Engineering

