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
**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. GENERAL INFORMATION

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1a</td>
<td>Home college: Engineering</td>
</tr>
<tr>
<td>1b</td>
<td>Home educational unit (department, school, college): Mining Engineering Department</td>
</tr>
<tr>
<td>1c</td>
<td>Office of Strategic Planning and Institutional Effectiveness (OSPIE) (Please contact OSPIE (<a href="mailto:OSPIE@L.uky.edu">OSPIE@L.uky.edu</a>) for help with questions in this section.)</td>
</tr>
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<td>Date of contact with OSPIE: January 22, 2019</td>
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- Appended to the end of this form is a PDF of the reply from OSPIE.
- Appended to the end of this form is a letter(s) of administrative feasibility from dean(s) of the college(s) offering the certificate.

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<tbody>
<tr>
<td>1d</td>
<td>Proposed certificate name: Graduate Certificate in Explosives and Blasting</td>
</tr>
<tr>
<td>1e</td>
<td>Requested effective date: Fall semester following approval. OR Specific Date: Fall 20</td>
</tr>
<tr>
<td>1f</td>
<td>Contact person name: Jhon Silva Email: <a href="mailto:jhon.silva@uky.edu">jhon.silva@uky.edu</a> Phone: 8592571173</td>
</tr>
</tbody>
</table>

### 2. OVERVIEW

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<table>
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<tbody>
<tr>
<td>2a</td>
<td>Provide a brief description of the proposed new graduate certificate. (300 word limit)</td>
</tr>
<tr>
<td></td>
<td>The Department of Mining Engineering at the University of Kentucky will offer an explosives and blasting online/hybrid certificate for industry professionals wanting to advance their careers. Students will learn by accessing online lectures and through directed self-study. The certificate consists of three core courses [9 total credit hours]:</td>
</tr>
<tr>
<td></td>
<td>- Advanced Blast Design and Technology [Online]</td>
</tr>
<tr>
<td></td>
<td>- Instrumentation for Blasting and Blast Mitigation [Online with a 2 day in-person lab]</td>
</tr>
<tr>
<td></td>
<td>- Environmental Aspects of Blasting/Federal and State Regulations [Online]</td>
</tr>
</tbody>
</table>

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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 held at the University of Kentucky Explosive Research Team Lab (UKERT lab).

2b This proposed graduate certificate (check all that apply):
- [x] Has a clear and focused academic competency as its subject.
- [x] 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 [x]*

If “yes,” include a brief statement of how it will complement the program. If “no,” incorporate a statement as 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 intermediary in the complex relationships between communities and operating mines, specifically in urban centers.

2d **Duplication.** Are there similar regional or national offerings?

*Yes [x] No [ ]*

If “Yes,” explain how the proposed certificate will or will not compete with similar regional or national offerings.

Missouri S&T offers a master degree in explosives technology. This is the only national program offering such program.

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 more qualified engineers (mining and civil professionals) with explosives and blasting knowledge both now and well into the future.

2f **Target student population.** Check the box(es) that apply to the target student population.

- [ ] Currently enrolled graduate students.
- [x] 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 increase their knowledge in explosives and blasting. Because of the potential misuse of the explosives knowledge acquired through the online certificate program, each applicant must submit to a background check and hold a relevant engineering or related degree prior to enrolling in the program.
**Projected enrollment.** What are the enrollment projections for the first three years?

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>10</td>
</tr>
<tr>
<td>Year 2 (Yr. 1 continuing + new entering)</td>
<td>15</td>
</tr>
<tr>
<td>Year 3 (Yrs. 1 and 2 continuing + new entering)</td>
<td>25</td>
</tr>
</tbody>
</table>

**Distance learning (DL).** Initially, will any portion of the graduate certificate be offered via DL? Yes ☒ No ☐

If “Yes,” please indicate below the percentage of the certificate that will be offered via DL.

- 1% - 24% ☐
- 25% - 49% ☐
- 50% - 74% ☐
- 75 - 99% ☒
- 100% ☐

If “Yes,” describe the DL course(s) in detail, including the number of required DL courses. (300 word limit)

There are three (3) required courses. All courses will meet in an asynchronous learning format (Canvas). The MNG 531- Advanced Blast design and Technology/Detonation theory and applications in mining engineering - This course review the detonation theories for mining applications. The course also includes the study of detonation of mining accidents in a methane coal dust scenario. MNG 621 - Instrumentation for Blasting and Blast Mitigation- This course includes the instrumentation for day-to-day blasting applications and instrumentation used for research. Students will have access to material to elaborate lab reports and one in-person day at the campus of the University of Kentucky to use the equipment. MNG 625 - Environmental Aspects of Blasting/Federal and State Regulations - This course will cover non-desire effects of blasting for mining including ground vibrations, fly rock events. The course also will introduce the students the federal and state regulations regarding blasting for mining and civil projects.

Students without an equivalent course in the theory of explosives in the Bachelor’s degree will be required to take MNG 331 – Explosives and Blasting as a pre-requisite/co-requisite.

### 3. ADMINISTRATION AND RESOURCES

**Administration.** Describe how the proposed graduate certificate will be administered, including admissions, student advising, retention, etc. (150 word limit)

The certificate director, with advice from the Chair of Mining Engineering, will administer the proposed certificate program. The certificate director will review applications with the support of the corresponding UK office or certified third-party who will conduct background checks for the applicants. A positive answer in questions 18 to 24, or the lack of prove citizenship will keep applicants to be admitted. Please see attachment. Admitted students will receive individualized advising from the certificate director to guarantee the students achieve their expected educational outcomes. If needed the certificate director will provide academic advising to keep the retention in the program. GPAs will be monitored as part of the individualized advising with the certificate director and must be a 3.0 or greater.

**Faculty of Record and Certificate Director.** (related to 2c) The initial faculty of record will be Dr. Tom Novak, Dr. Jhon Silva (the initial certificate director), and Dr. Josh Calnan. The faculty of record will establish policies for adding and removing members as appropriate who should demonstrate practical and theoretical experience in blasting for mining and have produced publications and/or research related to the topics covered in the program. Subsequent certificate directors will be selected by the chair of the Department of Mining Engineering in consultation with the faculty of record. At least three members of the graduate certificate’s faculty of record must be members of the Graduate Faculty. The Chair of Mining Engineering will appoint new members based on their qualifications and experience with Blasting. If a faculty member no longer wants to serve as a faculty of record, they will make the request to the Chair of Mining Engineering.

The graduate certificate is affiliated with a degree program. Yes ☐ No ☒
If “Yes,” list the name of the affiliated degree program below. If “No,” describe below the 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 publications and/or research related to the topics covered in the program.

<table>
<thead>
<tr>
<th>3c</th>
<th>Course utilization. Will this graduate certificate include courses from another unit(s)?</th>
<th>Yes ☐</th>
<th>No ☒</th>
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<tbody>
<tr>
<td></td>
<td>If “Yes,” two pieces of supporting documentation are required.</td>
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<td>☐ Check to confirm that appended to the end of this form is a letter of support from the other units’ chair/director from which individual courses will be used. The letter must include demonstration of true collaboration between multiple units and impact on the course’s use on the home educational unit.</td>
<td></td>
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<td>☐ 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.</td>
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</table>

<table>
<thead>
<tr>
<th>3d</th>
<th>Financial Resources. What are the (non-course) resource implications for the proposed graduate certificate, including any projected budget needs? <em>(300 word limit)</em></th>
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<tr>
<td></td>
<td>It is estimated that the modification of existing course material and the development of new material 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 awarded with funds as part of the Provost initiative to increase offerings via UK online.</td>
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<tr>
<th>3e</th>
<th>Other Resources. Will the proposed certificate utilize resources (e.g. departmentally controlled equipment or lab space) from additional units/programs?</th>
<th>Yes ☐</th>
<th>No ☒</th>
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<tr>
<td></td>
<td>If “Yes,” identify the other resources that will be shared. <em>(150 word limit)</em></td>
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<td>If “Yes,” two pieces of supporting documentation are required.</td>
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<td>☐ Check to confirm that appended to the end of this form is a letter of support from the appropriate chair/director of the unit whose “other resources” will be used.</td>
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<td>☐ 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.</td>
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### 4. IMPACT

<table>
<thead>
<tr>
<th>4a</th>
<th>Other related programs. Are there any related UK programs and certificates?</th>
<th>Yes ☐</th>
<th>No ☒</th>
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<tr>
<td></td>
<td>If “Yes,” describe how the new certificate will complement these existing UK offerings. <em>(250 word limit)</em></td>
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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.
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.

<table>
<thead>
<tr>
<th>Prefix &amp; Number</th>
<th>Course Title</th>
<th>Credit Hrs</th>
<th>Course Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNG 625</td>
<td>Identification, Mitigation, and Control of the Environmental Aspects of Blasting</td>
<td>3</td>
<td>New</td>
</tr>
<tr>
<td>MNG 531</td>
<td>Advanced blast design and technology/detonation theory and applications in mining engineering</td>
<td>3</td>
<td>Change</td>
</tr>
<tr>
<td>MNG 621</td>
<td>Instrumentation for blasting and blast mitigation</td>
<td>3</td>
<td>Change</td>
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</table>

Total Credit Hours of Core Courses:

5c Elective courses. List the electives below.

<table>
<thead>
<tr>
<th>Prefix &amp; Number</th>
<th>Course Title</th>
<th>Credit Hrs</th>
<th>Course Status</th>
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<td>Select one...</td>
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<td>Select one...</td>
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</table>

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”).
NEW GRADUATE CERTIFICATE

<table>
<thead>
<tr>
<th>5d</th>
<th>Are there any other requirements for the graduate certificate? If “Yes,” note below. (150 word limit)</th>
<th>Yes ☐ No ☑</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>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 can 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 of 3.0 or greater for all courses taken in pursuit of the certificate.</td>
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| 5e | Is there any other narrative about the graduate certificate that should be included in the Bulletin? If “Yes,” please note below. (300 word limit) | Yes ☑ No ☐ |

6. ASSESSMENT

6a | Student learning outcomes. Please provide the student learning outcomes for the graduate certificate. List the knowledge, competencies, and skills (learning outcomes) students will be able to do upon completion. (Use action verbs, not simply “understand.”) (250 word limit) |
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<tr>
<td></td>
<td>Students will be able to use explosives for mining or civil engineering applications. Students will understand the different detonation theories and its practical implementation in the field to optimize the required energy to break the rock. Students will acquire skills to measure and control secondary effects of the use of explosives such as air-blast and vibrations through the use and study of monitoring equipment and design practices for such propose.</td>
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6b | Student learning outcome (SLO) assessment. How and when will student learning outcomes be assessed? Please map proposed measures to the SLOs they are intended to assess. Do not use grades or indirect measures (e.g. focus groups, surveys) as the sole method. Measures likely include artifacts such as course-embedded assessment (e.g., portfolios, research papers or oral presentations); and course-embedded test items (embedded test questions, licensure/certification testing, nationally or state-normed exams). (300 word limit) |
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<td></td>
<td>Courses will be structured around learning modules in Canvas to meet student learning outcomes [SLOs]. At the end of each learning module, students will be required to pass an online quiz related to the topic under study. Some courses will require students to compose essays, research papers or create blast designs that include assessment of environmental impact as part of their assignments to meet SLOs. Students will upload assignments and homework into Canvas on specific dates. Appropriate and relevant questions from tests as well as key assignments will be selected as artifacts to assess the SLOs. The students should complete a successfully blast design including the assessment of its environmental effects.</td>
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</table>

6c | Certificate outcome assessment⁷. Describe evaluation procedures for the proposed graduate certificate. Include how the faculty of record will determine whether the program is a success or a failure. List the benchmarks, the assessment tools, and the plan of action if the program does not meet its objectives. (250 word limit) |

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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. OTHER INFORMATION

7a  Is there any other information about the graduate certificate to add? (150 word limit)

This certificate fills a need within Mining Engineering, specifically the blasting and explosives community to provide highly-skilled engineers who are capable of conducting controlled blasting, mitigating the environmental impact involved in the use of explosives, and working as an intermediary between community leaders mine operators, and other stakeholders. This certificate will be the second nationally offered program, which extends UK’s existing reputation as a leader in mining engineering. This certificate benefits our students’ ability to maintain their competitive advantage and increase their earnings and supports the University’s mission to strengthen the quality and distinctiveness of our graduate programs to transform our students into accomplished scholars and professionals who contribute to the Commonwealth, the nation, and the world.

8. 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).

<table>
<thead>
<tr>
<th>Reviewing Group Name</th>
<th>Date Approved</th>
<th>Contact Person Name/Phone/Email</th>
</tr>
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<tbody>
<tr>
<td>8a (Within College)</td>
<td></td>
<td>In addition to the information below, attach documentation of department and college approval. This typically takes the form of meeting minutes but may also be an email from the unit head reporting department- and college-level votes.</td>
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<tr>
<td>8b (Collaborating and/or Affected Units)</td>
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<td></td>
</tr>
<tr>
<td>8c (Senate Academic Council)</td>
<td>Date Approved</td>
<td>Contact Person Name</td>
</tr>
<tr>
<td>Health Care Colleges Council (if applicable)</td>
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<td>Graduate Council</td>
</tr>
</tbody>
</table>

NEW GRADUATE CERTIFICATE

Page 7 of 7
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
Visit the Office of Strategic Planning and Institutional Effectiveness Website
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
=================================

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,

BJ

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

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

Who needs to complete this form? This questionnaire MUST be completed by EACH employee possessor of a Federal explosives licensee or permittee or applicant, unless otherwise provided. (See reverse for definition of employee possessor.)

Employee Possessor Information and Certification

1. Last Name

2. First Name

3. Middle Name

4. Name Suffix, if any (e.g., sr., Jr., III)

5. Other Names Used - Including Maiden Name

6. Social Security Number (Voluntary, will help prevent misidentification)

7. Place of Birth (City and State - or - City and Foreign Country)

8. Date of Birth (Month/Day/Year)

9. Race/Ethnicity (Check one or more boxes)
   - American Indian or Alaska Native
   - Asian
   - Black or African American
   - Hispanic
   - Native Hawaiian or Other Pacific Islander

10. Sex (Check one box)
   - Male
   - Female

11. Home Telephone Number (Include area code)

12. Work Telephone Number (Include area code and extension)

13a. Street Address

13b. Apt. Number

13c. City

13d. State - or - Province, Foreign Country

13e. Zip Code / Postal Code

Explosives Applicant Business or Operations Name

14. Name and address of explosives business or operations at which you are an employee possessor.

15. Your position in the explosives business or operations.

16. Federal explosives license/permit number for explosives business/operations.

17a. List All Countries of Citizenship?

If you indicated above you are a United States citizen, skip to question 18.

17b. What is your U.S.-issued alien number or admission number?

The following questions must be answered with a "YES" or "NO". (See the "Note" at the bottom of the page.)

18. Are you a fugitive from justice?

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, or any other crime, for which the judge could have imprisoned you for more than one year, even if you received a shorter sentence, including probation? (See Definition 1, Exception 1.)

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 includes having been adjudicated incompetent to manage your own affairs) or have you ever been committed to a mental institution?

23. Have you ever been discharged from the Armed Forces under dishonorable conditions?

24. Have you ever renounced your United States citizenship?

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.)

   (Generally, if you are an alien [except for a lawful permanent resident alien], you cannot possess explosive materials.)

   Statement Attached.

Under the penalties imposed by Federal law, I, [Print Your Full Name], certify under the penalty of perjury that the answers on this questionnaire are true, accurate and complete.

Your Signature

Date

*Note: A copy of this form may be used for your renewal submission. See instruction #2 and #3. I certify, under penalties of perjury, that my answers on form are true, accurate and complete.

Your Signature (For second submission)

Date
Instructions

1. Who must fill out and complete this form? Each employee possessing or 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. To whom this form is being submitted and the license or permit renewal, the employee possessor may follow instructions 3 below and the form should be sent to: ATF, Explosives Licensing Center, 244 Needy Road, Martinsburg, WV 25405.

3. Resubmission of form upon 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 provided 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.

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 Employee Possessor Questionnaire. Please ensure that your name is on any attached documents. Additional, 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 also be ordered using ATF's Online Distribution Center Order Form at www.atf.gov/otoc/index.htm. The form can also be ordered by calling ATF's Distribution Center at (301) 583-4566.

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 explosives disabilities may be granted.

8. Need assistance in completing the form? Please review information online concerning this form at www.atf.gov, contact the National Licensing Center (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 (j). 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 Possessor. 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 license 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

1. A person who has been convicted of a felony, or any other crime, for which the judge could have imposed 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.

2. Purposes of this form, aliens can be employee possessors if they are lawful permanent residents. 18 U.S.C. § 842(d)(7); (c)(5).

Privacy Act Information

The following information is provided pursuant to Section 3 of the Privacy Act of 1974, 5 U.S.C. § 552a(6)(3):

1. 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.

2. 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.

4. 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(d), 843, and Executive Order 9517, 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.
April 10, 2019

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,

Rudy Buchheit
Dean, College of Engineering