

**IDAHO STATE BOARD OF EDUCATION
ACADEMIC/PROFESSIONAL-TECHNICAL EDUCATION
NOTICE OF INTENT**

To initiate a

**New, Expanded, Cooperative, Discontinued, program component or Off-Campus Instructional Program
or Instructional/Research Unit**

Institution Submitting Proposal: University of Idaho
 Name of College, School, or Division: College of Engineering & College of Education
 Name of Department(s) or Area(s): Nuclear Engineering Program

Indicate if this Notice of Intent (NOI) is for an Academic or Professional Technical Program
 Academic X Professional - Technical _____

A New, Expanded, Cooperative, Contract, or Off-Campus Instructional Program or Administrative/Research Unit (circle one) leading to:

Certificate of Nuclear Criticality Safety

(Degree or Certificate)

Proposed Starting Date: Summer 2009

For New Programs:

For Other Activity:

 Program (i.e., degree) Title & CIP 2000

- Program Component (major/minor/option/emphasis)
- Off-Campus Activity/Resident Center
- Instructional/Research Unit
- Addition/Expansion
- Discontinuance/consolidation
- Contract Program
- Other

 College Dean (Institution) Date

Deans' signatures on file **7/14/08 & 8/8/08**

 College Dean (Institution) Date

 Chief Fiscal Officer (Institution) Date

 Chief Academic Officer (Institution) Date

 President Date

 VP Research & Graduate Studies Date

 State Administrator, SDPTE Date

 Chief Academic Officer, OSBE Date

 SBOE/OSBE Approval Date

Before completing this form, refer to Board Policy Section III.G. Program Approval and Discontinuance.

1. Briefly describe the nature of the request e.g., is this a new program (degree, program, or certificate) or program component (e.g., new, discontinued, modified, addition to an existing program or option).

The Certificate of Completion in Nuclear Criticality Safety is a new program that will offer students in Nuclear Engineering or Industrial Safety the opportunity to gain expertise in Criticality Safety. All but one of the courses already exists in either Nuclear Engineering or Industrial Safety.

2. Provide a statement of need for program or a program modification. Include student and state need, demand, and employment potential. **Attach a Scope and Sequence, SDPTE Form Attachment B, for professional-technical education requests.** (Use additional sheets if necessary.).

The Idaho National Laboratory is experiencing a shortage of Nuclear Criticality Safety workers. The Lab has indicated that this shortage is a national condition in the nuclear industry. Nationally, only one other program has been located.

3. Briefly describe how the institution will ensure the quality of the program (e.g., accreditation, professional societies, licensing boards, etc.).

The courses in this sequence are part of the existing nuclear engineering or industrial safety curriculum, and therefore, have already met SBOE requirements, and where appropriate the requirements of the College of Engineering for ABET and regional accreditation. Only one new course is planned.

4. Identify similar programs offered within the state of Idaho or in the region by other colleges/universities. If the proposed request is similar to another program, provide a rationale for the duplication. This may not apply to PTE programs if workforce needs within the respective region have been established.

Currently, there are no other known criticality safety certificates or degrees available at BSU, CSI, EITC, ISU, LCSC, NIC, or in the region.

Enrollment and Graduates (i.e., number of majors or other relevant data)
 By Institution for the Proposed Program
 Last three years beginning with the current year and the 2 previous years

Institution	Relevant Enrollment Data			Number of Graduates		
	Current	Previous Year	Previous Year	Current	Previous Year	Previous Year
BSU						
CSI						
EITC		N/A				
ISU						
LCSC						
NIC						
UI						

Degrees offered by school/college or program(s) within disciplinary area under review

Institution and Degree name	Level	Specializations within the discipline (to reflect a national perspective)	Specializations offered within the degree at the institution
BSU			
CSI			
EITC		N/A	
ISU			
LCSC			
NIC			
UI			

5. Describe how this request is consistent with the State Board of Education's policy or role and mission of the institution (i.e., centrality).

These certificate courses will be delivered by a combination of “live” instruction and Web-supported DVD media at the Idaho Falls Center. This “hybrid” approach will meet the needs of outreach students as well as center students seeking coursework in the focus area of Nuclear Criticality Safety.

6. Is the proposed program in the 8-year Plan? Indicate below.
 Yes ___ No x

If not on 8-year plan, provide a justification for adding the program.

As the nation turns to nuclear technologies to supply the energy needs of the nation, nuclear criticality safety is increasing in significance, both regionally and nationally. Because of faculty expertise and existing UI courses and programs, UI is uniquely positioned to offer a certificate in this area. UI (and other state universities) have received a federal appropriation from DOE to enhance nuclear education and research capabilities within Idaho. This program will help UI fulfill the commitments of the appropriation.

8. Resources--Faculty/Staff/Space Needs/Capital Outlay. (Use additional sheets if necessary.):

Estimated Fiscal Impact FY _____ FY _____ FY _____ Total _____

A. Expenditures

1. Personnel				
2. Operating				
3. Capital Outlay				
4. Facilities				

TOTAL:

B. Source of Funds

1. Appropriated-reallocation				
2. Appropriated – New				
3. Federal				
4. Other:				

TOTAL:

B. Nature of Funds

1. Recurring *				
2. Non-recurring **				

TOTAL:

**No additional funds
or resources will be
required.**



* Recurring is defined as ongoing operating budget for the program, which will become of the base.
 ** Non-recurring is defined as one-time funding in a fiscal year and not part of the base.

NUCLEAR CRITICALITY SAFETY ACADEMIC CERTIFICATE

Students who wish to earn an academic certificate in Nuclear Criticality Safety have two possible tracks that can be used to complete this certificate. Students who are majoring within the Program in Nuclear Engineering are encouraged to complete the first track and students who are majoring within the Department of Adult, Career and Technology Education are encouraged to complete the second track. Students interested in this academic certificate should contact the Program Director of Nuclear Engineering.

Note: A grade of 'B' or higher is required in all coursework for this academic certificate.

Track 1:

- NE 450 Principles of Nuclear Engineering (3 cr)
 - NE 535 Nuclear Criticality Safety I (3 cr)
 - NE 555 Nuclear Criticality Safety II (3 cr)
 - One of the following (3 cr):
 - NE 525 Neutron Transport Theory (3 cr)
 - NE 533 Monte Carlo Methods (3 cr)*
 - NE 554 Radiation Detection and Shielding (3 cr)
 - Upper-Division or Graduate level Mathematics course (3 cr)
- Credits to total 12 for this Academic Certificate

*Note: Students are encouraged to complete NE 533 Monte Carlo Methods.

OR

Track 2:

PTTE 512 Fundamental Concepts of Nuclear Science or NE 450 Principles of Nuclear Engineering (3 cr)

PTTE 513 Nuclear Criticality Safety (3 cr)

PTTE 514 Nuclear Safety or NE 470 Nuclear Reactor Safety (3 cr)

PTTE 516 Nuclear Rules and Regulations (3 cr)

Credits to total 12 for this Academic Certificate