TENNESSEE BOARD OF REGENTS
Committee Chairs Meeting
Wednesday, May 29, 2024
Agenda

1. Opening remarks (*Reynolds/Tydings)*

2. External Affairs Update
   - Legislative Update *(McCormick/Williams)*
   - Workforce Development Update *(McCormick/Sisk)*

3. Academic Policies and Programs/Student Life
   - RSCC Nuclear Technology Program Proposal *(Reed)*

4. Title IX Final Rule *(Lapps)*

5. Review draft of the June Quarterly Meeting Schedule *(Tydings)*

- *This meeting will include members of the Tennessee Board of Regents who are participating by electronic means of communication and will be live-streamed and archived on the TBR website at https://www.tbr.edu/board/may-29-2024-committee-chairs-personnel-compensation-finance-business-operations-and-audit.*

- *Persons who want to request to address the Board may follow the process authorized by TBR Policy 1.02.12.00 – Requests to Address the Board.*

BOARD TRANSMITTAL

MEETING:	Committee Chairs Meeting
SUBJECT:	External Affairs Update
DATE:	May 29, 2024
PRESENTER:	Dr. Kim McCormick
PRESENTATION REQUIREMENTS:	25 minutes with discussion
ACTION REQUIRED:	Informational Purposes
STAFF RECOMMENDATION:	Not Applicable

Executive Vice Chancellor for External Affairs Dr. Kim McCormick will share the following updates:

Legislative Update

This update includes an overview of the Legislative Session and an overview of bills that we have tracked with an impact on TBR and higher education. This report highlights significant pieces of legislation that were relevant to the Board of Regents from this past legislative session.

Workforce Development Update

This update includes an overview of the 2023/2024 THEC reporting cycle for workforce hours, the addition of the Tennessee Council for Career and Technical Education (TCCTE) to the office of External Affairs, industry sub-sector workforce strategy, and the Workforce Convening.

THE COLLEGE SYSTEM of TENNESSEE

BOARD TRANSMITTAL

MEETING:	Committee Chairs Meeting
SUBJECT:	New A.A.S. in Nuclear Technology at Roane State Community College
DATE:	May 29, 2024
PRESENTER:	Vice Chancellor Jothany Reed
PRESENTATION REQUIREMENTS:	10 Minutes
ACTION REQUIRED:	Informational Purposes
STAFF RECOMMENDATION:	Not Applicable

Roane State Community College proposes the establishment of a new Associate of Applied Science (A.A.S.) in Nuclear Technology (NUCT).

Roane State Community College is partnering with Oak Ridge National Laboratories (ORNL), the Y-12 National Security Complex (Y-12), the University of Tennessee Knoxville (UTK), United Clean Up Oak Ridge (UCOR), and other partners to implement a program designed to develop a skilled workforce in nuclear technology areas. This program will prepare students with the education and skills needed to meet industry workforce demands in the nuclear area, including fuel manufacture, operations, and decommissioning and decontamination, among other necessary skills.

Roane State Community College's Nuclear Technology program focuses on the entire nuclear fuel cycle as opposed to any one specific discipline (i.e., reactor operator or medical isotopes). Its wider scope serves a larger segment of the workforce, including defense and modular reactor operations, and has support from industry partners in the region that includes the use of laboratory space and equipment as needed.

The A.A.S. in Nuclear Technology degree will be initially offered on the Harriman main campus of Roane State starting August 2024. While the program is not designed for transfer, discussions are being held with university partners concerning possible articulations into four year programs.

TBR Letter of Application/Implementation Portfolio

Please respond to each question. If the question is not applicable, please use "NA" and include a brief explanation of why the question is not applicable to the proposed action.

SECTION I. INTRODUCTION

INSTITUTION(S): Roane State Community College

PROPOSAL STATEMENT: Began a Nuclear Technology Program

TITLE OF PROGRAM: Nuclear Technology

CIP CODE: 15.1401
SOC CODE: 17-3029

CONCENTRATIONS:
CIP CODE:
SOC CODE:

DELIVERY SITE: Oak Ridge Campus

PROPOSED IMPLEMENTATION DATE: Fall 2024

COOPERATIVE/COLLABORATIVE PARTNERS: Major cooperative and collaborative partners for this program are the Oak Ridge National Laboratory (ORNL), the Y-12 National Security Complex (Y-12), University of Tennessee Knoxville (UTK), United Clean-up Oak Ridge (UCOR)

CAMPUS CONTACT (name/telephone): Dr. Diane Ward, 865-354-3000 x4513

PROJECTED DATE FOR SUBMISSION OF PROPOSAL: February 2024

TARGET DATE FOR BOARD APPROVAL: July 2024

A. PURPOSE (Goals and Objectives in keeping with Institutional Mission. Specify: campus specific, regional, state-wide, national, International; Population: Traditional, Non-traditional [over 25], Military, Dual Enrollment [High School], Workforce, or other; Academic, Workforce development and/or Research Needs):

Roane State Community College is a comprehensive, public, two-year postsecondary institution serving the higher education needs of a wide-ranging eight-county service area, which includes Roane, Anderson, Campbell, Cumberland, Fentress, Loudon, Morgan, and Scott counties and expands to include Knox and Blount counties for the delivery of a broad range of health science programs. Roane State provides staffed teaching locations throughout the service area and

multiple teaching delivery modes and distance education technologies to accommodate the learning needs of students balancing multiple priorities in the pursuit of their educational goals.

RSCC strives to continually explore new and supportive ways to provide an educational experience that meets the current and future needs of its service area communities. In addition, RSCC has a strong relationship with area industries in the nuclear field. Having engaged with area industries, RSCC has determined the need for a Nuclear Technology Program (NTP). The proposed NTP is designed to meet the workforce needs within the Oak Ridge and surrounding areas for technician level education in the field of nuclear science and radiation detection and measurements. Although this program will be located within the Oak Ridge area, it is intended to serve RSCC's eight-county service area providing access to a variety of nuclear technician and nuclear worker placements and job opportunities following graduation. The NTP parallels and is modeled by a successful Chemical Engineering Technology program already underway at Roane State.

Consistent with similar learning outcomes within programs listed in the TBR Common Course Library, upon successful completion of the NTP program of study, the graduate will be able to:

- Understand the history of the Atomic Age and the discoveries that led to modern atomic science.
- Recognize the various forms of radiation.
- Apply the basics of nuclear and industrial safety and security.
- Describe and identify different types of nuclear reactors.
- Recall and understand the different atomic elements.
- Analyze or perform radiation detection measurements and calculations.
- Perform simulated radioactive operations on actual equipment.
- Exemplify characteristics of workplace nuclear safety and security culture.
- Demonstrate proficiency in following procedures and understand the importance of procedure adherence including how to communicate effectively to peers and supervisors.
- Analyze radioactive spectrographic information and identify radioisotopes.
- Perform radiation measurement and detection experiments using actual equipment.

B. INSTITUTIONAL PRIORITY (Justify why this is a priority at this time and summarize the institution's current program development plans; institutional plans and meeting benchmarks to exit from post-approval monitoring, for any flagged programs; and resource commitments):

RSCC was approached by an independent advisory board, to develop a two-year associate of applied science in nuclear technology. The Nuclear Technology Advisory Board is currently in effect and is predominantly made up of major industries in the nuclear field surrounding the Oak Ridge Tennessee area. The industries serve RSCC's efforts for the NTP in both an advisory capacity and as a collaborative partner by providing subject matter expertise in curriculum development. The industries are Oak Ridge National Laboratory (ORNL), the Y-12 National Security Complex (Y-12), University of Tennessee Knoxville (UTK), United Clean-up Oak

Ridge (UCOR), Omega Technical Services, TRISO-X, MS Technologies, Energy Solutions, RBM Services and Gem Technologies.

C. NEED (Identify the academic, workforce development, and/or research needs the program proposed in this letter of application will meet. Cite employment projections and supply/demand data appropriate to the discipline and degree level as justification using the supply/demand analyses as appropriate, for the degree or certificate. Local WIA data may also serve as a good resource). Needs Met:

The Oak Ridge area is faced with substantial factors contributing to workforce needs in the region. These factors are complex and multifaceted. Analysis by the local economic council has indicated:

- The increasing demand for alternative clean energy solutions such as nuclear and the increased need for new technology designs such as Small Modular Reactors (SMRs) demanding nuclear technicians
- Early retirements resulting from the Covid Pandemic
- Increased demand in skilled workforce to support Department of Energy decommissioning and decontamination programs
- Increased demand in skilled workforce to support Department of Energy defense programs, in particular the Y-12 National Security Complex's Uranium Processing Facility
- Oak Ridge National Laboratory's projection to "strengthen its [nuclear physics] programs and service to the United States over the next decade" (ornl.gov 2023)

According to the Nuclear Energy Institute (NEI), an increased demand in nuclear is expected to remain high for years to come (Nuclear Energy Industry Workforce Strategic Plan – October 2023). Per the NEI 2023 report, skilled trade jobs are on the decline because employees " .. between the ages of 45 and 64 are nearing retirement—more than in many other occupations." The report further states that because "fewer people [are] going into skilled trade or craft jobs, as well as pending retirements, this pipeline needs to be reinvigorated and supported by the industry to ensure a sufficient workforce." NEI identifies the need to implement pipeline strategies for skilled trade and crafts workers including branding and messaging to attract new hires. RSCC believes this starts at the middle school level). The report recommends collaboration with local community colleges and trade schools on pipeline development as well as other options to manage the workforce needs. In addition to the national NEI report, the East Tennessee Economic Council brought together leaders from industry, government contractors, universities (colleges), and economic development organizations to define nuclear workforce [and identified workforce gaps]. A nuclear working group was established to specifically address these gaps and observed Nuclear Technicians as one of the critical workforce needs (https://www.eteconline.org/nuclear-industry-hub/).

The SOC Code associated with the Nuclear Technology program is 17-3029 (Engineering Technologists and Technicians, Except Drafters, All Other), which is in high-demand not only in East Tennessee, but across the state of Tennessee (https://www.tn.gov/content/tn/thec/research/supply-and-demand.html). This high-need occupation is key to multiple TNECD target industry clusters including healthcare, automotive,

and aerospace and defense. In Anderson County, Nuclear Engineers is listed in the TNECD profile as a "unique occupation, with the United States Department of Energy listed as a top employer (https://tnecd.com/county-profiles/). Nuclear Technology is an emerging field throughout the state, with targeted initiatives supporting the need for a prepared workforce. For example, Governor Bill Lee partnered with the Tennessee General Assembly in 2023 to create a $50 million Nuclear Fund to "continue [the] work to make Tennessee the number one state for nuclear energy companies to invest and thrive, bringing greater opportunity and quality jobs for Tennesseans" (https://www.tn.gov/governor/news/2023/5/16/gov--lee-issues-executive-order-to-advance-nuclear-energy-innovation---investment.html). In February 2024, Type One Energy was the first recipient of the funding, creating 330 new jobs in the Greater Knoxville region (https://www.tn.gov/ecd/news/2024/2/21/governor-lee--commissioner-mcwhorter-announce-type-one-energy-group--inc--to-establish-hq-and-expand-r-d-operations-to-tennessee-.html).

PLEASE CONFIRM:

☒Letters of support for short term (1-2 years) have been attached.

☒Letters of support for longer term (5+ years) have been attached.

D. IMPACT

Describe the articulation and transfer avenues projected for the proposed program in compliance with PC§ 49-7-202:

The Nuclear Technology Program (NTP) is not intended for articulation and transfer to four-year institutions at this time. Currently, RSCC's focus is establishing the AAS program to meet identified workforce needs. Ultimately, a transfer program is our goal, and we are working directly with UTK on curriculum development and UTK provides valuable input through its participation on the program advisory board.

RSCC has benchmarked over 15 community colleges with University of Tennessee's Nuclear Engineering's assistance. The benchmarking effort included a physical visit to Chattanooga State (CSCC), which has an engineering technology program with concentrations in nuclear power and radiation protection. Virtual reviews of Nuclear Technology curriculums available on other community college websites were also conducted. From these benchmarking efforts, RSCC gained some insight into curriculum design; however, RSCC's program will be unique, as defined by our industry partners, because it encompasses the entire nuclear fuel cycle as opposed to specific disciplines (e.g., Nuclear Reactor Operators or Medical Isotopes). This notwithstanding, CSCC has committed to assist RSCC in our efforts to stand up the Nuclear Technology program.

The NTP program curriculum is similar to the college's Chemical Engineering Technology, distinguished by the addition of four nuclear courses with a nuclear operations laboratory. The overlapping program curricula will lead to an increase in student demand for the Chemical Engineering Technology courses.

E. PLANS FOR ACCREDITATION (Identify the source and projected date of Professional accreditation if applicable; if the proposed program requires a SACSCOC Substantive Change Review and, if so, describe the scope of the substantive change. Include which

agencies provide accreditation and which you prefer. If there are no plans to seek specialized accreditation, please provide reasons):

The college has researched the accreditation requirements for this program and has determined that SACSCOC accreditation for the NTP is not required with the addition of the four new courses. In the future, however, RSCC will enhance the NTP curriculum further with additional courses and will seek SACSCOC approval prior to implementation of the enhanced curriculum.

The college will be seeking accreditation from the Association of Technology, Management, and Applied Engineering (ATMAE) in 2028. This timeline provides the program four years to collect the required data for the self-study.

G. IDENTIFY ANY LOW PRODUCING PROGRAMS AT YOUR INSTITUTION(S) BASED ON THEC ANNUAL PROGRAM PRODUCTIVITY REPORT(S):

The following RSCC programs were reported as low-producing in the latest Academic Program Productivity report:

- Advanced Pharmacy Technology
- Computer Information Technology
- Environmental Health Technology
- Surgical Technology

H. LIST ALL NEWLY APPROVED AND ESTABLISHED PROGRAMS INCLUDING CERTIFICATES OFFERED THROUGH ANY PUBLIC INSTITUTION IN TENNESSEE INCLUDING THE TENNESSEE COLLEGES OF TECHNOLOGY AT THE SAME LEVEL (within the same or similar CIP and SOC codes):

Chattanooga State Community College has an engineering technology program with concentrations in nuclear power and radiation protection. CSCC's programs are geared toward TVA's nuclear reactors workforce while RSCC's program will be broader encompassing the entire fuel cycle including technicians in nuclear fabrication (Y-12 National Security Complex), research (Oak Ridge National Laboratory) and decontamination and decommissioning fields (United Cleanup Oak Ridge).

SECTION II: ARTICULATIONS, COLLABORATIONS AND DUPLICATIONS INCLUDING INTERDISCIPLINARY PROPOSALS

A. If a similar program to the one proposed already exists at other institution(s) in the state, describe any opportunities for collaboration with other institutions that have been or will be pursued.

CSCC has committed to assist RSCC in our efforts to stand up the Nuclear Technology program. Ultimately, a transfer program is our goal, and we are working directly with UTK

on curriculum development and UTK provides valuable input through its participation on the program advisory board.

B. If there are no proposed articulation or collaborative programs, skip to the next section.
For any proposed articulated or collaborative program(s):

a. Which institution(s) will have a degree-granting authority?
b. Which institution(s) will have the authority for faculty hiring, course assignment, systematic evaluation, and reappointment decisions?
c. What agreements exist to ensure that faculty from all participating institutions will be involved in decisions about the curriculum, admissions standards, exit requirements?
d. Which institution(s) will be responsible for academic and student-support services, e.g., registration, advising, library, academic assistance, financial aid, etc.?
e. What agreements exist to ensure that the academic calendars of the participating institutions have been aligned as needed?
f. In addition to the information provided by each participating institution regarding Financial Projections, please address the following items:
    - How will tuition rates be determined if they differ among the institutions?
    - Has a formal agreement been developed regarding cost-sharing policies?
        - If yes, please include it as part of the Letter of Application.
        - If no, please summarize the current understanding between all parties and the plans for developing a formal agreement.
    - What arrangements, if any, have been made for exchange of money between participating institutions?
    - Provide Financial Projections (using the THEC Financial Projection form) for each institution involved PLUS an aggregate form representing all financial projections for proposed programs involving multiple institutions.
    - If one institution wishes to discontinue the program, what agreements exist for terminating the offering?
    - Specify any other issues and how they are proposed to be addressed.

C. If the proposed program is currently available through the Academic Common Market (ACM) (http://www.sreb.org/page/1304/academic_common_market.html), explain why the need for the requested program/course development cannot be better met through collaboration or in the case of universities, the ACM.

D. If a 100% online program is being proposed:
Review the State Authorization Reciprocity Agreement (http://www.wiche.edu/sara) for additional requirements if the program will be advertised as open to residents outside of Tennessee.

1. If the institution(s) is (are) authorized to offer the same program as a ground program, will the existing program be maintained in addition to on-line delivery?

☐Yes ☐No

2. Specify whether the proposed program is to be delivered:

☐Institutional online courses only
☐Institutional online courses and/or TN eCampus
☐Only through TN eCampus
☐Other Institutional Collaborative or Industry-Institutional Partnerships Length of Agreement—open-ended or limited (indicate start and end date if applicable)

3. Indicate all institutions and organizations that will participate in the collaborative:
   Universities:
   Community Colleges:
4. List any other support agencies including clinical affiliations, government, health and Business that will participate in the relationship:

For all new programs (degrees, certificates, or concentrations) or for expansion of any program to a new location, notification must be sent to the TCAT Directors and other Community College Presidents two weeks prior to submission of the proposal.

SECTION III: PROGRAM STRUCTURE

A. Residency requirements (in keeping with SACSCOC requirements):

Students must complete at least 25 percent of the credit hours required for their degree program through Roane State Community College. Experiential and Proficiency credit does not apply to this residency requirement.

A. Macromajors or Academic Foci:

☐Arts
☐Business
☐Education
☐Health Sciences
☐Humanities
☐Social Sciences
☐STEM
☒Applied Science and Technology
☐General Education

B. CURRICULUM:

Prefix Code Name

See Attached

Attach curriculum in this format:

1. *General Education (Undergraduate only)*
2. *Major Field Core (courses required of ALL students in a program)*
3. *Concentration(s) (identify and list courses for each concentration separately; undergraduate concentrations must be at least 15 SCH; graduate concentrations at least 12 SCH.)*
4. *Electives (May be guided or general electives; Include descriptions, prerequisites or restrictions that may apply.) This section defines pathways, specializations, etc. that are not listed on the Academic Program Inventory.*
5. *Other credits (If applicable, describe requirements for thesis, dissertation, clinical experience, internship, portfolio or other capstone experience.)*

NUMBER OF NEW COURSES (include newly developed yet never taught courses): 4

TOTAL SCH: 63 Roane State provides a 3-credit hour first-year course, COLS 1010, designed to help students become more efficient, proficient, and self-aware learners. It focuses on research-based learning strategies which can improve student performance in all courses. RSCC programs are generally 63 credit hours in length to allow students to complete this mandatory course.

NUMBER OF SCH ANTICIPATED FROM TRANSFER, ARTICULATION, PLA, OR OTHER SOURCES PER THEC 1.06.0 (specify source): 0

SECTION IV: STUDENT ENROLLMENT PROJECTIONS

Estimate the unduplicated annual full-time, part-time and FTE enrollments and number of graduates for the first five years of program operation. Include anticipated international enrollment if used as a primary recruiting tool. If the proposed program involves more than one institution, provide aggregated as well as disaggregated data for all institutions. Complete a minimum of 3 years projection for certificates and associate degrees or expand to the point that the program is expected to be self-sustaining.

Year (specify Term & AY start)	Full-Time Headcount	Part-time Headcount	International Headcount Anticipated	Total Year Headcount	FTE	Graduates
1	6	0	0	6	30 credits x 6 students = 180	0

					180/12 = 15	
2	18 Cohort 1: 6 Cohort 2: 12	0	0	18	30 credits x 18 students = 540 540/12 = 45	5
3	25 Cohort 2: 12 Cohort 3: 13	0	0	25	30 credits x 25 students = 750 750/12 = 62.5	10

A. Explain the basic assumptions including attrition rate used in estimating the size of the proposed program by benchmark against other comparable programs in the discipline and institution to establish a baseline for your projected enrollments. Assumptions should be related to the evidence of need and to other supportive data.

The Nuclear Technology Program (NTP) is a specialized program customized for the nuclear industry community. The projections above reflect workforce projections as well as the college's Chemical Engineering Technology program. The CET program started out with 5 students and now has up to 50-60 new students enrolled each year. The estimates above are conservative; in the first few years of the CET program, there were 5, 18, and 19 graduates, consecutively. We have estimated a graduation rate of approximately 90%.

B. Describe the recruitment plan for both domestic and international enrollment if anticipated.

The college does not anticipate any international enrollment. The college will advertise the program via high school engagement, college advising, recruitment activities of the college, social media, and other forms of marketing media. In addition, information will be included on the college website and in other official college publications. RSCC plans to offer the program as dual enrollment, with the possible exception of the internship course due to challenges presented by federal age restrictions at most area employers (18-21).

SECTION V: RESOURCES

A. List any requirements for needed resources support along with any industry contributions.

RSCC will need to purchase both equipment and supplies for the Nuclear Technology Program (NTP). Equipment will include gloveboxes, radiation measuring equipment, general

chemistry lab equipment, security system, simulated nuclear operations apparatuses, robots, racks, containers, lab coats and coveralls, safety classes, and other nuclear operations area incidentals.

The new nuclear technology program will be a hands-on experiential learning program. The new laboratory will be a simulated nuclear processing area equipped with actual equipment used in nuclear processing areas including exempt radioactive sources to meet the learning objectives for the program. Learning objectives include radiation measurements, radiation spectrographic analysis, nuclear security, nuclear operations, nuclear criticality safety, nuclear materials control and accounting and other real-life nuclear operation's aspects of working in radiological areas and to strict procedures. In order to achieve an experiential learning environment, approximately $612,000 will be needed. The equipment needs include gloveboxes (www.vacatm.com), radiation measuring equipment (eg Ludlum), radiation spectrographic equipment (Spectrum Techniques), equipment used by our industry partner that simulates radiation and radiation detection for a radiological worker (Teletrix), quadruped robots for teaching remote radiological detection, nuclear security equipment (cameras, access control, etc), nuclear operations apparatuses, exempt radioactive materials and associated proper handling and storage equipment protocols, and general laboratory (chemistry) equipment. The nuclear operations apparatuses are uniquely designed operations equipment similar to a chemical processing area (tanks, pumps, flow meters, computer controls). Special pumps and tanks are used to process and batch aqueous radioactive nuclear materials. We will simulate these operations to teach the student how to operate the equipment, radiation safety, nuclear materials accounting, procedure adherence and other learning objectives.

The budget includes $4,500 per year for instructional and general office supplies, as well as $1,500 for program director travel (local and travel associated with ATMAE accreditation).

B. Cite the THEC annual degree productivity data where funds may be redirected from closed low-producing programs (THEC A1:1.2OP) if relevant.

No RSCC program funds will be redirected for this program. This program will be supported by grants, industry financial contributions, and college funds. In August 2023, Roane State received a $100,000 contribution from UT-Battelle, LLC, which manages and operates Oak Ridge National Laboratory (ORNL) for the US Department of Energy, to establish a Nuclear Technology program. Additionally, the college has received a Department of Labor grant, which includes $50,000 for equipment and supplies. Since the time this proposal was submitted, the State of Tennessee, under Governor Lee's Nuclear Energy Fund, awarded RSCC $462,000 to support this program. The contract has been finalized; however, the exact timeline for funding is unclear at this time.

C. Faculty: Describe the strengths of the existing faculty in credentials and available FTE (state number of full- and part-time faculty to support the program). Estimate additional FTE (specify number of full-time and part-time faculty) needed to support the program. If faculty

are drawn from multiple departments or are committed to teach in multiple programs, identify which faculty and the percentage of their time dedicated to each program.

The NTP will be supported by a program director (already hired) and one adjunct faculty who will teach one four-credit hour course per year. The Program Director is a qualified Nuclear Technology field expert who will teach one course per academic year. The program director will work with the various RSCC recruiting departments and industry to solicit interest in the NTP.

D. Describe administrative/organizational structure and personnel.

The program director will be housed within the Division of Mathematics and Sciences. The Division of Mathematics and Sciences division reports to the Dean of Mathematics and Science, who reports directly to the Vice President for Student Learning. The Director of the institution's WORC grant, along with the Administrative Assistant for the WORC grant, will additionally be providing assistance for the Nuclear Technology program.

E. Describe clerical and support personnel, available and needed.

The Division of Mathematics and Sciences has a full-time administrative secretary, housed on the main campus in Harriman. The administrative secretary assists students and faculty in the Mathematics and Sciences division. In addition to the administrative secretary housed in the division office, there is additional secretarial support for faculty located on the Oak Ridge Branch Campus.

F. Describe existing library and information technology resources to be available to support the projected program.

The NTP will be a customized program derived from industry standards and knowledge. Should the need for library resources arise, RSCC Libraries provide collections, services and study environments that foster quality teaching and learning. RSCC's resource collections are accurate, useful, and up-to-date. RSCC library professionals teach students how to find and use quality information resources and work side-by-side with classroom faculty to promote lifelong practices of intellectual inquiry and champion the principles of academic freedom.

G. Describe student advisement support. If the proposed program is part of a collaboration or articulation agreement, how will student advising be coordinated by all participating institutions to facilitate progression and completion across all participating institutions.

Students seeking admission to the NTP will be assigned a Success Coach upon application to the college. The Success Coach will assist with onboarding students to the college. As students progress in the program, they will be advised by the NTP Program Director or other program faculty. All new students have access to a Success Coach at Roane State; as such, there are no additional costs associated with student advisement.

H. Describe existing and anticipated instructional facilities & instructional equipment to support the proposed program.

Roane State has recently terminated the Advanced Pharmacy Technician certificate program. The laboratory for the Advanced Pharmacy Technician program will be transferred to the NTP for a nuclear operations laboratory. RSCC will need to purchase both equipment and supplies for the nuclear operations laboratory. Equipment will include gloveboxes, radiation measuring equipment, general chemistry lab equipment, security system, simulated nuclear operations apparatuses, robots, racks, containers, lab coats and coveralls, safety classes, and other nuclear operations area incidental items.

RSCC will implement a parallel-phased approach to implementing the nuclear processing lab. The phased approach is underway since the beginning of this year by working with vendors to specify (spec out) the various equipment needed. This includes visiting local vendors. From these efforts, RSCC is ready to release the procurement of radiation detection equipment from ORNL's 100K gift and other procurements will follow very soon especially after the State of TN 462K contract. By year end, we expect the lab to be 25 to 50% complete with the installation of the gloveboxes, radiation apparatuses, and radiation equipment, enough to start the first course. The first course will mostly be lecture whereby the subsequent courses in the fall of '25 and spring of '26 will be mostly hands-on. The parallel aspect, or backup plan, is to utilize Y-12, UCOR and/or ORNL's labs for teaching.

SECTION VI: FINANCIAL PROJECTIONS

A. Use the THEC Financial Projections Form (FP) to provide revenues and expenditures for the proposed program. If the proposed program involved more than one institution, provide a separate excel FP Form for each institution as well as an aggregate for the combined financial projections. **See THEC Financial Projection Form.**

B. If reallocation is used, provide a rationale and source for reallocation of budgeted funds. Cite THEC annual degree productivity data where funds may be redirected from closed/ low producing program (A1:1.2OP), if relevant. What will be the impact on the other program?

No RSCC program funds will be reallocated for this program. This program will be supported by grants, industry financial contributions, and college funds.

C. List for each institution involved:

1. All active Letters of Application: n/a
2. Approved programs not meeting benchmarks: All Roane State programs are meeting benchmarks established internally and by external accrediting agencies.
3. Low producing programs at all levels: Advanced Pharmacy Technology, Computer Information Technology, Environmental Health Technology, Surgical Technology
4. Programs terminated within the last 12 months: Advanced Pharmacy Technology, GIS (AAS), and GIS Certificate

Section VII: DEGREE MAP OF PROGRAM STRUCTURE

A. Attach a Curriculum Master Academic Plan (MAP) showing the projected path to completion in the shortest period of time, (i.e., four semesters for 60 SCH).

Indicate course delivery method by color coding or highlighting delivery mode as follows:

BLACK	BOLD	Ground
RED	BOLD	On-line
BLUE	BOLD	TN eCampus Share Library of Courses
GREEN	BOLD	Hybrid

See attachment

B. Description of all Courses

1. Provide rubric, number, title, and credit hours of each course needed for full implementation of the proposed program.
2. Identify which courses already exist and which courses must be developed by the institution.
3. Identify any new courses to be requested as an addition to the Common Course Library.

See attachment

C. Describe any unique features not previously addressed, e.g., interdepartmental cooperation, industry partners, articulation, the proposed method of awarding of prior learning assessment credit, etc.

The Nuclear Technology Program (NTP) will glean lessons learned from the creation and implementation of the Chemical Engineering Technology program. RSCC has gained invaluable lessons learned from the Chemical Engineering Technology (CET) program in terms of initial student projections, course syllabi and program curriculum, laboratory development strategies, internal policies, and student learning abilities (critical thinking, collaboration, and problem solving). Gleaning lessons from the CET program is a continuous process currently and it is expected that the new Nuclear Technology Program director will continue to meet with the CET director until the program is underway.

D. Provide a rationale for the delivery mode(s). Include options such as block scheduling, dual enrollment, dual admissions, cohort programs, on-line, etc. If on-line delivery will be used, indicate what percentage of the program will be delivered on-line. (If the program is to be delivered 100% online, include a list of all degrees at all levels for which SACSCOC has been notified and accepted. If the program is to be delivered across state lines, please document appropriate support structures to facilitate a successful program in keeping with SARA guidelines.)

The NTP requires acquisition of knowledge, skills and abilities to learn and perform nuclear operations work safely and competently. Courses focusing primarily on the acquisition of knowledge in radiological and nuclear academics will be offered in a classroom and laboratory environment. The mode of delivery of the general education components may include online courses either in a synchronous or asynchronous mode. The lab component focuses on the acquisition of skills, assessment, and nuclear operations decision making. Student performance in the lab will enable faculty to assess and verify students' ability to safely perform those skills.

E. Admission, Retention, and Graduation Requirements (Provide complete statement as it will appear in the catalog only if requirements are different from standard institutional requirements as stated in the Catalog.) (Note: The Board reviews and approves the exact statement presented.)

Students in the program must first be accepted into RSCC. Admitted students must maintain a minimum of a grade of "C" in all required courses to be eligible to progress in the program. Students must satisfactorily complete all course requirements to graduate.

F. Include an organizational chart and/or statement to describe the location of the program within the organizational structure and if it will require the addition of a new organizational unit. If so, describe the nature of the unit.

The program director for the NTP reports to the Dean of Mathematics and Sciences. The Dean reports to the Vice President for Student Learning.

G. Identify campus and off-campus locations where the institution plans to offer the program.

The NTP will primarily be taught on the Oak Ridge RSCC campus.

H. If a certificate program is being proposed, will it meet Federal Student Aid eligibility per the U.S. Department of Education upon being added to the institution's Program Participation Agreement (PPA)?

No certificate program will be offered at this time.

SECTION VIII: PROGRAM PERFORMANCE, EVALUATION, AND RESOURCES

A. Identify the assessment metrics associated with each program goal and objective and how each metric will inform the program.

- Program completion: $\geq$ 90% students beginning the program will complete the program in 100% program length.

- Job placement: $\geq$ 90% of those seeking employment in the field of nuclear technology or radiological technicians will be employed within one year

- Graduate Satisfaction: $\geq$ 90% of graduates will express satisfaction with the program of study and their preparation for entry into practice.

- Employer Satisfaction: ≥ 90% of employers will express satisfaction with the program of study and the graduate's preparation for entry into practice.

B. Identify which individuals within the proposed program are responsible for evaluation and outline an evaluation schedule for each of the first five years of the program.
The program director in collaboration with the dean will be responsible for developing and implementing the plan of evaluation for the program of study. This will include both assessment and evaluation of student learning outcomes as well as program outcomes.

Attachment to TBR Letter of Application/Implementation Portfolio

RSCC Nuclear Technology Program

General Education		
MATH 1130	College Algebra	3
CHEM 1010	Introductory Chemistry I	4
TBD	Social Behavioral Sci. Elec.	3
TBD	Humanities Elective	3
ENG 1010	English Composition	3
INFS 1010	Computer Applications	3
CHEM 1020	Introductory Chemistry II	4
COMM 2025	Fund. Of Communication	3
Major Field Core		
ENST 1350	Industrial Safety	3
ENST 1362	Industrial Equipment	3
CHET 1320	Process Control & Instru. I	3
CHET 1410	Process Operations I	3
EHTC 1301	Industrial Hygiene & Safety I	3
EHTC 2315	Applied RadCon Technology	3
EHTC 2320	Industrial Hygiene & Safety II	3
NUCT 1510	Nuclear Physics & Radiochemistry	4
NUCT 2510	Nuclear Systems - Operations	4
NUCT 2520	Radiation Detection & Meas.	4
College Requirements and Electives		
COLS 1010	Study, Organize, Succeed	3
NUCT 2550	NTP Internship	1-3*

* Students may select 1-3 credit hours based on the number of internship hours. Completion of one credit hour fulfills the program requirements. RSCC will be securing internships after the first year for students enrolled in the NTP. Not only have our industry partners agreed to employ interns, but Oak Ridge Associated Universities (ORAU) has also joined RSCC as a partner and will assist RSCC in placing students within our industry partners, especially those under the Department of Energy contracts. ORAU will be a valuable collaborator to RSCC for the placement of nuclear engineering technicians in work-based learning opportunities. For more than 75 years, ORAU has been partnering with government agencies, universities, and corporate entities on scientific and technical workforce initiatives in the nuclear industry.

THEC

Financial Projections Form

Institution	Roane State Community College
Program Name	AAS: Nuclear Technology

Projected One-Time Expenditures

Category	Planning	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6*	Year 7*
Faculty & Instructional Staff								
Non-Instructional Staff								
Graduate Assistants								
Accreditation								
Consultants								
Equipment	$367,200	$183,600	$30,600	$30,600				
Information Technology								
Library resources								
Marketing								
Facilities								
Travel								
Other								
Total One-Time Expenditures	*$367,200*	*$183,600*	*$30,600*	*$30,600*	*$0*	*$0*	*$0*	*$0*

Projected Recurring Expenditures

Category	Planning	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6*	Year 7*
Faculty & Instructional Staff	$90,489	$128,366	$130,933	$133,552	$136,223	$138,948		
Non-Instructional Staff								
Graduate Assistants								
Accreditation								
Consultants								
Equipment								
Information Technology								
Library								
Marketing								
Facilities								
Travel		$1,500	$1,500	$1,500	$1,500	$1,500		
Other	$4,500	$4,500	$4,500	$4,500	$4,500	$4,500		
Total Recurring Expenditures	*$94,989*	*$134,366*	*$136,933*	*$139,552*	*$142,223*	*$144,948*	*$0*	*$0*
Grand Total (One-Time and Recurring)	**$462,189**	**$317,966**	**$167,533**	**$170,152**	**$142,223**	**$144,948**	**$0**	**$0**

Projected Revenue

Category	Planning	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6*	Year 7*
Tuition		$32,820	$96,667	$134,601	$154,055	$167,647		
Grants	$50,000							

Other	$562,000							
Total Revenues	**$612,000**	**$32,820**	**$96,667**	**$134,601**	**$154,055**	**$167,647**	**$0**	**$0**

**Years 6 and 7 should only be included for doctoral programs*

TENNESSEE BOARD OF REGENTS
Quarterly Board Meeting
Thursday, June 13, 2024 – 1:00 pm (Central)
Agenda

I. **Minutes**
- A. March 27, 2024 Quarterly Board Meeting
- B. May 6, 2024 Special Called Meeting of the Board

II. **Report of Interim Action**

III. **Report of the Committees**
- A. Report of the Finance and Business Operations Committee Meeting on May 29, 2024
- B. Report of the Personnel and Compensation Committee Meeting on May 29, 2024
- C. Report of the Audit Committee Meeting on May 29, 2024

IV. **Report of the Chancellor**
- TBR's Strategic Plan in Action

V. **Unfinished Business**

VI. **New Business**

A. Consent Agenda
1. RSCC Nuclear Technology Program Proposal

B. Informational Reporting
1. Accreditation Report

C. Action Items
1. Review and Consider Recommendation for Next President of TCAT Elizabethton
2. *Review and Consider Criteria for Next President of TCAT Jackson *(Subject to approval of Item 1)*
3. Consideration for Approval of FY24 Estimated Budgets and FY25 Proposed Budgets
4. Promotion Recommendations at Tennessee Colleges of Applied Technology
5. Promotion and Tenure Recommendations at Community Colleges
6. Faculty Promotion Increases
7. Institutional Requests for Compensation Plan Payments
8. Proposed Program Terminations, Modifications, and New Technical Program Implementations for TCATs
9. Resolution of Appreciation for President Willie Huffman
10. Resolution of Appreciation for Faculty Regent Vanessa Pilkinton
11. Resolution of Appreciation for Student Regent Layah Garton
12. Election of the Vice Chair for 2024-2025

- *This meeting will be live-streamed and archived on the TBR website at https://www.tbr.edu/board/june-2024-quarterly-board-meeting.*

- *Persons who want to request to address the Board may follow the process authorized by TBR Policy 1.02.12.00 – Requests to Address the Board.*