



August 21, 2025

Dr. Kevin Sightler
Substantive Change Office
SACS Commission on Colleges
1866 Southern Lane
Decatur, GA 30033

**Re: Off-Campus Instructional Site Approval (by Extensive Review) – Oak Ridge
Enhanced Technology and Training Center (ORETTC)**

Dear Kevin,

This is a late notification. The University of Tennessee, Knoxville is requesting approval from the Commission on Colleges to offer 50% or more of the Master of Science in Industrial Engineering at the Oak Ridge Enhanced Technology and Training Center (ORETTC) located at:

3607 Oak Ridge Turnpike
Oak Ridge, TN 37830

I have attached a prospectus to request approval for offering 50% or more of the MS in Industrial Engineering program at the ORETTC off-campus instructional site. Should you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Heather Hartman
SACSCOC Liaison

Cc: Donde Plowman, Chancellor
John Zomchick, Provost and Senior Vice Chancellor
Beth Avery Foster, Vice Provost for Academic Affairs
Matthew Mench, Dean, Tickle College of Engineering

1. If multiple sites are proposed in a consolidated prospectus (see qualifying criteria), address each site separately, viz., the description of the physical resources and a Faculty Roster Form separated by site.

The University of Tennessee, Knoxville is seeking approval for one off-campus instructional site.

Site name (must be unique, i.e., it cannot be the same as an institution's existing site).

Oak Ridge Enhanced Technology and Training Center (ORETTC)

The physical address or location of the site (i.e., no post office box numbers only).

3607 Oak Ridge Turnpike
Oak Ridge, TN 37830

The intended implementation date.

This is a late notification. Fifty percent or more of the Master of Science in Industrial Engineering degree has been offered at the Oak Ridge Enhanced Technology and Training Center since the spring 2024 semester.

Indicate if the site will be a branch campus.

The ORETTC site will not be a branch campus. The University of Tennessee, Knoxville retains authority over budgetary and hiring matters.

The institution must demonstrate, at an institutional level, the capacity to effectively oversee and provide ongoing support for off-campus instructional sites / additional locations (including branch campuses, as applicable), by the following:

- a. Demonstrating how the institution will have administrative oversight of off-campus instructional sites / additional locations that ensures academic control of all off campus instructional sites.**

The Oak Ridge Enhanced Technology and Training Center (ORETTC), located approximately 30 minutes from UT Knoxville's main campus, has been in operation since 2024. The program offered, a Master of Science in Industrial Engineering, has been offered at another off-campus instructional site, the UT Space Institute in Tullahoma, TN for some time. The program at ORETTC is staffed by full-time faculty and adjunct faculty with connection to the US Department of Energy Y-12 National Security Complex (Y-12) and Oak Ridge National Laboratory (ORNL), who are overseen by the Department of Industrial and Systems Engineering (the department).

Faculty teaching at this site are supervised and evaluated alongside faculty working at the main campus and at other off-campus sites.

b. Demonstrating how the institution will have academic assessment and evaluation processes that include the regular and robust assessment and evaluation of each of the institution's off-campus instructional sites / additional locations.

The institution's annual program assessment of student learning outcomes is coordinated through the Department of Institutional Effectiveness, which works with program faculty to develop appropriate outcomes, measures, and to interpret results for continued program improvement. The department conducts an annual meta-assessment review and prepares a report, which is shared with faculty and administration. Student assessment of all academic courses and instructors is accomplished using end of course evaluations.

Learning outcomes for students enrolled in the MS in Industrial Engineering program cohort at the Oak Ridge Enhanced Technology and Training Center (ORETTC) are the same as for the institution's campus-based and online classes. All results are included in the annual assessment report for the degree program. Course evaluations address topics such as quality of instruction, adequacy of facilities, adequacy of library resources, technology, and faculty availability (outside of class time). The evaluation instrument is the same for all locations and methods of delivery.

c. Demonstrating how the institution will engage in ongoing and thorough long-range planning processes for expansion of instructional and other services to off-campus instructional sites / additional locations.

The institution currently holds classes in the new ORETTC building, which opened in January 2023. The ORETTC building is 43,000 square feet and will be ideal for future program expansion. Owned by Roane County and leased by government contractor Consolidated Nuclear Security (CNS), the site also features a 40,000-square foot Emergency Response Training Facility (ERTF), a state-funded facility to train first responders for high-consequence alarm response scenarios. A 35,000-square foot Simulated Nuclear & Radiation Activities Facility (SNRAF) is in construction next to the ERTF. The SNRAF will allow for practical application of the training received at the ERTF.

d. Demonstrating financial resources and financial stability by submitting for review the institution's two most recent financial statement audits.

The 2024 financial statement audit can be found in Appendix A. The 2023 financial statement audit can be found in Appendix B.

Note: As part of the extensive review, the SACSCOC Board of Trustees will review the institution's audits and SACSCOC financial responsibility score based on financial data submitted by the institution as part of its annual financial profile. If it is not satisfied with the institution's financial stability, the SACSCOC Board of Trustee may deny approval.

Provide Common Content A – Background and Context, relative to the proposed change.

A list of programs offered by the institution (excerpt from the catalog or a printout of a webpage is acceptable).

The catalog information for programs in the Tickle College of Engineering can be found in Appendix C.

Abstract (one page maximum)

a. Briefly describe the proposed change to include the intended implementation date.

The Oak Ridge Enhanced Technology and Training Center (ORETTC), which is not a branch campus, hosts classes for the MS in Industrial Engineering on Fridays, as employees working at Oak Ridge National Laboratory (ORNL) and the Y-12 National Security Complex may choose to work a 4-10 schedule that allows them time to attend classes on Fridays. The institution's online resources are sufficient to support the site, and faculty from the main campus and some currently (or previously) working for the government organizations, teach the courses. The students have access to all library and research materials at the institution's main campus (30 minutes away) and online.

The Y-12 National Security Complex is a premier manufacturing facility dedicated to making our nation and the world a safer place and plays a vital role in the Department of Energy's Nuclear Security Enterprise. Y-12 retrieves and stores nuclear materials, fuels US naval reactors, and performs complementary work for other government and private-sector entities. Since 1943, Y-12 has played a key role in strengthening our country's national security and reducing the global threat from weapons of mass destruction. Y-12 has evolved to develop innovative solutions in manufacturing technologies, prototyping, safeguards and security, technical computing and environmental stewardship.

Oak Ridge National Laboratory is the world's premier research institution, empowering leaders and teams to pursue breakthroughs in an environment marked by operational excellence and engagement with the communities where we live and work. ORNL delivers scientific discoveries and technical breakthroughs needed to realize solutions in energy and national security and provide economic benefit to the nation. ORNL advances the science behind national security by applying unique expertise, capabilities, resources, and facilities to solve critical scientific challenges in cybersecurity, nuclear security, and human security.

b. Provide projected number of students, if applicable.

Currently, there are 66 students enrolled in the program at the ORETTC. The existing 33-credit hour MS in Industrial Engineering has been offered to two cohorts per year since 2011. To date, the program has completed 11 cohorts with 181 graduates.

c. Indicate the projected life of the change, as applicable: one-time/limited duration or ongoing).

The Oak Ridge Enhanced Technology and Training Center site is ongoing with a new cohort starting every fall so that two cohorts are active at any time.

d. Describe the primary target audience or market.

The department is invited to hold information sessions on-site at ORNL and Y-12 to recruit students for the program. Most students who attend classes at the Oak Ridge Enhanced Technology and Training Center are Y-12 and ORNL employees, with some additional US Department of Energy employees and others from the Oak Ridge area, as well. The Y-12 contractor CNS reimburses its employees directly for tuition and fees.

e. Describe the strengths of the institution to undertake the change.

The University of Tennessee, Knoxville currently operates off-campus instructional sites in two locations. The UT Space Institute, located at 411 B.H. Goethert Parkway, Tullahoma, TN 37388, has been in operation since 1964, offering various engineering programs including the MS in Industrial Engineering. And, the College of Social Work has operated in Nashville, TN at 193 Polk Avenue, offering several programs since 1951. The institution's ability to support sites is well documented.

Describe how the need for the change was determined and how the change was approved by the institution.

In preparation for reaffirmation this year, we discovered that the MS in Industrial Engineering was being offered at an off-campus instructional site in Oak Ridge (the Glazer Building). The program began in fall 2011, as a workforce development program for US Department of Energy employees. Most students who attend these classes are Y-12 and ORNL employees, with some additional US Department of Energy and others from the Oak Ridge area enrolling, as well. The program grew and, before we could seek approval of the Glazer Building site, was relocated in spring 2024, to ORETTC (also in Oak Ridge). The program's existence was hidden due to a coding error, which came to light this last year. Since the discovery, we have secured approval from the institution's Board of Trustees and the Tennessee Higher Education Commission (THEC). We are submitting the approval documentation as part of this prospectus.

The MS in Industrial Engineering is offered in Oak Ridge due to the presence of the organizations in that area. The rise in demands for an advanced degree not based on want but need to stay competitive in a tough job market has also created a need for on-site extended degree programs. Administrators at the US Department of Energy contractor Consolidated Nuclear Security (CNS) identified a need to develop its future workforce locally, rather than hiring employees from out of state. The program is structured to serve the non-traditional student while creating value for their organization. The organization benefits almost immediately because the project-based learning structure has a direct value cost saving metric attached to it.

Describe how the change is consistent with the mission and goals of the institution.

The mission of UT Knoxville is “We are a diverse community with a shared commitment to discovery, creativity, learning, and engagement. At UT Knoxville we:

- **Empower** learners of all ages and backgrounds to achieve their dreams through accessible and affordable education and state-of-the-art research training opportunities.
- **Advance** the prosperity, well-being, and vitality of communities across Tennessee and around the world through our research, teaching, service, and engagement.
- **Commit** to excellence, equity, and inclusion within the university, across the state, and in all our global activities.”

This off-campus instructional site allows UT Knoxville to work toward advancing the prosperity, well-being, and vitality of communities across Tennessee and around the world through our research, teaching, service, and engagement. Further, this off-campus instructional site provides UT Knoxville the opportunity to embody the modern R1 land-grant university and engage in conducting research that makes life and lives better, addressing two goals of the institution’s strategic vision.

Provide documentation of faculty involvement in the planning and approval of the change.

While we have no documentation of planning and approval, the academic department head staffs the classes from full-time faculty and adjunct faculty with connections to the US Department of Energy contractors. The courses are included in all student learning outcomes assessment efforts.

Provide evidence of legal authority for the change if approval is required by the governing board or the state.

The US Department of Energy works in cooperation with UT Knoxville to allow student recruitment on-site at ORNL and Y-12 locations. The ORETTC facility was constructed outside of the secured US Department of Energy sites in Oak Ridge as an integrated security campus so that the community can access the facility. The Oak Ridge Enhanced Technology and Training Center (ORETTC) was approved by the UT Board of Trustees on February 27, 2025 (Appendix D) and by the Tennessee Higher Education Commission (THEC) on May 16, 2025 (Appendix E).

Describe the educational program(s) to be offered at the site. If a program to be offered at the site is a new program requiring approval, also provide the prospectus information for New Program – Approval.

The Master of Science degree in Industrial Engineering is a 33-credit hour program with a thesis option and a capstone project option. A student who chooses the thesis option must be registered for IE 500 each semester, during the time work on the thesis is in progress, with a minimum of 3 hours the semester in which the thesis is accepted by the Graduate School. A total of six hours of IE 500 is required for the thesis option. After receiving the master’s degree, a student is no longer permitted to register for IE 500.

The capstone project is a 3-credit hour project that emphasizes the integration of theory, concepts, and procedures in several areas of industrial engineering, including, but not limited to, engineering economy, inventory and production control, operations research, and manufacturing processes. The student's creativity and ability to apply this material will be of fundamental importance to succeed in this course.

Provide documentation of approval to operate in the state where the site is located if the site is outside of the state of the institution's main campus (in addition to the state approval evidence in Common Content A).

The Oak Ridge Enhanced Technology and Training Center is located within the state of Tennessee.

Provide the course schedule and course descriptions to be taught during the first year of operation; do not provide syllabi.

The MS in Industrial Engineering program is progress, and we have included the course schedule for the last two long semesters.

Semester	Courses
Spring 2025	IE 501 Capstone Project IE 515 Advanced Production and Inventory Systems IE 532 Systems Based Requirements Engineering IE 536 Project Management IE 542 Design of Experiments for Engineering Managers
Fall 2024	IE 516 Statistical Methods in Industrial Engineering IE 517 Reliability of Lean Systems IE 522 Optimization Methods in Industrial Engineering IE 527 Lean Production Systems IE 531 Systems Thinking and Modeling

IE 501 - Design Project (Capstone Project)

1-3 Credit Hours

Grading Restriction: Satisfactory/No Credit grading only.

Repeatability: May be repeated. Maximum 6 hours.

Comment(s): Enrollment limited to industrial engineering students in non-thesis option.

Credit Level Restriction: Graduate credit only.

Registration Restriction(s): Minimum student level – graduate.

IE 515 - Advanced Production and Inventory Systems

3 Credit Hours

Advanced topics in production planning and inventory systems. Material requirements planning; production planning and master scheduling; just-in-time concepts; distribution requirements planning; and other selected topics. *(RE) Prerequisite(s): 402 or consent of instructor.*

IE 516 - Statistical Methods in Industrial Engineering

3 Credit Hours

Application of classical statistical techniques to industrial engineering problems. Statistics and statistical thinking in managerial context of organizational improvement; descriptive statistics and distribution theory; relationship between statistical process control techniques and classical statistical tools; parameter estimation and hypothesis testing; goodness-of-fit testing; linear regression and correlation; analysis of variance; single and multiple factor experimental design. *Recommended Background: Statistics 251 or equivalent.*

IE 517 - Reliability of Lean Systems

3 Credit Hours

Course is divided into two major components. First half of the course will focus on introducing the students to the concepts of reliability and maintainability and the impact of lean on the reliability of complex systems. The concepts of reliability engineering are utilized to address lean system failures, including equipment failures, human failures, material failures and scheduling failures. Will develop the ability to design systems that are both lean and reliable. The second half of the course will introduce students to specific case studies of systems failures and ask student to develop solutions by considering different dimensions including financial, technical feasibility, risk, safety, security and others. Multi criteria decision making methodologies will be presented to allow students to make decisions when different criteria lead to conflicting solutions. *(RE) Prerequisite(s): 516. Recommended Background: Background in lean and reliability.*

IE 522 - Optimization Methods in Industrial Engineering

3 Credit Hours

Development and application of fundamental deterministic optimization methods including linear programming, dynamic programming, introductory integer programming, basic game theory, and classical optimization theory applied to constrained and unconstrained models. *Recommended Background: Linear Algebra.*

IE 527 - Lean Production Systems

3 Credit Hours

Strategies for planning, development and implementation of Lean. Emphasis on integration of people, technology, processes and information dimensions (including product development, production and extended supply chain) into unified frameworks. Applications will be implemented into industry with work to further develop lean principles. *(RE) Prerequisite(s): 515 or consent of instructor.*

IE 531 - Systems Thinking and Modeling

3 Credit Hours

Introduces students to a systems thinking approach to problem-solving. It provides students with the key concepts of systems thinking and theory. The students learn the importance of the identification of the elements of a system, their interconnectivity, stocks, feedback and balancing loops. Students also learn to model through an introduction to systems dynamics using causal loop diagrams, stock and flow diagrams, and simulation. Concepts studied include systems environment, boundaries, and the emergence of their hierarchical structure.

IE 532 - Systems Based Requirements Engineering

3 Credit Hours

Focus of this course is to help students develop a conceptual understanding of the systems engineering life-cycle process and familiarity with analysis techniques used in that process. We will discuss systematically establishing, defining and managing the requirements for complex and changing systems from a technical and administrative perspective. We address the techniques used to capture, validate and understand all requirement specifications at all stages of a systems life cycle. Introduction to process design, with an emphasis in the requirements stage. *(RE) Prerequisite(s): 531.*

IE 536 - Project Management

3 Credit Hours

Development and management of engineering and technology projects. Project proposal preparation; resource and cost estimating; and project planning, organizing, and controlling: network diagrams and other techniques. Role of project manager: team building, conflict resolution, and contract negotiations. Discussion of typical problems and alternative solutions. Case studies and student projects. *Recommended Background: Graduate standing in Engineering or Business.*

IE 542 - Design of Experiments for Engineering Managers

3 Credit Hours

Methodology for experiments in product, service, and process improvements. Factorial experiments, screening designs, variance reduction, and other selected topics for engineering managers. Taguchi philosophy and concepts. Optimization and response surface methods. Case studies. *(RE) Prerequisite(s): Industrial Engineering 516.*

Provide Common Content B – Faculty Qualifications, relative to the proposed change. All courses to be taught during the first year of operation must be assigned to at least one faculty member on the Faculty Roster.

Provide a completed Faculty Roster Form to include faculty members scheduled to teach in the proposed substantive change (program, site, arrangement, etc.). Follow the Faculty Roster Form Instructions which require the institution to demonstrate the qualifications of each faculty member to teach the courses assigned (refer to Standard 6.2a (faculty qualifications) of the Principles of Accreditation). Use the standard Faculty Roster Form and instructions; do not create a new form or format.

Include on the Faculty Roster Form all faculty members for the courses to be taught; do not include historical teaching assignments unless they are also to be taught in the proposed change.

- a. For a program: list the faculty members for all courses in the curriculum; exclude general education courses, if applicable, unless the general education curriculum is the substantive change being submitted for review.**
- b. For an off-campus instructional site: list the faculty members for all courses to be taught at the site for the first 12 months of operation.**

The ORETTC site is currently in operation, therefore, the Faculty Roster Form for the MS in Industrial Engineering program at the site includes faculty who taught in the last two long semesters (see Appendix F). There are six faculty members teaching in Oak Ridge for the MS in Industrial Engineering program. Two faculty members are employed by the institution in a full-time capacity; four faculty members are employed by the institution in a part-time capacity. The full-time faculty members engage in scholarship and research contributing to the field of Industrial Engineering. Three of the faculty members teaching in Oak Ridge hold terminal degrees in Industrial and/or Systems Engineering. Other faculty members hold master's degrees in engineering fields and have extensive professional experience qualifying them to teach for the program.

Referring to Standard 6.2a (faculty qualifications):

- a. For a program: demonstrate the institution has at least one faculty member qualified in the discipline to develop the curriculum and/or teach in the program.**
- b. For a site: demonstrate the institution has at least one faculty member qualified in the discipline to teach at the site.**

Provide narrative with supporting evidence to demonstrate the number of full-time faculty members will be adequate to support the proposed change. In addition to at least one faculty member qualified in the discipline, include any to-be-hired faculty members, if applicable, on the Faculty Roster Form (e.g., "To-be-hired #1," "To-be-hired #2," etc.) with the expected qualifications for teaching the courses assigned. Describe the impact on faculty workload of the proposed change.

For a graduate program,

- a. demonstrate scholarship and research capability of faculty members teaching in the program and**
 - b. if applicable, document faculty experience in directing student research or creative work (always applicable for doctoral programs).**
- **Tom Berg's** professional experience has focused on transitioning technology from research to applied use, managing applied research and development programs and building university and private sector partnerships for the accelerations of the advancement of technology. His academic interests are on the application of engineering in support of nursing, specifically he is interested in computer modeling of complex adaptive systems to develop comprehensive understanding high consequence systems (e.g. healthcare operations) behavior.
 - **Daniel J. Linehan** has worked for over 30 years in private industry as an Engineering Manager, at Oak Ridge National Laboratory as a Program Manager, and within the NSE primarily at Y-12 in Oak Ridge, TN and Pantex in Amarillo, TX in a variety of technical and management roles including as Director of weapons Life Extension Programs and as Senior Director. Mr. Linehan has taken this extensive experience and built real-life examples into his lectures to provide students with work-related applications related to requirements management, engineering economy, and systems dynamics modeling. As a result, students can more readily relate to and apply theory learned in the classroom to their work environments, providing benefits back to their employer and the broader community.
 - **Craig Stevens** has developed numerous models and written books and papers on management subjects. He is a trainer/facilitator of Project Management, Lean Six Sigma, and Customer Service for Westbrook Stevens LLC, the American Management Association International (AMAI), Padgett Thompson, and VMEdU (ScrumStudy, PMStudy, 6sigmaStudy, MSSudy). He has worked as a consultant for over 100 different organizations in 25 states for US DOD, US DOE, NASA, Lockheed Martin, Westinghouse, DuPont, and others). Mr. Stevens has worked in every layer of an organization and in several industries (Healthcare, Agriculture, Government, Manufacturing, Hospitality, Scientific Research, Energy, Real Estate Investing and Construction, Waste Management and Environmental Restoration, and Not-For-Profits). He also worked as a senior project manager in the PMO for a major healthcare organization where he implemented both BA and PM best practices. He was the Manager for the Process Improvement Program for HCA Physician Services, where his CIPp Team developed the CPI/Lean/Six Sigma program for roughly 800 practices.
 - **John Kobza** joined the University of Tennessee as Department Head of Industrial and Systems Engineering in 2013. His research interests include modeling, analyzing and designing systems involving uncertainty and risk, such as security systems, manufacturing systems and communication networks. He is a member of Sigma Xi, Alpha Pi Mu, INFORMS, IISE, and a registered professional engineer in the state of Texas.
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- **Joseph Boudreaux** has over 38 years of maintenance, engineering and project management experience in the performance of operations, construction, maintenance, decontamination and dismantlement (D&D) activities at radiological and hazardous facilities. He is certified as a project management professional and has been part of the CNS team since 2001, working as a Project Engineer, Project Manager, Master/Strategic Planner, and Senior Director of Reliability Engineering. Mr. Boudreaux provides coaching and classroom instruction for continuous improvement, leadership, maintenance and reliability basics and provides coaching and mentoring for new leaders and supervisors. He has developed curriculum for introduction to reliability concepts, project/program development and implementation.
- **Gary Null** is the Assistant Department Head for Undergraduate Affairs and Assistant Professor of Practice in the Department of Industrial and Systems Engineering at the University of Tennessee Knoxville. He has spent over 30 years working in leadership roles within the government and private industry. He has also held positions in the areas of Plant and Production Management, and Business Capture Management in private industry. He is a certified Lean Six Sigma Master Black Belt, serving in this position in the government and private industry. Prior to joining UT, he taught various MBA, quantitative studies, operations management and engineering courses, as well as Lean Six Sigma black belt, green belt and transactional project leader courses of instruction. He is also a Design Thinking course facilitator and coach. He is a member of IISE and ASEM, and a registered professional engineer in the state of California.

Provide Common Content C – Resources, relative to the proposed change.

Library and Learning/Information Resources

1. **List and describe discipline-specific learning resources to support a new program. Do not list all library resources; include only those related to the proposed change. If electronic databases are listed, describe the discipline-specific suites of resources rather than the name only of the database or the consortium through which it is accessed (Such as Galileo, Louis, TexShare, Viva, etc.).**

No new library resources will be needed for the site. UT Libraries has a dedicated subject librarian for Engineering. Discipline-specific suites of resources listed in the Engineering LibGuide (see Appendix G) include AccessEngineering, APA PsycINFO, Business Source Complete, Engineering Village: Compendex, Knovel, PubMed, Scopus, SpringerLink, and Web of Science.

2. **Document discipline-specific refereed journals and primary source materials. This is particularly important for graduate programs and especially important for doctoral programs.**

Students can utilize OneSearch to search journals by category on the UT Libraries website. There are 559 journals readily available in the “Industrial & Management Engineering” category. Further, OneSearch provides students with access to 74 e-journals in Industrial Engineering available through BrowZine. Students may also utilize Resource Sharing to borrow materials not available at UT Libraries.

- 3. Describe how students enrolled in a new program, at an off-campus instructional site, or in a distance education program can access discipline-specific library and learning/information resources.**

The institution's online resources are sufficient to support the site. The students have access to all library and research materials at our main campus (30 minutes away) and online.

- 4. Describe how students are made aware of library and learning/information resources available to them, how they can learn how to access the resources and are instructed in the use of online resources, as well as on-site library resources.**

Students are made aware of library and learning/information resources available to them during several orientation sessions (in presentation and distributed digital information), course syllabi, and individual course orientation.

- 5. Describe resources to support students in access to and use of library and learning/information resources.**

Students have access to UT Libraries digital databases and AskUsNow, where they can chat with a librarian or get information on how to otherwise connect with a librarian. They can also request materials through Resource Sharing.

Student Support Services

- 1. Describe specific programs, services, and activities which will support students enrolled in the new program and / or enrolled at a new off-campus site /additional location and / or enrolled in distance education programs. Do not list student support services which are not relevant to the specific change.**

No new student support services will be needed to serve these new locations. The students have access to all student support services at our main campus (30 minutes away) and online, including academic tutoring, disability services, Center for Career Development, and personal counseling.

Physical Resources

- 1. Describe the adequacy of physical facilities which will support the change.**

The Oak Ridge Enhanced Technology and Training Center is 43,000 square feet, with ample space available for classes. Four 25 x 25-foot classrooms are utilized by the program (room numbers 163, 164, 167, and 168). Each classroom has a capacity of 100 people.



Image: Oak Ridge Enhanced Technology and Training Center (ORETTC), Oak Ridge, Tennessee

2. Describe equipment which will be available for a new program or available at a new site.

In the Oak Ridge Enhanced Technology and Training Center, each classroom has computer connectivity via HDMI to a series of 90-inch TV screens (one on each wall). Classrooms are also equipped with teleconferencing equipment including visual print positioning (VPP) camera, room microphone, and other expected presentation A/V.

3. Describe the impact that the proposed change will have on physical facilities and equipment for existing programs and services.

The ORETTC site will not have a substantive impact on existing programs and services, as this program has been offered in Oak Ridge for over a decade and at this site since spring 2024.

Financial Resources

1. Describe in narrative the financial resources needed to initiate and provide on-going support of the proposed change.

The financial sources for this program are provided for directly from tuition funding. Tuition revenues are expected to increase as more students take advantage of the opportunity to complete more than 50% of the program in Oak Ridge. Revenues could potentially reach over

\$1.1M with program administration, faculty, and staff salary expenditures totaling as much as \$613,793. There are no budget resources directed to institutions or organizations for contractual or support services for the site.

Provide a budget for the first year of the proposed change. For a branch campus, provide a three- year budget. Do not provide an institutional budget.

The program has been operating at the Oak Ridge Enhanced Technology and Training Center since 2024. Below, please find a budget for FY 2025-26.

	FY25 Total Projected revenue; 66 students @ \$9,000			
	Fall semester	Spring Semester	Summer	Total
Tuition	378,444.00	378,444.00	-	756,888.00
Differential Tuition	69,498.00	69,498.00	-	138,996.00
Program fee	146,058.00	146,058.00	-	292,116.00
Total	594,000.00	594,000.00	-	1,188,000.00
	FY25 ISE Projected revenue; 66 students @ \$9,000			
	Fall semester	Spring Semester	Summer	Total
Tuition (42.5%)	160,838.70	160,838.70	-	321,677.40
Differential Tuition	-	-	-	-
Program fee	146,058.00	146,058.00	-	292,116.00
Total	306,896.70	306,896.70	-	613,793.40
	FY25 ISE Projected expenditures			
	Fall semester	Spring Semester	Summer	Total
Program Management	66,667.00	53,333.00	40,000.00	160,000.00
Instructors/GRAs	84,250.00	84,250.00	-	168,500.00
Books, supplies, etc.	20,000.00	20,000.00	-	40,000.00
Other	15,000.00	15,000.00	5,000.00	35,000.00
Contribution to dept	100,979.00	109,314.00	-	210,293.00
Total	286,896.00	281,897.00	45,000.00	613,793.00

2. Include in the budget resources to be directed to institutions or organizations for contractual or support services for the proposed change.

UT Knoxville does not pay to utilize the Oak Ridge Enhanced Technology and Training Center, and no contractual or support services are in place for consideration. CNS/Y-12 leases the building and manages all building services.

3. Include projected revenues and expenditures and cash flow for the proposed change.

This is a fee-based program, with a cost of \$36,000 per student, or \$9,000 per semester over four semesters. CNS reimburses its employees directly for tuition and fees. Four instructors are utilized to support the program in Oak Ridge each year. Faculty who teach at the Oak Ridge Enhanced Technology and Training Center are compensated \$7,000 per course by the institution.

Current and future students may include US Department of Energy Y-12 National Security Complex currently employs approximately 4,700 individuals. 1,500 additional personnel on-site at Y-12 include employees of UT-Battelle, Science Applications International Corporation, UCOR, and WSI Oak Ridge. The US Department of Energy Pantex plant in Amarillo, Texas also employs approximately 4,200 individuals who may be interested.

4. Include a contingency plan should expected revenue does not materialize or should costs exceed estimates.

Most of the resources for the MS in Industrial Engineering program at the ORETTC are already in place. Enrollment projections are very conservative based on anticipated demand. The institution does not need to hire new faculty to support this location. Existing faculty will be able to support the needs of the site. Therefore, if enrollment numbers decline, the institution can scale back the number of sections offered at the site.

Provide Common Content D - Institutional Evaluation and Assessment Processes, relative to the proposed change.

1. Provide a brief description of institutional assessment processes.

UT Knoxville's annual assessment of student learning outcomes is coordinated through the Institutional Effectiveness Department (IE), and staff members work with program faculty to develop appropriate outcomes, measures, and to interpret results for continued program improvement. IE conducts an annual meta-assessment review and prepares a report, which is shared with faculty and administration. Student assessment of all academic courses and instructors is accomplished using online end-of-course evaluations. Results are available to administrators and are used in the promotion and tenure process.

2. Describe how the institution will incorporate the proposed change into the institution-wide assessment infrastructure and processes.

Learning outcomes for students enrolled in the MS in Industrial Engineering program Oak Ridge cohort are the same as for the institution's campus-based and online classes. All results are included in the annual assessment report for the degree program. Course evaluations address topics such as quality of instruction, adequacy of facilities, adequacy of library resources, technology, and faculty availability (outside of class time). The instrument used for these evaluations is the same for all locations and methods of delivery.
