

University System of Georgia Comprehensive Program Review

A. All Program Reviews

Please complete the following information. Note that the Degree/Major Name, Degree Acronym and the CIP Code MUST be the same as that listed in [Degrees and Majors Authorized](#). You will need Adobe Reader to view this file. (<http://www.adobe.com/products/acrobat/readstep2.html>)

Please complete the following information:

Institution Name

Southern Polytechnic State University

Date (MM/DD/YYYY)

02/25/2003

Degree/Major Name

Telecommunications Engineering Technology

Degree Acronym

TcET

CIP Code

150305

Degree Level

Bachelors

College/School/Division

School of Engineering Technology and Management

Department

Electrical and Computer Engineering Technology

Were other closely related programs reviewed as part of this program review? For example, if the BA and the BS with majors in Political Science are reviewed at the same time, provide that information.

- Yes [\[Click here if you selected this choice\]](#)
 No [\[Click here if you selected this choice\]](#)

Provide the names of these other programs so that we may connect these reviews.

Were external reviewers used to evaluate the results of the program's self-study?

- Yes [\[Click here if you selected this choice\]](#)
 No [\[Click here if you selected this choice\]](#)

If yes, please describe their role.

Technology Accreditation Commission/Accreditation Board for Engineering (TAC/ABET)

Year of Next Scheduled Program Review

Year

Accreditations Obtained (please spell out acronyms)

Technology Accreditation Commission/Accreditation Board for Engineering (TAC/ABET)

Year of initial accreditation or last program reaccreditation review

Year

Faculty Resources. Describe the faculty resources associated with this degree program by describing the faculty dedicated to the specific program, to the general education program, to services courses for other programs, etc. Include in your discussion the use of full-time and part-time faculty.

Full Time Faculty

All full-time faculty teaches major classes and some have research responsibilities.

Asgill, Austin B., Associate Professor	Ph.D., University of South Florida; M.Sc., University of Aston in Birmingham; M.B.A., Florida State University; B.Eng.(Hons), Fourah-Bay College, University of Sierra Leone; P.E., Florida.
Bachman, Charles L., Professor	M.Engr., Pennsylvania State University; M.S.E.E., University of Pittsburgh; B.S.E.E., Pennsylvania State University; P.E., Pennsylvania
Crimm, Lance C., Assistant Professor	M.S.E.E., Georgia Institute of Technology; B.E.E., Georgia Institute of Technology
Davis, Kim, Associate Professor and Program Head	M.S.E.T., Rochester Institute of Technology; B.E.E.T., Southern Polytechnic State University; P.E., California
Dreyer, Robert N., Professor	M.S.E.E., University of Michigan; B.S.E.E., Northwestern University
Fallon, Thomas, Associate Professor	M.S.E.E., Georgia Institute of Technology; B.S.E.E., Georgia Institute of Technology

Frinzi, Pamela S., Associate Professor	M.S., Southern Polytechnic State University; B.S., Southern Polytechnic State University
Hodges, William R., Associate Professor	M.S.E.E., Georgia Institute of Technology; B.E.E., Georgia Institute of Technology; P.E., California
Jenkins, L. Brent, Assistant Professor	M.S.E.E., Georgia Institute of Technology; B.S.E.E., University of Missouri – Rolla
Thain, Walter E., Jr., Associate Professor	Ph.D., Georgia Institute of Technology; M.S.E.E., Georgia Institute of Technology; B.E.E., GIT
Tippens, Scott J., Associate Professor	M.S.E.E., Georgia Institute of Technology; B.E.E., Georgia Institute of Technology
Wagner, Jeff H., Assistant Professor	M.S.E.E., Georgia Institute of Technology; B.S.E.E., Georgia Institute of Technology
Wilcox, Daren R., Assistant Professor	M.S.E.E., University of Central Florida; B.S.E.E., University of Central Florida
Wilson, Julian A., Jr., Professor	M.E., Clemson University; M.B.A., Georgia State University; B.E.E., Georgia Institute of Technology
Zia, Omar, Professor	Ph.D., Warsaw Technical University; M.S.E.E., Warsaw Technical University; B.S.E.E., Warsaw Technical University; P.E., California, Oregon, Georgia

Part-time Faculty

All part-time faculty teaches major classes

Currie, Nicholas C.	M.S. Electrical Engineering, Georgia Institute of Technology B.S. Physics, Georgia Institute of Technology
Donehoo, Sheila	M Engr, North Carolina State University BSEET, Southern Polytechnic State University BS Biology, University of North Carolina at Chapel Hill
Larisch, Scott	MSEE, University of Southern California BSEE, University of Colorado at Boulder
Low, Steven W.	M.E.E. Communication Engineering, George Washington University B.E.E. City College of New York
Tadayon, Mo	MSEE, Penn State University BEE, Youngstown State University
Thomas Jr., Donald	PhD EE, University of California MSEE, University of California BSEE, Howard University
Wilson, Stevie E.	BEET, Southern Technical Insitute ASE, Middle Georgia College

For more information on this program review, contact

Name

Title

Phone

Email

Was this review...

Scheduled? [\[Click here if you selected this choice\]](#)

Triggered? [\[Click here if you selected this choice\]](#)

B. Scheduled Reviews of Programs

Use the *Short Form*, and complete for each program undergoing review.

MAJOR FINDINGS AND RECOMMENDATIONS

Major findings should focus on relevant factors from the [Comprehensive Program Review Guidelines](#) in the Academic Affairs Handbook. Major findings and recommendations should address the quality, productivity and viability of this program. (limit to 1000 words)

Quality

The TCET program has a number of strengths. The ABET evaluation team for the Telecommunications Engineering Technology (TcET) program did not find any deficiencies, concerns or suggestions. They identified four areas judged as clearly exceptional:

1. “The curriculum is strong on theoretical and practical skills. Current technology is stressed in the program. Classroom observations and interviews of students confirm this.”
2. “All of the telecom core courses but one have an embedded lab component. These labs not only reinforce the theory learned in class, but provides the students a practical approach to learning technology.”
3. “Laboratory and computer facilities are modern and well maintained. This situation enhances learning opportunities and enriches their experiences.”
4. “Faculty are knowledgeable in their discipline, students appeared highly motivated and eager to learn.”

Part of the strength of SPSU’s TcET degree program is to produce graduates who possess the knowledge and skills necessary to compete successfully in today’s telecommunication industries, both national and international. The program is multidisciplinary in nature; it is comprised of both engineering technology and management components.

The engineering technology component imbues the student with a strong working knowledge and skill set geared towards all aspects of telecommunications: Local Area Networks (LAN), Wide Area Networks (WAN), Metropolitan Area Networks (MAN), network technologies, security strategies, network management, distributed applications, and so forth. The management component augments the technology component such that our graduates are capable of directing a group of professionals whose task it is to design, implement, and maintain telecommunications-based solutions; i.e. it provides a path of upward mobility within the industry. Several achievement metrics are employed in order to assess the program’s overall success and intermittent evaluation: quizzes, laboratory exercises, research assignments, term papers, departmental survey for graduates, and faculty-student interaction. The first four are standard metrics used to evaluate the effectiveness of program curricula. The telecommunications industry is very dynamic in nature and therefore our curriculum material and its effectiveness is measured analyzed and adjusted frequently to remain challenging, useful, and current.

As noted above, the faculty is a major strength of the program. Its broad background, depth of experience and dedication to the development and improvement of the program ensure the long-term success of the program and its graduates.

Our students are motivated, goal-oriented and generally well qualified. As we have increased the level of challenge to our students, they have risen to that challenge. Again, we can measure their success by their acceptance in industry and by the increasing numbers of them who are taking and passing the EIT exam.

Productivity

The ABET evaluation team identified two weaknesses for the Telecommunications Engineering Technology program.

1. "The library lacks sufficient periodicals and journals to support the Telecommunications Engineering program."
2. "A review of graduate transcripts have indicated students have met the minimum Basic Science and Math requirements (24 credits total) for this program. However, the current catalog (page 197) indicates that students should take 23 credits in this area."

Weakness number one has been corrected. We have supplied a list of additional periodicals and journals to the library. The library has purchased the additional publications and is available for student access.

Weakness number two is in the process of being corrected as we work on the new 2003-2004 catalog. The solution is a change in required coursework. Specifically, we will replace a three-hour accounting course (Acct 1101) with a three-hour MATH 2306, Differential Equations course. This will exceed the minimum hours requirement for the math and science areas.

Viability

Our goal is to prepare graduates for successful careers as Engineering Technologists capable of functioning in industry, government, and business. We strive for continuous improvement in two ways. First, our curriculum is up-to-date and includes the knowledge and skills required by industry. Second, our curriculum is continuously reviewed and the effectiveness of our teaching is assessed in light of feedback obtained from graduating students (exit interview), alumni and employers (regular questionnaires and surveys). Members of our Advisory Committee provide valuable input to the currency of our curriculum. At the same time they provide feedback as to the effectiveness of our teaching and curriculum. The committee is scheduled to meet at least once a year. Employers and our own alumni are another very valuable source of input and information. This input is collected from the surveys of the Career Services and also direct contact and surveys of our own faculty with employers and alumni.

The program objective is consistent with those of our institution, which is to produce graduates who:

- Possess the ability to communicate effectively in oral, written, visual and graphical modes in both interpersonal and group environments
- Have attitudes, abilities and skills required to adapt and adjust to rapidly changing technologies and a desire for life-long learning
- Demonstrate the ability to think critically and identify, evaluate and solve complex technical and non-technical problems
- Are prepared well in the fundamentals of their discipline for life-long learning
- Are provided with the necessary knowledge and skills to continue graduate studies.

Technical courses mix rigorous classroom instruction with a variety of laboratory experiences giving the hands-on experience necessary to perform the technical tasks required in industry. Advanced courses and technical electives provide technical depth and specialization. Every required and every technical elective ECET course, includes a three-hour laboratory each week except the Orientation course. A departmental

policy states that the laboratory portion of a course must be passed to obtain a passing grade for the course.

We are continuously reviewing the curriculum using the feedback from various surveys conducted by the department and the university. The end product is a strong curriculum that minimizes overlap and makes the transitions between courses and sequences of courses as smooth as possible.

C. Triggered Reviews of Programs

Use the *Long Form*, and complete for each program undergoing review.

Why was this program reviewed early? Briefly describe all that apply.

Low Enrollment

Few Graduates

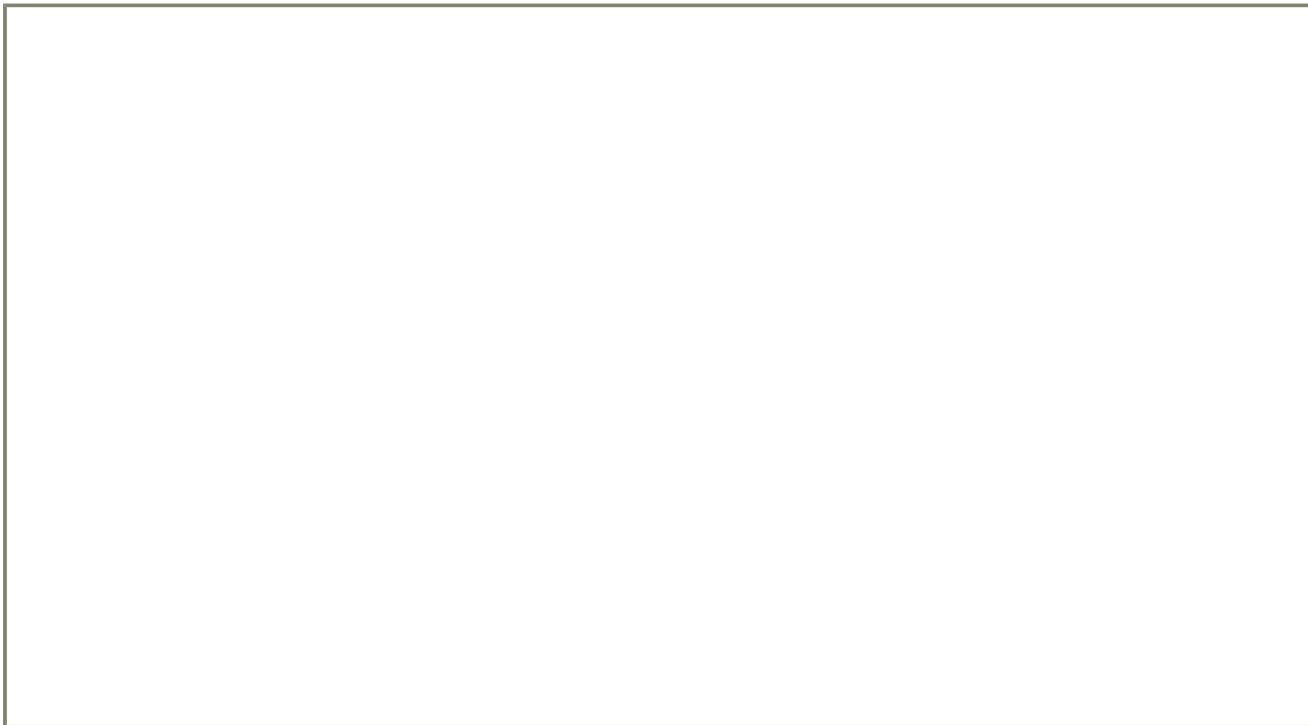
Low Pass Rates on Licensure Exams

Other (specify)

MAJOR FINDINGS AND RECOMMENDATIONS

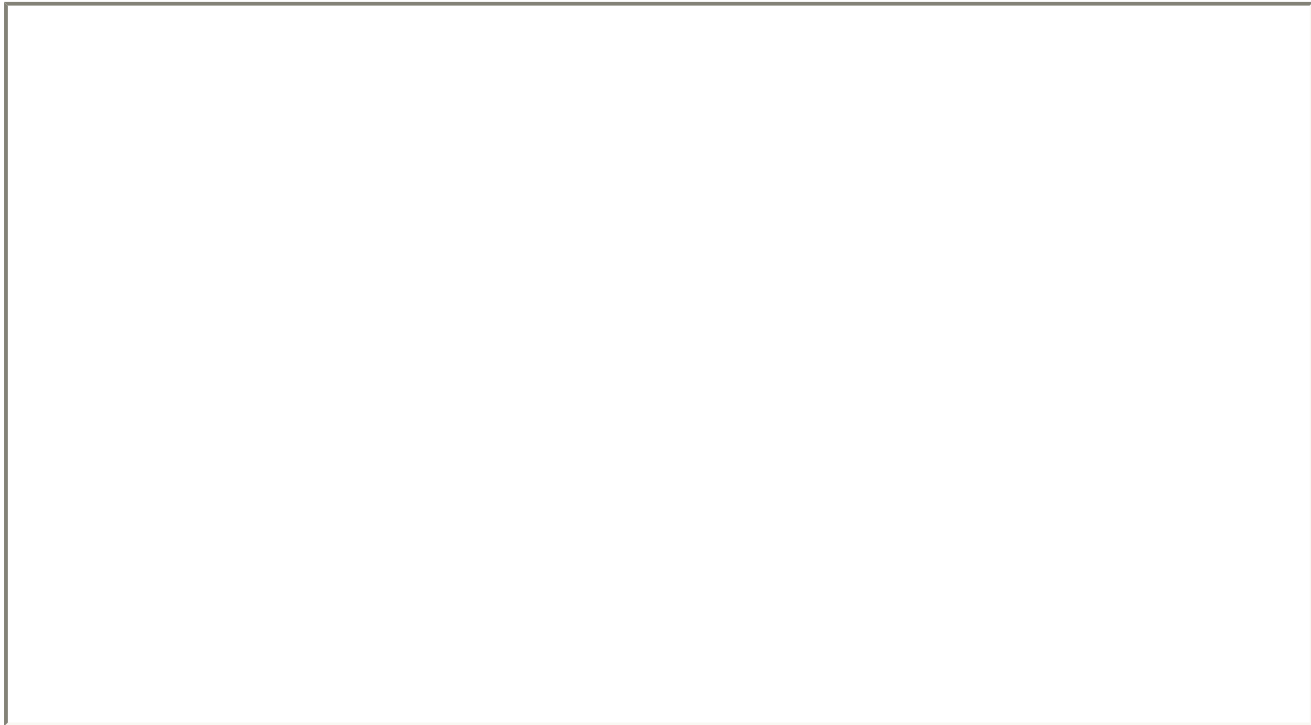
Quality

Major findings should focus on relevant factors from the [Comprehensive Program Review Guidelines](#) in the Academic Affairs Handbook [resources, such as faculty qualifications, faculty/student ratio, or the budget; program, learning, and service outcomes, such as the success of graduates, faculty scholarly productivity, or the assessment of student learning outcomes; and processes, such as review of the curriculum]. What is the quality of this program? Why? (limit to 750 words)



Productivity

Major findings should focus on productivity factors (enrollment and graduates). If the program is continued, what will be done to enhance productivity? (limit to 650 words)



Viability

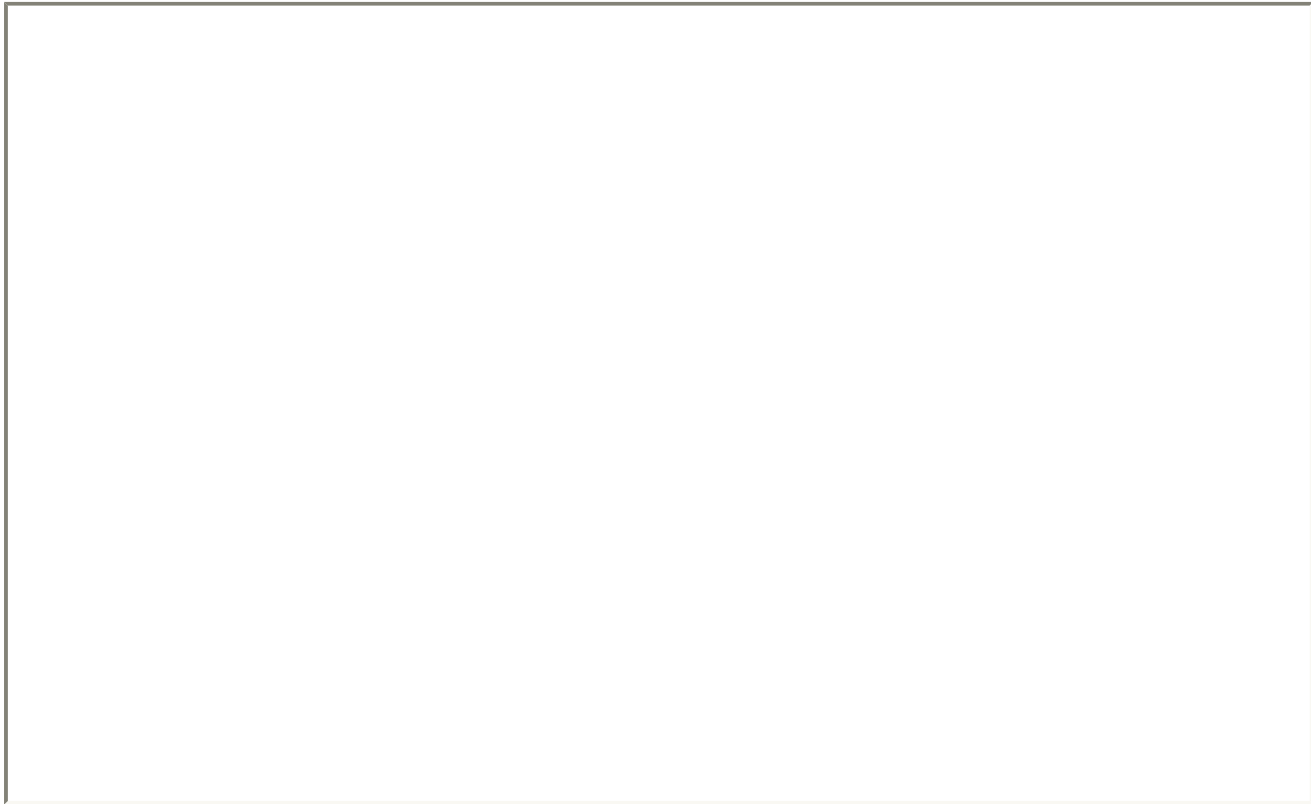
Recommendations on whether the program should be continued as is, continued and improved (enhanced, expanded, curtailed, or consolidated) or eliminated, addressing major questions:

A. Continue and strengthen the program

Should the program be continued as a separate degree program? If continuation is recommended provide sound and compelling reasons that reference

- Program centrality to the college or university's mission
- Program history of student demand and productivity over the last ten years
- Duplication of courses with other programs
- Distinctiveness of the program

If the recommendation is to continue the program, how will it become more productive? What actions will be taken to strengthen the program and make it more productive? How will funding be obtained to strengthen the program? Should the program be consolidated or merged with other existing programs? Which ones and why?

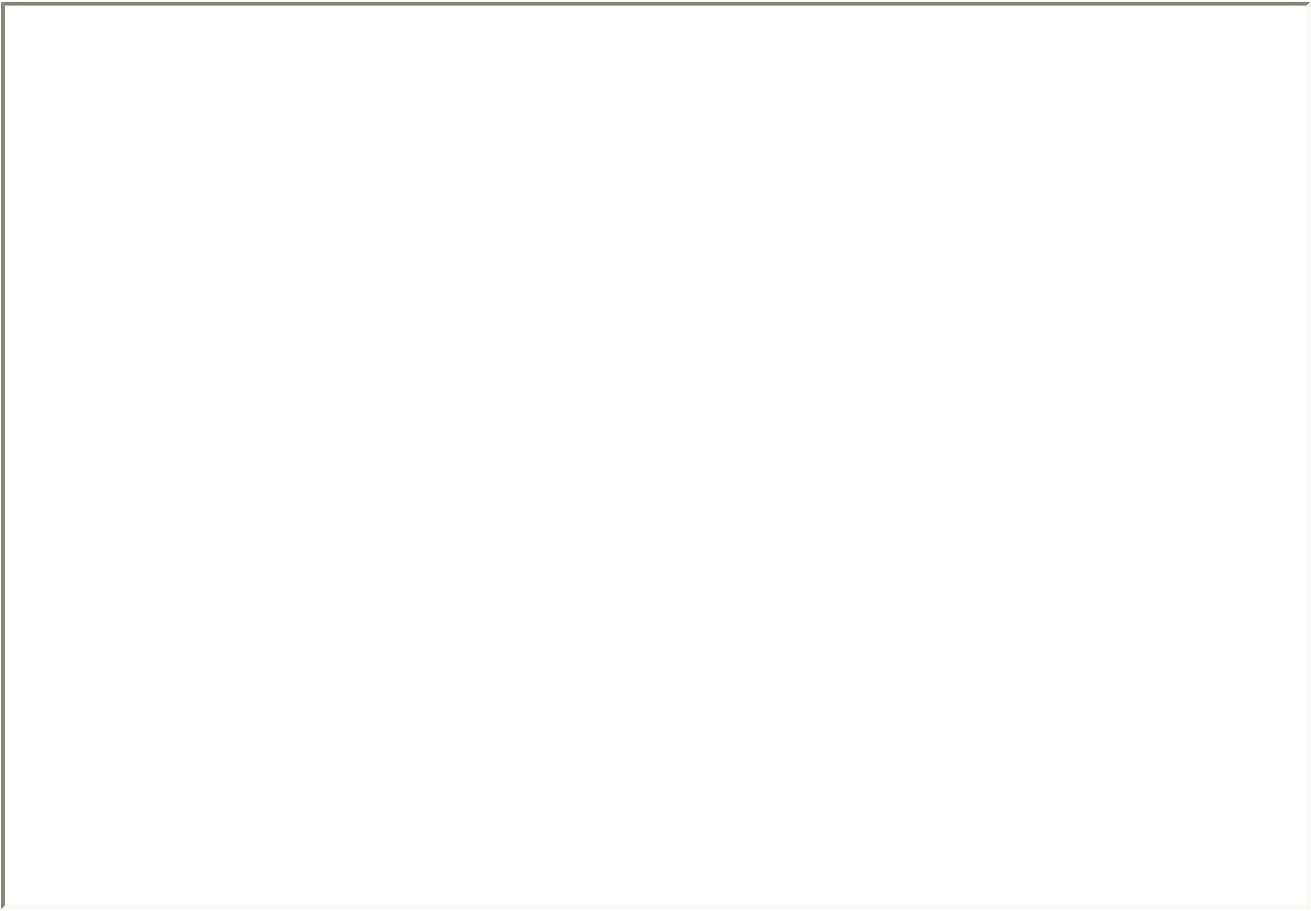


B. Discontinue the program

Should the program be discontinued as a separate degree program? If discontinuation is recommended provide sound and compelling reasons that reference

- Program centrality to the college or university's mission
- Impact on this or other departments or programs if the program under review is eliminated

If the recommendation is to discontinue the program What would be the timetable for discontinuation? Would there be any savings of funds or resources? How would those funds be reallocated?



Please use the Print button on your browser to print a copy of this form before submitting.