

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

Electrical Engineering Technology

Degree Acronym

EET

CIP Code

150303

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 Institute 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 EET program has a number of strengths. The ABET evaluation team for the Electrical Engineering Technology program did not find any deficiencies, weaknesses or concerns. They identified four areas judged as clearly exceptional:

1. “The Electrical Engineering Technology program has a strong, diverse faculty. The program faculty have a wide range of backgrounds and technical interests. They have strong industry contacts and continue their professional development in spite of reduced funding for faculty development. All are available to students and are concerned about the students and their education.”
2. “There is a significant amount of writing required in the Electrical Engineering Technology program. The technical writing course, ENGL 2010, provides the student with instruction in document design, technical memos, technical style, graphics, technical manuals, and oral presentation. This information is then utilized throughout the course work in the program. All laboratories require extensive formal reports and in several courses projects with formal reports. All report work is graded by the faculty not only for technical content but also for grammar and writing style. By the time the student completes the Electrical Engineering Technology program, they have been exposed to a significant writing experience which will help them in their career as they move into the industrial environment.”
3. “Public speaking has been incorporated into technical coursework in the Electrical Engineering Technology program. Numerous laboratories and projects in technical course work require oral presentation of project results at the end of the course. It is apparent from the videotapes provided to the evaluation team that students are comfortable speaking before their peers. Oral communication learned in technical course work will help students prepare for the numerous opportunities to speak before others in industry.”
4. “The display materials for the Electrical Engineering Technology program provided to the evaluation team were substantial. Each technical course was represented with a variety of student work including homework, exams, quizzes, laboratory reports, project reports, physical samples of projects, and video tapes showing project oral presentation. Material provided in this fashion help the evaluator to review the program content, the effectiveness of the faculty, the quality and capability of students, and the integrated education experience provided to the student.”

Part of the strength of the ECET Department of Southern Polytechnic State University comes from its history as a pioneer and leader in the development of baccalaureate level programs in the field. Throughout this history we have maintained close contact with our industrial clients through our graduates and through the Industrial Advisory Committee. We feel that our curriculum has developed in a way that is consistent with the needs of the industries we serve. As evidence that we have been successful in meeting the needs of

industry, we note the ready employability of our graduates. Our placement experience continues to be very positive with graduates going to a wide range of industries at competitive salaries.

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.

Productivity

The ABET evaluation team identified only two suggestions for the Electrical Engineering Technology program.

1. "Enrollment in the Electrical Engineering Technology program has declined continuously from a peak of 1100 students in 1982 to 778 students in 1992, to 521 students in 1997, to 317 students in 2001. However, the current enrollment shows a slight increase to 336 students." "It is suggested that the program and the institution should prepare and implement an effective plan to recruit students into the program before enrollment becomes a critical issue."
2. "During discussions with members of the Electrical Engineering Technology program's Industrial Advisory Committee, it became apparent that research money is available from local industry. The industry representatives were frustrated because there was no apparent mechanism for industry to fund research within the program." "It is suggested that the institution develop a system to encourage and incorporate research activities from local industry into the program."

The Electrical Engineering Technology (EET) program has experienced an increase in student enrollment this year. However, we do not want to rely on the current slight increase as an indicator that enrollment will not continue to decline. It should be pointed out that the Computer Engineering Technology (CpET) program began in 1982. We had a good number of EET students migrate into the CpET program. In fact, the enrollment for the department, both programs together, remained well over 1000 student from 1982 through 1992.

The EET program will closely interact with SPSU's Enrollment Services, and establish new connections with SPSU's Extended University and Advancement Office to further assist in marketing plans. For example, the program has already met with the office of enrollment services and created a brochure for our programs. The brochure has been designed and is presently being printed. This tool will be very useful in recruiting efforts at high school, community colleges and technical colleges. Our faculty will also become active in supporting enrollment services in the areas of recruiting, attending college fairs and becoming involved in any other activities that may attract new students.

The program is involved in research activities, but we have experienced that there is not a mechanism in place for the administration to process and approve the necessary documentation. Therefore, faculty and industry partners get discouraged and find it nonproductive to pursue any such activities. The institution needs to develop, with program help, a system that will encourage and support industry and faculty research activities.

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.

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. It is departmental policy 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)

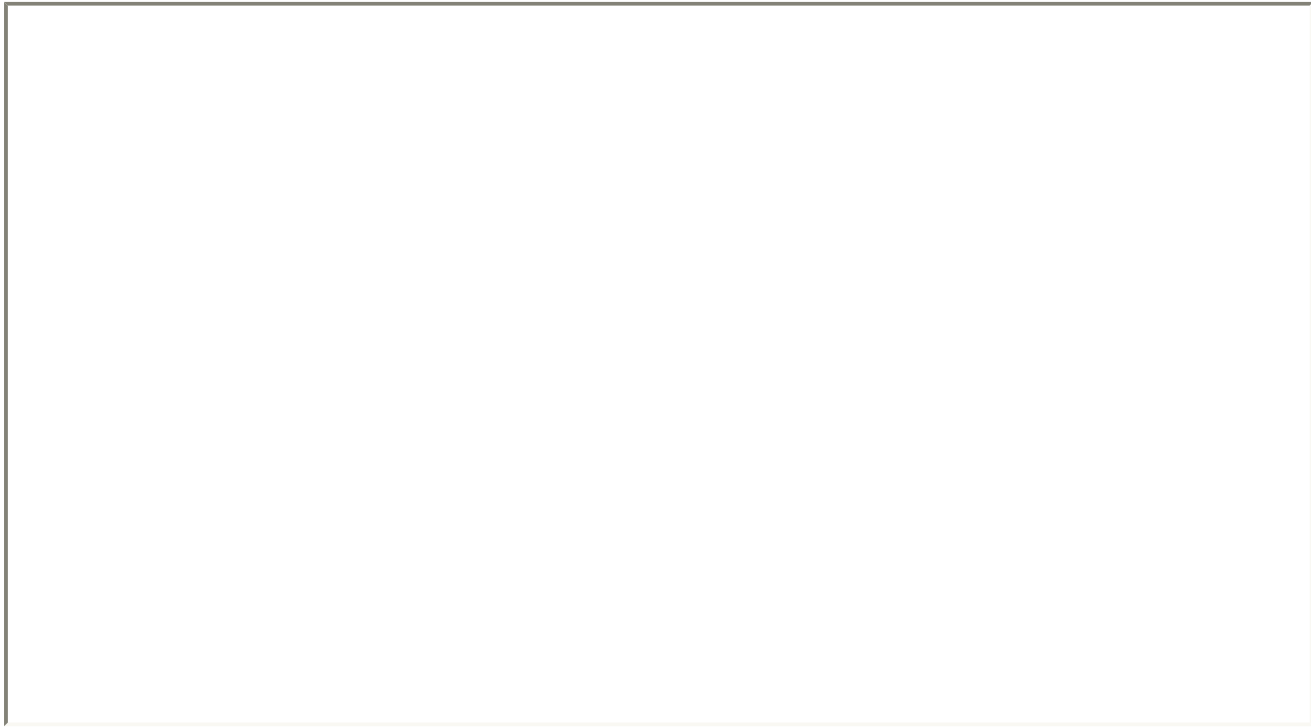
MAJOR FINDINGS AND RECOMMENDATIONS

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

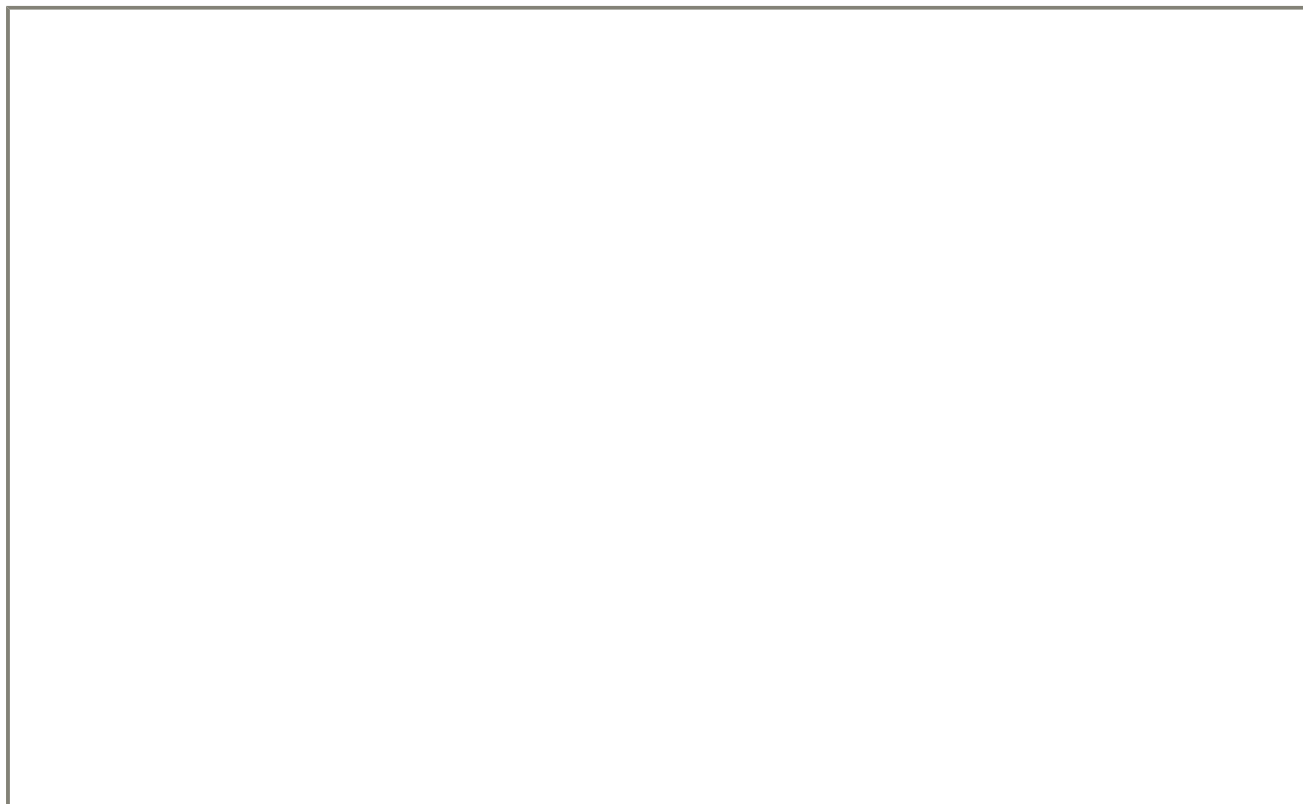
Recommendations on whether the program should be continued as is, continued and improved (enhanced, expanded, curtailed, or consolidated) or eliminated, addressing major questions:

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?

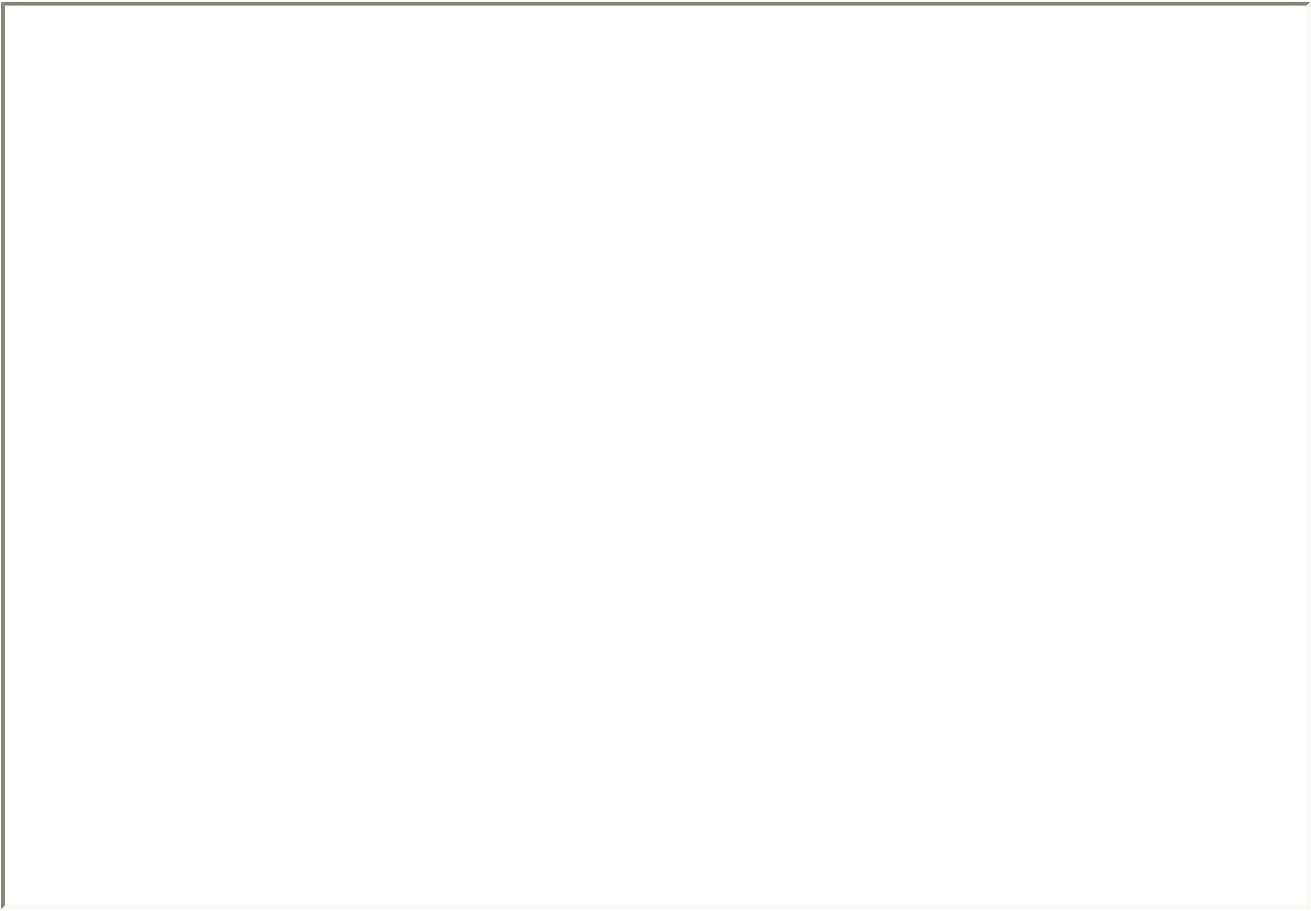


B. Discontinue the program

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?



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