

 <p>CARROLL COMMUNITY COLLEGE</p>	<p>COMPREHENSIVE ACADEMIC AFFAIRS PROGRAM REVIEW</p> <p>EXECUTIVE SUMMARY</p> <p>2021-2022</p>
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Complete Program Title Electrical Engineering			
Program Director/Coordinator Tricia Crossett			
Division Mathematics and Engineering	Division Chair Brianna McGinnis		
<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Type of Program Transfer Degree: <input type="checkbox"/> Associate of Arts (A.A.) <input type="checkbox"/> Associate of Arts in Teaching (A.A.T.) <input type="checkbox"/> Associate of Fine Arts (A.F.A.) <input type="checkbox"/> Associate of Science (A.S.) <input checked="" type="checkbox"/> Associate of Science in Engineering (A.S.E.) </td> <td style="width: 50%; vertical-align: top;"> Terminal Degree: <input type="checkbox"/> Associate of Applied Science (A.A.S.) Certificate: <input type="checkbox"/> Directed Technology Certificate <input type="checkbox"/> New Certificate Program within an Existing Degree Area <input type="checkbox"/> New Stand Alone Certificate </td> </tr> </table>		Type of Program Transfer Degree: <input type="checkbox"/> Associate of Arts (A.A.) <input type="checkbox"/> Associate of Arts in Teaching (A.A.T.) <input type="checkbox"/> Associate of Fine Arts (A.F.A.) <input type="checkbox"/> Associate of Science (A.S.) <input checked="" type="checkbox"/> Associate of Science in Engineering (A.S.E.)	Terminal Degree: <input type="checkbox"/> Associate of Applied Science (A.A.S.) Certificate: <input type="checkbox"/> Directed Technology Certificate <input type="checkbox"/> New Certificate Program within an Existing Degree Area <input type="checkbox"/> New Stand Alone Certificate
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Please provide the following information about the program based on the results of the Program Review. Use a bulleted format and do not exceed one page (front and back).

1. Synopses of the significant findings

- The program has gone through a major transition:
 - change in division and program leadership.
 - low enrollment leading to a revitalization plan.
 - new full-time program faculty member.
- Data shows that students who begin below Calculus I have a lower retention rate than those who start in the Calculus sequence.
- Enrollment increased during the pandemic; however, lab courses were not best suited for a remote setting, so the transition back to an in-person setting was a priority.
- Efforts are underway to incorporate the Virtual Reality Lab.

2. Strengths of the program

- Continued industry demand for electrical engineers.
- An active and supportive Advisory Board.
- Internship opportunities for students.
- Graduate success through and after transfer.

3. Weaknesses of the program

- 50% retention rate for students who start below Calculus I.
- Five or fewer graduates per year.
- Graduate diversity.

4. Plans for Improvement including timeline

- Increase internship opportunities in cooperation with Advisory Board. (completion Fall 2023).
- Develop an online network of engineering alumni to hear feedback and ideas for marketing. (completion Fall 2023).
- Marketing to increase enrollment and diversity. (completion Fall 2026).
- Develop a Precalculus cohort to increase retention. (completion Fall 2026).

5. Identification of weaknesses or deficiencies from the previous review and the status of improvements implemented or accomplished

- N/A (no previous review located).

6. Budget/position requests

- A larger engineering classroom, lab, and makerspace.
- Up-to-date lab equipment equivalent to that of transfer institutions.
 - Oscilloscope probes: \$930 once.
 - Components (IC chips/resistors, etc.): \$100/yr.
 - CircuitLab software: \$2,400/yr.
 - Oscilloscopes recalibrated: \$2,640/2-3 years.
- Maintain the full-time Electrical Engineering and Mathematics Faculty position.

Signatures

<u>Tricia Crossett</u>	<u>May 17, 2022</u>
Program Director/Coordinator	Date
<u>Brianna L. McGinnis</u>	<u>May 17, 2022</u>
Division Chair	Date
<u>Melody L. Moore, Ph.D.</u>	<u>May 19, 2022</u>
Associate Vice President for Program Development and Partnerships	Date