

# Electronics I

08/23/2022



## Program/Course Assessment - Electronic Engineering Technology (AS)

### ELET141N:Electronics I

| <i>Course Competencies</i>  | <i>Assessment Methods</i>   | <i>Results</i>   | <i>Use of Results</i>   |
|---|---|--|---|
| <b>1. Semiconductor Principles</b> - Define semiconductor principles and construct DC load lines and operating points for diodes, bipolar junction transistors (BJT's) and Field Effect Transistors (FET's).<br><b>Course Competency Status:</b> Active<br><b>Assessment Cycles:</b> 2017 - 2018 (Spring), 2018 - 2019 (Spring), 2019 - 2020 (Spring), 2020 - 2021 (Spring), 2021-2022 (Spring) | <b>Series of Assignments</b> - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL).<br><b>*Criterion:</b> Average of POL for all students >= 7.0 out of 10.0 | <b>Reporting Period:</b> 2021-2022 (Spring)<br><b>Result Type:</b> Criteria Met<br>Average of POL for all students = 7.13 out of 10.00 (05/31/2022)<br><b>Total # of Students Assessed:</b> 4<br><b>Related Documents:</b><br><a href="#">EET Assessment Report 5-31-22.docx</a><br><a href="#">ELET141N Section 1 Assessment Spring 2022.docx</a><br><a href="#">ELET141N Section 1 Grades Spring 2022.xlsx</a>   | <b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2022) |
|   |   | <b>Reporting Period:</b> 2020-2021 (Spring)<br><b>Result Type:</b> Criteria Met<br>Average of POL for all students = 8.21 out of 10.00 (05/31/2021)<br><b>Total # of Students Assessed:</b> 9<br><b>Related Documents:</b><br><a href="#">ELET141N Grades Spring 2021.xlsx</a><br><a href="#">ELET141N-1_S2021_Assessment.docx</a><br><a href="#">Electrical Engineering Technology May 31 2021 Assessment Report.docx</a><br><a href="#">ELET Assessment Meeting Notes 011421.pdf</a> | <b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2021) |
|   |   | <b>Reporting Period:</b> 2019-2020 (Spring)<br><b>Result Type:</b> Criteria Met<br>Average of POL for all students = 8.44 out of 10.00 (05/31/2020)<br><b>Total # of Students Assessed:</b> 12<br><b>Related Documents:</b>  | <b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2020) |

| Course Competencies  | Assessment Methods  | Results   | Use of Results   |
|--|---|---|--|
|  |   | <p><a href="#">ELET141N Grades Spring 2020.xlsx</a><br/> <a href="#">ELET141N-1_S2020_Assessment.docx</a></p> <hr/> <p><b>Reporting Period:</b> 2018 - 2019<br/> <b>Result Type:</b> Criteria Not Met<br/> Average of POL for all students = 6.82 out of 10.00 (05/31/2019)<br/> <b>Total # of Students Assessed:</b> 5<br/> <b>Related Documents:</b><br/> <a href="#">ELET141N Grades Spring 2019.xlsx</a><br/> <a href="#">ELET141N-1_S2019_Assessment.docx</a><br/> <a href="#">ELET141N-A_S2019_Assessment.docx</a></p> <hr/> <p><b>Reporting Period:</b> 2017 - 2018<br/> <b>Result Type:</b> Criteria Not Met<br/> Average of POL for all students = 6.93 out of 10.00 (05/14/2018)<br/> <b>Total # of Students Assessed:</b> 9<br/> <b>Notes:</b> more practice on load lines.<br/> <b>Related Documents:</b><br/> <a href="#">ELET141N-1 Grades Spring18.xlsx</a><br/> <a href="#">ELET141N-1_S2018_Assessment.docx</a><br/> <a href="#">ELET141N-A Grades Spring18.xlsx</a><br/> <a href="#">ELET141N-A_S2018_Assessment.docx</a><br/> <a href="#">ELET Assessment Meeting Notes 051418.docx</a></p> <hr/> <p><b>Reporting Period:</b> 2021-2022 (Spring)<br/> <b>Result Type:</b> Criteria Met<br/> 50.00% (05/31/2022)<br/> <b>Total # of Students Assessed:</b> 4<br/> <b># of Students Meeting Criteria:</b> 2<br/> <b>Related Documents:</b><br/> <a href="#">ELET141N Section 1 Assessment Spring 2022.docx</a><br/> <a href="#">ELET141N Section 1 Grades Spring 2022.xlsx</a><br/> <a href="#">EET Assessment Report 5-31-22.docx</a></p> | <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2019)</p> <hr/> <p><b>Use of Results:</b> See "Related Documents" under Results for more information. More practice on Load lines going forward (05/14/2018)</p> <hr/> <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2022)</p> |
| <p><b>2. Half-wave and Full-wave rectifiers</b><br/> - Identify and analyze half-wave and full-wave rectifier circuits as well as clippers, clampers, peak detectors and voltage multipliers.<br/> <b>Course Competency Status:</b> Active</p> | <p><b>Series of Assignments</b> - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL).<br/> <b>*Criterion:</b> 50% of students achieve &gt;= 7.0 out of 10.0</p> | <p><b>Reporting Period:</b> 2021-2022 (Spring)<br/> <b>Result Type:</b> Criteria Not Met<br/> Average of POL for all students = 4.93 out of 10.00 (05/31/2022)<br/> <b>Total # of Students Assessed:</b> 4<br/> <b>Related Documents:</b></p>   | <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2022)</p>   |

| Course Competencies  | Assessment Methods  | Results   | Use of Results  |
|--|---|---|---|
| <b>Assessment Cycles:</b> 2017 - 2018 (Spring), 2018 - 2019 (Spring), 2019 - 2020 (Spring), 2020 - 2021 (Spring), 2021-2022 (Spring) | <b>*Criterion:</b> Average of POL for all students >= 7.0 out of 10.0 | <a href="#">EET Assessment Report 5-31-22.docx</a><br><a href="#">ELET141N Section 1 Assessment Spring 2022.docx</a><br><a href="#">ELET141N Section 1 Grades Spring 2022.xlsx</a>  | <b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2021) |
|  |   | <b>Reporting Period:</b> 2020-2021 (Spring)<br><b>Result Type:</b> Criteria Met<br>Average of POL for all students = 7.78 out of 10.00 (05/31/2021)   |   |
|  |   | <b>Total # of Students Assessed:</b> 9<br><b>Related Documents:</b><br><a href="#">ELET141N Grades Spring 2021.xlsx</a><br><a href="#">ELET141N-1_S2021_Assessment.docx</a><br><a href="#">Electrical Engineering Technology May 31 2021 Assessment Report.docx</a><br><a href="#">ELET Assessment Meeting Notes 011421.pdf</a> |   |
|  |   | <b>Reporting Period:</b> 2019-2020 (Spring)<br><b>Result Type:</b> Criteria Met<br>Average of POL for all students = 7.41 out of 10.00 (05/31/2020)   |   |
|  |   | <b>Total # of Students Assessed:</b> 12<br><b>Related Documents:</b><br><a href="#">ELET141N Grades Spring 2020.xlsx</a><br><a href="#">ELET141N-1_S2020_Assessment.docx</a>  | <b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2020) |
|  |   | <b>Reporting Period:</b> 2018 - 2019<br><b>Result Type:</b> Criteria Met<br>Average of POL for all students = 7.01 out of 10.00 (05/31/2019)  |   |
|  |   | <b>Total # of Students Assessed:</b> 5<br><b>Related Documents:</b><br><a href="#">ELET141N Grades Spring 2019.xlsx</a><br><a href="#">ELET141N-1_S2019_Assessment.docx</a><br><a href="#">ELET141N-A_S2019_Assessment.docx</a>   |   |
|  |   | <b>Reporting Period:</b> 2017 - 2018<br><b>Result Type:</b> Criteria Met<br>Average of POL for all students = 7.21 out of 10.00 (05/14/2018)  |   |
|  |   | <b>Total # of Students Assessed:</b> 9<br><b>Related Documents:</b><br><a href="#">ELET Assessment Meeting Notes 051418.docx</a><br><a href="#">ELET141N-1 Grades Spring18.xlsx</a>   | <b>Use of Results:</b> See "Related Documents" under Results for more information. (05/14/2018) |

| Course Competencies   | Assessment Methods  | Results   | Use of Results   |
|---|---|---|--|
|   | <p><b>Series of Assignments</b> - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL).<br/> <b>*Criterion:</b> 50% of students achieve &gt;= 7.0 out of 10.0</p>         | <p><a href="#">ELET141N-1_S2018_Assessment.docx</a><br/> <a href="#">ELET141N-A Grades Spring18.xlsx</a><br/> <a href="#">ELET141N-A_S2018_Assessment.docx</a></p> <p><b>Reporting Period:</b> 2021-2022 (Spring)<br/> <b>Result Type:</b> Criteria Not Met<br/> 25.00% (05/31/2022)<br/> <b>Total # of Students Assessed:</b> 4<br/> <b># of Students Meeting Criteria:</b> 1<br/> <b>Related Documents:</b><br/> <a href="#">ELET141N Section 1 Assessment Spring 2022.docx</a><br/> <a href="#">ELET141N Section 1 Grades Spring 2022.xlsx</a><br/> <a href="#">EET Assessment Report 5-31-22.docx</a></p> | <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2022)</p> |
| <p><b>3. BJT and FET Devices</b> - Discuss the operation of the BJT and the FET including biasing them in various configurations and identifying saturation and cut-off points for a given bias.<br/> <b>Course Competency Status:</b> Active<br/> <b>Assessment Cycles:</b> 2017 - 2018 (Spring), 2018 - 2019 (Spring), 2019 - 2020 (Spring), 2020 - 2021 (Spring), 2021-2022 (Spring)</p> | <p><b>Series of Assignments</b> - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL).<br/> <b>*Criterion:</b> Average of POL for all students &gt;= 7.0 out of 10.0</p> | <p><b>Reporting Period:</b> 2021-2022 (Spring)<br/> <b>Result Type:</b> Criteria Not Met<br/> Average of POL for all students = 6.65 out of 10.00 (05/31/2022)<br/> <b>Total # of Students Assessed:</b> 4<br/> <b>Related Documents:</b><br/> <a href="#">EET Assessment Report 5-31-22.docx</a><br/> <a href="#">ELET141N Section 1 Assessment Spring 2022.docx</a><br/> <a href="#">ELET141N Section 1 Grades Spring 2022.xlsx</a></p>   | <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2022)</p> |
|   |   | <p><b>Reporting Period:</b> 2020-2021 (Spring)<br/> <b>Result Type:</b> Criteria Met<br/> Average of POL for all students = 8.45 out of 10.00 (05/31/2021)<br/> <b>Total # of Students Assessed:</b> 9<br/> <b>Related Documents:</b><br/> <a href="#">ELET141N Grades Spring 2021.xlsx</a><br/> <a href="#">ELET141N-1_S2021_Assessment.docx</a><br/> <a href="#">Electrical Engineering Technology May 31 2021 Assessment Report.docx</a><br/> <a href="#">ELET Assessment Meeting Notes 011421.pdf</a></p>   | <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2021)</p> |
|   |   | <p><b>Reporting Period:</b> 2019-2020 (Spring)<br/> <b>Result Type:</b> Criteria Met<br/> Average of POL for all students = 8.77 out of 10.00 (05/31/2020)<br/> <b>Total # of Students Assessed:</b> 12<br/> <b>Related Documents:</b></p>  | <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2020)</p> |

| Course Competencies   | Assessment Methods   | Results   | Use of Results   |
|---|--|---|--|
|   |  | <p><a href="#">ELET141N Grades Spring 2020.xlsx</a><br/> <a href="#">ELET141N-1_S2020_Assessment.docx</a></p> <hr/> <p><b>Reporting Period:</b> 2018 - 2019<br/> <b>Result Type:</b> Criteria Met<br/> Average of POL for all students = 8.12 out of 10.00 (05/31/2019)<br/> <b>Total # of Students Assessed:</b> 5<br/> <b>Related Documents:</b><br/> <a href="#">ELET141N Grades Spring 2019.xlsx</a><br/> <a href="#">ELET141N-1_S2019_Assessment.docx</a><br/> <a href="#">ELET141N-A_S2019_Assessment.docx</a></p> <hr/> <p><b>Reporting Period:</b> 2017 - 2018<br/> <b>Result Type:</b> Criteria Met<br/> Average of POL for all students = 8.31 out of 10.00 (05/14/2018)<br/> <b>Total # of Students Assessed:</b> 9<br/> <b>Related Documents:</b><br/> <a href="#">ELET Assessment Meeting Notes 051418.docx</a><br/> <a href="#">ELET141N-1 Grades Spring18.xlsx</a><br/> <a href="#">ELET141N-1_S2018_Assessment.docx</a><br/> <a href="#">ELET141N-A Grades Spring18.xlsx</a><br/> <a href="#">ELET141N-A_S2018_Assessment.docx</a></p> <hr/> <p><b>Reporting Period:</b> 2021-2022 (Spring)<br/> <b>Result Type:</b> Criteria Met<br/> 50.00% (05/31/2022)<br/> <b>Total # of Students Assessed:</b> 4<br/> <b># of Students Meeting Criteria:</b> 2<br/> <b>Related Documents:</b><br/> <a href="#">ELET141N Section 1 Assessment Spring 2022.docx</a><br/> <a href="#">ELET141N Section 1 Grades Spring 2022.xlsx</a><br/> <a href="#">EET Assessment Report 5-31-22.docx</a></p> | <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2019)</p> <hr/> <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/14/2018)</p> <hr/> <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2022)</p> |
| <p><b>4. BJT and FET Amplifiers</b> - Design BJT and FET amplifier networks and use decibels and Bode Plots to understand their Frequency Response.<br/> <b>Course Competency Status:</b> Active<br/> <b>Assessment Cycles:</b> 2017 - 2018</p> | <p><b>Series of Assignments</b> - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL).<br/> <b>*Criterion:</b> 50% of students achieve &gt;= 7.0 out of 10.0</p> <hr/> <p><b>Series of Assignments</b> - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL).<br/> <b>*Criterion:</b> Average of POL for all</p> | <p><b>Reporting Period:</b> 2021-2022 (Spring)<br/> <b>Result Type:</b> Criteria Not Met<br/> Average of POL for all students = 5.83 out of 10.00 (05/31/2022)<br/> <b>Total # of Students Assessed:</b> 4<br/> <b>Related Documents:</b><br/> <a href="#">EET Assessment Report 5-31-22.docx</a></p>   | <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2022)</p>   |

| Course Competencies   | Assessment Methods  | Results   | Use of Results  |
|---|---|---|---|
| (Spring), 2018 - 2019 (Spring), 2019 - 2020 (Spring), 2020 - 2021 (Spring), 2021-2022 (Spring)  | students >= 7.0 out of 10.0   | <a href="#">ELET141N Section 1 Assessment Spring 2022.docx</a><br><a href="#">ELET141N Section 1 Grades Spring 2022.xlsx</a>  | <b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2021) |
|   |   | <b>Reporting Period:</b> 2020-2021 (Spring)<br><b>Result Type:</b> Criteria Not Met<br>Average of POL for all students = 6.46 out of 10.00 (05/31/2021)   |   |
|   |   | <b>Total # of Students Assessed:</b> 9<br><b>Related Documents:</b><br><a href="#">ELET141N Grades Spring 2021.xlsx</a><br><a href="#">ELET141N-1_S2021_Assessment.docx</a><br><a href="#">Electrical Engineering Technology May 31 2021 Assessment Report.docx</a><br><a href="#">ELET Assessment Meeting Notes 011421.pdf</a> |   |
|   |   | <b>Reporting Period:</b> 2019-2020 (Spring)<br><b>Result Type:</b> Criteria Met<br>Average of POL for all students = 7.02 out of 10.00 (05/31/2020)   |   |
| <b>Total # of Students Assessed:</b> 12<br><b>Related Documents:</b><br><a href="#">ELET141N Grades Spring 2020.xlsx</a><br><a href="#">ELET141N-1_S2020_Assessment.docx</a>  | <b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2020)   |   |   |
| <b>Reporting Period:</b> 2018 - 2019<br><b>Result Type:</b> Criteria Met<br>Average of POL for all students = 7.81 out of 10.00 (05/31/2019)  | <b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2019)   |   |   |
| <b>Total # of Students Assessed:</b> 5<br><b>Related Documents:</b><br><a href="#">ELET141N Grades Spring 2019.xlsx</a><br><a href="#">ELET141N-1_S2019_Assessment.docx</a><br><a href="#">ELET141N-A_S2019_Assessment.docx</a>         | <b>Use of Results:</b> See "Related Documents" under Results for more information. Will remove decibels and Bode Plots which will be now covered in ELET241. (05/14/2018) |   |   |
| <b>Reporting Period:</b> 2017 - 2018<br><b>Result Type:</b> Criteria Met<br>Average of POL for all students = 8.00 out of 10.00 (05/14/2018)  | <b>Follow-Up:</b> Verify that Decibals and Bode Plots are now covered in ELET241 (08/10/2018)   |   |   |
| <b>Total # of Students Assessed:</b> 9<br><b>Related Documents:</b><br><a href="#">ELET Assessment Meeting Notes 051418.docx</a><br><a href="#">ELET141N-1 Grades Spring18.xlsx</a><br><a href="#">ELET141N-1_S2018_Assessment.docx</a> |   |   |   |

| Course Competencies | Assessment Methods  | Results   | Use of Results   |
|---------------------|---|---|--|
|                     | <p><b>Series of Assignments</b> - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL).</p> <p><b>*Criterion:</b> 50% of students achieve &gt;= 7.0 out of 10.0</p> | <p><a href="#">ELET141N-A_S2018_Assessment.docx</a><br/> <a href="#">ELET141N-A Grades Spring18.xlsx</a></p> <p><b>Reporting Period:</b> 2021-2022 (Spring)<br/> <b>Result Type:</b> Criteria Not Met<br/> 25.00% (05/31/2022)<br/> <b>Total # of Students Assessed:</b> 4<br/> <b># of Students Meeting Criteria:</b> 1<br/> <b>Related Documents:</b><br/> <a href="#">ELET141N Section 1 Assessment Spring 2022.docx</a><br/> <a href="#">ELET141N Section 1 Grades Spring 2022.xlsx</a><br/> <a href="#">EET Assessment Report 5-31-22.docx</a></p> | <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/31/2022)</p> |