

# Microcontrollers

08/23/2022



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

### ELET250N:Microcontrollers

<i>Course Competencies</i>	<i>Assessment Methods</i>	<i>Results</i>	<i>Use of Results</i>
<b>1. Intel Embedded Microcontrollers -</b> Analyze the Hardware and Software Architectures of the Intel Family of Embedded Microprocessors. <b>Course Competency Status:</b> Active <b>Assessment Cycles:</b> 2017 - 2018 (Fall), 2018 - 2019 (Fall), 2019 - 2020 (Fall), 2020 - 2021 (Fall), 2021-2022 (Fall)	<b>Series of Assignments -</b> Homeworks, Exams, and Labs are used to determine the overall grade. <b>*Criterion:</b> 70% of students achieve >= 7.0 out of 10.0	<b>Reporting Period:</b> 2021-2022 (Fall) <b>Result Type:</b> Criteria Met 79% (05/25/2022) <b>Total # of Students Assessed:</b> 14 <b># of Students Meeting Criteria:</b> 11 <b>Related Documents:</b> <a href="#">ELET250N Assessment F2021.docx</a> <a href="#">EET Assessment Report 5-31-22.docx</a> <a href="#">ELET250N Grades F2021.xlsx</a>	<b>Use of Results:</b> See "Related Documents" under Results for more information. (06/08/2022)
	<b>Series of Assignments -</b> Homeworks, Exams, and Labs are used to determine the overall grade. <b>*Criterion:</b> Average of POL for all students >= 7.0 out of 10.0	<b>Reporting Period:</b> 2021-2022 (Fall) <b>Result Type:</b> Criteria Met Average of POL for all students = 8.05 out of 10.00 (05/26/2022) <b>Total # of Students Assessed:</b> 14 <b>Related Documents:</b> <a href="#">ELET250N Assessment F2021.docx</a> <a href="#">EET Assessment Report 5-31-22.docx</a> <a href="#">ELET250N Grades F2021.xlsx</a>	<b>Use of Results:</b> See "Related Documents" under Results for more information. (05/26/2022)
		<b>Reporting Period:</b> 2020-2021 (Fall) <b>Result Type:</b> Criteria Met Average of POL for all students = 8.81 out of 10.00 (12/17/2020) <b>Total # of Students Assessed:</b> 8 <b>Related Documents:</b> <a href="#">ELET250N-1_F2020_Assessment.docx</a> <a href="#">Electrical Engineering Technology May 31 2021 Assessment</a>	<b>Use of Results:</b> See "Related Documents" under Results for more information. (12/17/2020)

Course Competencies	Assessment Methods	Results	Use of Results
		<p><a href="#">Report.docx</a>  <a href="#">ELET Assessment Meeting Notes 011421.pdf</a>  <a href="#">ELET250N Grades Fall 2020.xlsx</a></p> <hr/> <p><b>Reporting Period:</b> 2019-2020 (Fall)  <b>Result Type:</b> Criteria Met  Average of POL for all students = 8.33 out of 10.00 (12/23/2019)  <b>Total # of Students Assessed:</b> 13  <b>Related Documents:</b>  <a href="#">ELET250N-A_F2019_Assessment.docx</a>  <a href="#">Grades Fall 2019.xlsx</a></p> <hr/> <p><b>Reporting Period:</b> 2018 - 2019  <b>Result Type:</b> Criteria Met  Average of POL for all students = 8.54 out of 10.00 (12/19/2018)  <b>Total # of Students Assessed:</b> 10  <b>Related Documents:</b>  <a href="#">ELET250N-A_F2018_Assessment.docx</a>  <a href="#">Grades Fall 2018.xlsx</a></p> <hr/> <p><b>Reporting Period:</b> 2017 - 2018  <b>Result Type:</b> Criteria Met  Average of POL for all students = 8.03 out of 10.00 (02/06/2018)  <b>Total # of Students Assessed:</b> 9  <b>Related Documents:</b>  <a href="#">ELET250N-A_F2017_Assessment (2).docx</a>  <a href="#">ELET Assessment Meeting Notes 020518.docx</a>  <a href="#">ELET250N-Exam-Grades_Evals_Wksheet.xlsx</a></p>	<p><b>Use of Results:</b> See "Related Documents" under Results for more information. (12/23/2019)</p> <hr/> <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (12/19/2018)</p> <hr/> <p><b>Use of Results:</b> Will keep the using the Final Project instead of a Final Exam going forward. Both Professor's Poteat and Marcotte Agree on 12/12/2017. See "Related Documents" under Results for more information. (02/06/2018)</p>
<p><b>2. Assembly Language Fundamentals</b>  - Understand and interpret coding schemes, such as Assembly Language Fundamentals, including looping, calls, and procedures and the differences between Microcontrollers and Microprocessors  <b>Course Competency Status:</b> Active  <b>Assessment Cycles:</b> 2017 - 2018 (Fall), 2018 - 2019 (Fall), 2019 - 2020 (Fall), 2020 - 2021 (Fall), 2021-2022</p>	<p><b>Series of Assignments</b> - Homeworks, Exams, and Labs are used to determine the overall grade.  <b>*Criterion:</b> 70% of students achieve &gt;= 7.0 out of 10.0</p> <hr/> <p><b>Series of Assignments</b> - Homeworks,</p>	<p><b>Reporting Period:</b> 2021-2022 (Fall)  <b>Result Type:</b> Criteria Not Met  57% (05/25/2022)  <b>Total # of Students Assessed:</b> 14  <b># of Students Meeting Criteria:</b> 8  <b>Related Documents:</b>  <a href="#">ELET250N Assessment F2021.docx</a>  <a href="#">EET Assessment Report 5-31-22.docx</a>  <a href="#">ELET250N Grades F2021.xlsx</a></p> <hr/> <p><b>Reporting Period:</b> 2021-2022 (Fall)</p>	<p><b>Use of Results:</b> See "Related Documents" under Results for more information. (06/08/2022)</p> <hr/> <p><b>Use of Results:</b> See "Related</p>

Course Competencies	Assessment Methods	Results	Use of Results
(Fall)	Exams, and Labs are used to determine the overall grade. <b>*Criterion:</b> Average of POL for all students >= 7.0 out of 10.0	<p><b>Result Type:</b> Criteria Met Average of POL for all students = 7.66 out of 10.00 (05/26/2022)</p> <p><b>Total # of Students Assessed:</b> 14</p> <p><b>Related Documents:</b>  <a href="#">ELET250N Assessment F2021.docx</a>  <a href="#">EET Assessment Report 5-31-22.docx</a>  <a href="#">ELET250N Grades F2021.xlsx</a></p>	Documents" under Results for more information. (05/26/2022)
		<p><b>Reporting Period:</b> 2020-2021 (Fall)</p> <p><b>Result Type:</b> Criteria Met Average of POL for all students = 8.78 out of 10.00 (12/17/2020)</p> <p><b>Total # of Students Assessed:</b> 8</p> <p><b>Related Documents:</b>  <a href="#">ELET250N-1_F2020_Assessment.docx</a>  <a href="#">Electrical Engineering Technology May 31 2021 Assessment Report.docx</a>  <a href="#">ELET Assessment Meeting Notes 011421.pdf</a>  <a href="#">ELET250N Grades Fall 2020.xlsx</a></p>	<b>Use of Results:</b> See "Related Documents" under Results for more information. (12/17/2020)
		<p><b>Reporting Period:</b> 2019-2020 (Fall)</p> <p><b>Result Type:</b> Criteria Met Average of POL for all students = 8.54 out of 10.00 (12/23/2019)</p> <p><b>Total # of Students Assessed:</b> 13</p> <p><b>Related Documents:</b>  <a href="#">ELET250N-A_F2019_Assessment.docx</a>  <a href="#">Grades Fall 2019.xlsx</a></p>	<b>Use of Results:</b> See "Related Documents" under Results for more information. (12/23/2019)
		<p><b>Reporting Period:</b> 2018 - 2019</p> <p><b>Result Type:</b> Criteria Met Average of POL for all students = 8.74 out of 10.00 (12/19/2018)</p> <p><b>Total # of Students Assessed:</b> 10</p> <p><b>Related Documents:</b>  <a href="#">ELET250N-A_F2018_Assessment.docx</a>  <a href="#">Grades Fall 2018.xlsx</a></p>	<b>Use of Results:</b> See "Related Documents" under Results for more information. (12/19/2018)
		<p><b>Reporting Period:</b> 2017 - 2018</p> <p><b>Result Type:</b> Criteria Met Average of POL for all students = 7.66 out of 10.00 (02/06/2018)</p>	<b>Use of Results:</b> Will keep the using the Final Project instead of a Final Exam going forward. Both Professor's Poteat and Marcotte

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		<p><b>Total # of Students Assessed:</b> 9  <b>Related Documents:</b>  <a href="#">ELET Assessment Meeting Notes 020518.docx</a>  <a href="#">ELET250N-A_F2017_Assessment (2).docx</a>  <a href="#">ELET250N-Exam-Grades_Evals_Wksheet.xlsx</a></p>	<p>Agree on 12/12/2017. See "Related Documents" under Results for more information. (02/06/2018)</p>
<p><b>3. 8051 Registers, Timers, Counters, Memory and GPIO</b> - Interface the on-board ROM, RAM, registers, timers, counters, serial port, and general purpose I/O to digital, analog, and time-varying input and output signals  <b>Course Competency Status:</b> Active  <b>Assessment Cycles:</b> 2017 - 2018 (Fall), 2018 - 2019 (Fall), 2019 - 2020 (Fall), 2020 - 2021 (Fall), 2021-2022 (Fall)</p>	<p><b>Series of Assignments</b> - Homeworks, Exams, and Labs are used to determine the overall grade.  <b>*Criterion:</b> 70% of students achieve &gt;= 7.0 out of 10.0</p>	<p><b>Reporting Period:</b> 2021-2022 (Fall)  <b>Result Type:</b> Criteria Met  79% (05/25/2022)  <b>Total # of Students Assessed:</b> 14  <b># of Students Meeting Criteria:</b> 11  <b>Related Documents:</b>  <a href="#">ELET250N Assessment F2021.docx</a>  <a href="#">EET Assessment Report 5-31-22.docx</a>  <a href="#">ELET250N Grades F2021.xlsx</a></p>	<p><b>Use of Results:</b> See "Related Documents" under Results for more information. (06/08/2022)</p>
	<p><b>Series of Assignments</b> - Homeworks, Exams, and Labs are used to determine the overall grade.  <b>*Criterion:</b> Average of POL for all students &gt;= 7.0 out of 10.0</p>	<p><b>Reporting Period:</b> 2021-2022 (Fall)  <b>Result Type:</b> Criteria Met  Average of POL for all students = 7.73 out of 10.00 (05/26/2022)  <b>Total # of Students Assessed:</b> 14  <b>Related Documents:</b>  <a href="#">ELET250N Assessment F2021.docx</a>  <a href="#">EET Assessment Report 5-31-22.docx</a>  <a href="#">ELET250N Grades F2021.xlsx</a></p>	<p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/26/2022)</p>
		<p><b>Reporting Period:</b> 2020-2021 (Fall)  <b>Result Type:</b> Criteria Met  Average of POL for all students = 8.39 out of 10.00 (12/17/2020)  <b>Total # of Students Assessed:</b> 8  <b>Related Documents:</b>  <a href="#">ELET250N-1_F2020_Assessment.docx</a>  <a href="#">Electrical Engineering Technology May 31 2021 Assessment Report.docx</a>  <a href="#">ELET Assessment Meeting Notes 011421.pdf</a>  <a href="#">ELET250N Grades Fall 2020.xlsx</a></p>	<p><b>Use of Results:</b> See "Related Documents" under Results for more information. (12/17/2020)</p>
		<p><b>Reporting Period:</b> 2019-2020 (Fall)  <b>Result Type:</b> Criteria Met  Average of POL for all students = 7.55 out of 10.00</p>	<p><b>Use of Results:</b> See "Related Documents" under Results for more information. (12/23/2019)</p>

Course Competencies	Assessment Methods	Results	Use of Results
		<p>(12/23/2019)  <b>Total # of Students Assessed:</b> 13  <b>Related Documents:</b>  <a href="#">ELET250N-A_F2019_Assessment.docx</a>  <a href="#">Grades Fall 2019.xlsx</a></p> <hr/> <p><b>Reporting Period:</b> 2018 - 2019  <b>Result Type:</b> Criteria Met  Average of POL for all students = 7.61 out of 10.00  (12/19/2018)  <b>Total # of Students Assessed:</b> 10  <b>Related Documents:</b>  <a href="#">ELET250N-A_F2018_Assessment.docx</a>  <a href="#">Grades Fall 2018.xlsx</a></p> <hr/> <p><b>Reporting Period:</b> 2017 - 2018  <b>Result Type:</b> Criteria Met  Average of POL for all students = 7.8 out of 10.00  (02/06/2018)  <b>Total # of Students Assessed:</b> 9  <b>Related Documents:</b>  <a href="#">ELET Assessment Meeting Notes 020518.docx</a>  <a href="#">ELET250N-A_F2017_Assessment (2).docx</a>  <a href="#">ELET250N-Exam-Grades_Evals_Wksheet.xlsx</a></p>	<p><b>Use of Results:</b> See "Related Documents" under Results for more information. (12/19/2018)</p> <hr/> <p><b>Use of Results:</b> Will keep the using the Final Project instead of a Final Exam going forward. Both Professor's Poteat and Marcotte Agree on 12/12/2017. See "Related Documents" under Results for more information. (02/06/2018)</p>
<p><b>4. Microcontroller Applications -</b>  Apply Microcontroller principles to real world situations. This includes develop real-time assembly language programs using linear, polling, handshaking, and interrupt techniques.  <b>Course Competency Status:</b> Active  <b>Assessment Cycles:</b> 2017 - 2018 (Fall), 2018 - 2019 (Fall), 2019 - 2020 (Fall), 2020 - 2021 (Fall), 2021-2022 (Fall)</p>	<p><b>Series of Assignments -</b> Homeworks, Exams, and Labs are used to determine the overall grade.  <b>*Criterion:</b> 70% of students achieve &gt;= 7.0 out of 10.0</p> <hr/> <p><b>Series of Assignments -</b> Homeworks, Exams, and Labs are used to determine the overall grade.  <b>*Criterion:</b> Average of POL for all students &gt;= 7.0 out of 10.0</p>	<p><b>Reporting Period:</b> 2021-2022 (Fall)  <b>Result Type:</b> Criteria Not Met  57% (05/25/2022)  <b>Total # of Students Assessed:</b> 14  <b># of Students Meeting Criteria:</b> 8  <b>Related Documents:</b>  <a href="#">ELET250N Assessment F2021.docx</a>  <a href="#">EET Assessment Report 5-31-22.docx</a>  <a href="#">ELET250N Grades F2021.xlsx</a></p> <hr/> <p><b>Reporting Period:</b> 2021-2022 (Fall)  <b>Result Type:</b> Criteria Met  Average of POL for all students = 7.61 out of 10.00  (05/26/2022)  <b>Total # of Students Assessed:</b> 14  <b>Related Documents:</b>  <a href="#">ELET250N Assessment F2021.docx</a></p>	<p><b>Use of Results:</b> See "Related Documents" under Results for more information. (06/08/2022)</p> <hr/> <p><b>Use of Results:</b> See "Related Documents" under Results for more information. (05/26/2022)</p>

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		<p><b>Reporting Period:</b> 2019-2020 (Fall)  <b>Result Type:</b> Criteria Met  Average of POL for all students = 8.45 out of 10.00 (12/23/2019)  <b>Total # of Students Assessed:</b> 13  <b>Related Documents:</b>  <a href="#">ELET250N-A_F2019_Assessment.docx</a>  <a href="#">Grades Fall 2019.xlsx</a></p>	<p><b>Use of Results:</b> See "Related Documents" under Results for more information. (12/23/2019)</p>
		<p><b>Reporting Period:</b> 2018 - 2019  <b>Result Type:</b> Criteria Met  Average of POL for all students = 7.92 out of 10.00 (12/19/2018)  <b>Total # of Students Assessed:</b> 10  <b>Related Documents:</b>  <a href="#">ELET250N-A_F2018_Assessment.docx</a>  <a href="#">Grades Fall 2018.xlsx</a></p>	<p><b>Use of Results:</b> See "Related Documents" under Results for more information. (12/19/2018)</p>
		<p><b>Reporting Period:</b> 2017 - 2018  <b>Result Type:</b> Criteria Met  Average of POL for all students = 8.08 out of 10.00 (02/06/2018)  <b>Total # of Students Assessed:</b> 9  <b>Related Documents:</b>  <a href="#">ELET Assessment Meeting Notes 020518.docx</a>  <a href="#">ELET250N-A_F2017_Assessment (2).docx</a>  <a href="#">ELET250N-Exam-Grades_Evals_Wksheet.xlsx</a></p>	<p><b>Use of Results:</b> Will keep the using the Final Project instead of a Final Exam going forward. Both Professor's Poteat and Marcotte Agree on 12/12/2017. See "Related Documents" under Results for more information. (02/06/2018)</p>