



## Digital Systems Lab

<b>Course Number</b>	EET 201L
<b>Course Name</b>	Digital Systems Lab
<b>Credit Value (Breakdown of theory and lab credits)</b>	0T+0.5L
<b>Catalog Course Description</b>	Students will learn to implement and analyze digital circuits using VHDL to develop combinatorial and sequential circuits.
<b>Student Learning Outcomes/Objectives /Competencies of the Course</b>	<ol style="list-style-type: none"> <li>1- Describe and use binary and other number system representations such as octal and hexadecimal</li> <li>2- Describe Boolean logic and applied to logic design</li> <li>3- Design combinatorial circuits</li> <li>4- Describe and applied the concept of state machine</li> <li>5- Design sequential circuits</li> <li>6- Implement combinatorial and sequential circuits in software and hardware.</li> <li>7- Develop skill in using VHDL to describe hardware using register transfer methodology</li> <li>8- Design and prototype simple CPUs using FPGAs</li> </ol>
<b>College-Wide Student Learning Outcomes</b>	Critical Thought

**NORTHERN NEW MEXICO COLLEGE**

